

4-26-2017

# INTERNAL AND EXTERNAL FACTORS INFLUENCING ENROLLMENT INTO AN UNDERGRADUATE ARABIC LANGUAGE PROGRAM IN INDIANA: A SURVEY OF UNIVERSITY FRESHMEN AND SOPHOMORES

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INTERNAL AND EXTERNAL FACTORS INFLUENCING ENROLLMENT INTO AN UNDERGRADUATE  
ARABIC LANGUAGE PROGRAM IN INDIANA: A SURVEY OF UNIVERSITY FRESHMEN AND  
SOPHOMORES

A Thesis  
Submitted to the Faculty  
Of  
Purdue University  
By  
Tyler J. Mallari

In Fulfillment of the  
Requirements for the Degree  
of  
Master of Science in Technology, Leadership and Innovation

May 2017  
Purdue University  
West Lafayette, Indiana

## ACKNOWLEDGEMENTS

Words cannot encapsulate the gratitude and admiration I have for the three esteemed professors who served on my committee, Dr. Linda Naimi, Dr. Ahmed Idrissi Alami and Dr. James Mohler, who excel as both educators and principled human beings. It was through their constant academic guidance that I was able to explore the depths of the disciplines of ethical leadership, Arabic cultural studies and academic writing and gain knowledge and skills that will continue to serve me for the rest of my life. More importantly, it was through their personal mentorship and friendly, caring treatment of both myself and their other students that I learned that an educator's true worth is seen through the presence of integrity and true concern for the affairs of students.

Finally, I would like to thank my angelic, strong role model of a mother and my ever-supportive little brother for their supporting me throughout my graduate studies. They have always been and will forever be the lights that guide me home.

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## ABSTRACT

Mallari, Tyler J. M.S., Purdue University, May 2017. Internal and External Factors influencing Enrollment into an Undergraduate Arabic Language Program in Indiana: A Survey of University Freshmen and Sophomores. Major Professor: Linda Naimi

Within the rankings of world languages, Arabic takes a prominent place, being the fifth most-spoken language in the world (Lane, 2016). Despite the surge of concern in modern media with relations in the Middle East, particularly in Arab-populated countries, very little focus has been put on improving enrollment in Arabic programs in the United States, and in particular in the Midwest. At Purdue University, enrollment in Arabic language courses have only been low and no effort has been made on the part of the university or the department to understand this trend from more than a purely statistical analysis of enrollment numbers (Purdue, 2016). In the present study, freshman and sophomore perceptions of an undergraduate Arabic program at Purdue University were evaluated with specific regards to the relationship between enrollment and motivations students had for enrolling or not enrolling in the program's courses. Despite the participation of only one student enrolled in Arabic language courses at the university, factors found that significantly affected student enrollment into foreign language courses included student perceptions about personal abilities and the foreign language departments themselves, student perceptions about the availability of jobs in their field which required the use of a foreign language and the requirement or non-requirement of foreign language courses



in student plans of study. Results were discussed in terms of student responses to qualitative survey, whose responses are described and characterized quantitatively.

## CHAPTER 1. INTRODUCTION

This thesis was a mixed-methods case study of freshman and sophomore enrollment into an undergraduate Arabic language program at a Big 10 university in Indiana. From the perspective of a then-current student of the program, its consistently small enrollment and retention rates were of interest, being a phenomenon occurring continuously despite the enthusiasm and competence of the professors teaching its courses. As such, it was proposed that a closer analysis of the factors influencing the aforementioned low enrollment numbers could dramatically improve the department's understanding of student perceptions of the Arabic language program and boost enrollment and retention rates in years to come.

### 1.1 Background and Context

The interdisciplinary focus of this thesis situated itself squarely between the realms of enrollment management and language program evaluation. Specifically, the problem at hand occurred as a result of a lack of understanding of U.S. collegiate language program enrollment trends on the part of both academicians and university management and the nonexistence of a focus on enrollment and retention issues in language program evaluation, to be explored below.

#### 1.1.1 U.S. undergraduate enrollment – state of current and past studies

At U.S. public universities at the time of the study, student tuition dollars comprised a large portion of the budget, nearly 50%, of university funding (Woodhouse, 2015). Amongst students enrolled in public university programs in the U.S. at the time, a whopping 97% were undergraduates (NCES, 2014). Because of this, it was assumed that it would be wise for any

university to undertake enrollment management accordingly, if only for the purpose of securing undergraduate tuition dollars.

Within enrollment management, studies focusing on factors influencing undergraduate enrollment from more than a purely reactive, statistical level were few and far between. Despite this, however, studies that have been conducted have determined both external and internal factors influencing undergraduate enrollment decisions, to be defined later.

One example of such a study was conducted by Heckel (1996), where a correlation between undergraduate enrollment in U.S. engineering programs and the prospective freshman student perceptions of the economic reward to be gained by enrolling in engineering was found. Additionally, Lillard and Gerner (1999) found that students whose households comprised of two biological parents were more likely to apply for, become admitted to, and attend U.S. public institutions rather than those who had only one or no biological parents at home. Tharp (1998) even found that commuter students' choices of degree programs to enroll into even affected their retention rates.

Though the findings of the aforementioned studies are intriguing, they again represented a small number of enrollment studies that have been conducted and, as of the time of the study, had yet to be duplicated or built upon.

#### 1.1.2 Benefits to be gained through U.S. undergraduate enrollment analyses

The benefits to be gained by U.S. public universities through undergraduate enrollment analyses include, but are not limited to, the generation of a comprehensive undergraduate

enrollment management plan and the refinement of budgeting and outreach operations. It was expected that the data from this study would be used accordingly by Purdue University.

