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# Pathways and Assessment Effects on Composition I for Hispanic Non-Native English Speakers 

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Tammy Pérez
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Walden University
2021

Abstract<br>Pathways and Assessment Effects on Composition I<br>for Hispanic Non-Native English Speakers<br>by<br>Tammy Pérez<br>MA, University of Texas, 2003<br>MA, University of New Mexico, 1991<br>BA, Purdue University, 1989<br>Project Study Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

Walden University
September 2021


#### Abstract

The problem addressed in this study was the absence of a clearly defined pathway to Composition I for Hispanic non-native English-speaking students (HNNESS) testing below college level English at the study site. The purpose of the study was to identify an optimal pre-college English pathway for HNNESS using the college assessment of basic skills (CABS) and the pre-college English pathways (English for speakers of other languages (ESOL) pathway vs Developmental English pathway) on grade point average (GPA) in Composition I. Language acquisition theory framed the study. The research question focused on the effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS. In this quantitative, cross-sectional, comparative study, data from 815 students were analyzed with a two-factor ANOVA. Based on analysis of archival data from the research site, the findings showed that HNNESS in the English for speakers of other languages (ESOL) pathway achieved a significantly higher mean Composition I GPA than those in the Developmental English pathway. The variable of CABS performance caused no simple main effects and there was no significant interaction between pathway and CABS performance on Freshman Composition I GPA for HNNESS. To improve access to education and promote positive social change, a white paper was created based on the findings that discusses policy recommendations for mandatory English language assessment by the ESOL program for all HNNESS, better use of institutional data, and greater collaboration between the ESOL and Developmental English programs.


# Pathways and Assessment Effects on Composition I for Hispanic Non-Native English Speakers by Tammy Pérez 

 MA, University of Texas, 2003 MA, University of New Mexico, 1991 BA, Purdue University, 1989Project Study Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

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## Dedication

I dedicate this work to my dad, Glenn Baker, and to my oldest brother, Steve Baker. They always believed in the best of me. I miss them tremendously and wish they could have been here to celebrate this accomplishment with me. May they both rest in peace.

## Acknowledgments

First and foremost, I want to acknowledge my family, my tremendously supportive husband, Gilberto, and my incredibly smart, funny, resilient and accomplished children, Cristián and Lumari, of whom I am ridiculously proud. They have all put up with my lack of presence during the time I completed this doctoral work. They have been my biggest fans and supporters and my greatest joy. Without them and their consistent encouragement, this document would not exist. I also want to acknowledge both of my parents for their high expectations, for pushing me, and for telling me I was destined for great things from the time I was small. Without that foundation, I would not be where I am now.

I would like to acknowledge the input and feedback of my first committee chair, Dr. Suzy Harney. I greatly appreciated her guidance through the first stages of my project study. I thank Dr. Katherine Garlough for picking up the reins after Dr. Harney was no longer able to carry on with me. With Dr. Garlough, I found my direction and motivation to finish. I thank her for her kindness, persistence, patience, and direction. With her consistent feedback and encouragement, I was able to bring this project to completion. I also thank Dr. Valadez and Dr. Berndt for their tremendously helpful feedback. Dr. Stacy Wahl also stepped in at the very end, and her timely input and assistance was much appreciated.

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insight and for the many in-depth communications we had that, in part, led me to conduct this research.

Lest I forget, I am sending a great big shout-out to the owners and staff at the Crosswalk and at various other coffee houses where I spent many hours over many years completing this document. I am giving up my tables now for others who may need them.

## Table of Contents

List of Tables ..... iv
List of Figures ..... v
Section 1: The Problem ..... 1
The Local Problem ..... 1
Rationale ..... 11
Definition of Terms. ..... 16
Significance of the Study ..... 21
Research Question and Hypotheses ..... 22
Review of the Literature ..... 24
Theoretical Framework ..... 24
Review of the Broader Problem ..... 28
Implications ..... 39
Summary ..... 42
Section 2: The Methodology ..... 45
Research Design and Approach ..... 45
Setting and Sample ..... 47
Instrumentation and Materials ..... 51
Data Collection and Analysis ..... 53
Assumptions, Limitations, Scope, and Delimitations ..... 57
Protection of Participants' Rights ..... 58
Data Analysis Results ..... 58
Data Results ..... 58
Results in Terms of RQ ..... 62
Section 3: The Project ..... 78
Introduction ..... 78
Rationale ..... 78
Review of the Literature ..... 79
Project Genre ..... 79
Assessment of HNNESS ..... 80
Data Metrics ..... 83
Collaboration Between Pathway Programs ..... 85
Advising, Mentoring, and Student Support ..... 88
Professional Development ..... 91
Project Description ..... 93
Free, Mandatory Testing in the ESOL Program and Mandatory ESOL for
Low CABS ..... 93
Better Use of Data Metrics ..... 94
Increased Collaboration Between Departments ..... 95
Timeline for Implementation ..... 97
Project Evaluation Plan. ..... 99
Project Implications ..... 101
Section 4: Reflections and Conclusions ..... 103
Project Strengths and Limitations ..... 103
Recommendations for Alternative Approaches ..... 104
Scholarship, Project Development and Evaluation, and Leadership and
Change ..... 106
Reflection on Importance of the Work ..... 107
Implications, Applications, and Directions for Future Research ..... 107
Conclusion ..... 110
References ..... 112
Appendix: Project: Hispanic English Language Learner Pathways: Promoting College Success ..... 134

## List of Tables

Table 1. LUPHI Institutional Race and Ethnicity Demographics ..... 4
Table 2. Sample Sizes for Each Group ..... 51
Table 3. Between-Subjects Factors ..... 59
Table 4. Shapiro-Wilk Test of Normality ..... 60
Table 5. Levene's Test of Equality of Error Variances: Freshman Composition I GPA. ..... 61
Table 6. F Test for Heteroscedasticity. ..... 61
Table 7. Tests of Between-Subjects Effects: Dependent Variable: Freshman Composition
I GPA ..... 63
Table 8. Univariate Tests: Effect of Pathway on Freshman Composition I GPA ..... 64
Table 9. Pairwise Comparison: Pathway. ..... 67
Table 10. Pairwise Comparisons: Main Effects ..... 68
Table 11. Project Study Phases of Implementation ..... 98

## List of Figures

Figure 1. Student Race/Ethnicity at LUPHI .......................................................... 2
Figure 2. HNNESS Pathways to Freshman Composition I ........................................ 9
Figure 3. PGR in Freshman Composition I of Non-Native English-Speaking Students
$\qquad$
Figure 4. Freshman Composition I GPA Mean Values and Standard Deviations per
Factor Level....................................................................................... 62
Figure 5. The Effects of CABS Cutoff Scores at Each Level of Pathway.................... 65

Section 1: The Problem

## The Local Problem

At the institution under study, referred to as LUPHI, there are three pathways to Freshman Composition I for Hispanic non-native English-speaking students (HNNESS) who require pre-college level English: 1) alternative developmental education English (A-DE), 2) corequisite developmental education English (C-DE), and 3) English as a second language (ESOL). The problem is that HNNESS at the institution are not advised into an appropriate pathway based on data-driven best practices. HNNESS testing precollege level, depending on their basic skills entry assessment, self-select either the developmental education (DE) English pathway that they test into, or the appropriate course within the ESOL pathway after taking an additional ESOL program language leveling assessment (ELSA). The gap in practice is that the institution under study does not analyze the interaction effects of the college assessment of basic skills (CABS) entry assessment and the pre-college pathways as they relate to the grade point average (GPA) in Freshman Composition I to determine best practices for advising HNNESS in precollege course selection. In addition, HNNESS at LUPHI are not required to document a sufficient level of English language proficiency to satisfy requirements for admission to the institution (college website, 2020). Most institutions require the Test of English as a Foreign Language, more commonly known as TOEFL, or a similar English language skills assessment (ELSA), to verify English language proficiency level. Furthermore, LUPHI does not record a student's native language in the college student information database during the application, admissions, and assessment processes (personal
communications with ESOL program coordinator, April 7, 2014; personal communications with the Coordinator of the International Student Services Office, August 4, 2020). But more importantly, LUPHI does not assign HNNESS to a developmental English-language pathway based on their non-native English speaker status (personal communications with a department chair in the Academic Affairs Division, June 15, 2017; personal communications with a senior level administrator in the Student Success Division, February 12, 2015).

The institution under study, LUPHI, is a large, urban, predominantly Hispanic, 2year institution. Hispanic students are the majority population at LUPHI comprising $62 \%$ of the student population (National Center for Educational Statistics Integrated Postsecondary Education Data System [NCES IPEDS], 2016) and comprise the focus of the study (Figure 1). That percentage roughly mirrors the population in the service area of 60.3\% Hispanic (U.S. Census Bureau, 2011).

## Figure 1

## Student Race/Ethnicity at LUPHI

## 100



Note. This chart copied directly from the NCES IPEDS website for LUPHI (2016). However, with a graduation rate of $24 \%$, Hispanics complete and graduate at lower rates than any other demographic group at LUPHI that might contain non-native Englishspeaking students.

For HNNESS who do not test into Freshman Composition I, there are three possible pathways that students may choose. One pathway is the ESOL program in the languages department designed for non-native English speakers with language comprehension and acquisition deficiencies. The other two pathways are DE English pathways in the English department designed for native speakers with English grammar and writing deficiencies: A-DE and C-DE. For the A-DE pathway, non-native Englishspeaking students that test below college-level with low CABS cutoff scores, as determined by LUPHI CABS cutoff score guidelines, must successfully complete either the highest-level course in the A-DE program with a grade of C or better, or the highestlevel bridge courses in the ESOL program. Conversely, the C-DE pathway is limited to students with high CABS cutoff scores. HNNESS with high CABS cutoff scores are eligible to take a developmental English course paired with Freshman Composition I, even though they are not considered as having met the college-level prerequisite in place for other coursework. The three pathways will be the independent variable in this study, as it is this variable's effect on the dependent variable that is of primary concern.

The CABS, a general-topic college assessment given to all incoming freshmen that categorizes students into the basic college entry skills levels of low, high, or college level, is used to determine HNNESS placement in Freshmen English courses. However,
this intake assessment process was designed for assessment of native English-speaking students. Realizing that the CABS is not an English language leveling or placement exam - it simply tests basic English skills of sentence structure, reading, and writing - there is a question as to how accurate this assessment is for HNNESS entering college. The CABS process includes post-assessment advising that identifies remediation needs to the student (personal communications with the DE English department chair, October 15, 2018; personal communications with department chair for ESOL program, May 1, 2020). However, post-assessment advising is not obliged to refer English deficient HNNESS to the ESOL program office (personal communication with the director of advising, November 30, 2016) and HNNESS are not required to enroll in the ESOL pathway. The CABS score will be the second independent variable due to the possible interaction effect that might occur when combined with the first independent variable, pathway.

LUPHI is a Hispanic Serving Institution (HSI) with a predominantly low socioeconomic status (SES) student population and the highest non-native English-speaking student population of any community college in the associated metropolitan area. As can be seen in Table 1, the student population at LUPHI is comprised of a predominantly Hispanic demographic that consistently trends to fall above $50 \%$ and recently tops $60 \%$.

## Table 1

## LUPHI Institutional Race and Ethnicity Demographics

| College | Fa 2014 | Fa 2015 | Fa 2016 | Fa 2017 | Fa 2018 | Fa 2019 | Fa 2020 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| White | $28 \%$ | $28.2 \%$ | $27.5 \%$ | $26 \%$ | $23.6 \%$ | $22.9 \%$ | $21.8 \%$ |
| Hispanic | $51.3 \%$ | $54.3 \%$ | $55.7 \%$ | $56.6 \%$ | $58.7 \%$ | $62.8 \%$ | $64.3 \%$ |
| Black | $11.9 \%$ | $11.4 \%$ | $10.8 \%$ | $11.2 \%$ | $10.9 \%$ | $8.6 \%$ | $8.7 \%$ |
| Other | $7.7 \%$ | $6.1 \%$ | $6.0 \%$ | $6.1 \%$ | $6.7 \%$ | $5.7 \%$ | $5.3 \%$ |

Note. Data pulled from the institutional Key Performance Indicator dashboard.
The Hispanic student demographic at LUPHI includes multiple HNNESS types that relate to varying levels of English language skill attainment from very little English proficiency to native English speaker. Within the domestic student population at the institution, there are students who have recently gained citizenship, permanent residents, refugees, Generation 1, which are immigrants who arrived in the United States as adults, and Generation 1.5, which are immigrants who arrived in the United States as children or adolescents, as well as students whose parents fall within those categories and who taught them Spanish as their first language. Generation 2 students at LUPHI are students that were born in the United States who had at least one immigrant parent. These children may have been taught Spanish as their first language but have typically grown up surrounded by English in their schools and communities. Additionally, there is a rather large group of international students, and a smaller group of undocumented students. Since the institution does not require the TOEFL assessment for any non-native Englishspeaking student to be accepted or placed into coursework, the CABS assessment and the ESOL English language placement exams serve as the tools to place students into pre-college-level coursework. Additionally, while the participants possess varying levels of English language skills attainment, there is currently no way to disaggregate the various levels, so I acknowledged this limitation and worked with the samples based on CABS cutoff scores and pathways.

According to the LUPHI website (LUPHI English Department website, fall 2020), the DE English program identifies academically under-prepared students and
recommends pre-college coursework, alternative delivery methods, and support services to assist students. The English program website contains information further explaining that if a student enrolling in English needs remediation before taking Freshman Composition I, the student will be required to take a non-credit no-cost booster option that serves to remind students of prior instruction. The student does not have to pay to register for it and is not further assessed by a post-booster attempt at the CABS into appropriate English coursework. After the non-credit no-cost booster option, the student is evaluated by a faculty member and, if still not college-level, must take one of the three pre-college level English options: Adult Basic English (ABE), A-DE, or Freshman Composition I with a corequisite DE English component companion (C-DE).

For the purposes of this study, I counted ABE as part of the A-DE pathway. If students are required to take A-DE pathway alone, not as part of the C-DE model, they must pass that course with a " C " or better before enrolling in Freshman Composition I. If students are assessed into the corequisite model, they are enrolled in college-level English with an integrated reading and writing academic support course to assist them. Therefore, within the DE English pathway, students testing below college-level could have at a maximum two courses to take before reaching Freshman Composition I and at a minimum, could be enrolled in Freshman Composition I at the outset along with a companion DE English course in the corequisite model depending on their CABS score and assessment after the booster. It is important to note that students are encouraged to take the highest level they place into but are not required to enroll in a higher level of English than they are comfortable taking, so it is possible for a student taking C-DE or

ESOL to have placed in the college-level CABS cutoff range. Additionally, students who have placed within the low or high range on the CABS, after taking the booster, may enroll in a course one or two levels above their CABS placement due to reevaluation. The English department website does not link to the ESOL website, and there is no information contained on the English department website that addresses non-native English-speaking student success.

The website for the LUPHI ESOL program (LUPHI ESOL Department website, fall 2020) states that they provide opportunities for all types of English language learners to study English in a learning-community-type situation and acquire or improve essential English skills to succeed in a variety of goals: personal, professional, and academic. Their goals are to prepare English language learners to be successful in college or in their profession through a high-quality education where the students learn to work and communicate in a diverse global society. This program contains four levels of intensive study in five 8-week blocks throughout the year. Each level contains four skills-building courses that focus on reading and vocabulary, writing, speaking and listening, and grammar. The number of courses a student must take in this program depends upon the level they place into based on their scores on an ESOL program ELSA. Once students complete the highest courses in those levels, they enter a bridge program that contains two courses, Grammar and Composition, and Reading and Vocabulary. Students may additionally test directly into this program. The bridge program prepares students to transition to college-level coursework and serves as one of the prerequisites for Freshman Composition I. To pass into college-level English, students must receive a B or better on
the first attempt at these two courses. If they do not receive a $B$, they may repeat the courses. A grade of C or better on the second attempt clears the prerequisite.

Additionally, the institution enrolls a robust number of international students who are HNNESS and who, if they test pre-college level in English, are counted within this study. The website for the International Student Services Office does not link to the English department. Their website does link to the ESOL department and provides detailed information about the ESOL program.

It may appear to HNNESS that the most expedient pathway to Freshmen Composition, in both duration and cost, would be DE English courses and not the ESOL program. Due to the large disparity between the number of DE English and ESOL program courses required to meet the prerequisite to enroll in Freshman Composition I, HNNESS may not be making choices based on academic needs. HNNESS may take one or two courses in the DE English pathways to complete college-level English (provided they pass on the first attempt) or take anywhere from two to 20 ESOL courses in the ESOL pathway to even achieve college-level coursework eligibility, depending on their intake proficiency in the English language. Lengthy ESOL pathways delay degree completion in non-native English-speaking students that elect the ESOL pathway (Hodara, 2015). With state legislation and policies in various states across the nation covering corequisite courses to reduce the number of pre-college-level courses for native English-speaking students and accelerate students through the pre-college pathway (Miller et al., 2020), this disparity has become pronounced as students testing below college-level may have options to take their DE English courses as corequisites to their
college-level courses, depending on their CABS scores. In my study, the corequisite pathway is designated C-DE. For some, this eliminates the time it takes to enter the college-level English course within the DE English pathway.

This study identified, by examining the interaction effects of CABS cutoff scores and pre-college pathway on HNNESS GPA scores in Freshman Composition I, differences in the GPA scores between the groups (Figure 2) that results in a recommended plan for HNNESS to succeed in Freshman Composition I.

## Figure 2

HNNESS Pathways to Freshman Composition I


The institution would benefit from the development of appropriate recommendations beyond the CABS that would direct HNNESS into the relevant pre-college-level English courses for them based on their individual assessment to ensure their future academic success.

Nationwide, approximately $38 \%$ of all students requiring remediation are Hispanic and, in the state where LUPHI is located, only $5.8 \%$ of all community college students requiring remediation complete a degree or certificate to graduate in 3 years (Complete College America [CCA], 2012). Providing HNNESS with appropriate guidance related to pathway selection can improve their academic success. For example, within an English-only classroom, research has shown that non-native English-speaking students are not as likely to engage in experiences of collaborative learning and group work due to their culture and language norms possibly not lining up with the demands or conditions of a mainstream English classroom (Liu et al., 2019). This problem is compounded with Hispanic students due to their varying levels of acquisition and time in country (Abbott, 2018; Asher et al., 2009; Roberge, 2002). Their lack of engagement or a misplacement into inadequate pathways due to their language acquisition process could have a negative impact on their subsequent persistence, completion, and success rates.

In a mainstream course, faculty members are not TESOL (Teaching English to Speakers of Other Languages) trained and are not as likely to make corrections on student writing that non-native English-speaking students need to fill gaps in their language acquisition base (Monroe, 2018). Moreover, there are studies that show that non-native English-speaking students are more comfortable, more engaged, and perform better in ESOL classrooms (Braine, 1996). They are more apt to feel a sense of belonging, feel less lonely, and experience more fellowship with their non-native English-speaking classmates (Anderson-Manrique, 2015). Students can experience greater morale and motivation in a setting where they share a common language with classmates who are
comfortable in the target language (Gupta, 2019). The effect of HNNESS placement based on assessment into pre-college pathway programs has not been widely studied as it relates to completion of college-level English courses (Doran \& Singh, 2018; PattheyChavez et al., 1998). Additionally, Hispanic cultural influences are a key factor in educational motivation and attainment (Arbelo-Marrero \& Milacci, 2016; Doran \& Singh, 2018), and there is limited literature on HNNESS and the importance of language proficiency for college success (Fong et al., 2016).

## Rationale

Based on personal communications with the department chair of English (April 7, 2014), and with both the coordinator of the ESOL program (May 6, 2021) and the ESOL program curriculum coordinator (May 3, 2021) at LUPHI, there is a problem with placing non-native English-speaking students into the DE English pathway (that is designed for native English speakers) when they have not reached a level of proficiency in English to allow them to function in an academic environment. According to the English department chair, while the faculty members in DE English desire to assist the non-native Englishspeaking students, they do not have the specialized training to effectively present the course-required content while simultaneously trying to manage the special linguistic needs of the non-native English-speaking students. The expectation, then, might be that the targeted training that faculty members teaching ESOL courses receive would result in a more focused curriculum and more effective preparation of non-native Englishspeaking students to handle content area coursework in mainstream courses.

Preliminary data from the LUPHI ESOL program seem to support the hypothesis that non-native English-speaking students that pass through the ESOL pathway succeed at higher rates than students passing through the DE English pathway. These data show that $92 \%$ of students completing the ESOL program bridge courses achieved an overall GPA of 2 or higher (a grade of $C$, required to meet prerequisites in subsequent courses) in Freshman Composition I during the time fall 2010-spring 2017 with a withdrawal rate of $2.5 \%$ (Figure 3). In Figure 3, the percentage of students with a GPA of 2 or better is designated as productive grade rate (PGR). These data were not disaggregated by demographics or by CABS cutoff scores.