#### 1.1.3 The nonexistence of enrollment in language program evaluation literature

In a cursive review of current and past literature concerning language program evaluation, it was found that the subject of enrollment management was unaddressed in the two most comprehensive texts of enrollment management, *Language Program Evaluation* and *Language Program Evaluation - Theory And Practice*, as well as in other, smaller works on the subject (Norris, 2016 and Lynch, 1996). This represented a significantly large gap in language program evaluation literature and it was be hoped that this study would have been a starting point for the future inclusion of enrollment management in said literature.

#### 1.1.4 Purdue University enrollment management and Arabic language enrollment

Through study of its enrollment management websites and its reports, it was found that Purdue University's enrollment management staff only consider enrollment numbers quantitatively, and only in reaction to statistical trends. No attempts to understand such trends were made and this, taken together with falling, low enrollment of students into Arabic language courses at Purdue, painted a dire picture for the future of Purdue's Arabic department. This study marked the first of what would hopefully be several initiatives to come to positively influence Purdue undergraduate enrollment numbers from a more insightful standpoint, which at its heart took into concern the opinions of Purdue students themselves.

### 1.1.5 Summarized methodology

In this study, focus centered on describing internal factors, namely perception and motivation factors, influencing enrollment decisions of freshman and sophomore undergraduate students at Purdue University regarding its undergraduate Arabic language courses. A 23-question, qualitative survey was delivered and results were described according to a combination of both quantitative and qualitative methods, with quantitative data supporting qualitative conclusions.

## 1.2 Statement of the Problem

The Arabic department at Purdue University had historically faced multiple problems with regards to undergraduate enrollment into its Arabic language courses. At the time of the survey, only 120 students, or about 4.9% of the 2,447 undergraduates enrolled in Purdue's liberal arts programs, were enrolled in this language program.

These issues, as discussed by the department's head, were proposed as being due to modification of departmental language requirements, lack of emphasis by the university on language programs and more.

Despite the prominence of the Middle East on the global political scene at the time of the study, the growing job market in Arabic-speaking countries and the claimed emphasis by Purdue to be an increasingly globalized university, the department appeared to be experiencing identical enrollment numbers with those of years past.

If Purdue's globally-minded students were to take advantage of said opportunities, it was crucial that they develop a working understanding of the Arabic language, most conveniently through studying the language at the university in which they were already enrolled. However, such students may not have been fully aware of the opportunities present at Purdue for Arabic language learning and cultural understanding. Thus, Purdue's Arabic department would need to seriously consider its strategies with regards to issues of enrollment, retention and marketing in order to attract and retain students.

Despite this, no studies existed at the time of the study which evaluated the factors influencing undergraduate enrollment in collegiate Arabic language programs. Additionally, apparently little attention was being paid to the Arabic department's consistently low enrollment numbers by Purdue's Office of Enrollment Management and its International Student Services and Global Purdue offices. Without such studies and efforts, the ideal methods with which to continually improve enrollment remained unknown and as a result, both Purdue's Arabic department and its undergraduate population as a whole were losing out on precious opportunities to engender multicultural understanding.

### 1.3 Purpose of the Study

The purpose of this mixed-methods study was to describe the perceptions of freshman and sophomore students enrolled at Purdue University of its language programs as a whole and its Arabic language program in particular as well as their motivations for taking or not taking Purdue's Arabic language courses. After surveying freshman and sophomore students via a 23-question email survey, it was set to be determined after evaluation of survey responses

whether or not Purdue freshmen and sophomores believed they had a good knowledge of the offerings provided by the Arabic language department and if further promotion of such offerings would influence their likeliness to enroll. The population surveyed comprised of freshman and sophomore undergraduate male and female students between the ages of 18 and 21 who were enrolled at Purdue University for the spring 2017 semester. The sample of students was a voluntary response sample and hence was randomly selected. Data was collected on-site at the university via email correspondence.

#### 1.4 Significance of the Study

This study sought to reveal the internal perception and motivation factors which influenced freshman and sophomore enrollment into Purdue University's Arabic language program.

The significance of the study primarily concerned both those administering collegiate language programs nationwide and Purdue University specifically. At the time of the study, no literature existed which examined the internal factors influencing undergraduate Arabic language program enrollment in U.S. public universities. It was hoped that the findings of this study would better inform those looking to market their collegiate foreign language programs. With such information at hand, strategies for connecting eager students with the language learning opportunities on campus would become much easier and would ideally improve both enrollment and retainment rates in U.S. undergraduate foreign language programs.

Additionally, Purdue University could put this data to use to more effectively market its undergraduate foreign language programs as well as assess and improve the marketing of

undergraduate programs in its other departments. As such, the findings could be included as part of overall marketing strategies and give insight into which particular goals and methods work best for attracting and retaining undergraduate, and particularly freshman and sophomore, students.

Furthermore, Purdue could distinguish itself as a leading U.S. public institution in foreign language instruction through said marketing and even attract further state and federal funding for its language programs, which in turn would help it maintain such status. If Purdue were to, in the future, become specialized in undergraduate Arabic language instruction, it would attract a slew of language and culture students, and this would result in diversification of its undergraduate student population. Such diversity is sorely needed, as according to the most numbers provided by Purdue at the time of the study, 66% of its undergraduates were enrolled in colleges with STEM focuses and only 9% were enrolled in the university's liberal arts programs (Purdue, 2016).

### 1.5 Research Questions

The research questions posed and answered through this study were the following:

1. What is the current and past state of enrollment of undergraduate students in Purdue's Arabic language program?
2. How does this compare with the current and past enrollment of undergraduate students at Purdue University as a whole and Purdue's College of Liberal Arts and School of Languages and Cultures in particular?



3. What are freshman and sophomore students' perceptions of Purdue University's language programs and its Arabic language offerings?
4. What are freshman and sophomore students' motivations to take or not to take Purdue's Arabic courses?

## 1.6 Scope

This study surveyed freshman and sophomore undergraduate students enrolled in Purdue University at the time of the study, estimated to be 14,024 students, about their awareness of Purdue's Arabic language program and their reasons for taking or not taking the department's courses (Purdue, 2016).

This population was chosen as the ideal undergraduate population to examine at Purdue because both freshman and sophomore undergraduate students were more likely to enroll in university language programs if made aware of their options due to the presence of more gaps in their plans of study. This was opposed to junior and senior undergraduate students who, if made more aware of language program options, would have had great difficulty working language classes into their schedules, as they would have been close to completing their degree requirements.

## 1.7 Assumptions

The assumptions characteristic of the survey performed, which concerned the perception of students of Purdue University's language offerings included:

- The dispensation of the aforementioned survey would return significant, applicable insights into the perception of Purdue freshman and sophomore undergraduate students of the Arabic language and Arabic language offerings at Purdue University
- There would be a sufficient amount of freshman and sophomore undergraduate participants to comprise a representative sample of Purdue's current freshman and sophomore classes and warrant meaningful statistical analysis
- The freshman and sophomore undergraduates participating in this study would answer questions whilst thoroughly contemplating both the questions asked and their own sentiments regarding said questions
- The freshman and sophomore undergraduates participating in this study would provide honest responses to the questions asked
- The survey undertaken would provide sufficient data to affirm the hypotheses posed by the researcher

## 1.8 Limitations and Delimitations

### 1.8.1 Limitations

The limitations pertinent to this survey included:

- The survey would be distributed via email through Purdue University solely to currently enrolled freshman and sophomore undergraduates
- The survey would only be completed by the aforementioned freshman and sophomore undergraduates who, at the time of the survey, would have access to the internet

### 1.8.2 Delimitations

The delimitations pertinent to this survey included:

- The survey would be given during a fixed amount of time determined by the researcher and, accordingly, responses will be bound by a deadline also determined by the researcher
- The freshman and sophomore undergraduate students participating in the survey would have no academic or administrative obstacles preventing them from enrolling in Purdue's Arabic language courses
- Undergraduate students currently in their sophomore, junior or senior years of study at Purdue University would not be included in this survey

#### 1.9 Definition of Terms

*Enrollment* – “the state of (a student) being registered/enrolled as a member (of an academic institution)” (Merriam-Webster, 2016)

*External factors* – “forces influencing undergraduates’ enrollment decisions which exist outside of the student’s mental conceptions and are unrelated to their background” (Mallari, 2016)

*Internal factors* – “forces influencing undergraduates’ enrollment decisions which arise due to a student’s mental conceptions or background” (Mallari, 2016)

#### 1.10 Summary

This chapter presented a clear rationale for the research undertaken. This chapter grounded the proposed research within the context of the apparent ignorance of university

enrollment management and Arabic language department staff of the relation between undergraduate perceptions of Arabic language offerings, with the goal to improve enrollment into Arabic language courses through such research. A total of five research questions were proposed to address the aforementioned issue. Finally, the purpose, significance, scope, assumptions, limitations, and delimitations of the research were outlined.

## CHAPTER 2: LITERATURE REVIEW

Though undergraduate student enrollment forms a major portion of U.S. public university funding and efforts have been made to understand enrollment trends through examining a multitude of factors both internal and external to undergraduate students, no efforts had been made to examine factors influencing enrollment into undergraduate language programs. Purdue University as a whole, and its Arabic department in particular, have yet to delve into analytics that take into account the internal and external factors influencing undergraduate enrollment into their language programs and have thus far taken a purely reactive, statistics-based approach.

This review delved into the condition of undergraduate enrollment into U.S. public universities as a whole, the identification and analysis of factors influencing said enrollment, the potential budgeting and outreach benefits that U.S. public universities can gain from such identification and analysis, the lack of attention paid to issues of enrollment in standardized methods of language program evaluation as well as by Purdue University as a whole and its Arabic language department in particular.

### 2.1 U.S. undergraduate enrollment

Within the realm of collegiate academic administration, issues concerning enrollment, or “the state of (a student) being registered/enrolled as a member (of an academic institution)” arise (Merriam-Webster, 2017).

As U.S. public universities are funded in large part by student tuition dollars, comprising around 47% of public university funding, it becomes of high interest to university faculty to both attract and retain students in university programs (Woodhouse, 2015). Particularly crucial are issues concerning enrollment of undergraduate students in U.S. public universities, as 17.3 million of the U.S.'s 17.8 million students enrolled in public universities, overall 97%, are undergraduates (NCES, 2014).

Factors that affect U.S. undergraduate enrollment are numerous and include issues related to economics, perception, student background, university outreach and more, which as a whole can be classified as factors "external" or "internal" to the undergraduates themselves. Within this review, external factors are defined as those forces influencing undergraduate enrollment decisions that exist outside of the student's mental conceptions or background and internal factors are defined as forces influencing undergraduate enrollment decisions that arise due to a student's mental conceptions or background. This present study concerned itself with both internal and external factors.

To discover both internal and external factors influencing undergraduate enrollment into U.S. public universities, multiple studies have been conducted that reveal factors that fall broadly under the categories of external economic factors, internal student perception and motivation factors and internal student background factors.

## 2.2 U.S. undergraduate enrollment factors – models and studies

The factors influencing undergraduate enrollment into U.S. public universities are numerous and previous studies have centered on revealing both the external factors affecting

undergraduate decisions to enroll as well as the internal factors, such as motivations and perceptions.

For example, in a study conducted three years ago that successfully managed to estimate predicted enrollment yield for a private, liberal arts university, researchers used the tuition discount amount offered and the prospective students' ACT scores and state residence (Hayes et al., 2013). This would be an example of examining primarily external economic factors (tuition discount) and internal student background information (ACT scores and state residence) and their relation to enrollment. Importantly, this hints at the fact that examining such relationships can lead to universities being able to predict enrollment based on both qualitative and quantitative factors and manage their operations accordingly.