## Figure 3

PGR in Freshman Composition I of Non-Native English-Speaking Students Taking the ESOL Pathway


Figure 3 shows that productive grades for non-native English-speaking students far exceeded non-productive grades and withdrawal rates were low. In fact, in several years, there were no withdrawals recorded. The PGR data refer to a final course grade classified as a productive or passing grade $(\mathrm{A}, \mathrm{B}, \mathrm{C})$, a non-productive or not passing grade $(\mathrm{D}, \mathrm{F})$, or a student withdrawal (W). In other words, these data show that non-native Englishspeaking students that passed through the ESOL program, thereby receiving targeted academic language acquisition preparation in a pre-college-level course, experienced much higher GPAs in Freshman Composition I at the institution than the overall GPA in Freshman Composition I of all students, both native English-speaking and non-native English-speaking students.

The overall percentage for all students at the institution receiving a GPA of 2 or better in Freshman Composition I was slightly less than 57\%. That number included all students, both non-native English-speaking and native English-speaking students, that did not complete the ESOL bridge courses. These preliminary data allow for a narrative to be constructed around the Freshman Composition I GPA of non-native English-speaking students that pass through the ESOL pathway. What information gleaned from this study added to these data refined knowledge about first, the GPA of the specific demographic of HNNESS in Freshman Composition I that went through the ESOL pathway, second, HNNESS GPA in Freshman Composition I that went through the DE English pathway, since sparse data exist on that topic, third, HNNESS success in a corequisite model, and fourth, that there was very little indication of interaction between the cutoff CABS scores and pathway as they relate to HNNESS GPA in Freshman Composition I.

The ESOL program data evaluations and analyses at LUPHI have been focused only on the success rate of the non-native English-speaking students that passed through the ESOL pathway (personal communication with the ESOL coordinator, August 4, 2020; ESOL program unit review, 2015). They did not disaggregate the success rate of HNNESS nor of non-native English-speaking students that passed through the DE English pathway from all other students (personal communication with the ESOL coordinator, August 4, 2020). Furthermore, they did not study GPA, only PGR. In fact, LUPHI does not analyze those data to inform institutional best practices regarding nonnative English-speaking student pathways (personal communication with the ESOL coordinator, August 4, 2020).

The partner institution also does not use the CABS scores to inform ESOL program data or placement due to ESOL program faculty opposition to the CABS being used as a tool to measure language acquisition (personal communication with the ESOL program chair, July 12, 2016, personal communication with the coordinator of the ESOL program, December 15, 2020). The ESOL program relies solely on an ESOL department ELSA and faculty review for placement into ESOL coursework. Further disaggregation of the data was necessary, and a broader study was required to evaluate if the ESOL pathway at this institution was the most optimum for HNNESS, particularly since proper placement of HNNESS is complicated by a varying linguistic continuum of acquisition levels within Hispanic student type as it relates to their English language acquisition background (Roberge, 2002). According to the results of this study, students in the ESOL
pathway did receive a higher GPA in the Freshman Composition I course than those that passed through either of the other pathways.

The literature has sparse research to evaluate the value of the ESOL pathway on non-native English-speaking students' success rates in college-level courses (Hodara, 2015; Knoblock \& Youngquist, 2016) and some evidence that shows that in sheltered instruction models with non-native English-speaker-specific sections of the required English curriculum, non-native English-speaking students experience a greater sense of comfort, better satisfaction, higher success rates, and lower withdrawal rates (Braine, 1996; Ciriza-Lope et al., 2016; Flink, 2018; Knoblock \& Youngquist, 2016). Regardless, it might be that some HNNESS that test at a high level of proficiency based on the CABS score might reach college-level more quickly and succeed at a higher rate by passing through the A-DE or C-DE pathway, if there were a non-native English-speaker-specific option, since some studies show that sheltered ESOL models that isolate non-native English-speaking students from mainstream courses hinder college success and make non-native English-speaking students feel isolated and marginalized (Cerezo \& McWhirter, 2012; Razfar \& Simon, 2011).

There is some support in the research that students who pass through the highest level academic ESOL writing courses are more successful than students that pass through the DE English pathway (Patthey-Chavez et al., 1998, Patthey-Chavez et al., 2005). They complete at a higher rate, and they have a higher GPA (Patthey-Chavez et al., 1998). While a reasonable hypothesis from these studies might be that HNNESS that pass through the ESOL pathway will succeed at higher rates in the Freshman Composition I
course than those that pass through the DE English pathway, this research did not disaggregate the non-native English-speaking students from the native English-speaking students nor the Hispanic students from the other demographic groups. The PattheyChavez studies additionally did not consider the students' CABS scores as they relate to performance in pathways and subsequently in college-level English.

Therefore, the purpose of this study was to evaluate institutional data to ascertain if it was possible to identify a difference in Freshman Composition I GPA based on the groupings as described in the cross-sectional between-subjects design shown in Figure 2. The first attempt CABS score was assigned a nominal level value of low, high, or college level by the institution, and the pre-college-level educational pathway was assigned a nominal level value of A-DE, C-DE, or ESOL. The GPA in Freshman Composition I was a continuous value from 4-0 based on the grade the student received in the class with the values of $4,3,2,1$, and 0 corresponding to grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, and F , respectively. All students with a withdrawal were removed from the study due to the inability to determine the underlying reason for the withdrawal. The difference observed in the GPA between the groups indicated a need for the institution to create an appropriate advising plan that could promote success in Freshman Composition I based on entry level CABS cutoff scores.

## Definition of Terms

The following terms inform my study:
College Assessment of Basic Skills (CABS) is the college entry assessment used at LUPHI to determine the basic skills level of all First Time in College (FTIC) students
entering the institution with less than 12 hours of college-level academic credit (partner institution website, 2021). This assessment yields multiple scores: math, reading, and writing. For this study, the college level, high, and low cutoffs were determined by the institutional placement rubric. College level was used for CABS scores that placed students into college level Freshman Composition I. High was used for CABS scores that placed a student into the co-requisite model. Low was used for CABS scores that placed a student into coursework at any level below the co-requisite model. After taking the CABS, students have the option of taking a self-paced booster that serves to remind students of the prior concepts and skills that they have learned in coursework before coming to the institution. Depending on how they do on the exit exam for the booster, the student may be allowed to take a course that they did not originally place into. Students also always have the option of taking a course that is below the level the CABS score indicates if they do not feel confident with their skills. Therefore, there is not more of a one-to-one correlation between the cutoff scores and the pathway taken. The only group that does not contain all CABS levels is the A-DE level, which does not contain any students that tested college-level on the CABS, presumably, because that is two levels below their placement. CABS scores serve as one of the two independent variables in this study (IV 1).

Developmental education ( $D E$ ) is pre-college-level preparatory work which has various components, but only the integrated reading and writing classes are used in this study. DE Math was not considered in this study. A corequisite model pairs a DE course with a college-level course as a corequisite to be taken during the same semester.

Typically, this model is implemented with math and English coursework to improve the rates at which students who test below college-level pass their first college-level course within the first year (Finkel, 2018). The high CABS cutoff scores place a student into the corequisite model. For differentiation purposes when analyzing data, the DE English courses in the level below corequisite were labeled the A-DE pathway, and C-DE pathway referred to the courses within the corequisite model. The A-DE and C-DE pathways are two levels of the second independent variable (IV 2).

English for Speakers of Other Languages (ESOL), for the purposes of this study, refers to instructional programs in English-speaking countries that teach the English language to non-native English speakers. Other terms, such as English as a Second Language (ESL) and English as a Foreign Language (EFL), are also occasionally used in literature to refer to programs that instruct English to non-native English speakers (Simpson, 2016).

English Language Skills Assessment (ELSA) is the English language leveling exam used in the ESOL department to place students into an appropriate level within the ESOL program (ESOL program website, 2021).

First generation in college (FGIC) students may have attended college prior to coming to the institution; however, the parents of these students have not received a degree from a higher education institution (Cataldi et al., 2019).

First time in college (FTIC) students have earned less than 12 semester credit hours of college credit, not including any Dual Credit courses taken while in high school (National Center for Education Statistics, n.d.).

Freshman Composition I is the designation for Freshman English Composition I, the first required college-level English composition course, considered a gateway course (see definition of gateway course below; Woods et al., 2019). Most programs require two English courses as part of the general education core, but Professional/Career Technical Education programs usually only require this one. GPA in this course comprises the dependent variable for this study (DV).

Gateway courses are entry-level courses that typically serve as indicators of future success and completion. They typically serve as prerequisite courses to other courses in a degree program or impart skills to students that will be needed in other courses in a degree program. They are high challenge and contain high enrollment (John N. Gardner Institute for Excellence in Undergraduate Education, 2016).

Hispanic Serving Institution (HSI) is defined by the federal government as an institution that grants degrees, enrolls at least $25 \%$ Hispanic students, and whose policies and practices support Hispanic student success (Office of the Legislative Counsel, 2019).

L1 refers to a student's first (or native) language, while the second language is referred to as $L 2$ (Cook \& Singleton, 2014). The use of the terminology L2 also carries the implicit reference to acquisition of the language. A target language (TL) is the language the learner is attempting to acquire.

Non-native English-speaking students are students whose first language is not English as designated by their self-identification of being more comfortable reading or speaking a language other than English on the CABS pre-screening questions or designating a language other than English as first language on the splash page in the
student portal or on the CABS pre-screening questions. There are various student types that fall within the designation of non-native English speaker. Generation 1 students were born in a foreign country and arrived in the United States afterward. Their level of English acquisition varies based on their time in country and prior educational formation. Therefore, they may have acquired anywhere from no English at all to a very advanced level of English. Generation 1.5 students are students whose first language is not English, and they have experiences that fall somewhere between a first-generation immigrant and a second-generation child of an immigrant (Roberge, 2002). They may have experienced many years of education in the United States, likely understand the U.S. culture, and may feel devastated when placed into an ESOL pathway (Holten, 2002). Generation 2 students were born in the United States and have at least one Generation 1 parent. International students have typically spent their formative years in their home country and had formal education in English but know little U.S. historical and cultural background. Undocumented and refugee students are students without U.S. citizenship, possessing varying levels of English education, time in country, and historical knowledge of the United States.

Productive grade rate ( $P G R$ ), related to completion, is used to refer to the percentage of students in a section of a course receiving a $C$ or better, a passing grade, in individual sections or for the totality of specific courses (Linton, 2020). For example, a PGR of $67 \%$ in a section of Freshman Composition I translates to $67 \%$ of the students in that class receiving an $\mathrm{A}, \mathrm{B}$, or C in the class. Success rates focus on the rate at which individual or groups of students receive productive grades that allow them to meet a
completion requirement such as Core or Field of Study, that meet the requirement for any course that has this course as a prerequisite, or that clear the student to progress to the subsequent level within a series of sequenced courses. A course with low PGR may still contain a high number of HNNESS with high success rates. Conversely, a course with a high PGR may contain a high number of HNNESS with low success rates. Success rate is often used to describe overall student performance in courses where they receive a C or better; however, there are some courses that require a B to meet the success requirements and others that only require a D to qualify within the success rate category.

## Significance of the Study

To provide the institution better data for HNNESS taking the CABS, this study attempted to provide an analysis of institutional archival data to assist advisors to recommend an appropriate (best choice) pathway for entering students. Due to the increase of Hispanic population to the state anticipated within the next 40 years (Murdock et al., 2015), and due to cultural factors affecting non-native English-speaking student success (Liu et al., 2019) and the large numbers of Hispanic students at LUPHI, this study should provide valuable and relevant information to create better methods of advising Hispanic students. The study could assist in creation of plans to guide HNNESS at LUPHI to an appropriate pathway to their college-level English course, one of the gateway courses at the institution for most degree programs. A well-delineated process for advising the HNNESS into an appropriate pathway based on their CABS cutoff scores at intake is a possible process improvement. In addition, better information going out to

HNNESS about the pathway options, and rationales for the options based on the data analysis, will provide transparency in communication and better decision making.

Since LUPHI is a designated HSI, which is a U.S. Department of Education designation, this study will benefit the institution. It provides documentation of intentional efforts to promote Hispanic student success by delivering a deliberate study of their data and performance. This study proposes a plan to implement a project intended to assist Hispanic students to become academically successful and achieve their higher education goals, assisting them more globally as it pertains to their economic and social mobility. Since English reading and writing skills impact other academic performance (Knoblock \& Youngquist, 2016), by gaining an understanding of HNNESS and their pathway needs as they attain college-level and the appropriate English language skills to be successful in their degree coursework, the institution will be better prepared to meet the specific demands of this population in the future.

## Research Question and Hypotheses

This study provided an analysis of the data for HNNESS entering the college by identifying the interaction of two independent variables, the first being their CABS cutoff score, and the second being their pre-college pathway, on the participants' GPA in Freshman Composition I, the dependent variable. An analysis of variance (ANOVA) was carried out to determine if there was a statistically significant interaction between the factors of CABS cutoff scores (college level, high, or low) and pre-college pathways (ADE, C-DE, or ESOL) on student GPA scores in Freshman Composition I.

This study excluded two groups of students: first, the students that tested below college-level on the CABS assessment and moved between ESOL and DE English pathways, and second, the HNNESS that tested directly into college-level English and took Freshman Composition I without going through a pre-college pathway. More information about why these groups were excluded is included in Section 2, Setting and Sample. A clearer picture of best practices might result from an analysis of the data points resulting from the following question.

RQ: What is the effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS?
$H_{0}$ : There is no effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS.
$H_{\mathrm{A}}$ : There is an effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS.

By analyzing the interaction of the factors of CABS cutoff scores and pre-college pathway leading to Freshman Composition I and evaluating the main effects of those factors on the students' GPA in Freshman Composition I, a clear difference arose that led to a viable best choice plan for HNNESS. Data driven advisement of students into precollege pathways based on CABS scores at intake should yield better outcomes for Freshman Composition I GPA and give students a better idea of the length of time they will spend in remedial coursework.

## Review of the Literature

For the review of the literature, several key terms informed the search: developmental education, DE, developmental, remedial, remediation, corequisite, English language learner, ELL, English as a second language, ESL, ESOL, non-native English speaker, NNES, Limited English Proficient, LEP, Hispanic, community college, foreign language acquisition, second language acquisition, English language acquisition, Krashen, Natural Approach, TESOL, college composition, mainstream, college-level, writing, and Freshman Composition I. The searches were carried out through multiple databases at Walden University, and on Google Scholar. In addition, during the writing of the literature review, and specifically, the theoretical framework, I consulted various other textbooks on higher education leadership, language acquisition theory, statistical research, and research methodology.

## Theoretical Framework

The theoretical framework presented herein, the Natural Approach, relates to the development of language proficiency in non-native speakers of a language and was used to review the data collected for this study. Stephen Krashen is one of the foremost researchers on Second Language Acquisition (SLA) since the 1970s. Within his research, Krashen has identified five individual hypotheses that inform the processes of language acquisition as they relate to adults and their development of language proficiency. The hypotheses are: the Language Acquisition-Learning Hypothesis, the Monitor Hypothesis, the Input Hypothesis, the Natural Order Hypothesis, and the Affective Filter Hypothesis (Krashen, 1982). An additional component of language acquisition is the Language

Acquisition Device, the part of the brain responsible for language acquisition (Krashen, 1982; Krashen \& Terrell, 1983).

With the Language Acquisition-Learning Hypothesis, Krashen proposed that there is a fundamental difference between acquiring a language and learning a language (1982, 2003). Language acquisition occurs in a subconscious, natural process without formal instruction much like a child acquires their first language (Berken et al., 2015; Krashen, 1982; Rolstad, 2017). Language acquisition late in life, such as an individual learning language for the first time in college, limits the learner's acquisition ability (Berken et al., 2015). Language learning, on the other hand, is intentional and requires formal instruction in which the rules of the language must be presented and learned (Krashen, 1982, 2003). The former focuses on meaning, the latter more on form and structure. The former relates to a living language, which implies specific dialectal implications; the latter relates to a construct of language, not a particular dialect, for which there exists a specific model of the language based on a grammar. In other words, acquisition produces spontaneous communicative utterances while learning produces more grammatically correct utterances.

According to Krashen, grammatical correctness can be related to the "monitor" which is activated during the language learning component of the Language AcquisitionLearning Hypothesis (1982). Krashen's Monitor Theory describes a process by which a language learner can monitor their own utterances in the L2 (Krashen, 1979, 1981, 1982; Krashen \& Terrell, 1983). Krashen claimed that there are three components that the monitor requires: time to process and adequately assimilate or acquire skills, ability to
focus on form and not content, and knowledge of the grammatical rules $(1979,1982)$. The monitor does interfere with spontaneous production of language and communication. Therefore, the monitor is used better in learning situations that allow time for reflection, such as writing exercises. The monitor impedes fluency in a language. If a speaker is busy monitoring their own utterances, they are focused on producing correct grammatical structure rather than on producing meaningful, comprehensible communication. For the monitor to function, the rules of grammar must be explicitly presented to the students for them to monitor their own produced utterances (Krashen, 1979, 1982). The monitor is not infallible. It is impossible to learn every rule in the language because not every rule is taught, and even the best students do not know all the rules (Krashen, 1982; Krashen \& Terrell, 1983). In fact, not all native speakers know the rules of their own language.

While the monitor governs form and rules as they relate to language learning, the input hypothesis explains the method by which language acquisition occurs in adults. Fluency in a language requires both, opportunities for language learning, and opportunities for language acquisition. Regarding the acquisition of new constructs and content, research has shown that students that receive direction via comprehensible, contextualized, gradually more complex instruction in foreign language, develop communicative competence much better (Chater \& Christiansen, 2018; Eberly, 2018; Krashen, 1980, 1982, 1985; Krashen \& Terrell, 1983). This is what Krashen refers to as comprehensible input (Krashen, 1982, 1985). Students with no knowledge of a language benefit from a scaffolding approach to language acquisition whereby they receive input (i) at the mastered level, plus input from the next level (i+1). In other words, input theory
indicates that once a student masters a particular construct, they receive comprehensible input, and they are incrementally challenged by language input at the next logical level of difficulty (Chater \& Christiansen, 2018). This keeps students learning but not overwhelmed and is one of the foundations of language course structure.

The Natural Order Hypothesis relates a predictable order of acquisition of grammatical structures (Krashen, 1982, 1985; Krashen \& Terrell, 1983). Like the Input Hypothesis, this construct relates more to language acquisition, not language learning. Krashen noted that the natural order of acquisition is not the same between L1 and L2 (1982).

Based on the Affective Filter Hypothesis, variables such as comfort, motivation, and self-confidence assist to lower the affective filter, anxiety, lack of motivation and low self-efficacy raise the affective filter and do not allow for learning to take place as easily (Krashen, 1982; Krashen \& Terrell, 1983). Students experiencing language anxiety experience negative effects on language acquisition (Lababidi, 2016). In other words, a raised affective filter inhibits input from reaching the Language Acquisition Device and does not allow it to engage (Krashen, 1982). Therefore, pairing the complexity of language cognition with high anxiety situations that may cause a student stress could inhibit the student's linguistic progress. For students with common backgrounds, learning a new language in a community or group such as an ESOL classroom, lowered anxiety levels result in a relatively low affective filter which facilitates language cognition (Ciriza-Lope et al., 2016). In lowering the affective filter in the educational environment, a student needing to increase their competency in a foreign language will be able to focus
more on the material and language input presented. There are several ways to lower the affective filter: help the language learner to feel more comfortable, create situations that boost the learner's self-esteem, lower fear and embarrassment, and stimulate the learner's interest level in the material (Gallagher, 2013). A low affective filter is said to be among the most important factors in language learning as it emboldens learners to take risks in producing utterances (Ciriza-Lope et al., 2016; Gallagher, 2013).

Opponents of Krashen's theory point to some of the less defined terminology and concepts used as being inadequate to refine the methodology behind the teaching of language concepts while maintaining that this theory, by moving away from prior strict grammar-translation or audiolingual methods, is appropriate (Rasakumaran, 2020).

## Review of the Broader Problem

## Hispanic and Non-Native English-Speaking Hispanic Students (HNNESS)

Projections of Hispanic population in the United States show an increase of twice the current numbers between the years 2018 and 2050 (Stokes-Brown, 2012). By the year 2020, a quarter of the students enrolling in K-12 will be Hispanic or Latino (Maxwell, 2012) and within the next 2 decades, Hispanics will comprise most of the student population overall (Eberly, 2018; Murdock, 2015). Of the Hispanic students that do pursue a degree in higher education, a high percentage attend a community college; however, only about half of those individuals transfer from community college to a 4year institution (Crisp \& Nora, 2010; Krogstad, 2016). Community college is a preference for Hispanic students even after considering typical decision-influencing variables such as prior educational experiences (Smith Morest, 2013).