Other factors that could influence undergraduate enrollment include university application requirements, student perceptions of a university and its programs, current economic conditions and more. In considering all of these various factors, it can be understood that the aforementioned factors can be categorized into two main classifications: external factors (such as economic conditions, university requirements, etc.) and internal factors (such as student family composition, student high school grades, etc.).

Within these two classifications, three main sets of factors have been examined to a large degree within undergraduate enrollment studies: external economic factors, internal student perception and motivation factors and internal student background factors.

### 2.2.1 External economic factors

Examples of external economic factors affecting undergraduate student decisions to enroll into U.S. public universities can be seen in three key enrollment studies conducted within the last 20 years. Such factors can include national economic conditions (i.e., the current state of the U.S.'s GDP or unemployment, financial crises), national and state taxation policies and more. Though a proactive approach to addressing these issues by university enrollment managers cannot be taken, as these managers as a group cannot influence large-scale national economic realities, reactive approaches involving tailoring financial aid packages accordingly would be useful in improving undergraduate enrollment.

In investigating economic factors influencing U.S. freshman enrollments into public engineering programs, Heckel's (1996) research produced mixed results. Overall, no correlation was found between freshman engineering enrollments and national unemployment and GDP rates (used as representative of national U.S. economic conditions), but a correlation was found between said enrollments and the prospective freshman students' perceptions of the economic rewards to be gained by enrolling in engineering (Heckel, 1996).

In a simulation conducted by Fossen and Glocker (2009), a tax reform involving a revenue-neutral, flat rate approach to taxation (i.e., all incomes taxed at same rate) saw an increase in enrollment rates for men in Germany due to an increased expected net income. Though a similar simulation may produce different results when run on college students in the U.S., the simulation was nonetheless a useful exercise in understanding how national taxation policies affect undergraduate enrollment.



Finally, a series of studies was done evaluating how the U.S. financial crisis of 2007-2008 affected U.S. higher education and published in book format and one such study conducted by Long (2014) examined the crisis' effect on U.S. college enrollment. Overall, the researcher found that the crisis negatively affected family incomes and that college tuitions had been rising over the past few years, commenting that it would be reasonable to assume that as a result, U.S. undergraduate enrollment rates would drop (Long, 2014). However, she noted that, in their research as well as the research of others, college enrollment often increased as the rate of unemployment grew, especially amongst 16 to 24-year-old American students (Long, 2014). As such, she predicted that the long-term effects of the recession on U.S. undergraduate enrollment would have an unclear net effect and suggested that further research be done at a later point in time.

Again, though such studies reveal important information about how national economic conditions affect U.S. undergraduate enrollment, national economic trends are ultimately those that must be acted upon reactively by enrollment managers.

### 2.2.2 Internal student perception and motivation factors

Interestingly, in a cursory survey of enrollment literature, no studies could be found which take into account student perception and motivation factors influencing undergraduate decisions to enroll into U.S. public institutions. This represents a large gap in understanding on the part of collegiate enrollment strategists and it would be wise to perhaps pair university enrollment staff with members of its psychological studies department to carefully determine

how prospective student perceptions of a university and its programs as well as the various motivations for enrolling that exist.

It would be expected that such studies would discover that student perceptions of a university's prestige or rank, the efficacy of its programs, the nature of its campus culture and more would arise as potential internal perception factors that could be used to predict enrollment. It could also be inferred that determined internal student motivation factors for enrolling would be primarily economically or socially grounded.

Importantly, internal perception factors are those that can be proactively addressed by university enrollment management programs, as prospective student perceptions of a university and its programs can be altered through strategic and even tailored marketing. However, internal motivation factors vary greatly per student and are influenced by several other outside forces such as family members, peer pressure and economic conditions and represent factors that university enrollment managers can simply react to. Nevertheless, in the opinion of the researcher, internal motivation factors affecting undergraduate enrollment may be the most important of factors for which a reactive approach can be taken, as they are, like internal perception factors, pertain directly to individual student mental conceptions, as opposed to external economic and internal student background factors. Thus, in this study, both internal perception and internal motivation factors were examined.

### 2.2.3 Internal student background factors

As can be seen from the following two studies, even factors related to an individual student's background can affect enrollment, whether directly correlated to the student

collegiate ambitions or not. Student background factors are here considered as those related to family background, high school academic performance and choice of prospective collegiate academic program. Again, the fact that these two studies appear to be the only two addressing how student background factors affect undergraduate enrollment reveals how little attention has been paid to discovering how more qualitative factors influence U.S. undergraduate enrollment.

In their study of 11,995 high school seniors and 14,825 high school sophomores interviewed intermittently throughout the 1980s about their high school careers, academic ambitions and family backgrounds and whose enrollment into colleges were tracked, Lillard and Gerner (1999) found that students whose households comprised of two biological parents were more likely to apply for, become admitted to and attend U.S. public institutions rather than those who had only one or no biological parents at home.

Additionally, student choice of degree programs to enroll in ultimately affected their overall retention rates in Tharp's (1998) study of students at an urban, U.S. public commuter institution, as those who chose to enroll in two-year associates programs wound up having lower levels of dropout than those who enrolled in four-year bachelor's programs.

Importantly, student background factors, if studied in conjunction with undergraduate enrollment numbers, represent factors influencing enrollment which a university cannot take proactive action towards, in contrast to the internal perception factors mentioned previously and in line with the internal motivation factors mentioned previously. This is not much of a hindrance, however, as the universities' development of appropriate reactions to forces outside

of their control is just as important as their proactive steps towards addressing solvable issues in developing comprehensive enrollment management plans.

### 2.3 Strategic benefits of U.S. undergraduate enrollment factor predictions

In identifying the aforementioned and other external and internal factors influencing undergraduate student enrollment, academic administrators could potentially gain great strategic advantages. Approaches similar to the studies mentioned would provide a more in-depth, relational approach to examining factors influencing undergraduate enrollment and would allow for a much more proactive approach to strategy rather than a passive one involving reacting to gathered statistical data. Most importantly, such an approach would allow for the generation of more comprehensive enrollment management plans and would benefit universities primarily within the areas of budgeting and outreach.

#### 2.3.1 Generating a comprehensive enrollment management plan

When enrollment numbers and the factors influencing them are taken into account, enrollment management plans can be installed at both the university and department levels.

A successful university enrollment management plan, according to Professor Donald Hossler, who has not only published multiple articles but also an entire textbook on enrollment management entitled *Enrollment Management: An Integrated Approach*, would encompass the following four characteristics (Hossler,1986):

1. *Involvement by the highest levels of administration*: the institution's administration is involved in both conceptual support and policy-making

2. *A vision which is holistic in nature*: the institution's vision encompasses not only itself and its mission, but also its students
3. *A proactive stance in dealing with enrollment*: the institution intends to shape its future through its actions
4. *Informed decision-making processes*: the institution does not make impulsive decisions nor backs down from making tough, though informed, decisions
5. *A flexible and tolerant climate*: the institution allows for experimentation and alteration of strategies and actions as necessary

Additionally, according to Dr. Frank Bingham, professor at Bryant College, this theoretical enrollment management plan would include analysis encompassing the following areas (Bingham, 2008):

1. *Research Analysis*: analyze the profile of the students targeted for enrollment, determine the image the institution wants to portray of itself, decide to expand or restrict course offerings, decide to raise or lower tuition, decide on method (s) of promotion
2. *Resource Analysis*: analyze the amount of manpower, money and facilities the institution has to dedicate towards enrollment management
3. *Enrollment Analysis*: evaluate the current state of the admissions, enrollment, financial aid, alumni outreach and department outreach efforts currently being made
4. *Retention Analysis*: evaluate the follow-up, counseling, advising, tutoring and career planning efforts currently being made

5. *Market Audit Analysis*: perform goal setting, marketing control performance analysis, performance diagnosis, corrective action and follow-up functions

Ideally, this detailed enrollment management plan that would be grounded in both in the statistical enrollment data gathered by most U.S. public universities as well as a holistic understanding of the factors influencing student enrollment as can be gained by the aforementioned studies.

Interestingly, no existent book or published articles were found which covered the subject of enrollment management of university language programs.

### 2.3.2 Budgeting

With regards to the specific advantages of analyzing enrollment factors, one major area of university function where enrollment management would benefit is in budgeting. One such example of this can be seen in a study conducted at the University of Delaware in 2011, in which the relationship between enrollment and budgeting is explained in detail.

In the study, university administrators Dale Trusheim and Carol Rylee, in noticing the large gap in enrollment projection literature for individual U.S. public universities, devised a simple model for calculating projected university enrollments for the coming years. Significantly, this effort was made through collaboration between Trusheim's Office of Institutional Research at Washington College in Maryland and Rylee's budgeting department at the University of Delaware, marking the first enrollment study intimately linking enrollment and budgeting functions within a university (Trusheim & Rylee, 2011). As is stated in the introduction to the article, the researchers conducted this study with the intent to allow

universities, through this generated model of data collection and partnership, to better prepare for economic realities, especially in these modern times of economic turbulence (Trusheim & Rylee, 2011).

The simple enrollment projection model developed by Trusheim's office involved a series of four steps (Trusheim & Rylee, 2011):

1. *Obtain historical enrollment*: gather data on past student enrollment into the institution
2. *Develop retention percentage*: predict what number of students currently enrolled in the fall semester will return for the spring semester
3. *Obtain student targets*: have the provost and university enrollment management committee determine the ideal number of freshman, transfer and readmitted students they wish to have enrolled in a given year
4. *Run numbers to generate predictions*: calculate average enrollment and retention rates, particularly for the aforementioned student groups targeted by the provost and enrollment management committee

From there, Rylee's budgeting department simply took the data calculated and ran tuition income projections for the University of Delaware accordingly. Overall, Trusheim and Rylee reported that the University of Delaware's budgeting staff gained a much better understanding of the economic year to come for the university in terms of tuition dollars and

recommended that the model be used in other U.S. public universities (Trusheim & Rylee, 2011).

As mentioned before, this groundbreaking study reveals the massive potential that enrollment management has in benefiting U.S. public universities within the realm of financial management and it would be hoped that attention would be paid to this reality accordingly.

### 2.3.3 Outreach

Additionally, in analyzing enrollment trends and the factors influencing them and developing more comprehensive enrollment management strategies, universities would be able to further refine their outreach tactics.

In basing their understanding in the nature of the institution and the ideal population of potential students it is trying to target, university administrators would be able to develop concrete, reliable methods of marketing that would ideally be tailored to this ideal population and would incorporate a variety of media. Such media could include the use of brand ambassadors, websites, blogs, television ads, corporate and government partnerships, webinars, social media and more (Blackboard, 2014).

## 2.4 Undergraduate language program enrollment evaluations

Interestingly, when surveying literature related to evaluating the overall efficacy of university language programs, the subject of enrollment was never discussed.

Within the field of collegiate language program evaluation, the two most comprehensive texts one finds are *Language Program Evaluation*, written by Georgetown



linguistics professor Dr. John M. Norris and *Language Program Evaluation - Theory And Practice*, written by University of Melbourne linguistics professor Brian Lynch.