Hispanic student completion rates also convey noteworthy data. The number of students entering college versus the number of students completing and getting a degree is lower for Hispanics (Krogstad, 2016; NCES, 2016). Overall, persistence and completion rates for students of color are lower than their non-minority counterparts (Crisp \& Delgado, 2014; Crisp \& Nora, 2010; Ryan et al., 2016; Stewart et al., 2015). High risk factors with this population such as socioeconomic status may affect persistence and completion (Jimerson et al., 2016). Higher education institutions do not retain Hispanic students at the high rates they do non-minorities in part because students of color need a defined educational pathway with academic support (Fong et al., 2016).

Hispanics also stop out, drop out, and do not start at greater rates than nonminorities (U.S. Department of Education as cited in Benítez \& Dearo, 2004). While Hispanic students realize the value of an education for economic mobility and better life opportunities (Abbott, 2018; Arbelo-Marrero \& Milacci, 2016; Eberly, 2018), less than half plan to register in a degree-granting program and less than a third attain a bachelor's degree (Flores et al., 2017; Krogstad, 2016). For the United States to remain competitive across the world, degree attainment among students of color must increase (Crisp \& Nora, 2010; Richards et al., 2018). Hispanic students make up the most under-educated population in the United States (Flink, 2018). For institutions of higher education to meet the needs of Hispanics studying at their institutions, viable interventions should be identified and implemented early. Implementing interventions even as early as high school has been found to increase college-going academic performance (Berbery \&

O'Brien, 2018). Research to understand the distinctive challenges confronting this population will help to inform institutional policies (Flink, 2018).

Many Hispanic students experience barriers that are cultural and programs that take this into account to celebrate cultural diversity and the family-centric nature of the Hispanic culture, approaching student learning from a strengths model rather than a deficit model, are more successful (Doran \& Singh, 2018; Sibley \& Brabeck, 2017). Because of the Hispanic students' cultural differences, they may have different outside influences and viewpoints than non-Hispanic students (Ciriza-Lope et al., 2016; Hodara, 2015). Parental influences impart strengths that can positively impact students' academic performance and that can be leveraged when creating community relationships (Sibley \& Brabeck, 2017). For example, in the Hispanic culture where family plays a key role (Arbelo-Marrero \& Milacci, 2016; Ciriza-Lope et al., 2016), it is important for the learning environment to feel relational and for the HNNESS to feel part of a community (Arbelo-Marrero \& Milacci, 2016; Doran \& Singh, 2018). Regarding non-native Englishspeaking students, Bronfenbrenner (as cited in Arbelo-Marrero \& Milacci, 2016) defined their learning environments as a Microsystem:

A Microsystem is a pattern of activities, social roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical, social, and symbolic features that invite, permit, or inhibit engagement in sustained, progressively more complex interaction with, or activity in, the immediate environment. (p. 32)

Other Hispanic students experience barriers that are grounded in linguistic difficulties. Specifically, for non-native English-speaking students, the most significant barrier is a lack of preparation in the English skills of reading and writing (Crisp \& Delgado, 2014; Schwartz, 2011). This is a linguistic issue distinct from the underpreparedness that might cause HNNESS to end up in DE courses, but it is often misunderstood to be the same difficulty. Likewise, many HNNESS are misidentified as special needs in public school, which causes them to end up in courses for students with disabilities (Hoy, 2018; Kangas, 2017).

Due to there being many categories or types of non-native English-speaking students, there is a misconception as to the characteristics of HNNESS. Some HNNESS are immigrants that have arrived to the United States at varying ages and stages along their educational journey (Abbott, 2018; Roberge, 2002). Of the 41.3 million immigrants that reside in the United States, approximately 47\% are Hispanic (Sibley \& Brabeck, 2017). Multiple HNNESS types exist that relate to varying levels of English language skill attainment, some of which are: Generation 1, Generation 1.5, international students, and undocumented students (Abbott, 2018; Asher et al., 2009; Roberge, 2002). In addition, within each of these groups, for example, international students, the students possess a diversity of language acquisition levels (Knoblock \& Youngquist, 2016; Schwartz, 2011). Nationwide, it is important to note that not all Hispanic immigrants are non-native English-speaking individuals and not all non-native English-speaking Hispanics are immigrants (Olvera, 2015). A large majority of designated non-native English-speaking students are born in the United States (Gándara, 2015). Of the

HNNESS that are both immigrants and native born, some have attended public school in the United States prior to attending college (Olvera, 2015).

Academic writing courses present non-native English-speaking students with challenges when those courses serve as prerequisites for other, higher level courses (Braine, 1996). HNNESS, depending on the time they have been in the country and speaking English, need to acquire an academic English vocabulary and understanding in order to successfully complete their academic programs (Jacobs, 2016). HNNESS that began their English language instruction in the public schools in the United States have unique difficulties. The language that individuals learn and speak daily among friends is very different than the language that is needed to succeed in academic coursework (Jacobs, 2016). These students have often acquired a level of social linguistic competence that makes them seem English proficient even though their academic linguistic competence has not been fully developed (Olvera, 2015; Ousey et al., 2014; Rivera et al., 2008; Schwartz, 2011).

Cummins differentiated Basic Interpersonal Communicative Skills (BICS), which referred to social linguistic skills, from Cognitive Academic Language Proficiency (CALP), which referred to the academic language necessary to be successful in college (Cummins \& Ontario Inst. for Studies in Education, T. B. E. P., 1979; Cummins, 1999). Students who do not already possess the skills to successfully manipulate the academic register of English must receive targeted input and instruction that will help them acquire it. While non-native English-speaking students that lack CALP must progress in their academic linguistic formation, they also need to keep up the pace and progress with
academic content while simultaneously developing academic linguistic competence in English (Rivera et al., 2008; Rolstad, 2017; Russell, 2017).

Data show that Hispanic students that are more comfortable in Spanish achieve a higher GPA than Hispanic students that prefer English when comparing students with similar backgrounds academically (Crisp \& Nora, 2010; Fong et al., 2016). English as a first language for Hispanic students does not predict achievement in either retention or completion (Fong et al., 2016). Therefore, between the recent influx of Hispanic population that has come from migration (Murdock, 2015), and the number of nativeborn students that are non-native English speakers (Gándara, 2015), the research undertaken in this study should provide timely and urgently needed information to all stakeholders on how HNNESS should maneuver from intake through the first required college-level English course and on to completion. It is vital that Hispanic students who are underprepared obtain the support they need to succeed (Nora \& Crisp, 2012).

## DE English Versus ESOL

While both DE English for native English-speaking students and ESOL for nonnative English-speaking students are considered English-language DE tracks according to the state Coordinating Board for Higher Education, they are not equal in pedagogy. Mainstream DE and college-level courses are not designed for limited English proficient non-native English-speaking students (Crisp \& Delgado, 2014; Hodara, 2015; Rivera, Moughamian et al., 2008; Schwartz, 2011). The regular DE English faculty would need specialized professional development to teach English to the distinct linguistic and cultural needs and varying levels of acquisition of HNNESS (Ciriza-Lope et al., 2016;

Doran \& Singh, 2018; Gándara, 2015; Hodara, 2015; Russell, 2017). There is a lack of empirical research on the professional development of DE faculty (Doran \& Singh, 2018). ESOL faculty members and teachers have specialized training as a job requirement (Gándara, 2015; Monroe, 2018; Rivera et al., 2008; Russell, 2017) that gives them focused training to support the linguistic and cultural difficulties occurring external to, and contributing to, students' content area difficulties (Ciriza-Lope et al., 2016; Russell, 2017).

## Developmental English and Hispanic Students

Nationwide, there are various approaches for non-native English-speaking students to enter and satisfy the college-level English requirement (Braine, 1996). Some programs place non-native English-speaking students into DE English courses while others provide ESOL courses for non-native English speakers (Braine, 1996). There are institutions that place non-native English-speaking students directly into mainstream courses and other institutions allow students to make a choice as to which pathway to enroll in (Braine, 1996).

The original intent for DE systems was to create a remediation program to assist students that enter college underprepared or without basic skills to be successful once they attempted college-level coursework (Patthey-Chavez et al., 1998; Stewart et al., 2015; Valentine et al., 2017; Woods et al., 2017); however, DE has been proven to be a barrier to college completion (Bracco et al., 2015). Approximately 60\% of FTIC community college students enroll in DE courses due to a need for English or math remediation (Bailey et al., 2010). Non-credit-bearing DE Math and English courses
overall have become an academic "Bridge to Nowhere" with more than half of all students and $58.3 \%$ of Hispanics in 2-year colleges needing at least one course (CCA, 2012; NCES, 2016). Students of color overall are overrepresented in DE across the nation (Crisp \& Delgado, 2014; Parker, 2012) with the percentage of Hispanics lacking academic preparation and requiring DE coursework disproportionately higher than that of non-minorities (Athanases et al., 2016).

Completion rates are low for students that require remediation (CCA, 2012; Crisp \& Delgado, 2014; Edgecomb, 2016; Stewart et al., 2015). Studies additionally show that DE negatively impacts community college students' likelihood to persist (Ran et al., 2019; Valentine et al., 2017). If these students do enter college and continue without dropping out, it is possible for them, depending on their entry level basic skills, to delay or forego any actual college credit for an entire semester, sometimes up to a full year or more, while they are completing their pre-college-level basic skills courses (Hodara, 2015; Ran et al., 2019; Scott-Clayton \& Rodriguez, 2014; Smith Morest, 2013). This is particularly true of HNNESS that enter college (Nora \& Crisp, 2012).

DE research trends and state legislation in many states lean toward less pre-college-level remediation coursework and toward redesigned models that accelerate students through the pipeline to college-level academic courses as soon as possible (Bracco et al., 2015; Finkel, 2018; Lass et al., 2014). Policymakers and educators nationwide have come to question the efficacy of DE courses as a stand-alone model (Bracco et al., 2015) and feel that if students are able to acquire college-level coursework more quickly, they will spend less time with remedial coursework that does not produce
degree-applicable credit hours (Finkel, 2018). As the trend to decrease the amount of time students spend in DE coursework shortens DE programs nationwide, non-native English-speaking students, for whom time intensive language acquisition is a difficulty (Arbelo-Marrero \& Milacci, 2016), will be placed at a greater disadvantage if they pass through a condensed program. For HNNESS, acquisition of the appropriate academic register of English language can take around five to seven years (Cummins, 1981; Ousey et al., 2014). This impedes the non-native English-speaking students' ability to complete an academic program particularly in states where the penalty for unsuccessful completion of the DE sequence within a specific time frame is dis-enrollment (Goen-Salter, 2008). In programs such as these where remedial courses have been reduced or cut, the positive strides made on educational attainment and student success for minorities could suffer (Parker, 2012).

Nationwide, DE coursework is undergoing significant redesign. Some states have made DE optional for specific sub-groups of individuals and fully redesigned for others (Brower et al., 2017; Finkel, 2018). Other recommendations for DE program reform are to compress the program to address the specific areas where students are deficient and need extra instruction or support, break down the skills into separate modules, or contextualize the curriculum (Bracco et al., 2015; Brower et al., 2017; Finkel, 2018). These are strategies typically already used for ESOL program courses. Another recommendation revolves around mandatory advising for all incoming students, which is already seen as crucial for community college students (Woods et al., 2017).

## ESOL for Hispanic Students

Legislation between the 1970s and early 2000s saw languages other than English in a deficit model, as a problem to be solved, and progress was measured with assessments not designed for non-native English-speaking students (Gándara, 2015). In fact, due to assessments that were not created for non-native English-speaking students in the public K-12 school system, a disproportionately large number of non-native Englishspeaking students tested into special education (Hoy, 2018) which increased the stigma of assessment measures and non-mainstream pathways for non-native English-speaking students. Americanization was the priority in the public schools and many children learned the target language (TL) at the expense of their native language (L1) (Jacobs, 2016).

Some studies have considered the efficacy of integrating non-native Englishspeaking students into mainstream courses (Russell, 2017). When non-native Englishspeaking students are given access to content classrooms and integrated with individuals that speak the TL, they gain the ability to practice with native speaker peers and, provided the content area instructor has support from an ESOL coach, students may learn content while acquiring the language (Russell, 2017). However, non-native Englishspeaking students themselves have expressed that they were more comfortable in ESOL courses versus mainstream courses (Braine, 1996). Non-native English-speaking students reportedly also performed better and were more engaged and involved in ESOL sections versus mainstream sections (Braine, 1996). They were better able to lower their language anxiety and create safe zones where mistakes could be made without judgment through
the group membership of the ESOL classroom (Ciriza-Lope et al., 2016). The ESOL classroom learning environment mirrors the Microsystem defined above as being the optimal learning environment for HNNESS.

Instruction via input that targets various learning styles within the whole language spectrum, and addresses multiple intelligences, facilitates the learning of non-native English-speaking students (Alrabah et al., 2018). To that point, faculty members teaching within ESOL programs have specialized training in this type of ESOL curriculum, which is different from the training that DE English faculty members receive (Crandall \& Sheppard, 2004; Hodara, 2015). However, there is evidence that enrollment in ESOL programs has significantly delayed non-native English-speaking students' progress in three-year AA degree attainment (Hodara, 2015).

ESOL programs in general, and the one at LUPHI in particular, are much smaller and do give the experience of a learning community. Having access to information through other students that speak their L1 assists in knowledge acquisition particularly when these students are surrounded by others that speak their L1. They can study together to gain a better understanding and that helps them create a shared experience. There is a more controlled peer group with whom the students share a common cultural bond that helps them negotiate meaning within a particular speech community (CirizaLope et al., 2016), or microsystem. This has the effect of lowering the students' affective filter and increasing their sense of belonging (Ciriza-Lope et al., 2016).

Some HNNESS excel in their language study being that they see the study of the language as the one thing that will give them the ability to fulfil responsibilities related to
potential earnings and family duties (Ciriza-Lope et al., 2016). Other HNNESS often struggle with a strong sense of responsibility for practical matters and may perceive their time spent in language acquisition as a frivolity (Ciriza-Lope et al., 2016). These opinions and perceptions influence the non-native English-speaker's motivation to study and acquire the English language.

## Implications

This study attempted to identify a better process that could be created at the partner institution to achieve a completion agenda for the HNNESS population based on research, as well as institutional and national data that identify and reflect best practices. One anticipated option that could have resulted from the data analysis was a set of clearly defined pathways for post-assessment advisors to enroll HNNESS based on their CABS cutoff score. Those students scoring into the CABS low level should take the ESOL program ELSA to accurately level their English language abilities for the ESOL program courses. Those testing into the CABS high level might be better advised to enroll in DE English coursework pathway after taking the ELSA, depending on the ESOL program level they place into. Those HNNESS testing into college level that do not feel ready to take Freshman Composition I might better be served by enrolling first into ESOL based on the results of this study. In addition, based on the data analyses in future chapters, an alternate recommendation for future research is a co-curricular model created in the C DE pathway where those students testing into a particular CABS level combined with a specific range of ELSA score receive specialized ESOL instruction as an additional
component of the DE English program. This model has proven to be beneficial in other programs (Patthey-Chavez et al., 1998; Patthey-Chavez et al., 2005)

Additionally, multiple measures for placement such as high school GPA or additional test scores should be considered (Bracco et al., 2015; Finkel, 2018; Lass et al., 2014; Stewart et al., 2015; Valentine et al., 2017; Woods et al., 2019). In some institutions with more than one DE pathway that leads to Freshman Composition I, nonnative English-speaking students who do not place into college-level or who do not provide evidence of prior assessment that places them into college-level, are identified based on their CABS scores and are then guided into the appropriate pathway at the institution based on further evaluation of an assessment such as a writing sample (Hodara, 2015). Since a clear pathway to success in Academic English I did not surface in the analysis of the data collected using HNNESS' college level, high and low CABS cutoff scores, the recommendation was made for all HNNESS testing low or high on the CABS to take the ESOL program's ELSA as a mandatory requirement for all students who have specified first language other than English on the CABS background questionnaire or on the student portal splash page, or who have designated a preference for reading or speaking a language other than English on the CABS background questionnaire.

Other alternate options for HNNESS resulting from this analysis might be academic support in the form of specialized tutoring (Arbelo-Marrero \& Milacci, 2016; Eberly, 2018), writing assistance, language assistance, or bridges to academic coursework (Eberly, 2018; Valentine et al., 2017). Tutoring, academic support, and bridge programs
have been successful for DE students overall (Finkel, 2018). Peer support programs, special advising, mentoring, and a sense of caring community are all positive academic support systems as well (Arbelo-Marrero \& Milacci, 2016; Doran \& Singh, 2018). Culturally relevant activities and learning communities are particularly helpful for Hispanic students in the Catch the Next (CTN) program (Doran \& Singh, 2018) and those may be viable options to implement at this institution. Additionally, due to language barriers, many non-native English-speaking students do not have access to the important information contained in new student orientations, advising sessions, and academic support so promoting these support systems more or providing these resources in the students' native language as much as possible would benefit the students to know what they have available to them (Abbott, 2018; Eberly, 2018). In addition to learning communities and courses offered in the students' native language, there are benefits to blended coursework, flexible scheduling (Arbelo-Marrero \& Milacci, 2016), and servicelearning opportunities as a means of reflection and transitioning students gradually from developmental courses to college-level courses (Smith Morest, 2013).

The project resulting from this study promotes positive social change by addressing the educational needs of communities with typically lower SES and poor academic preparation (Roberge, 2002). These individuals likely experience less social and economic mobility than they would have had in their parents' home country and in fact, have been known to end up in a declining economic situation and feel forced to follow a higher education path to gain social and economic mobility (Roberge, 2002). Discovering best practices for HNNESS learning English to succeed in their goal of
language acquisition is one step toward providing them greater economic and social mobility (Abbott, 2018; Roberge, 2002).

Higher education experiences expand opportunities for them in career paths through enhancing the critical academic skills that they need to succeed (Eberly, 2018; Gámez et al., 2017). An analysis of the outcomes from the various pathways that these students take in a higher education situation while in the development of their English language skills and proposed viable strategies will likely provide opportunities for the partner institution to address disparities and inequities in their academic preparation. Additionally, with the expected population increase of HNNES individuals in the U.S. and their corresponding potential to affect the intellectual and economic landscape nationwide (Jiménez-Castellanos, 2017), identifying optimal pathways to support individuals who lack preparation to attain an academic formation will be critical (Nora \& Crisp, 2012).

## Summary

The problem presented in this study revolved around analyzing institutional archival data to determine if there were any interaction effects between the high and low CABS cutoff scores and the A-DE and C-DE English pathway or ESOL pre-college pathway on Freshman Composition I GPA that might indicate a pathway advising strategy for HNNESS that would yield better outcomes in Freshman Composition I GPA. The rationale to undertake this study stemmed from preliminary institutional data that supported positive outcomes in Freshman Composition I for non-native English-speaking students who had completed the ESOL pathway and the lack of institutional data that
describe the outcomes for HNNESS that complete the ESOL pathway and the A-DE or C-DE English pathway. There is a dearth of studies focused on identifying the appropriate CABS score to properly advise HNNESS into pre-college-level coursework.

This study will be significant to the institution under study in that it provides documentation of intentional analysis of data and a proposed project to implement that promotes Hispanic student success, and thus social and economic mobility, based on scholarly research. The research question focused on HNNESS who have completed the pre-college A-DE or C-DE English or ESOL pathway and if the interaction between that pathway and the students' intake CABS cutoff scores have an effect on Freshman Composition I GPA. The literature review presented information about theories on foreign language acquisition, Hispanic students, DE English versus ESOL, HNNESS in DE English, and HNNESS in ESOL. One possible implication of this work might be clear guidelines for advisement depending on college level, high or low cutoff CABS scores, the recommendation of non-native English-speaker-specific assessment, and the possible addition of a specific non-native English-speaking corequisite-based course or model for those students testing in the high-level cutoff on the CABS.

The remainder of this work presents the type of methodology used along with the justification for the design and how the design most adequately addresses the problem. It points out the goals of the evaluation and the expected outcomes. Section two details the population, size, and sampling strategy, as well as the criteria for data inclusion, exclusion, collection, and characteristics. It explains the origin of the data, and the location where the raw data are housed; there is a discussion of the reliability and validity
of the CABS and pre-assessment questions as well as the placement information and scores used for post-assessment advising. There is a description of the way the data were attained, and the analysis required to address the research questions. Access to archival data is discussed including permissions with permission letters available upon request. The scale for variables is explained as is an analysis as it relates to the RQ. The rest of section 2 discusses the assumptions, limitations, and scope of the study as well as the measures taken to protect participants' rights. The final part of section 2 covers the methodology used for data analysis and it contains the analysis of the data.