Norris' *Language Program Evaluation* provides a good summary of the current state of language program evaluation, as one based on holding schools accountable for the quality of their language programs and involves doing so through evaluating teacher competency, program effectiveness, student learning outcomes and conducting needs analysis of the students and program monitoring behaviors (Norris, 2016). Additionally, he makes several suggestions for improving the future of language program evaluation, mainly through assessing the validity of the aforementioned existing methods of evaluating language programs, using big data analytics to gain a larger picture of student language learning trends and more (Norris, 2016). Absent is what would have been a wise suggestion to evaluate both enrollment and retention into language programs through the use of evaluations conducted using the latest technology. Without this, Norris' suggestions will only improve program quality and such quality will not mean much if student enrollment into language programs declines or stagnates, as only a limited population of students will benefit from his suggestions.

Furthermore, Lynch's *Language Program Evaluation – Theory And Practice* is purely grounded in statistics and consists solely of the description of the history of language program evaluation and the quantitative and qualitative methods used in such evaluation (Lynch, 1996). This is an even shallower outlook on language program evaluation than Norris' and also overlooks the topics of enrollment and retention, despite the fact that suggestions to use both quantitative and qualitative methods to monitor enrollment and retention would have indeed

been an excellent way to link his emphasis on statistics and the practice of language program evaluation as a whole.

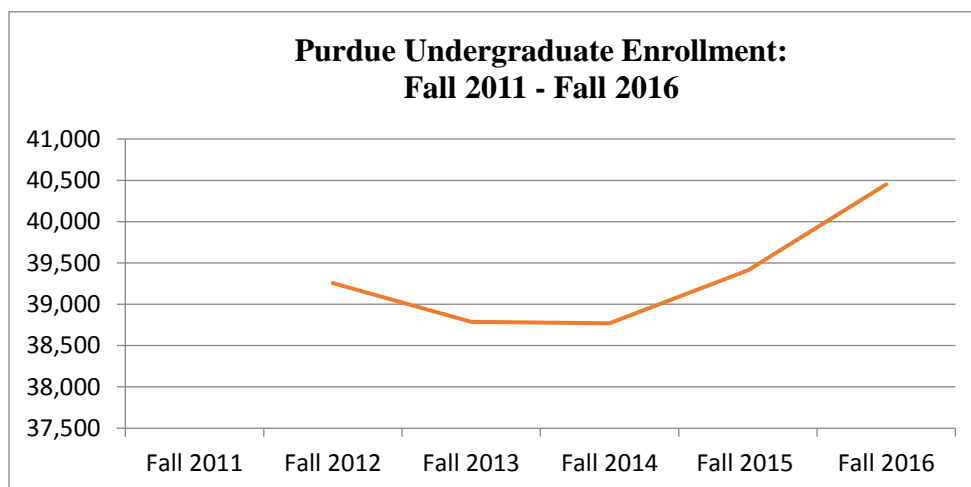
Additionally, in two other, less comprehensive texts, *Blended Language Program Evaluation* and *Intercultural Language Teaching And Learning*, similar voids are found. The first text primarily focuses on the evaluation of the teachers, teaching methods, students and technologies involved with blended language programs, which “provide students with both the human support of the classroom context and the opportunities for engagement with carefully planned learning materials and social communication tasks” through case studies (Gruba et al., 2016). The second contains a section for program planning and evaluation, but focuses on the same elements evaluated in the first text (Liddicoat & Scarino, 2013). As seen again, no mention exists about language program evaluations incorporating aspects of enrollment and retention.

Finally, if one were determined to delve further into language program literature and search for phrases such as “enrollment management language programs”, “enrollment language program evaluation”, “enrollment model language programs” and “factors language program enrollment” into online search engines for scholarly publications, this query unsurprisingly yields no relevant results. Though language program enrollment numbers are explored briefly in an article published by Welles (2002), the purpose of this article is purely to describe the interpretation of statistical trends with regards to nationwide undergraduate enrollment into language programs and does not at all explore factors influencing enrollment nor proposes a model to discover and evaluate them. Additionally, the article also fails to link language program enrollment statistics to the field of language program evaluation.

As such, it can be made clear that both past and present approaches to language program evaluation have given absolutely no consideration to the health of such programs in relation to their maintenance of either constant or increasing student enrollment. Without such necessary research on enrollment and retention, collegiate language programs will never be satisfactorily maintained and the aforementioned benefits that can be gained from the development of enrollment management models will never be reaped by universities and their language departments.

## 2.5 Purdue University language program enrollment predictions and analyses

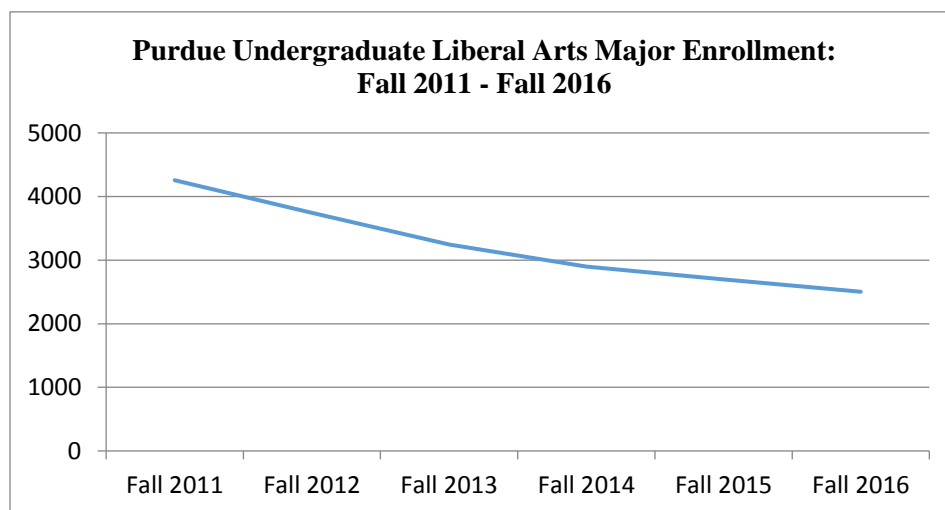
As of Fall 2016, 29,497 undergraduate students were enrolled into programs at Purdue University, with 14,024 of them being freshmen and sophomore students (Purdue, 2016). Over the past five years, undergraduate enrollment at Purdue had fluctuated slightly, though it had increased recently and enrollment into each individual college at Purdue was expected to increase during the spring 2017 semester (Purdue, 2016). Figure 2.1, below, reveals the trend of undergraduate enrollment at Purdue since the fall 2011 semester.