Section 2: The Methodology

## Research Design and Approach

The objective and scientific nature of quantitative studies allows for larger sample sizes, structured completion of the analysis, and more focus and control (Queirós et al., 2017). The two-factor ANOVA is the most appropriate statistical test for data sets containing two independent nominal variables and one continuous dependent variable. Since the research questions required data that arrived in interval and nominal format, this methodology was the most suitable. Completing the study using quantitative reasoning did not give robust contextualized interpretation behind the analysis conducted but did identify broad generalizations that stimulated recommendations based on the findings. The purpose of this research required a method that allowed for reliable results with the ability to repeat the analysis and where the generalizations made in the explanation of results could effect positive change for students. Changes that are made based on the findings will be easily tracked over time to see if the implemented changes resulted in positive outcomes for HNNESS thereby allowing for continuous improvement processes to occur at LUPHI.

The quantitative methodology used in this research study employed a statistical analysis in the form of a two-factor ANOVA using between-subjects variables. The two design factors in the ANOVA were CABS cutoff scores and pre-college pathway, the independent variables. Each factor contained three levels. The levels for CABS cutoff scores were college level, high, and low; the levels for pathway were A-DE, C-DE, and ESOL. The factorial design, therefore, contained nine groups. I used institutional archival
data to determine if the interaction of CABS cutoff scores (IV 1) and the pre-collegelevel pathway (IV 2) impacted the GPA in Freshman Composition I (DV) to understand if there were differences between the groups. I reviewed pairwise comparisons and conducted a post-hoc Tukey multiple comparison test to determine which group differed from the others. The groups identified for this study were: Group 1: college level CABS scores and A-DE pathway coursework that lead to Freshman Composition I; Group 2: high CABS scores and A-DE pathway coursework that lead to Freshman Composition I; Group 3: low CABS scores and A-DE pathway coursework that lead to Freshman Composition I; Group 4: college level CABS scores and C-DE pathway coursework that lead to Freshman Composition I; Group 5: high CABS scores and C-DE pathway coursework that lead to Freshman Composition I; Group 6: low CABS scores and C-DE pathway coursework that lead to Freshman Composition I; Group 7: college level CABS scores and ESOL pathway coursework that lead to Freshman Composition I; Group 8: high CABS scores and ESOL pathway coursework that lead to Freshman Composition I; and Group 9: low CABS scores and ESOL pathway coursework that lead to Freshman Composition I. These were shown in Figure 1 on p. 2.

After an ANOVA has been carried out, if there is an observed effect, a post hoc test is the most viable way to discover where the effect occurs (SPSS tutorial, n.d.). The Statistical Package for the Social Sciences (SPSS) system allowed for a post hoc test to be run on the data to determine which level of the factors showed significant interaction effects. I chose a Tukey post hoc test as the best method to refine and identify interaction effects.

## Setting and Sample

The participant sample included all students that identified as HNNESS. All students who tested directly into Freshman Composition I and all students who took courses in more than one of the three pathways, A-DE, C-DE and ESOL, before attempting Freshman Composition I were excluded to evaluate students who originally took courses below college-level and who maintained a consistent pathway throughout their pre-college-level coursework. In a between-subjects ANOVA study, the assumption is that each participant should only contribute one data point so that the values remain independent (Laerd, n.d.).

For this study, institutional archival data collected through the state mandated CABS pre-assessment questions and scores were reviewed and analyzed. Archival data on Freshman Composition I GPA of HNNESS that completed Freshman Composition I and passed through either the ESOL, A-DE or C-DE pathway were provided. Because state legislation mandates that HNNESS may temporarily postpone the CABS until they have completed 15 hours of ESOL coursework or until they plan to enroll in a collegelevel course, whichever comes first (State Coordinating Board for Higher Education guidelines for the institution), the data requested were from the students' first attempt at the CABS. Since the CABS is repeatable, a student was considered HNNESS if they chose Spanish over English even once on any attempt of the CABS test for the background questions identifying first language or language of most comfort, or Spanish as first language on the student portal splash page.

I used all the population derived from the totality of HNNESS at LUPHI entering fall 2014 or after who attempted Freshman Composition I and who first passed through either the A-DE or C-DE English pathway or the ESOL pathway. According to the G*Power analysis calculator for two main factors in a two-way ANOVA, using an effect size of .25 to identify a medium effect, an alpha error probability of .05 for the confidence level, and a power of .80 , the total sample size should have been at least 128 participants. The total number of participants used was 815 .

The specific process to determine the membership of the sample is detailed in this section. From the totality of HNNESS at the institution as determined by the CABS background questions and institution's student information splash page, the sample was all the HNNESS who had CABS scores, who had passed through one of the three pathways, and who had completed Freshman Composition I. The specific data that were provided and numbers of students in each group are described below.

The data request generated two tabs on one Excel document. I saved the raw data in a password protected file to preserve the original data and created a copy that I worked with for coding purposes. The first tab contained the requested deidentified information concerning HNNESS Spanish-language-first status. There were three columns on the first tab with the students' answers to the CABS language background questions of language first, language read best, and language spoken best. There were no data in these columns for students who preferred not to answer.

There were two columns that listed the students' answers from the college student portal splash page for first language and home language. Again, these columns were
absent data if students skipped this page. For each of the students on tab one, there were two columns for each of the English language sections, Reading, Writing, and Essay, of the CABS. One column was the score for the section and the other column was the semester the section was taken. Within those columns with data present, a total of 3,601 students designated Spanish as their first language on the college student portal splash page, or language first, language they read best, or language they spoke best on the CABS background questions between fall 2014 and fall 2020. Of the 3,601 students that had designated Spanish, 2,499 had taken the CABS for the first time between the designated years. These 2,499 students comprise the corpus of HNNESS at the institution between the years of the study for whom the independent variable of CABS score was available. On this tab, I created an additional column titled "CABS Cutoff Score" and used annual institutional guidelines to identify the appropriate CABS cutoff designation per student of "college level,"" "high," or "low" for all 2,499 students.

The second tab contained the deidentified coursework and grades information for the 3,601 HNNESS at the institution. The columns on this tab included all coursework, A-DE and C-DE English and ESOL as well as Freshman Composition I grades for courses taken between fall 2014 and fall 2020 along with the semester the courses were taken. Between those years, 2,627 HNNESS students had attempted Freshman Composition I at least one time. Those students comprised the corpus of HNNESS at the institution between the years of the study for whom the dependent variable of Freshman Composition I GPA was available. I added a column on this sheet titled "Pathway" and for all 2,627 students, designated "College Level" for any student that only took

Freshman Composition I without taking any pre-college pathway. Then, I designated "ESOL" for any student that passed through the ESOL program, regardless of level they entered, "C-DE" for any student that took an integrated reading and writing course and Freshman Composition I the same semester, and "A-DE" for any student that took integrated reading and writing before taking Freshman Composition I regardless of any subsequent corequisite enrollment. I additionally designated "ESOL/DE" for students that crossed pathways. I then added a column titled "Freshman Composition I GPA" and entered the number equivalent of the Freshman Composition I grade for the student's first attempt at Freshman Composition I: 4 for an A, 3 for a B, 2 for a C, 1 for a D, and 0 for an F. Since I was not including the withdrawal, W, in this study, I entered that in the Freshman Composition I GPA as a W and subsequently removed those from the data after merging the two tabs.

The two tabs were then merged into one spreadsheet that contained all information for each student including both independent variables, the column created for CABS cutoff scores from tab one, and the column created for pathway from tab two, and the column created that contained the dependent variable of Freshman Composition I GPA on tab two. Once merged, there were 1,910 students that had data in all three columns of CABS cutoff scores, pathway, and Freshman Composition I GPA.

After merging the data, there were a few adjustments to the membership within the data set due to the study design. There were 12 students that took courses in both pathways, the ESOL and the DE English pathways, designated "ESOL/DE." Per study design, these students were removed from the data set to assure that the pathway data
remained free from cross-contamination. That left 1,898 HNNESS students in the study. Since this study focused on HNNESS that passed through a pre-college pathway, students that entered directly into Freshman Composition I without participating in any of the precollege pathways were removed. There were 980 students that fell within the category of students that tested directly into Freshman Composition I and did not take one of the three designated pathways. Because this study design focused on students that received a letter grade in Freshman Composition I, another 103 students were removed from the study due to a grade of W , withdrawal, on the first attempt. Of those 103 students, there were 45 from the A-DE pathway, 55 from the C-DE pathway, and three from the ESOL pathway. A total of 815 participants comprised the remaining data set with the distribution in Table 2. As can be seen from the data in Table 2, one of the nine groups for the ANOVA did not contain any participants. This was expected because students testing college level are much less likely to take a course two ranges down from their CABS placement cutoff score.

## Table 2

Sample Sizes for Each Group

| Pathway | College level | High | Low | Grand total |
| :--- | :---: | :---: | :---: | :---: |
| A-DE | - | 33 | 225 | 258 |
| C-DE | 9 | 336 | 186 | 531 |
| ESOL | 3 | 11 | 12 | 26 |
| Grand total | 12 | 380 | 423 | 815 |

## Instrumentation and Materials

The state where LUPHI is located mandates the CABS for all FTIC students entering college. As part of this exam, there are several background questions that the
state requests be included. Three of these questions are relevant to this study and were used as one of the primary methods to identify HNNESS. The relevant questions identify first language, language best read, and language best spoken. The CABS has been tested for reliability and validity by the state Coordinating Board for Higher Education. The assessment was created for use beginning fall 2013. The CABS test includes three basic skills assessments: reading, writing, and math. The writing portion contains two subsets, a multiple-choice section, and an essay. It takes approximately 5 hours to finish the exam and, while there is no set time limit for any of the sections, the test adjusts difficulty based on prior answers to questions. The CABS test is machine graded, and students receive their scores immediately. Beginning in 2017, if a student placed below ninth grade level, additional remediation in the form of a booster course has been required before standard DE is considered. This is designated by an ABE (Adult Basic Education) score in the students' results. Students testing into ABE were placed into the low CABS cutoff range.

The reading, writing, and essay CABS scores served as the only relevant data for the current study. The math score was not requested for this study since college-level skills in math are not a prerequisite to attempt Freshman Composition I. The "college level" scores for the CABS are the scores allowing students to enter Freshman Composition I, or college-level English. The "high" scores for the CABS are the scores allowing students to enter the C-DE pathway pairing DE English with college-level English. The "low" scores for the CABS require students to enroll in A-DE pathway or ABE English. Each student's scores in the three areas were evaluated and assigned a low,
high, or college level designation for their CABS based on placement into the English program. Students who do not feel confident with their English skills may take a level lower than their CABS scores indicate and, if a student completes the non-credit no-cost booster option successfully, they may take levels higher than their CABS scores indicate. Thus, CABS scores and pathway do not always correlate completely.

The data that were used for the dependent variable, GPA, were pulled from institutional archives. The students' GPA in Freshman Composition I was determined by converting the letter grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or F to a traditional number scale where $\mathrm{A}=4$, $\mathrm{B}=3, \mathrm{C}=2, \mathrm{D}=1$, and $\mathrm{F}=0$. Exact student scores are not stored in institutional archives. Any student not completing the first attempt at Freshman Composition I was removed from the study due to the inability to determine if the withdrawal was due to other than academic reasons. Raw data will be made available upon request from me.

## Data Collection and Analysis

The data analyzed in this study originated from archival data that the institution collects and maintains. Two offices provided de-identified data for this quantitative study. Letters granting permission for access to the data are available upon request. Since the college does not identify non-native English-speaking student status as part of the application process, for purposes of this study, there were two sources used to facilitate identification and designation of HNNESS status. One was the college student portal splash page. Within the institutional student portal, students are asked to designate a first language and a home language on a pop-up page as they enter the portal. For the purposes of this study, the data from the student portal splash page designated any
student that answered SPAN to the question on first language as HNNESS. Since home language is not necessarily indicative of first language, data from that question were not used. Some students may not feel comfortable answering the language questions, so they may skip this page if they prefer not to answer. The Director of Institutional Research has access to pull the information that students enter on the student portal splash page from institutional archives. The second source was from the CABS background questions. The pre-assessment background questions request students to identify their first language as "English," "Spanish," or "other," as well as the language they feel most comfortable reading and speaking as "English,"" "Spanish," or "other." As previously stated, HNNESS designation from the CABS background questions was identified as students that answered Spanish to any of these language questions: "first language," "language read best," and/or "language speak best." Again, students may prefer not to answer the language background questions for some reason, so they are not required to answer these questions as a prerequisite for taking the CABS exam.

While the scores for the CABS are immediately accessible to the institution and the assessment office enters those scores into the student records system, the college office does not provide immediate access to the database that houses the information gained from the supplemental CABS questions that identify language ability. Those data must be requested. The Director of Assessment provided these data to the Director of Institutional Research for each individual non-native English-speaking student that took the CABS so that the Director of Institutional Research could compile the two lists of HNNESS and pull the study data for analysis. The requests from both sources generated a
file of all HNNESS from fall 2014, the semester of first use of the corequisite model at LUPHI, through the most currently completed semester. These nominal data formed the preliminary participants list.

The IR office at the institution provided student information related to progression through specific course rubrics within the A-DE and C-DE English pathway and the ESOL pathway, CABS scores, and GPAs. The IR office provided the specific grade, A, B, C, D, F, or W, for any student identified as HNNESS in the first attempt of Freshman Composition I, if taken past the $12^{\text {th }}$ class date (state reporting date at which point, student withdrawal is recorded as a W on the transcript. Before this date, the student may drop the course without it appearing on their record). These ordinal data were only available for HNNESS that attempted Freshman Composition I. The Office of Institutional Research also provided for all students identified as HNNESS and having attempted Freshman Composition I, the first attempt CABS scores (which specify English language basic skills for college). Those data were converted to college level, high, and low cutoff scores based on the cutoff guidelines for the year the CABS test was taken and served as categorical independent variables. Additionally, for all students having completed Freshman Composition I and who are categorized as HNNESS, the IR office provided semester-by-semester coursework rubrics and course numbers for A-DE and C-DE English and ESOL pathways to assure the categorical pathway data were uniform and accurate.

Based on the data, which contained two independent categorical variables, pathway, and CABS cutoff scores, each with three levels, along with the continuous
dependent variable of Freshman Composition I GPA, a two-factor ANOVA was the most appropriate test design. Thus, the two-factor ANOVA should have generated nine interactions between independent variable levels: college level CABS cutoff scores and A-DE pathway, high CABS cutoff scores and A-DE pathway, low CABS cutoff scores and A-DE pathway, college level CABS cutoff scores and C-DE pathway, high CABS cutoff scores and C-DE pathway, low CABS cutoff scores and C-DE pathway, college level CABS cutoff scores and ESOL pathway, high CABS cutoff scores and ESOL pathway, and low CABS cutoff scores and ESOL pathway. These groups were illustrated above in Figure 2. As discussed in Table 2, there were no students that tested at the college level CABS cutoff score who took the A-DE pathway so data for that interaction are not present in the study analysis.

The two-way ANOVA main effect yielded a simple comparison between the pathways and Freshman Composition I GPA, and a simple comparison between the CABS cutoff scores and Freshman Composition I GPA. In running a two-factor design, the interaction effect would have shown any possible interaction between the two independent variables on the dependent variable of Freshman Composition I GPA. Therefore, the analysis of variance was able to identify statistically significant differences between the main effects and a post-hoc Tukey HSD test was run to determine where the differences occurred. This analysis derived logically from the problem in that it provides a method for ongoing data analysis of this population of students and their success rates. It also assisted in preliminary identification of effective pathways for HNNESS based on their CABS scores at intake. Since the institution provides course advisement based on
the CABS scores, this research should assist advisors to identify appropriate pathways for student success more quickly.

## Assumptions, Limitations, Scope, and Delimitations

The primary assumption of this study was that HNNESS who tested at a precise level would attain success at a higher rate by going through a specific pathway. Based on preliminary program data, one assumption of this study was that HNNESS who tested at a low CABS level would succeed better going through the ESOL pathway. This study additionally assumed that all instructors in each pathway present the material with a similar pedagogical foundation based on ESOL and DE English theoretical constructs presented above in the literature review.

There are several limitations of this study. It was not possible to consider any external factors that might affect student performance in their courses. Some of these factors may include socio-economic status, level of language acquisition and background, and time in country. This study did not request nor analyze the participants' success in the pre-college pathways, nor time in pathway; both of those may influence Freshman Composition I GPA.

The scope of this study included as participants all HNNESS taking a pre-college pathway, completing Freshman Composition I, and having taken the CABS. The data requested for the participants includes scores for first attempt at CABS which were converted to college level, high, or low score, grade in Freshman Composition I which were converted to numerical GPA, and pre-college pathway leading to Freshman Composition I of A-DE pathway, C-DE pathway, or ESOL pathway. Every individual
rubric and course number of pre-college pathway coursework was requested to assure that the students did not mix pre-college pathway between DE English and ESOL.

While many factors affect student success, this overall study did not evaluate factors outside of the scope of the above-mentioned population, CABS scores, GPAs, and pathways. This study acknowledges the delimitations of not evaluating the time in pathway nor the GPAs of the participants while they were in their pre-college pathway as those variables fall outside of the scope of the study. However, they are included later in Section 4 as items to include in further research.

## Protection of Participants' Rights

All data collected in this study were provided from institutional archives. All data were de-identified before being given to me by the IR office and I maintained the confidentiality of the records and documents by storing them on my personal passwordprotected external hard drive. All data provided by LUPHI were deleted after the study was performed.

## Data Analysis Results

## Data Results

A total of 815 HNNESS who completed at least one attempt at Freshman Composition I with a grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or F , and began their studies at the institution in one of the ESOL, A-DE, or C-DE pathways were used for the data analysis. The data for those 815 participants including the first independent variable factor of pathway, second independent variable factor of CABS cutoff score, and the dependent variable of Freshman Composition I GPA were imported into the Statistical Package for the Social

Sciences (SPSS) software. The descriptive statistics output for a general univariate linear model is below in Table 3. The number of participants within each variable group was not uniform.

Table 3
Between-Subjects Factors

| Variable | Categories | Counts | Frequencies | $\%$ |
| :--- | :--- | :---: | :---: | :---: |
| CABS Cutoff Score | College Level | 12 | 12 | 1.47 |
|  | High | 380 | 380 | 46.63 |
|  | Low | 423 | 423 | 51.90 |
| Pathway | C-DE | 531 | 531 | 65.15 |
|  | A-DE | 258 | 258 | 31.66 |
|  | ESOL | 26 | 26 | 3.19 |

The data were tested to verify that they met the key assumptions to carry out an ANOVA: (a) continuous dependent variable; (b) at least two independent variables that contain at least two levels each; (c) independent observations; (d) no significant outliers; (e) normal distribution of dependent variable residuals; and (f) equal variance of dependent variable residuals. Assumptions $a, b$, and $c$ have been met by the study design. Assumptions d , e, and f were verified using tests within SPSS as described below.

I used studentized residuals and boxplots to verify assumption $d$ to determine if there were significant outliers. There were no studentized residuals that were above $\pm 2.5$ standardized deviations away from the mean. Boxplots of the data also indicated that there were no significant outliers assessed as being greater than three box-lengths from the edge of the box. Therefore, the data met assumption d.

For assumption e, the Shapiro-Wilk test of normality was carried out to determine if there was a normal distribution of dependent variable residuals. The significance score indicated that the data were not normally distributed (Table 4), however, considering the fairly robust nature of ANOVAs regarding deviations from normality (Maxwell \& Delaney, 2004), I decided to move forward with the analysis.

Table 4
Shapiro-Wilk Test of Normality

| Pathway | CABS Cutoff Score | Residual for Freshman Composition I GPA |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | 0.938 | 9 | .557 |
| C-DE |  | 0.881 | 336 | .000 |
|  | Low | 0.898 | 186 | .000 |
|  | College Level | - | - | - |
|  | High | 0.897 | 33 | .005 |
|  | Low | 0.896 | 225 | .000 |
| ESOL | College Level | High | 0.750 | 3 |
|  | Low | 0.832 | 11 | .000 |
|  |  | 0.845 | 12 | .031 |

For assumption f , the assumption of equal variance, the Levene's Test output in Table 5 shows that there was no significant difference between groups, thus, the data provided do not violate any of the parameters of homoscedasticity. Therefore, having performed the various tests for the six key assumptions to carry out an ANOVA, and having found one significance score of concern that should be accounted for within the nature of the ANOVA design, I moved forward with additional tests.

## Table 5

Levene's Test of Equality of Error Variances: Freshman Composition I GPA

|  | Levene Statistic | Sig. |
| :--- | :---: | :--- |
| Based on Mean | 0.722 | .653 |
| Based on Median | 0.468 | .858 |
| Based on Median with adjusted df | 0.468 | .858 |
| Based on trimmed mean | 0.688 | .683 |

When testing for heteroscedasticity, as can be seen in Table 6 there was no significance found. The F-statistic reinforced the findings that the data points were dispersed closely to the mean: $\mathrm{F}(1,813)=0.099, p>.05$. This showed that the variance of the errors did not depend on the values of the independent variables. Therefore, the data were dependable and the differences in sample size per group should not affect the overall results.

## Table 6

$F$ Test for Heteroscedasticity ${ }^{a, b, c}$

| F | df1 | df2 | Sig. |
| :---: | :---: | :---: | :---: |
| 0.099 | 1 | 813 | .754 |

a. Dependent variable: Freshman Composition I GPA; b. Tests the null hypothesis that the variance of the errors does not depend on the values of the independent variables;
c. Predicted values from design: Intercept + Pathway + CABS Cutoff Score + Pathway

* CABS Cutoff Score


## Results in Terms of RQ

Figure 4 provides a summary of the mean values of Freshman Composition I GPA per pathway and CABS cutoff score as well as the error bar representation of the standard deviation of those data per level. The Freshman Composition I GPA mean values are clearly higher than either of the other two pathways with the A-DE pathway resulting in the lowest mean GPA among the three levels of the main factor of pathway. Before doing any analysis, there seems to not be a clear relationship between CABS cutoff score and Freshman Composition I GPA, although there may be an interaction effect between the college-level and high CABS cutoff scores and the ESOL pathway on Freshman Composition I GPA.

## Figure 4

Freshman Composition I GPA Mean Values and Standard Deviations per Factor Level


The research data were input into a two factor between-subjects ANOVA in SPSS. In this design, there were 7 degrees of freedom. The ANOVA output found in Table 7 showed a significant main factor for the independent variable of Pathway of $\mathrm{F}(7)$ $=1.348, p<.05$. There is no significant main factor for the independent variable of CABS cutoff scores nor for the interaction of Pathway and CABS cutoff scores being that $p>.05$ for both. Therefore, a statistically significant difference occurred in Freshman Composition I GPA for HNNESS with respect to the main factor of Pathway.

## Table 7

Tests of Between-Subjects Effects: Dependent Variable: Freshman Composition I GPA

| Source | df | F | Sig. |
| :--- | :---: | :---: | :--- |
| Pathway | 2 | 3.287 | .038 |
| CABS Cutoff Score | 2 | 0.324 | .723 |
| Pathway * CABS Cutoff Score | 3 | 1.772 | .151 |

Based on the results of that analysis, I rejected the null hypothesis posited in the Research Question (repeated below).

RQ: What is the effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS?
$\mathrm{H}_{0}$ : There is no effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS.
$\mathrm{H}_{1}$ : There is an effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS.

The results in the tests of between-subjects effects in Table 7 showed that there was not a significant difference in the simple main effect of the independent variable

CABS cutoff score on Freshman Composition I GPA, nor was there an interaction effect between pathway and CABS cutoff score on Freshman Composition I GPA; the statistically significant difference of .038 occurred with the independent variable of pathway. Therefore, among the explanatory variables, based on the Type III sum of squares, variable pathway was the most influential. Further analysis will determine which pathway might yield the highest Freshman Composition I GPA for HNNESS.

The univariate test carried out as part of the two-way ANOVA, based on the linearly independent pairwise comparisons among the estimated marginal means for the effect of pathway on Freshman Composition I GPA shown in Table 8, was $p=.041$. The univariate F-test reinforced the significance of Pathway on Freshman Composition I GPA showing $F(2,807)=3.287, p=.041$. Table 8 contains the pairwise comparison of effect of pathway on Freshman Composition I GPA produced by the two-way ANOVA conducted in SPSS.

Table 8
Univariate Tests: Effect of Pathway on Freshman Composition I GPA

|  | Sum of <br> Squares | df | Mean |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 9.105 | 2 | 4.552 | 3.218 | 0.041 |
| Contrast |  |  |  |  | Sig. |

Because there was no observed interaction effect between the independent variables, I did not need to run a Tukey HSD. However, if the lines in the profile plots showing the effects of pathway at each level of CABS cutoff scores, and the effects of CABS cutoff scores at each level of pathway cross, there is a greater likelihood for interaction effects. In reviewing the profile plot for the effect of pathway at each level of

CABS cutoff score, the lines were not parallel; however, they did not cross. This did not indicate an interaction effect present.

On the other hand, the profile plot for the effect of the variable of CABS cutoff scores at each level of pathway did intersect as shown in Figure 5. This serves as evidence that there might be an interaction effect between the independent variable of CABS cutoff score and the independent variable of pathway on the dependent variable of Freshman Composition I GPA.

## Figure 5

The Effects of CABS Cutoff Scores at Each Level of Pathway


Based on the lines in the profile plot intersecting, a post-hoc Tukey HSD test was carried out to verify that no interaction effects were present between the main effect of pathway and the main effect of CABS scores. The results of that test clearly showed no significant statistical interaction effect, regardless of the lines in the profile plot.

However, the importance of an interaction effect does not solely rely on it being statistically significant (Laerd, n.d.).

A pairwise comparison was carried out to identify where the significance in marginal means for Pathway occurred. As can be seen in Table 9 , the $p$-values showing significance of $p<.05$ are for ESOL-C-DE and ESOL-A-DE. The data identified that a significant difference in marginal mean occurred between the ESOL pathway and both DE English pathways with significance levels of $p=.013$ for ESOL-C-DE and $p=.018$ for ESOL-A-DE. With the mean difference between students taking the ESOL pathway and those taking the C-DE pathway being .780 and the mean difference between students taking the ESOL pathway and those taking the A-DE pathway being .716, there was a significant difference between the mean GPA for students taking the ESOL pathway regardless of CABS cutoff score. This reinforced that the variable of pathway did have an effect on Freshman Composition I GPA, and that the CABS scores did not have an effect on Freshman Composition I GPA. Students taking the ESOL pathway seemed to achieve higher GPA in Freshman Composition I than students taking the A-DE and C-DE pathways, especially for those testing into college-level, even though the ANOVA did not yield significant findings. See Table 10.

## Table 9

Pairwise Comparison: Pathway

| (I) <br> Pathway | (J) Pathway | Mean Difference (I-J) | Std. Error | Sig. ${ }^{\text {c }}$ | 95\% CI for Difference ${ }^{\text {c }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower Bound | Upper <br> Bound |
| C-DE | A-DE | -. $064{ }^{\text {a }}$ | 0.176 | . 717 | -0.410 | 0.282 |
|  | ESOL | -. 780 * | 0.314 | . 013 | -1.396 | -0.164 |
| A-DE | C-DE | . $064{ }^{\text {b }}$ | 0.176 | . 717 | -0.282 | 0.410 |
|  | ESOL | -. $716^{*}$, b | 0.303 | . 018 | -1.312 | -0.121 |
| ESOL | C-DE | .780* | 0.314 | . 013 | 0.164 | 1.396 |
|  | A-DE | $.716^{\text {a, * }}$ | 0.303 | . 018 | 0.121 | 1.312 |

a. An estimate of the modified population marginal mean (J); b. An estimate of the modified population marginal mean (I); c. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).
*. The mean difference is significant at the .05 level.
To refine the information concerning where the significance in mean difference manifested, Table 10 shows the simple main effects of CABS Cutoff Score on Pathway. In this pairwise comparison, for HNNESS with a College Level CABS Cutoff Score that took the corequisite pathway or the ESOL pathway, the mean Freshman Composition I GPA score was $-1.89(95 \% \mathrm{CI},-3.45$ to -.33$)$ points lower for the corequisite pathway than for the ESOL pathway and the significance was .017 .

## Table 10

Pairwise Comparisons: Main Effects

| (I) Pathway | (J) Pathway | Mean Difference (I-J) | Std. <br> Error | $\text { Sig. }{ }^{\text {c }}$ | 95\% Confidence Interval for Difference ${ }^{\text {c }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower Bound | Upper Bound |
| College Level CABS Cutoff Score |  |  |  |  |  |  |
| C-DE | A-DE | $-^{\text {a }}$ | - | - | - | - |
|  | ESOL | -1.889* | . 793 | . 017 | -3.445 | -. 333 |
| A-DE | C-DE | - b | - | - | - | - |
|  | ESOL | - b | - | - | - | - |
| ESOL | C-DE | $1.889^{*}$ | . 793 | . 017 | . 333 | 3.445 |
|  | A-DE | - ${ }^{\text {a }}$ | - | - | - | - |
| High CABS Cutoff Score |  |  |  |  |  |  |
| C-DE | A-DE | . 247 | . 217 | . 767 | -. 274 | . 767 |
|  | ESOL | -. 390 | . 364 | . 856 | -1.264 | . 485 |
| A-DE | C-DE | -. 247 | . 217 | . 767 | -. 767 | . 274 |
|  | ESOL | -. 636 | . 414 | . 374 | -1.630 | . 357 |
| ESOL | C-DE | . 390 | . 364 | . 856 | -. 485 | 1.264 |
|  | A-DE | . 636 | . 414 | . 374 | -. 357 | 1.630 |
| Low CABS Cutoff Score |  |  |  |  |  |  |
| C-DE | A-DE | . 035 | . 118 | 1.000 | -. 248 | . 318 |
|  | ESOL | -. 062 | . 354 | 1.000 | -. 912 | . 788 |
| A-DE | C-DE | -. 035 | . 118 | 1.000 | -. 318 | . 248 |
|  | ESOL | -. 097 | . 352 | 1.000 | -. 942 | . 749 |
| ESOL | C-DE | . 062 | . 354 | 1.000 | -. 788 | . 912 |
|  | A-DE | . 097 | . 352 | 1.000 | -. 749 | . 942 |

Note. Based on estimated marginal means
a. The level combination of factors in (J) is not observed; b. The level combination of factors in (I) is not observed; c. Adjustment for multiple comparisons: Bonferroni. *. The mean difference is significant at the .05 level.

As already seen in Figure 4 above, the bar chart illustrates the mean values and standard deviations for each factor. The data in the figure reveal higher GPA for HNNESS that passed through the ESOL pathway regardless of their CABS scores and a marked difference in those that scored College Level on the CABS. The mean data strengthened the analysis from the pairwise comparison concerning the effect of type of pathway on Freshman Composition I GPA of HNNESS. The data show that, regardless of CABS cutoff score, HNNESS that passed through the ESOL pathway achieved a higher mean GPA than HNNESS that passed through either of the DE English pathways. Therefore, because pathway did have an effect on Freshman Composition I GPA per the results of the ANOVA, the null hypothesis that there is no effect of CABS performance and type of pathway on Freshman Composition I GPA of HNNESS was rejected.

## Discussion of the Results

The variable of CABS cutoff scores caused no simple main effects and there was no significant interaction between the independent variable pathway and the independent variable of CABS cutoff scores on Freshman Composition I GPA for HNNESS. The lack of impact by the CABS cutoff scores variable could be caused by the CABS assessment itself. The CABS was not designed to serve as a language proficiency or leveling assessment. This study seemed to bear out the prior research that found that college entry
exams are not an accurate assessment for HNNESS entering college who need additional language acquisition assistance. Often, and particularly in the mainstream coursework and DE English pathways, HNNESS progress is evaluated with assessments designed for native English-speaking students (Gándara, 2015) when an assessment designed for nonnative English-speaking students could more adequately and accurately place them.

Based on the information in Figure 4, HNNESS that took courses in the ESOL pathway outperformed the HNNESS that passed through either of the other two pathways regardless of CABS cutoff score. Additionally, HNNESS that began their English study in the C-DE pathway that originally tested high or low on the CABS outperformed those that started in the A-DE pathway. The HNNESS that tested into the low cutoff on the CABS performed almost at the same level through all three pathways with the students completing the ESOL pathway exhibiting a slightly higher mean than those completing the corequisite pathway and the HNNESS that completed the C-DE pathway obtaining a slightly higher mean than those that completed the A-DE pathway.

The HNNESS that tested into college level on the CABS and who completed the ESOL pathway far outperformed the HNNESS that tested into college level and completed the corequisite pathway. There could be several reasons for this. The relative N is small for the students that tested into college level as can be seen in Table 2, with an overall total of 12.

Additionally, there is a very low N for HNNESS enrolled in the ESOL pathway overall. The low number of HNNESS enrolled in the ESOL pathway could be a result of a stigma surrounding the assessments of non-native English speakers and surrounding the

ESOL pathway itself. Both low Ns could be causing an anomaly. Students that complete the corequisite pathway are effectively taking Freshman Composition I at the same time as they take the corequisite course. One might assume that these students are receiving additional assistance alongside their college-level course which should hypothetically assist them much like having a tutor for the course. While that additional assistance may be a benefit for native English-speaking students, it is not designed for the non-native English-speaker. HNNESS do not have the time to assimilate the information and practice it before using it in the college level course within the corequisite model because they are essentially learning the course material and applying it for a grade within the same limited time frame.

The analysis carried out in this project study is significant for LUPHI due to the sizable population of HNNESS that comprise the non-native English-speaking student population at the institution. The numbers of self-identified HNNESS each year that were admitted to the institution numbered in the hundreds throughout the years of the study with the most being 485 in the 2014-2015 academic year cohort which was the first year of the study, the least being 373 at the mid-point, the 2016-2017 academic year cohort, and 407 in the most recent academic year, the 2019-2020 cohort. Since HNNESS are presented with such unique challenges obtaining the language needed to perform well in their college level classes (Jacobs, 2016), these study results should assist the institution in its desire to support the HNNESS population to achieve the appropriate level of academic English to succeed in Freshman Composition I and beyond, being that so many of the HNNESS begin their studies in pre-college-level coursework.

## Discussion of the Results in Terms of the Literature

Of the 3,601 students in the original participants list that self-identified as HNNESS per study guidelines, 686 of them never enrolled in any of the courses under study at LUPHI. An additional 271 began one of the pre-college-level pathways but did not continue into the college-level English class, Freshman Composition I. There were 286 HNNESS that attempted Freshman Composition I but withdrew on their first attempt before receiving a grade. The study data reflected the observation in the research that students that require remediation suffer low completion rates (CCA, 2012; Crisp \& Delgado, 2014; Edgecomb, 2016; Stewart et al., 2015). Following research and trends on Hispanic student persistence and completion (Crisp \& Delgado, 2014; Crisp \& Nora, 2010; Krogstad, 2016; NCES, 2016; Ryan et al., 2016; Stewart et al., 2015), these students did not persist with their education to completion of the first college-level English course. Students that either did not begin, stopped out, or dropped out before completion of Freshman Composition I comprised $35 \%$ of the entering HNNESS at the institution. This aligns to studies citing high Hispanic stop out and dropout rates (U.S. Department of Education as cited in Benítez \& Dearo, 2004).

For those students that enrolled and persisted, the results of this study suggest a specific pathway for students regardless of their CABS cutoff scores. The results reinforce research that indicates that negative consequences occur if HNNESS do not pass through an appropriate pathway of pre-college-level courses (Hodara, 2015). Since for non-native English-speaking students, a key problem is a gap in the target language skills of writing and reading (Crisp \& Delgado, 2014; Schwartz, 2011), placement of

HNNESS into appropriate courses could impact future success rates in all college-level coursework. According to the results of this study, it would seem that the intensive instruction and practice of these skills in the ESOL program, where students take separate courses to develop each skill set, seem to be beneficial for HNNESS and the results reinforce prior studies which have found that Hispanic students who enroll in the college with a college readiness gap must obtain adequate support if they are to succeed (Nora \& Crisp, 2012). Since the findings of research into the challenges that Hispanics face as they navigate their education should feed institutional policies (Flink, 2018), these data indicate a need for new policies at the institution to be informed by the results of this study.

Of the HNNESS who tested into college level and opted to take a lower level, the students that passed through the ESOL pathway achieved a mean difference in Freshman Composition I GPA score of 1.89 from those that passed through the C-DE pathway. Likewise, there is an observed difference between the HNNESS that tested into the high CABS cutoff range who passed through the ESOL pathway and those that passed through either of the DE English pathways. Students who tested into the high range of the CABS had a mean difference of .390 between ESOL and C-DE and a mean difference of .636 between ESOL and A-DE in Freshman Composition I GPA. Those HNNESS testing into the low range of CABS scores had a mean difference of .620 between ESOL and C-DE and .097 between ESOL and A-DE GPA in Freshman Composition I. According to these results, the HNNESS in this study who have opted for the C-DE or A-DE pathways were put at a disadvantage with the remedial curriculum when, according to research, what
they require is more targeted language instruction (Alrabah et al., 2018). For non-native English speakers who struggle with the concentrated instruction of a compressed pathway (Arbelo-Marrero \& Milacci, 2016), the condensed corequisite pathway, C-DE, may be a disadvantage to the HNNESS. This type of pathway goes in opposition to the needs of the HNNESS who require time for acquisition and intentional presentation of linguistic material.

Within both DE English pathways, HNNESS testing into both high and low ranges on the CABS received a higher GPA in C-DE than in A-DE showing that overall students who do not pass through the ESOL pathway do better in C-DE than in A-DE. Hypothetically, students testing into the low range on the CABS should be sent to the ESOL pathway for testing and for coursework, and those testing into high range should be required to take the ELSA exam for later placement determination. The DE English pathway was not designed for HNNESS with language barriers (Crisp \& Delgado, 2014; Hodara, 2015; Rivera, Moughamian et al., 2008; Schwartz, 2011), rather, it was designed to remediate college readiness gaps to assist students to acquire the skills to be successful in college-level work (Patthey-Chavez et al., 1998; Stewart et al., 2015; Valentine et al., 2017; Woods et al., 2017). This is the foundation for one of the recommendations that will be found in the project study area, that students that test low on the CABS must pass through the ESOL pathway.

## Discussion of the Results in Terms of the Framework

The data in Figure 4 show that the HNNESS that passed through the ESOL pathway did experience greater success overall, regardless of CABS cutoff scores, than
the HNNESS that passed through the A-DE or C-DE English pathways. The Language Acquisition-Learning Hypothesis (Krashen, 1982) which proposed that language acquisition that occurs later in life, such as in post-secondary education settings, limits the student's ability to acquire language (Berken et al., 2015), could account for the greater success of HNNESS in the ESOL pathway. Language learning takes place when rules are presented and the structure of language is learned (Krashen, 1982, 2003), particularly for adult language learners. In an ESOL classroom, students are presented with more than basic writing skills instruction. They are taught all aspects of language, including vocabulary, grammatical constructs where form and structure are emphasized, and reading and listening skills. Faculty members are specially trained to deliver L2 instruction and to scaffold learning to level appropriate linguistic input. Students in the ESOL pathway receive the extended time they need to process the rules and practice the concepts.

The study results might reflect that the students in the DE English pathways are not offered such an in-depth presentation of the English language. The greater success of HNNESS in Freshman Composition I GPA could be due to the curriculum being created with the assumption that students taking courses within the DE English pathways are native English-speaking students that require reading and writing skill enhancement, not English language instruction. Additionally, for the students in the DE English pathways, the primary impetus is that they complete the pre-college-level work as quickly as possible to achieve the goal of completion of the first college-level Freshman Composition I course within the first year. Since gaining a working knowledge and skill
set to produce an appropriate academic register of English can take an extended period of time (Cummins, 1981; Ousey et al., 2014), the HNNESS students in condensed DE English programs are put at a disadvantage and that could be an additional reason for the HNNESS passing through the ESOL pathway achieving higher GPA in Freshman Composition I than those that passed through the DE English pathway.

The Natural Approach hypothesis that Krashen devised appears to be evidenced in the data observed in this study which show that HNNESS in the ESOL pathway outperform HNNESS that have taken the A-DE pathway or the C-DE pathway courses. The results seem to support each of the five hypotheses within the Natural Approach, the Language Acquisition-Learning Hypothesis, the Monitor Hypothesis, the Input Hypothesis, the Natural Order Hypothesis, and the Affective Filter Hypothesis.

## Project Deliverable as an Outcome of the Results.

I recommend a project that proposes policy recommendations based on the data analysis and information from the theoretical foundation as a rationale. It includes a new policy of free mandatory ELSA testing, an assessment that is designed for non-native English speakers, for all HNNESS testing at the high or low levels on the CABS and mandatory ESOL pathway for those testing low on the CABS. I detail the benefits of more collaboration between the A-DE and C-DE English program and the ESOL program with regards to the availability of information, professional development, marketing, and more intentional advisement surrounding pathway options for students that are HNNESS.

Marketing materials should be designed with an intentional objective of moving
away from a deficit mindset toward an asset mindset surrounding the ESOL pre-college pathway and that additionally engage the sense of community that HNNESS value, per the broader conceptual findings in the primary literature review, as a part of the proposal. It also proposes a better use of the data metrics that are already collected by the institution on students' first language that are not currently being used to guide these students to become better informed about their choices.

The project is presented via a white paper format in the Appendix. It includes information pertaining to the problem, background, research questions, results analysis, and recommendations. The three recommendations are: 1) free, mandatory testing in the ESOL program for HNNESS who test low or high on the CABS, 2) better use of data metrics already available at the institution, and 3) increased collaboration between the two departments, the ESOL Department and the English Department. I have identified the appropriate data points to track that can serve as the evaluation and assessment for the project to be implemented. The implications for positive social change have been considered and discussed as they relate to the project study impact on these students.