*Figure 2.1 – Purdue Undergraduate Enrollment: Fall 2011-Fall 2016*

### 2.5.1 Purdue liberal arts enrollment

Interestingly, in Purdue’s Liberal Arts Department, under which Purdue’s Arabic program functions, enrollment into majors had been steadily declining over the past five years, as seen in Figure 2.2, in contrast to the aforementioned general undergraduate enrollment trend (Purdue, 2016). Additionally, it was estimated that only 9% of Purdue’s undergraduate students were enrolled into liberal arts programs (Purdue, 2016).

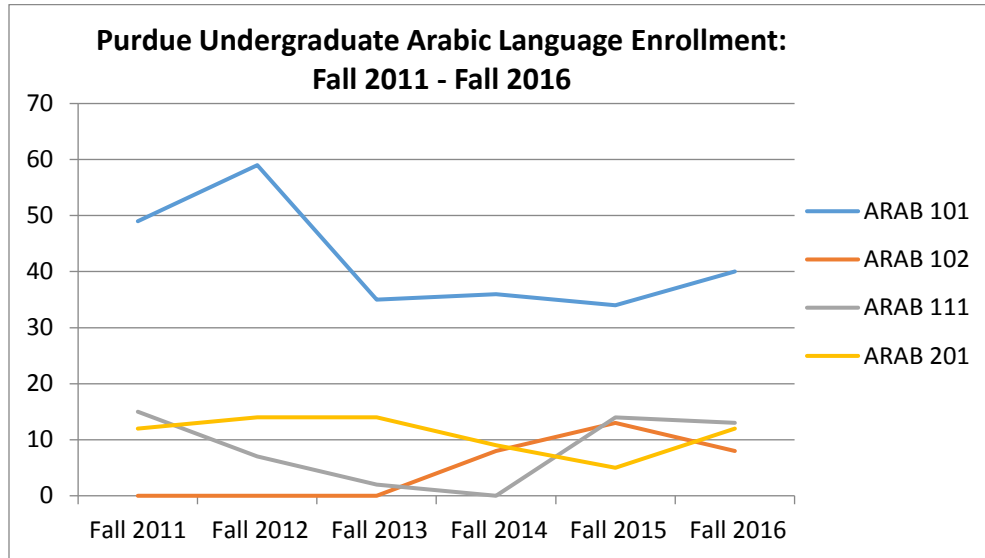


*Figure 2.2 – Purdue Undergraduate Liberal Arts Major Enrollment: Fall 2011-Fall 2016*

### 2.5.2 Purdue Arabic language enrollment

Over the past five years, enrollment into Purdue’s undergraduate Arabic language courses had been low and rising and falling quite unpredictably, as can be seen in Figure 2.3, below, which takes into account only those Purdue Arabic language courses which freshman

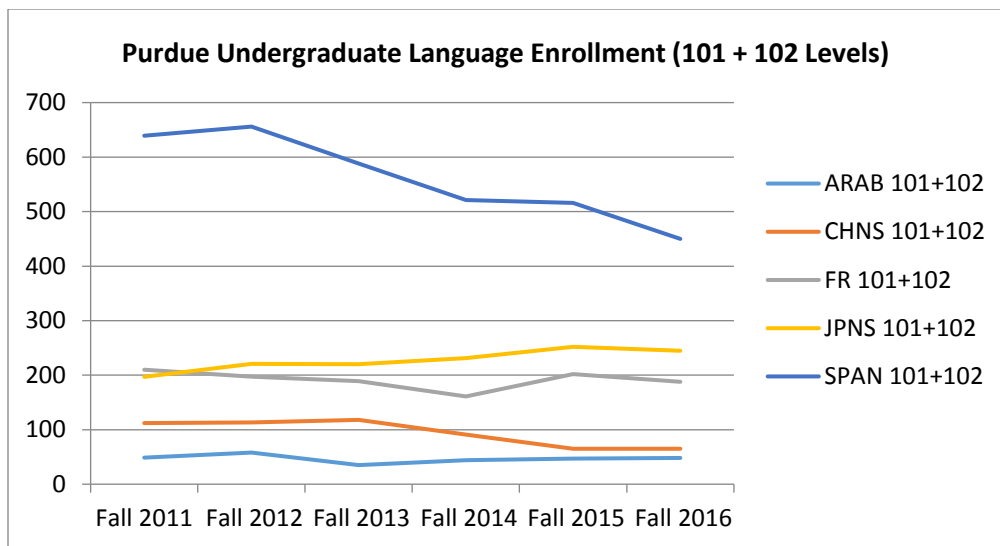
and sophomores would be expected to enroll in, namely ARAB 101, ARAB 102, ARAB 111 and ARAB 201.



*Figure 2.3 – Purdue Undergraduate Arabic Language Enrollment: Fall 2011-Fall 2016*

From this chart, it is understood that maximum enrollment for any given freshman and sophomore level Arabic course, enrollment had not reached past a very small 50 students per semester and averages between 15-25 students per semester (Purdue, 2016).

Furthermore, when adding enrollments for the ARAB 101 and ARAB 102 courses and comparing their enrollment numbers with those of the 101 and 102-level courses for Purdue's freshman and sophomore level Chinese, French, Japanese and Spanish courses, the following trends were observed, as shown in Figure 2.4.