Section 3: The Project

## Introduction

The project laid out below is a procedure proposal via white paper with specific recommendations that form the foundation of the proposed solution to the identified problem. There are three recommendations for implementation at the partner institution. The first, free, mandatory testing in the ESOL program for HNNESS who test low or high on the CABS and mandatory ESOL pathway for those HNNESS that test low on the CABS, should facilitate better placement advice from advisors to the incoming HNNESS. The second recommendation concerning use of the institution's current data metrics on HNNESS first language will assist with identifying the HNNESS as they take their first assessment, the CABS, and will inform the advisors which students need to progress to the ESOL department for additional testing and coursework. I also recommend, as a third recommendation, increased collaboration between the departments, the ESOL Department and the English Department, as well as the International Student Services Office. This should create a more unified approach to all aspects of the college experience for HNNESS. By implementing these recommendations, the institution will better support their primary student demographic and assist them to successfully complete their first college-level English course.

## Rationale

A policy/procedure recommendation with detail was chosen as the deliverable for the project study due to the relatively large impact that could be achieved by implementing a new procedure, initiating a policy of mandatory testing by the ESOL
program for all HNNESS testing low or high on the CABS, mandatory ESOL for those testing low on the CABS, better use of institutional data, and more collaboration between the English and ESOL programs to share information, create professional development opportunities, deliver positive messaging, provide advocacy information, and refine advising strategies. Institutions that are HSI should do more than enroll Hispanic students (Pennamon, 2019). They need to fully support them from enrollment through graduation, creating positive environments, assisting them financially, and employing faculty and staff that look like them in representative numbers (Pennamon, 2019).

## Review of the Literature

The literature review in this section was carried out primarily via Walden University databases such as ERIC, ProQuest, and Google Scholar. The search terminology used for the literature review included: non-native English-speaker, community college, assessment, ESL, ESOL, 2-year college, strategies, white paper, higher education, advising, Hispanic students, mentor, English language learner, intervention, advocacy, success strategies, testing, data metrics, transitions, professional development, teaching and learning, learning styles, motivation, completion, barriers, and persistence.

## Project Genre

White papers originated as a method of communicating governmental policy positions (Powell, 2012; Stelzner, 2007; Willerton, 2013). The first one was written by Winston Churchill in 1922 (Stelzner, 2004). They are a powerful instrument for organizing and disseminating coherent, illustrated content using research and evidence
for support (Powell, 2012; Rotarius \& Rotarius, 2016; Stelzner, 2007). Additionally, the white paper delivers information that is useful to the intended audience, not simply the promotion of a viable solution, and serves as an educational tool (Bly, 2020; Campbell et al. 2020; Stelzner, 2004; Willerton, 2013). White papers allow for a focus on the pain points of the intended audience, allow for them to quickly identify the problem, and help them see the possible solution (Stelzner, 2004, 2007).

White papers typically contain several sections that are relatively uniform: a cover page, a statement of the issue and background, presentation of the literature, purpose and design, analysis results, recommendations, conclusion, and references (Rotarius \& Rotarius, 2016). They typically contain useful and appropriate illustrations of the concepts and information presented in the document in the form of images, charts, and tables (Rotarius \& Rotarius, 2016; Stelzner, 2007). White papers should be broken down into smaller chunks of information with subheadings and bullet points (Stelzner, 2007) in order to maintain the attention of the audience. The white paper is one of the best vehicles to present recommendations for problems encountered in higher education.

## Assessment of HNNESS

Approximately 86\% of non-native English-speakers that are English language learners that complete high school in the United States enter the A-DE or C-DE track; only $14 \%$ enter the ESOL track (Hayward \& RP Group, 2020). There is a difference between the non-native English-speaking student that requires language stage development that takes place in the ESOL pathway and the student whose first language was not English but whose dominant language is English and who needs development of
basic literacy skills in the A-DE or C-DE pathway (California Teachers of English to Speakers of Other Languages [CATESOL], 1994). While both require development of CALP, the two types have different needs. Students in the ESOL pathway typically have goals of improving English skills whereas those on the English pathway have educational goals of completion and/or transfer (Hayward \& RP Group, 2020). Distinguishing between the two groups, the HNNESS that require development of English language skills and those that require development of English literacy skills, may be the foundation of pathway selection.

There are typically two types of placement assessments that non-native English speakers must take to enter an institution and be placed appropriately. They are CABStype assessments to assess basic skills and ESOL program assessments such as the ELSA for leveling into the ESOL program course sequence (Shaw, 2019). Assessments designed for native English speakers are not appropriate for the non-native English speaker (CATESOL, 1994). Standardized tests (such as the CABS) tend to focus on the negative and do not point out what students do well (Academic Senate for California Community Colleges, 2004). They consistently misrepresent the basic skills of students of color (Academic Senate for California Community Colleges, 2004).

All-or-nothing assessment is questionable as a means of non-native Englishspeaker placement and evaluating remedial student readiness for Freshman Composition I and other credit bearing classes (Comeau-Kirschner \& Shahar, 2019). The reliability of single measures for placement of non-native English-speakers is questionable (Maloy, 2019). Higher education institutions should be more introspective regarding their own
assessments of the Hispanic demographic groups on campus and should turn their gaze inward to programs and processes that may adversely affect their students of color (Castro \& Cortez, 2017). Failure to appropriately place NNES may hinder the college's ability to support its students equitably and effectively (Shaw, 2019).

The assessment process should identify placement through multiple measures (Academic Senate for California Community Colleges, 2004; Willett \& RP Group, 2017). Even the Educational Testing Service states that the TOEFL should not be used as the sole determinant for placement (RP Group, 2019). Some research recommends starting U.S. high school graduates in A-DE or C-DE pathways rather than in ESOL courses (Hayward \& RP Group, 2020). Some non-native English-speaking students will not have the HS data to place them within a multiple measures system (Willett \& RP Group, 2017). In that case, there are other methods such as guided self-placement which can additionally reinforce the asset narrative (RP Group, 2019; Willett \& RP Group, 2017).

There are several measures that could be used to place non-native Englishspeaking students in addition to the CABS and ELSA assessments, two of which are high school GPA and ACT or SAT subject area test scores as an indicator of placement (Barbitta \& Munn, 2018; Hayward \& RP Group, 2020). Some additional examples of multiple measures for non-native English speakers that are a little more complicated to collect include how many years the student has been in the United States, the student's language use in the home (Academic Senate for California Community Colleges, 2004), and the student's prior formal education and years studying English (Willett \& RP Group,
2017). The above information can be asked in several different formats such as interviews, standardized tests, and holistic scoring processes.

There are several guidelines for testing that are necessary for non-native English speaker assessment and placement. There should be direct measures of language ability such as written essays or oral interviews, and they should be graded by individuals that have the experience to rate the responses (CATESOL, 1994). When requiring a writing sample, it is better for the students to have the prompt beforehand so that they do not waste time formulating a response and they can focus on their writing formation (RP Group, 2019). Additionally, timed writing could negatively impact students (RP Group, 2019). Timed writing allows non-native English-speakers little time to think and less time to review their response to make revisions (RP Group, 2019). ESOL programs should create a retesting procedure as well (RP Group, 2019) to motivate the students to exit levels by retest. Some institutions have had some luck with the use of guided selfplacement as part of the placement process (RP Group, 2019).

## Data Metrics

As an extension of the placement process, tracking of the placement related to persistence and completion is key. In California, analysis shows that very few who take the CABS enroll in English or ESOL (Beam et al., 2019). These are the students that do not start. Data on HNNESS that simply do not enroll after expressing an interest further informs placements and barriers to enrollment. When a student does decide to enroll, for students that choose the DE English pathway, high school GPA tends to predict completion of Freshman Composition I and for those students who choose the ESOL
pathway, the student's starting point in the ESOL program course sequence and the overall complexity of the ESOL program course sequence impact the student's completion of Freshman Composition I (Hayward \& RP Group, 2020). Additionally, institutions need to track student progress between the ESOL and English pathways (Hayward \& RP Group, 2020).

Students still need support once they pass beyond DE coursework and into college-level classes (Barbitta \& Munn, 2018). Freshman Composition I should be considered a milestone in the students' educational journey (Park, 2019). Other courses to monitor typically have been first year experience college orientation courses and discipline-specific preparatory courses such as History, Biology, and entry workforce courses (Academic Senate for California Community Colleges, 2004; CATESOL, 1994). More research is necessary to determine how the support systems and programs impact Hispanic students as well (Carales, 2020). Once provided with the data, an institution may make changes to address the gaps in a data driven and culturally responsive way (Castro \& Cortez, 2017).

Multiple variables may have an impact on completion: educational goals, background, primary language, age, race, ethnicity, gender, class, sexuality, highest educational level, income level, citizenship status, socioeconomic status, full-time or part-time enrollment, marital status, current employment status, current residency, residence classification, prior education, and class load (Beam et al., 2019; Carales, 2020; Castro \& Cortez, 2017; Coullie, 2020; Davaasambuu et al., 2020; Park, 2019). Additionally, the Academic Senate for California Community Colleges (2004) stated that
it is important to assess a student's study skills, English language proficiency, computational skills, aptitudes, goals, learning styles, career aspirations, academic performance, and need for special services. Research has shown that race and preferred language do not predict success in Freshman Composition I, and in ESOL, men progress less quickly than women in their academic formation (Park, 2019). A student's overall goals determine the extent to which they achieve a degree or certificate (Hayward \& RP Group, 2020).

## Collaboration Between Pathway Programs

Students have a stigmatized view of pre-college courses overall which applies to both the DE English and ESOL program courses (Academic Senate for California Community Colleges, 2004). In order to overcome the stigma, the advantages and disadvantages of each pathway should be clearly delineated (Maloy, 2019). Non-native English-speaking students who completed high school in the United States feel that they should not need further specialized ESOL courses in the community college (Academic Senate for California Community Colleges, 2004). That viewpoint is especially harmful to the HNNESS that would benefit from ESOL courses. Other non-native Englishspeaking students who have been in-country long enough that they feel comfortable in English may not identify as candidates for an ESOL program, and therefore may not enroll into the ESOL pathway (Hayward \& RP Group, 2020), thus making the need for asset mindset marketing of the ESOL program more crucial.

Housing the different pre-college pathways leading to Freshman Composition I in different departments in the college causes challenges with understanding expectations
and pedagogical philosophies that differ between the programs (Maloy, 2019). Thus, collaboration is even more essential. The lack of a united pre-college program for basic skills in writing impacts everything from assessment and placement to curricular sequencing and course learning outcomes (Maloy, 2019).

Research shows that mixing ESOL and native English-speaking students in an accelerated developmental program yields less student satisfaction overall while promoting better course success (Anderst et al., 2016). ESOL students in accelerated programs complete the second semester of Freshman Composition I at higher rates (Anderst et al., 2016). However, student satisfaction is greater in ESOL program courses due to sense of community and belonging (Anderst et al., 2016). There has been some success with mixed non-native English-speaker/native English speaker sections with supplemental instruction incorporated (Comeau-Kirschner \& Shahar, 2019).

Many community college students start their community college experience in continuing education courses (Academic Senate for California Community Colleges, 2004) that typically do not require the CABS before entry. Likewise, most adult nonnative English-speakers begin their English education in non-credit courses (Beam et al., 2019). The LUPHI ESOL program includes a component of continuing education in the lower 4 levels. Students who enroll in non-credit ESOL have the lowest rate of completion of Freshman Composition I (Beam et al., 2019). Since there are so few students who test into credit ESOL, it makes it difficult to identify if there is any correlation between scores and outcomes (Beam et al., 2019). It is important for the institution to evaluate how the students in CE courses are doing (Academic Senate for

California Community Colleges, 2004). Institutions should provide access to the data to evaluate students' needs; otherwise, it is difficult to evaluate the effectiveness of the programs and need for improvement (Davaasambuu et al., 2020).

Trends in California (Beam et al., 2019) have integrated CE and credit ESOL programs. They are reducing the number of levels of ESOL (Beam et al., 2019) and offer transfer level ESOL courses, using the CE option for unlimited repetition to assist the students to not damage their GPA for credit classes (Beam et al., 2019). Overall, threeyear completion rates for non-native English-speaking students that go through the A-DE or C-DE pathway are greater than those who take the ESOL pathway (Hayward \& RP Group, 2020). With A-DE and C-DE pathways, there are higher completion rates the closer to Freshman Composition I they place, and in ESOL, the farther below Freshman Composition I they place, the less likely the students are to complete (Beam et al., 2019; Park, 2019). In other words, the best predictor of student success in Freshman Composition I is placement level in the ESOL program (Park, 2019). The higher they place, the better the likelihood of completion (Park, 2019). Students in credit ESOL programs are typically headed to completion and transfer goals (Park, 2019).

To assure students understand the opportunities presented regarding the ESOL and DE English pathways, marketing of the different pathways needs to be uniform and accessible to all stakeholders (RP Group, 2019). Advisors, students, and faculty should be kept updated to not cause confusion (RP Group, 2019). The ESOL program needs to be marketed to assure that students know of their options and the benefits (Hayward \& RP

Group, 2020). The marketing and key website information should be accessible in Spanish as well for the HNNESS (Pennamon, 2019).

## Advising, Mentoring, and Student Support

There is a correlation between advising and retention (Pascarella \& Terenzini, 2005; Tinto, 1993). When there are low expectations of students, the students do not have high educational achievement (Rojas \& Liou, 2016). Deficit viewpoints create negative impacts for the student; advisors cannot approach interactions with minoritized students with a view to their deficiencies (Coronella, 2019). The deficit narrative needs to be challenged (Castro \& Cortez, 2017; Maloy, 2019). These students have a critical need for advising and mentoring (HACU, 2020). HSIs play an important role in supporting our Hispanic students to succeed and complete (HACU, 2020) and creating a culture of asset mindedness is critical. Approaching students with an asset-based paradigm promotes student success (Carales, 2020; Castro \& Cortez, 2017).

In an asset mindset, the student's linguistic skill allows them to take part in various diverse environments (Rios-Ellis et al., 2015). They gain abilities to change register through their experiences serving as interpreters for non-native English-speaking family members in professional situations such as in doctor offices and school conferences and they possess an ability to advocate for themselves (Rios-Ellis et al., 2015). There seems to be a correlation between non-U.S. citizenship and first language not English with success in persistence and completion (Carales, 2020). That could be because the community college environment is more suitable for and embraces students who are more diverse (Carales, 2020). Advising practices that are validating and
supportive are what HNNESS need (Coronella, 2019). Advisors and mentors should get to know the students on a more personal level to build meaningful relationships and allow students to elucidate on their assets. Creating meaningful relationships helps the students feel like they are valued as an integral part of the college community. These students do better when they feel a connection (Coronella, 2019). Advisors should participate with a fully engaged mindset (Coronella, 2019).

Advisors and mentors who want to connect with students and have meaningful conversations about students' culture may be given scripted conversation starters such as, "How does being a Latino/a impact you?" (Coronella, 2019). Questions such as this validate students' experiences and background. Such a supportive environment might produce benefits for both advisor and advisee. Hispanic students who create meaningful relationships with peer and faculty mentors report a greater feeling of belonging and are encouraged to set goals with leadership possibilities in mind (Excelencia in Education, 2019). Hispanic students are retained and persist at greater rates when they have better guidance such as clearly defined pathways and persistent, intentional advising (Excelencia in Education, 2019). Nationally, academic integration is not necessary for success (Carales, 2020). Institutions need to support students that are FGIC, low socioeconomic status, people of color by creating well-delineated pathways to completion (Castro \& Cortez, 2017).

Men of color, a demographic group with documented college readiness gap, also benefit from mentoring to help them receive the support they need to succeed in college (Gardenhire et al. 2016). There is empirical evidence that advising and mentoring
positively impact non-traditional student success (Hatch \& Garcia, 2017). Engagement in meaningful academic and social connections impacts students' persistence in community college (Hatch \& Garcia, 2017). Often, lip-service is paid to cultural relevance at institutions by bringing speakers and holding cultural events (Rios-Ellis et al., 2015). Instead, cultural relevance should be wrapped around the college success services (RiosEllis et al., 2015). Students who feel less culturally isolated feel more comfortable (Castro \& Cortez, 2017).

Cohort models work because of the trust developed in working with like groups of individuals (Pennamon, 2019). However, HNNESS live in a place of intersectionality; they experience a mix of family, education, and community life experiences and we should support their identities by creating opportunities to support them (Castro \& Cortez, 2017). Students experience financial difficulties and are food and/or housing insecure and bring intersectional identities that the institution needs to consider (Castro \& Cortez, 2017). The Hispanic demographic group overall lives in poverty in disproportionate numbers to other demographic groups nationwide (HACU, 2020). The power and oppression dynamic involved in all the sub-groups mentioned above affects the students' intersectional identities (Castro \& Cortez, 2017).

Hispanic students report that their role models are primarily family, and faculty and staff (Preuss et al., 2020) but have reported finding that the college has a focus on academics and does not take advantage of the students' cultural assets as well as their strengths and resilience (Rios-Ellis et al., 2015). Students report that they value someone who is encouraging and has information to assist them (Preuss et al., 2020). Hispanic
students value relationships with individuals associated with the college (Preuss et al., 2020) and at the same time, intersectionality causes complex experiences for students who may perceive they are alone or isolated in classes due to the lack of others "like me" for mentors (Castro \& Cortez, 2017). Having Hispanics in roles of leadership and mentoring to motivate Hispanic students to achieve their goals (Hispanic Association of Colleges and Universities [HACU], 2020) and faculty mentors are essential for student success (Rios-Ellis et al., 2015). Latinos are resilient and aspire to better themselves through education (Rios-Ellis et al., 2015). Their language is much more than a barrier to success (Rios-Ellis et al., 2015). Hispanic students that are FGIC may experience conflicts between family life and school life. However, connection to family is key to student success (Castro \& Cortez, 2017).

In addition to advising and mentoring, to promote student success, it is important to have college student support services such as: tutoring, academic advising, career development, counseling, disability support services, financial aid, and an advocacy center, (Rios-Ellis et al., 2015). The institution should assist Hispanic students in their seeking of assistance via scholarships, financial aid, and grants (Carales, 2020). These services provide important support for HNNESS in higher education institutions.

## Professional Development

Providing education to non-native English-speaking students within the community college needs to be a priority and, due to the length of time it takes for nonnative English-speakers to acquire an academic language register in English, all faculty members throughout the institution should be provided with the professional
development to support these students (Garrison-Fletcher, 2020). We should support students to acquire the academic language they need to succeed in college setting. Faculty members who teach the first-year experience courses need these skills because their courses are first ones that students enroll in.

The institution should intentionally build essential skills such as critical reading into the content of the curriculum (Coullie, 2020). The faculty need professional development in diverse content areas as well, in disciplines to pair linguistic outcomes with discipline outcomes (Garrison-Fletcher, 2020). The curriculum should teach students skills such as effective summarizing and paraphrasing which does not come intuitively to non-native English-speakers. (Coullie, 2020). Students need to learn vocabulary building in content areas as well as scaffolding to gradually increase rigor to make texts accessible (Coullie, 2020). Even small changes to the presentation of content could have a large impact for HNNESS, such as speaking clearly, enunciating, and avoiding colloquialisms (Coullie, 2020). It is important to be intentional about essential skills; they cannot be expected to occur incidentally (Coullie, 2020).

The institution should also have college-wide conversations between faculty, staff, and administrators about what it means to be an HSI (Pennamon, 2019). They should be a model for what it looks like to be Hispanic serving (Pennamon, 2019) and show what it is to value the HNNESS family culture by including the family in the programming (Pennamon, 2019).

## Project Description

For the project study, I decided on a white paper format to propose a change in procedure at the partner institution. Based on the data analysis and literature review, I proposed three recommendations: 1) free, mandatory ELSA for HNNESS who test low or high on the CABS and mandatory ESOL pathway for those HNNESS testing low on the CABS, 2) better use of data metrics already available at the institution, and 3) increased collaboration between the two departments, the ESOL Department and the English Department.

## Free, Mandatory Testing in the ESOL Program and Mandatory ESOL for Low CABS

Requiring mandatory free ESOL department ELSA testing for any student selecting Spanish on their first language question for the CABS background questions or for the question on the college student portal splash page will refine the information the advisors have at hand to place HNNESS more adequately into coursework. The corequisite pathway was designed for native English-speakers who lack basic skills to accelerate students through to Freshman Composition I quickly (Bracco et al., 2015; Finkel, 2018; Lass et al., 2014) and reduce the number of credit hours that are not degree applicable (Finkel, 2018). Thus, the mandatory exam will provide both programs with relevant data to better guide HNNESS to an appropriate pathway to achieve the goals of the institution of HNNESS completion of the first college-level English course.

The HNNESS that have completed the ESOL pathway received instruction on target language development, a scaffolding of academic writing skills, and presentation
of the necessary writing concepts along with instruction on linguistic competence and academic language proficiency. In the ESOL program, students that require targeted instruction in linguistic formation receive it at the same time they receive level appropriate content that scaffolds through the program up to a college level academic competency, due to the specialized professional development that ESOL faculty members receive as part of their formation (Gándara, 2015; Monroe, 2018; Rivera et al., 2008; Russell, 2017). HNNESS who test low likely need both, the language skills instruction, and the literacy skills instruction. They will receive both in the ESOL pathway. In addition, the courses within the ESOL pathway already focus on assisting students in the specific areas where they experience difficulty and target instruction by disaggregating the skills into individual sections and include curriculum where linguistic input is integrated with content within the curriculum (Bracco et al., 2015; Brower et al., 2017; Finkel, 2018).

## Better Use of Data Metrics

The institution has access to several data sets that it does not currently use to inform practices surrounding HNNESS. The recommendation is to download the identifying information for language first being Spanish to identify HNNESS as they take the CABS and as they enter their student portal at the institution. Using those data, better post-CABS advising can occur. There is also a need to examine the students who CABS test but never enroll or enroll and stop out or drop out.

Additionally, LUPHI needs to gain access to the data that are recorded in the student information system for CE students taking the ESOL classes. There is incomplete
information for the students that cross between ESOL and CE which needs to be rectified. The institution needs to evaluate the CE data because they are missing a valuable enrollment funnel for strategic enrollment management. (Davaasambuu et al., 2020) This is the primary rationale for the ESOL and DE English program to access the CE data.

## Increased Collaboration Between Departments

Since HNNESS attend all three pathways, ESOL, A-DE, and C-DE, collaboration between departments and faculty members in these programs is essential (Maloy, 2019). In order for the faculty not TESOL trained to adequately support linguistically diverse students, professional development will be key. While ESOL and DE English are considered developmental or remedial due to their pre-college-level identification, the pedagogical differences could be causing some of the observed results. The DE English pathway curriculum assumes that the students have learned academic writing skills and need support to remember and use the concepts students have learned in their native language. The mainstream instructors in the two DE pathways do not receive the professional development required to teach English to non-native English speakers who have specialized needs that contribute to content area difficulties (Ciriza-Lope et al., 2016; Crandall \& Sheppard, 2004; Doran \& Singh, 2018; Gándara, 2015; Hodara, 2015; Russell, 2017). When academic writing is a requirement for other, more advanced courses, challenges occur for non-native English speakers (Braine, 1996) who require pedagogical methodology that takes into account a wide variety of linguistic needs and acquisition methods (Alrabah et al., 2018).

Another recommendation revolves around mandatory advising, something already seen as a crucial intake component for incoming community college students (Woods et al., 2017). Advising should reach out to students to promote the program to HNNESS. Marketing that addresses the benefits of the ESOL program based on data driven research is key. Prior research that examines the cultural factors of HNNESS in education should not be discounted in the recommendation for asset minded marketing of the program. In ESOL programs, there are typically smaller class sizes and a learning-community type environment that feels relational, much like a social or familial relationship. For HNNESS, whose cultural background focuses on family with a key role at the center (Arbelo-Marrero \& Milacci, 2016; Ciriza-Lope et al., 2016), a relational learning environment is important for the sense of community (Arbelo-Marrero \& Milacci, 2016; Doran \& Singh, 2018).

Since there are a fewer number of students in the program and in each individual class, students in the ESOL pathway experience a closer relationship with each other and with other non-native English speakers. Many non-native English speakers express more comfort in ESOL programs than in mainstream courses (Braine, 1996). This closely relates to the affective filter which is an essential part of language learning. When the affective filter is lowered, students experience a greater sense of unity within their learning community (Ciriza-Lope et al., 2016). Students that feel more comfortable lower their level of anxiety and feel safe to make mistakes without fear of ridicule (Ciriza-Lope et al., 2016). They are able to create a peer group that bonds together based on common cultural ties where they share experiences with other students that share their L1 in a
cohort environment. Through these connections, they engage more and perform better (Ciriza-Lope et al., 2016). The ESOL pathway honors cultural diversity and according to research, programs that can leverage a student's differences are more successful (Doran \& Singh, 2018; Sibley \& Brabeck, 2017). HNNESS experience barriers due to cultural and linguistic obstacles that negatively impact their learning of content (Ciriza-Lope et al., 2016; Russell, 2017).

HNNESS that view language study as a positive step toward helping them attain their goals (Ciriza-Lope et al., 2016) will be more comfortable in an ESOL pathway, will be more successful, and will engage more with the material and course (Braine, 1996), and those that see it as inconsequential (Ciriza-Lope et al., 2016) will struggle in their educational attainment. Either viewpoint creates a great impact on the student's motivation and perception of higher education, which translates to persistence and completion metrics.

## Timeline for Implementation

This proposal includes various components that should be implemented in two phases as can be seen in Table 11. The first phase is the design phase. In this phase, approvals will be requested for the plan, all of the background processes such as creation of surveys and marketing materials, and website corrections need to be completed in preparation for implementation. The second phase will be to implement the plan and begin to collect data leading to assessments and recommendations for improvements based on identified problem areas as a continuous improvement cycle for the next year.

The processes should become institutionalized so that there is a consistent communication plan that goes out at regular intervals.

Table 11
Project Study Phases of Implementation

| Action items | Who is accountable? | Assessment |
| :---: | :---: | :---: |
| Phase 1 |  |  |
| - Approve mandatory ESOL department testing | - Administration | - Approval complete |
| - Create advising messaging | - ESOL and DE English in collaboration with advising | - Messaging campaign begun |
| - Create entry goals survey | - Administered by advising | - Collection and tracking of survey data. |
| - Pull baseline data metrics | - IR office | - Annual review and evaluation of effectiveness |
| - ESOL department and DE English department collaboration on website and information about new procedure | - Coordinators include information from both programs | - Website updated and PR monitors website clicks and sends to ESOL and DE English programs |
| - Create post-advising/mentoring survey | - Administered by advising or mentor | -Tracking of survey data |

## Phase 2

| $\bullet$ Implement mandatory testing for | $\bullet$ Administration approves plan | $\bullet$ Tracking of survey data |
| :--- | :--- | :--- |
| HNNESS in ESOL department, |  |  |
| • Begin to collect qualitative data <br> from students about the efficacy of | $\bullet$ Leads for each program, A-DE | $\bullet$ Use of information in marketing |
| each pathway to use in marketing <br> and messaging. | and C-DE English and ESOL | campaigns. |

The partner institution already has in place many of the resources that will be required to carry out the proposed project. Several departments at the institution will have to work together to pull data, analyze the information, propose course corrections, and implement changes. They will also have to collaborate on messaging between the ESOL program office and the English office where A-DE and C-DE are housed, as well as
reference each other's programs on the college website. Additionally, the International Student Services Office website should describe both programs and link to both.

Each of the programs is already led by an individual that is a content expert in the discipline of the program. Because this will be a collaborative effort between the programs, they will need to work together to assure the assessment, data collection, marketing, advising, tracking, and continuous improvement processes take place according to the proposed plan in the project study.

Regarding required resources, the institution will require staffing to accommodate the increased influx of ESOL department language exams. There will have to be a way to evenly distribute the exam grading throughout the faculty members in the program since they are the experts in the ELSA, the ESOL program assessment. All HNNESS testing low on the CABS and those students that test into levels below the level 4 and bridge level on the ELSA will be advised to take the ESOL program track. Those that test into level 4 or the bridge program will be advised as to the advantages of the bridge program and the A-DE or C-DE options. They may elect to take either pathway.

I do not foresee any potential barriers except for time to implement and budget to hire the additional staffing. The institution may need to be somewhat flexible in the implementation. Budget will need to be allocated for the new positions.

## Project Evaluation Plan

Various data points will serve as assessment tools to demonstrate how effectively the project addresses the needs of HNNESS at the partner institution. Data metrics that will be routinely evaluated will be summative data on student retention in course, and
persistence to completion of the first college-level English course. Student GPA in Freshman Composition I should continue to be monitored and evaluated as it relates to the added metric of ELSA scores.

HNNESS testing low or high on the CABS will be required to take the free ESOL department English language leveling exam (ELSA) and those that place low on the CABS must enroll in the ESOL pathway. This strategy should form the basis for further research and evaluation of HNNESS success within pathways. In other words, the same study shown here should be run using the ESOL program ELSA in the place of or in addition to the CABS. This research will assist students that are HNNESS to make informed decisions about how they proceed through the pathways to complete Freshman Composition I.

The IR office will collect the data and will deliver them to the ESOL and DE English programs. The data will be reviewed annually and input into each department's unit reviews. This will assist the programs with accreditation documentation, and it will assist the institution with information and documentation to justify the HSI designation.

Some students in the ESOL program do not want to complete a certificate or program; they are there to learn English to succeed in their work. The students will be given a pre-survey to identify their ultimate goals and will be put in touch with an advisor and a faculty mentor who can talk them through their options for both career and education. This will be done in their native language if they are more comfortable using that language. Once they have received information about possibilities, they will be surveyed post-advising and mentoring session to determine if their ultimate goals have
changed based on information received in these mentoring meetings. This will identify if the advising and mentoring opportunities are having an impact. Additionally, they will be tracked according to completion of their goals per what they indicated on the survey.

## Project Implications

The data produced from this project can be used for documentation of strategies that are specifically targeted to the Hispanic population and should aid in the HSI designation continuation. Based on that designation, the institution will be able to apply for grants and funds to offer further support services and scholarships to HNNESS. The recommendations for HNNESS could be expanded beyond that demographic to include other non-native English-speaking student types.

Through this project, the institution will be creating support systems that should assist the students once they decide what they want to do, to succeed in their coursework, to persist, and to complete. The advising and mentoring opportunities will aid students to build meaningful relationships with the individuals that can best advise them and could positively impact the student's empowerment in social situations. These are strategies and opportunities which will help them achieve greater social and economic mobility. This plan proposes to address the deficits experienced by HNNESS who often do not start a formal post-secondary degree plan due to numerous reasons, one of them being financial. This project promotes education for HNNESS so the student and community both benefit from more students completing degrees and certificates. Equitable access to educational opportunities is a key sociopolitical and economic agenda (Castro \& Cortez, 2017). Community colleges give Hispanics a more viable and more affordable pathway to
completion and certificate or degree attainment to promote social mobility (Carales, 2020). In making the adjustments proposed in this project study, the institution will be moving forward to further the futures of their HNNESS.

## Section 4: Reflections and Conclusions

## Project Strengths and Limitations

The strengths of this project are that this policy mandate results directly from the results of the data analysis concerning HNNESS retention, persistence, completion, and success in the courses that were part of this study. Specific strategies were identified that could be implemented to assist the HNNESS to succeed in Freshman Composition I, the first college-level English course. Specific data metrics were recommended to be tracked as continuous improvement cycles are run.

There were several limitations to this project. With the relatively small number of Hispanic participants in the ESOL pathway that completed Freshman Composition I, further empirical studies will be required to verify the findings of this report. Additionally, there were various variables that were not available for this study such as student generation or residency. HNNESS arrive to the country and to higher education with varying levels of language education, proficiency, and skills (Abbott, 2018; Asher et al., 2009; Knoblock \& Youngquist, 2016; Roberge, 2002; Schwartz, 2011). HNNESS who have been in the country for an extended period, and who may have attended public school in the United States (Olvera, 2015), may have acquired a diversity of scales of linguistic proficiency and competence that are related to the socially relevant BICS and not to the levels and registers that are related to the more educationally relevant CALP (Cummins \& Ontario Inst. for Studies in Education, T. B. E. P., 1979; Cummins, 1999). The first, BICS, are necessary to function well in society and among peers; the second, CALP, is a level of linguistic skill that allows an individual to manage and succeed in the
realm of higher education. In other words, these students appear completely competent and proficient in English due to their ability to accurately use informal, colloquial spoken language when, in fact, they lack the academic language competence in vocabulary, communication structure, and reading comprehension skills to succeed in their collegelevel academic programs (Jacobs, 2016; Olvera, 2015; Ousey et al., 2014; Rivera et al., 2008; Schwartz, 2011). The students' ability to use BICS and CALP were not assessed as part of this study.

Another limitation is that the data only come from one community college. While the ANOVA and analysis should make it standardized across institutions, there may be a variance in output based on the individual programs at other institutions. It was not possible to consider any external factors that might affect student performance in their courses. Some factors may include gender, socio-economic status, level of language acquisition, and time in country. This study did not request nor analyze the participants' success in the pre-college pathways, nor time in pathway; both of those may influence Freshman Composition I GPA.

## Recommendations for Alternative Approaches

In addition to the policy change that has been proposed, this project study could have moved in a different direction altogether. Studies have shown that non-native English-speaking students perform better when they are in a cohort with like-minded/ same language individuals that they can relate to. There are other studies that support putting non-native English-speaking students into mainstream courses. When non-native English-speaking students are given access to content classrooms and integrated with
individuals that speak the TL, they gain the ability to practice with native speaker peers and, provided the content area instructor has support from an ESOL coach, students may learn content while acquiring the language (Russell, 2017).

The results of this study support the idea that students perform better within the ESOL pathway. However, there are studies that also show that the same type of environment can be achieved by pairing courses across the aisle. The lower a student places in the ESOL program, the less the likelihood of success and persistence (Anderst et al., 2016). If the ESOL program could revisit the placement procedure and collaborate with the English department on a companion course, this would lend itself to shortening the time for HNNESS to achieve success in Freshman Composition I. Implementing a program with an ESOL course as a co-requisite to the regular Freshman Composition I with ESOL faculty members teaching the support class might offer the best of both worlds.

Students are more likely to complete their Freshman Composition I course successfully with acceleration in a C-DE model (Anderst et al., 2016, Barbitta \& Munn, 2018). This would help students achieve college-level status more quickly and still incorporate the elements of the ESOL program that are beneficial to non-native Englishspeaking students. This plan would necessitate a close working relationship between the ESOL department and the DE English department. This could be considered a type of "ESOL steppingstone" to arrive to Freshman Composition I (Hayward \& RP Group, 2020). A variation of this could be an ESOL section of Freshman Composition I. ESOL
programs with Freshman Composition I equivalent ESOL courses have better completion rates (Hayward \& RP Group, 2020).

Peer mentoring, coaching, supplemental instruction, and tutoring could be incorporated into these programs as well. Students are more willing to participate in this type of setting (Barbitta \& Munn, 2018; Comeau-Kirschner \& Shahar, 2019) where there are tutors embedded into the courses. This model has caused more English communication inside and outside the classroom as well as more voluntary interaction with the tutors outside of class (Comeau-Kirschner \& Shahar, 2019).

## Scholarship, Project Development and Evaluation, and Leadership and Change

The work contained in this project study reinforced for me how to construct a scholarly research paper, how to conduct a literature review, how to use statistics, and how to organize myself regarding literature review and article notations, references, APA formatting, and productive searches. Time management was a constant challenge due to competing priorities. The front matter was the most difficult for me to construct. The analysis and project were the most intuitive and quickest because the data lent themselves to straight-forward analysis. I was able to put together the project study very quickly due to the ideas that came about as I wrote the results section. The relationships between the data and research in the first section came together satisfactorily.

I have additionally learned about my own implicit bias and how to mitigate that through a matter-of-fact focus on the data and description of findings. I was also very aware that this work would be read by those with a vested interest in the findings and thus placed a high regard on respectful, professional, scholarly writing.

In developing the project, I focused on the end goal of student success and identified the recommendations that would most likely bring it about based on the analysis of the results. I have developed an understanding of the process behind creating a project to implement and how to explain the project, stressing the benefits to students along with the measurement metrics, both summative and formative assessments, and next steps beyond the implementation of the project.

I have always seen myself as a problem solver, as someone that works to resolve problems and propose viable solutions. It is my contention that the project study contained in this document will further student learning and should solve a problem that exists at the partner institution. Particularly, it will assist the student population most at risk at this institution.

## Reflection on Importance of the Work

The partner institution has collected these data for many years and has never used them in a meaningful way. This oversight has resulted in HNNESS perhaps proceeding through a less-than-optimal pre-college pathway. The implementation of this project at the institution will assure that the data that are collected are used to promote student success by assisting both programs and the advisors at the institution in their assessment of student placement and course advisement.

## Implications, Applications, and Directions for Future Research

The study would have benefitted from a larger sample group. It was difficult to say for certain where the statistical significance occurred due to a very low number of students in some of the groups and no students in one of the other groups. This was not
unexpected due to prior research showing that students in ESOL programs complete Freshman Composition I at lower rates than those in the DE English pathways.

Various extraneous variables were not able to be considered. Teaching style, home environment, background, time in country, gender, demographic information, socio-economic status, time in pathway, and success rates along the pre-college pathway were acknowledged as important but not part of the study. In addition, it was not possible to tell from these data if the ESOL pathway curriculum had an effect on Freshman Composition I GPA or if HNNESS that enroll in the ESOL pathway simply have a different motivation or mindset. This would make for an interesting future study.

To refine the study, collecting and disaggregating the above extraneous variable information would be helpful, particularly regarding the recommendations made in the project study. Based on the research in this paper, there are various variables that may have an impact on student performance and persistence and narrowing down the contributing variables would assist the institution to target specific groups with more focused academic support.

In this study, I assumed that all instructors in each pathway present the material with a similar pedagogical foundation based on ESOL and DE English theoretical constructs presented above in the literature review. A qualitative study of the individual instructional styles and curriculum in each pathway could add to the results and give additional information to refine the project study. Finding out the specific pedagogical foundations that correlated with higher GPA in Freshman Composition I might inform the professional development recommendation. Having read a few articles concerning the
attitudes of faculty members toward HNNESS students and students who have accents, the study could have benefitted from additional information about instructor implicit bias as well.

There are additional ways that this research could have incorporated qualitative measures. An addition of a qualitative portion to the study would assist in finding out why students stopped out, dropped out, or did not continue. Surveying students about why they chose the pathway they did, about why they withdrew, or why they did not continue could provide valuable information for all three pathways. Since it is notoriously difficult to collect data from students who have stopped out, dropped out, or never enrolled, a study could alternatively target students who continued in the program to completion of Freshman Composition I to see what helped them persist to completion of that milestone. Also, reviewing the quantitative data around HNNESS that persist through the gatekeeper general education courses and on to completion of certificates, degrees, and workforce courses might yield interesting results concerning pathways and overall completion at the institution.

CABS is an assessment not designed for non-native English-speaking students. It is not a linguistic competency assessment. The study would have benefitted from using the ESOL program ELSA scores in addition to the CABS scores to have a more accurate idea of linguistic competence and to refine the recommendation concerning advisement into appropriate pathways. Additionally, the institution should create a plan for the future to use multiple measures to assess HNNESS placement. When looking at placement, the ESOL program uses an assessment that does include direct measures of student language
aptitude in written form. The indirect measures used include a multiple-choice exam based on reading, grammar, and vocabulary. They additionally collect background information via pre-test survey. What the ELSA assessment does not do is evaluate skills that demonstrate that the student does not need ESOL instruction and should instead be placed in the relevant DE English course. In other words, there is a need to revise the placement process to discover a best practice of multiple measures for placing students into either the ESOL or the A-DE or C-DE pathways.

## Conclusion

Policymakers who feel that students should be pushed along to college-level coursework more quickly, spending less time with remedial coursework without regard to their speaker status and individual linguistic ability, should consider reexamining that recommendation for HNNESS based on these data. While HNNESS that test below college level do typically experience difficulty in production skills of reading and writing (Crisp \& Delgado, 2014; Schwartz, 2011), this is a linguistic matter disparate from the lack of academic preparation that might cause HNNESS to be advised into DE English courses, but it is often misunderstood to be the same difficulty. Decreasing the amount of time students spend in developmental English coursework might be putting HNNESS at a disadvantage due to the abbreviated time they are allotted for learning within the DE pathways. A more in-depth examination of these results with a larger participant group from the ESOL pathway should be carried out to determine if the results of this study are repeated on a larger scale. If so, policymakers may want to reconsider condensed
programs for non-native English speakers and recommend an ESOL intervention for them instead or in addition to what is already in place.

The data showed that HNNESS did better overall having passed through an ESOL program. However, due to the small sample size, more study is needed to determine the specific situations in which HNNESS excel, whether the ELSA exam assists in identifying appropriate pathway, and how to best place them within pathways based on the data available at the institution. Then, a holistic plan to promote HNNESS success based on this research should be implemented.

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Appendix: Project: Hispanic English Language Learner Pathways: Promoting College
Success



## Introduction

Hispanic non-native English Speakers who test below college level need assistance to navigate the multiple pre-college pathways available to them.

## What do these students need?

- Viable options informed by data
- Appropriate recommendations to direct them into relevant pre-college-level English courses based on their individual needs

The goal of this white paper is to provide the following:

- Presentation of the problem backed by research and data
- Recommendations and resources available to resolve the problem
- Suggested timeline and additional resources needed for implementation


## Refinement of the problem

The institution does not assign HNNESS into
[.] a pre-college-level English-language pathway based on their non-native English speaker status

Post-assessment advising is not obliged to refer English deficient HNNESS to the ESOL program office
7.] HNNESS are not required to enroll in the ESOL pathway
\(\left.\begin{array}{l}The institution collects data on a student's <br>
native language and preferred language <br>
during the assessment process and within <br>

the student portal\end{array}\right\}\)| HNNESS at LUPHI are not required to document |
| :--- |
| a sufficient level of English language |
| proficiency to satisfy requirements for |
| admission to the institution |

HNNESS at the institution are not advised
7. into an appropriate pathway based on data driven best practices.

The institution does not record a student's native language in the college student information database during the application admissions, and assessment processes

## Data research:

The interaction effects of the English assessment (CABS) and the pre-college English pathways as they relate to the grade point average (GPA) in Freshman Composition are not analyzed to determine best practices for guiding HNNESS into effective pre-college-level pathways.

## Background

## Institutional Race and Ethnicity Demographics

Hispanic students are the majority population at LUPHI comprising $62 \%$ of the student population (National Center for Educational Statistics Integrated Postsecondary Education Data System [NCES IPEDS], 2016).

That percentage roughly mirrors the population in the service area of $60.3 \%$ Hispanic (US Census Bureau, 2011).

Higher education institutions do not retain Hispanic students at the high rates they do non-minorities in part because students of color need a defined educational pathway with academic support (Fong et al., 2016).

## $\hat{0}$

With a graduation rate of $24 \%$, Hispanics complete and graduate at lower rates than any other demographic group at the institution that might contain non-native Englishspeaking students.

While Hispanic students realize the value of an education for economic mobility and better life opportunities (Abbott, 2018; Arbelo-Marrero \& Milacci, 2016; Eberly, 2018), less than half plan to register in a degree-granting program and less than a third attain a bachelor's degree (Krogstad, 2016; Flores et al., 2017).

| College | Fa 2014 | Fa 2015 | Fa 2016 | Fa 2017 | Fa 2018 | Fa 2019 | Fa 2020 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| White | $28 \%$ | $28.2 \%$ | 27.5 | 26 | 23.6 | 22.9 | 21.8 |
| Hispanic | $51.3 \%$ | $54.3 \%$ | 55.7 | 56.6 | 58.7 | 62.8 | 64.3 |
| Black | $11.9 \%$ | $11.4 \%$ | 10.8 | 11.2 | 10.9 | 8.6 | 8.7 |
| Other | $7.7 \%$ | $6.1 \%$ | 6.0 | 6.1 | 6.7 | 5.7 | 5.3 |

Note. Data pulled from the institutional Key Performance Indicator dashboard.

## Institution student population:

Predominantly Hispanic demographic that consistently trends above 50\%.
The multiple HNNESS types that relate to multiple residency statuses and varying levels of English language skill attainment from very little English proficiency to native English speaker:

- Recent citizens; permanent residents; refugees
- Undocumented students
- International students
- Generation 1: immigrants who arrived to the US as adults
- Generation 1.5: immigrants who arrived to the US as children or adolescents, as well as students whose parents fall within those categories and who taught them Spanish as their first language.
- Generation 2: students that were born in the US who had at least one immigrant parent. These children may have been taught Spanish as their first language but have typically grown up surrounded by English in their schools and communities.


## Literature Review



## To understand the impact of different pre-college pathways, it is important to understand the link between cultural and career goals on HNNESS' goals.

Hispanic cultural influences are a key factor in educational motivation and attainment (Arbelo-Marrero \& Milacci, 2016; Doran \& Singh, 2018). Within an English-only classroom, nonnative English-speaking students are not as likely to engage in experiences of collaborative learning and group work, their culture and language norms possibly not lining up with the demands or conditions of a mainstream English classroom (Liu et al., 2019).


This problem is compounded with Hispanic students due to their varying levels of acquisition and time in country (Abbott, 2018; Asher et al., 2009; Roberge, 2002). Non-native Englishspeaking students are more comfortable, more engaged, and perform better in ESOL classrooms (Braine, 1996).

However, lengthy ESOL pathways have been shown to delay degree completion in non-native English-speaking students that elect the ESOL pathway (Hodara, 2015)

In a mainstream course, faculty members are not TESOL (Teaching English to Speakers of Other Languages) trained and are not as likely to make corrections on student writing that non-native English-speaking students need to fill gaps in their language acquisition base (Monroe, 2018).

There is a difference between the non-native English-speaking student that requires language stage development that takes place in the ESOL pathway and the student whose first language was not English but whose dominant language is English and who needs development of basic literacy skills in the A-DE or C-DE pathway (CATESOL, 1994).

Students in the ESOL pathway typically have goals of improving English skills whereas those on the English pathway have educational goals of completion and/or transfer (Hayward \& RP Group, 2020). Distinguishing between the two groups, the HNNESS that require development of English language skills, and those that require development of English literacy skills, may form the foundation of pathway selection.

There are several measures that could be used to place non-native English-speaking students in addition to the CABS and ELSA assessments, two of which are high school GPA, and ACT or SAT subject area test scores as an indicator of placement (Barbitta \& Munn, 2018; Hayward \& RP Group, 2020). Some research recommends starting US high school graduates in A-DE or C-DE pathways rather than in ESOL courses (Hayward \& RP Group, 2020).

Only 5.8\% of all community college students in the state requirling remediation complete a degree or certificate to graduate In three years (Complete College America, 2012).
2020).

## Literature Review - continued

In California, analysis shows that very few who take the CABS actually enroll in ENGL or ESOL (Beam et al. 2019). Data on HNNESS that simply don't enroll after expressing an interest further inform placements and barriers to enrollment. When a student does decide to enroll, for students that choose the DE English pathway, high school GPA tends to predict completion of Freshman Composition I, and for those students who choose the ESOL pathway, the student's starting point in the ESOL program course sequence and the overall complexity of the ESOL program course sequence impact the student's completion of Freshman Composition I (Hayward \& RP Group, 2020). ESOL students in accelerated programs complete the second semester of Freshman Composition I at higher rates (Anderst et al., 2016). However, student satisfaction is greater in ESOL program courses due to sense of community and belonging (Anderst et al., 2016). Ultimately, a student's overall goals determine the extent to which they achieve a degree or certificate (Hayward \& RP Group, 2020).

Students have a stigmatized view of pre-college courses overall, which applies to both the DEEnglish and ESOL program courses (Academic Senate for California Community Colleges, 2004). To overcome the stigma, the advantages and disadvantages of each pathway should be clearly delineated (Maloy, 2019). In order to assure students understand the opportunities presented with regard to the ESOL and DE English pathways, marketing of the different pathways needs to be uniform and accessible to all stakeholders (RP Group, 2019).

Additionally, there is a correlation between advising and retention (Pascarella \& Terenzini, 2005; Tinto, 1993). However, advisors cannot approach interactions with minoritized students with a view to their deficiencies (Coronella, 2019). The deficit narrative needs to be challenged (Castro \& Cortez, 2017; Maloy, 2019). HSIs play an important role in supporting our Hispanic students to succeed and complete (HACU, 2020) and creating a culture of asset mindedness is critical. to promote student success (Carales 2020; Castro \& Cortez, 2017).

Hispanic students value relationships with individuals associated with the college (Preuss et al. 2020) and at the same time, intersectionality causes complex experiences for students who may perceive they are alone or isolated in classes due to the lack of others "like me" for mentors (Castro \& Cortez, 2017). Hispanics in roles of leadership and mentoring motivate Hispanic students to achieve their goals (Hispanic Association of Colleges and Universities [HACU], 2020) and faculty mentors are essential for student success (Rios-Ellis et al., 2015).

The faculty need professional development in diverse content areas as well, in disciplines to pair linguistic outcomes with discipline outcomes (Garrison-Fletcher, 2020). The curriculum should teach students skills such as effective summarizing and paraphrasing, which does not come intuitively to non-native English-speakers. (Coullie, 2020). Students need to learn vocabulary building in content areas as well as scaffolding to gradually increase rigor to make texts accessible (Coullie, 2020). It is important to be intentional about essential skills; they can't be expected to occur incidentally (Coullie, 2020).

## | Purpose and Design

## What is the effect of CABS performance and type of pathway on Freshman Composition GPA of HNNESS?

The purpose of this study was to evaluate institutional data to identify if a difference exists in Freshman Composition GPA based on the interaction between the two elements below in a cross-sectional between-subjects design. Fall 2014 first use of the corequisite model

```
First Attempt at CABS:
    - low
    - high
    - college level
```

    Pre-College Pathways:
    - A-DE
    - C-DE
    This research study employed a two-factor ANOVA using between-subjects variables. The two design factors that served as independent variables in the ANOVA were CABS cutoff scores and pre-college pathway. The factorial design contained nine groups. The GPA in Freshman Composition, the dependent variable, was assigned a value from 4-0 based on the grade the student received in the class. All students with a withdrawal were removed from the study due to inability to determine the underlying reason for the withdrawal.

Primary methods used to identify HNNESS:

- student chooses Spanish over English on any attempt of the CABS test for the background question that identifies first language and language of most comfort in reading and speaking
- indicates Spanish as first language on the student portal splash page in the college student platform

Some students may not feel comfortable answering the language questions, so they may skip these questions if they prefer not to answer. Those students are not included in the study.

Participants included:

- HNNESS that completed Freshman Composition and passed through either the A-DE, C-DE, or the ESOL pathway

Participants excluded:

- All students who tested directly into Freshman Composition and all students who took courses in more than one of the three pathways, A-DE, C-DE, and ESOL, before attempting Freshman Composition
- Students who received a grade of W, withdrawal, on the first attempt.

A total of $\mathbf{8 1 5}$ participants comprised the data set.

## Results



The results in the tests of between-subjects effects showed that there was not a significant difference in variance in the effect of the independent variable CABS cutoff score nor was there an interaction effect between pathway and CABS cutoff score on Freshman Composition GPA. There was an effect by the focused variable of pathway which was the most influential.

Effect of Pathway on Freshman Composition GPA

|  | Sum of Squares | df | Mean Square | $F$ |
| :--- | :--- | :--- | :--- | :--- |
| Contrast | 9.105 | 2 | 4.552 | 3.218 |
| Error | $1,141.51$ | 807 | 1.415 |  |

Additionally, a significant difference in marginal mean lies between the ESOL pathway and the other pathways with significance levels of $p=.013$ for ESOL-C-DE, and $p=.018$ for ESOL-ADE.

There is a significant difference between the mean GPA for students taking the ESOL pathway regardless of CABS cutoff score. This reinforces that the focused variable of pathway does have an effect on Freshman Composition GPA and that students taking the ESOL pathway seem to achieve higher GPA in Freshman Composition than students taking the DE English pathway.

Freshman Composition GPA Mean Values per Pathway by CABS Cutoff Score


## Current college resources available

The institution has various resources already in place that can be leveraged to carry out the suggested recommendations:

Data mining

- First Language data from CABS
- First Language data from splash page
- GPA data in student system

Robust department processes

- ESOL leveling exam
- Excellent website connected to International Student Services Office
- English Writing Center.


## Marketing

- Award-winning PR Department
- Advisors deliver message

Advising

- Robust advising department


## Mentoring

- Faculty-Student Mentoring
- Men of Color Program
- Special Programs for High-Risk Students


## Advocacy

- Excellent Advocacy Center
- Women's Center
- Veteran's Center


## Exam Center

- Exam center already works individually with ESOL and English
- Need to merge advising for these two programs.


## Resources needed and requirements for implementation

- Budget allocation for additional staffing
- ELSA assessment training for new staff to administer, grade, and track the ELSA for a large quantity of students
- Release time allocation for faculty members to grade the written section of the ELSA
- Administrative support for project implementation


## Recommendations

## \#1

## Free, mandatory ELSA testing for all HNNESS testing low or high on CABS; mandatory ESOL pathway for low CABS



Students who designate first language as Spanish and test in the high CABS cutoff score range will have:

- Mandatory testing using the ESOL program English language skills assessment (ELSA)

The ELSA provides additional assessment information for proper placement within the ESOL pathway or DE English pathway.

Students who designate first language as Spanish and test in the low CABS cutoff score range:

- Mandatory testing using the ESOL program English language skills assessment (ELSA), and
- Mandatory ESOL pathway coursework

Students testing low on the CABS need targeted language skills development as well as literacy skills development. They will receive this within the ESOL pathway.


This study seemed to bear out prior research that found that college entry exams are not an accurate assessment for HNNESS entering college who need additional language acquisition assistance. Often, HNNESS progress is evaluated with assessments designed for native English-speaking students (Gándara, 2015) when an assessment designed for non-native English-speaking students could more adequately and accurately place them.

HNNESS in the ESOL pathway outperformed HNNESS that passed through either of the other two pathways regardless of CABS cutoff score. Within both DE English pathways, HNNESS testing into both high and low ranges on the CABS received a higher GPA in C-DE than in A-DE. The HNNESS that tested low on the CABS performed almost at the same level through all three pathways with the students completing the ESOL pathway exhibiting a slightly higher mean than those completing the C-DE pathway. HNNESS completing the C-DE pathway obtained a slightly higher mean than those that completed the A-DE pathway. Students testing low should be sent to the ESOL pathway for testing and for coursework. Those testing high should be required to take the ELSA exam for later placement determination. The DE English pathway was not designed for HNNESS with language barriers (Crisp \& Delgado, 2014; Hodara, 2015; Rivera et al., 2008; Schwartz, 2011), rather, it was designed to remediate college readiness gaps to assist students to acquire the skills to be successfulin collegelevel work (Patthey-Chavez et al., 1998; Stewart et al., 2015; Valentine et al., 2017; Woods etal., 2017). This is the foundation for the recommendation that students that test low on the CABS must pass through the ESOL pathway.

> Testing via the ELSA will ensure all HNNESS are tested using an assessment that is designed for non-native English speakers.

## Recommendations



Use available data more effectively to assist students to achieve what they set out to do, and make continuous progress toward increasingly challenging academic goals.

The data metrics that are already collected by the institution on students' first language are not currently being used to inform best practices to guide these students. There are three specific areas where data could be better used to

- CABS background questions on first language
- Splash page information on first language
- Continuing Education course and student performance data

The institution would benefit from better methods to collect the above data and deliver it to the ESOL and DE English program offices. Identification of appropriate data points to track that will serve as the evaluation and assessment for the project to be implemented have been designated on the project implementation timeline.


## Recommendations

## 43 Collaboration Between English and ESOL \#3 Departments



More collaboration between departments will ensure all students make continuous progress toward increasingly challenging academic goals.

Data on student success measures for the ESOL and the A-DE and C-DE pathways should be made available for the HNNESS students at the institution to become better informed about their choices.


The English department website does not link to the ESOL website, and there is no information contained onthe English department website that addresses nonnative English-speaking student success.

## The DE English program

- Identifies academically under-prepared students, prescribes appropriate developmental course work, offers alternative delivery methods, and assures adequate support services for students in the program.
- Contains a maximum of two courses before reaching Freshman Composition and at a minimum, could be enrolled in Freshman Composition at the outset along with a companion DE English course in the corequisite model depending on their CABS score and assessment after the booster.


## The ESOL program

- Provides an opportunity for international students, immigrants, professionals, and other English Language Learners (ELLs) to study in a dynamic learning community and acquire or improve essential English skills.
- Contains anywhere from two to 20 ESOL courses to achieve college-level coursework eligibility, depending on intake proficiency in the English language.


## Recommendations

Additional collaboration between English and ESOL Departments


ESOL faculty members and teachers have specialized training as a job requirement (Gándara, 2015; Monroe, 2018; Rivera et al., 2008; Russell, 2017) that gives them focused training to support the linguistic and cultural difficulties occurring external to, and contributing to, students' content area difficulties (CirizaLope et al., 2016; Russell, 2017). The regular DE English faculty would need specialized professional development to teach English to the distinct linguistic and cultural needs and varying levels of acquisition of HNNESS (Ciriza-Lope et al., 2016; Doran \& Singh, 2018; Gándara, 2015; Hodara, 2015; Russell, 2017). More collaboration between departments on professional development will ensure faculty members outside of the ESOL program have the basic skills necessary to assist the HNNESS that opt for the DE pathway.


## Advocacy

- will ensure all students know how to access services and resources available to them.
- distribute informational materials regarding services and resources available for all students at the institution
- intentional contact with the students in this group

Marketing materials should:

- Be designed with an intentional objective of moving away from the deficit mindset surrounding the ESOL pre-college pathway.
- Ensure all HNNESS receive current, relevant information on the benefits of the two pathways.
- Engage the sense of community that HNNESS value,
 per the broader conceptual findings in the primary literature review, as a part of the proposal.


## Advising and Mentoring

- Implement a team approach to advising and mentoring where students are given career and transfer options along with advisement around their personal goals. This will ensure all students receive intentional advisement on the benefits of each pathway including data metrics.
- Include information pertaining to promotional marketing for the ESOL and DE English programs to HNNESS at the partner institution and propose training for advisors that carry out the postassessment advising.
- Facilitate mentoring relationships for the HNNESS students.


## Timeline

Identify individuals that will carry out the proposed duties within the project study proposal, and those individuals will need to be allowed significant time to allot to the assessment, collaboration, mentoring, marketing, and messaging surrounding the different pre-college-level English options.

Phase in the plan to assure thoughtful and deliberate implementation.


## Implications

HNNESS likely experience less social and economic mobility than they would have had in their parents' home country and in fact, have been known to end up ina declining economic situation and feel forced to followa higher education path to gain social and economic mobility (Roberge, 2002). Discovering best practices for HNNESS learning English to succeed in their goal of language acquisition is one step toward providing them with that mobility (Abbott, 2018; Roberge, 2002). Higher education
 experiences expand opportunities for them in career paths through enhancing the critical academic skills that they need to succeed (Eberly, 2018; Gámez et al., 2017). An analysis of the outcomes from the various pathways that these students take in a higher education situation while in the development of their English language skills and proposed viable strategies will likely provide opportunities for the partner institution to address disparities and inequities in their academic preparation. Additionally, with the expected population increase of HNNES individuals in the United States and their corresponding potential to affect the intellectual and economic landscape nationwide (Jiménez-Castellanos, 2017), identifying optimal pathways to support individuals who lack preparation to attain an academic formation will becritical (Nora \& Crisp, 2012).

Through this project, the institution will be creating support systems that should assist HNNESS to make a decision as to what they want to do, to succeed in their coursework, to persist, and to complete. The advising and mentoring opportunities will aid students to build meaningful relationships with the individuals that can best advise them and could positively impact the student's empowerment in social situations. This plan proposes to address the deficits experienced by HNNESS who often don't start a formal post-secondary degree plan due to numerous reasons, one of them being financial. This project promotes education for HNNESS so the student and community both benefit from more students completing degrees and certificates. Equitable access to educational opportunities is a key sociopolitical and economic agenda (Castro \& Cortez, 2017). Community colleges give Hispanics a more viable and more affordable pathway to completion and certificate or degree attainment to promote social mobility (Carales 2020). In making the adjustments proposed in this project study, the institution will be moving forward to further the futures of their HNNESS students.

## Conclusions

## HNNESS need interventions designed specifically for their ethnic and cultural demographic.

Policymakers who feel that students should be pushed along to college-level coursework more quickly, spending less time with remedial coursework without regard to their nonnative English speaker status and individual linguistic ability, should consider reexamining that recommendation for HNNESS based on the data included in this study. While HNNESS that test below college level do typically experience difficulty in production skills of reading and writing (Crisp \& Delgado, 2014; Schwartz, 2011), this is a linguistic matter disparate from the lack of academic preparation that might cause HNNESS to be advised into developmental education English courses, but it is often misunderstood to be the same difficulty. Decreasing the amount of time students spend in developmental English coursework might be putting HNNESS at a disadvantage due to the abbreviated time they are allotted for learning within the DE pathways. A more in-depth examination of these results with a larger participant group from the ESOL pathway should be carried out to determine if the results of this study are repeated on a larger scale. If so, policymakers may want to reconsider condensed programs for non-native English-speakers and recommend an ESOL intervention for them instead, or in addition to, what is already in place.

The data showed that HNNESS did better overall having passed through an ESOL program. However, due to the small sample size, more study is needed to determine the specific situations in which HNNESS excel, whether the ELSA exam assists in identifying appropriate pathway, and how to best place them within pathways based on the data available at the institution. Then, a holistic plan to promote HNNESS success based on this research should be implemented.


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