*Figure 2.4 – Purdue Undergraduate Language Enrollment (101+102 Levels)*

As can be seen, Arabic language courses at Purdue totaled the lowest number of enrolled students, even falling hundreds of students behind the more popular Spanish Japanese and French courses (Purdue, 2016). Additionally, falling enrollment numbers were common across all Purdue language courses within the past enrollment year, mirroring the overall decline in enrollment in liberal arts major enrollment within the past enrollment year (Purdue, 2016). Enrollment into all of Purdue's undergraduate Arabic language courses was expected to remain exactly the same in the spring 2017 semester as it was in the fall 2016 semester and it was inferred that future trends of enrollment into such courses would continue to mimic Purdue liberal arts major enrollment somewhat (Purdue, 2016).

From the above data, it was gained that Purdue's Arabic language courses at Purdue had suffered from continually low enrollment numbers and these numbers were likely to decline along with enrollment into other liberal arts courses unless immediate action was taken by the university.

### 2.5.3 Purdue undergraduate enrollment evaluations

Although Purdue's Office of Enrollment Management claimed that its mission is to "increase the number of pathways that qualified students use to enroll at Purdue", its gathering and analysis of enrollment data to meet this end appeared, overall, shallow (Purdue, 2014).

Branching under the authority of this Purdue office is the Enrollment Management Analysis and Reporting (EMAR) division, headed by director Stephen Lipps and whose goal is to provide "timely, accurate, and relevant data and technologies regarding the recruitment, enrollment, and retention of students" (Purdue, 2016).

A cursory survey of the reports, publications and conference presentations produced by EMAR reveals that although the division was producing accurate statistical data regarding past, present and expected future current undergraduate and graduate enrollment at Purdue, such gathering and analyses of data are limited only to a purely statistical realm (Purdue, 2016). Absolutely no effort had been made toward either quantitative or qualitative analysis of deeper factors influencing student enrollment at Purdue, nor did there seem to be any analyses concerning trends of enrollment per department.

Without such analyses, those employed to increase enrollment at Purdue would simply be passively reacting to numbers calculated through machinery and would never attain understanding of what truly affects enrollment at Purdue and, as a result, would never be able to increase enrollment save through shallow marketing efforts based on demographical data. Furthermore, they would be completely unable to avail Purdue of the strategic advantages

mentioned previously as related to building more comprehensive enrollment management plans which account specifically for budgeting and outreach goals.

Finally, on a micro level, Purdue's Arabic language program would continue to suffer from low enrollment without this understanding, as the College of Liberal Arts as a whole would continue to be bereft of any strategy to address its currently falling enrollment numbers. This would result in continued lower funding and overall lack of attention given by Purdue and the situation for the department's undergraduate students regarding program quality would, for the most part, remain the same.

## 2.6 Summary

As previously stated, models used to predict and describe both internal and external factors influencing undergraduate enrollment can benefit university administrators through providing data to be implemented for improving undergraduate enrollment from a standpoint which takes into account relational aspects of enrollment data. Within language program evaluation, however, no such studies had been conducted which reveal deeper internal and external factors influencing undergraduate enrollment into language programs. Specifically, within Purdue University, enrollment numbers and predictions as a whole had primarily been statistically-based and additionally did not include such findings or descriptions. This case was the same for its language programs in particular, which includes courses listed under its undergraduate Arabic language program.

If Purdue University wishes to avail itself of opportunities and increase enrollment into its undergraduate language programs, in particular its Arabic language program, and potentially



become a regional or national leader in undergraduate Arabic studies, it should conduct enrollment factor determinations and analyses. Attaining a more thorough understanding of what has led to historically low enrollment into undergraduate Arabic programs would mark the first, significant step towards a set of actions towards improving such numbers.

## CHAPTER 3 - METHODOLOGY

This chapter explains the structure within which this study, which concerns freshman and sophomore perceptions of Purdue language and Arabic language courses and their motivations for taking or not taking language courses at Purdue, will be conducted. Included are descriptions of the research methodology, the survey to be delivered to the students electronically and the nature of statistical analysis of survey data and validation of the study.

### 3.1 Research Methodology

With the ultimate goal of this study being to gather the opinions of a representative sample of Purdue's freshman and sophomore classes regarding Arabic language courses at the university, it was determined by the researcher that a survey should be sent to the freshman and sophomore classes as a whole, rather than conducting surveys or interviews with only those freshman and sophomore students currently enrolled in Arabic language courses. Due to the small numbers of students currently enrolled in Arabic language courses at Purdue, interviews of students taking Arabic courses would give us insight into the thoughts of a small, and potentially cognitively homogenous, minority of students at Purdue, falling short of providing insight into the minds of the "average" Purdue freshman or sophomore and hence providing little insight for campus outreach strategies for the Arabic department. Additionally, surveying this same group of students would not only lead to potentially homogenous results, but comprise of a number of students that would be far too low to be claimed as representative of the entire Purdue freshman and sophomore population, as the total number of students currently enrolled in freshman and sophomore-level Arabic language courses (ARAB 101, 102

and 201) is only 60, comprising 0.1% of Purdue's undergraduate population (Purdue, 2016). With that being noted, the methodology for conducting said survey is as described in the following sections:

### 3.1.1 Research questions

Of the research questions outlined in the first chapter, the two research questions to be explored via the survey are:

- What are freshman and sophomore students' perceptions of Purdue University's language programs and its Arabic language offerings?
- What are freshman and sophomore students' motivations to take or not to take Purdue's Arabic courses?

### 3.1.2 Hypotheses

The researcher hypothesized that:

1. Students will describe Arabic as a language that is spoken widely worldwide, not so widely spoken in the U.S., can at least somewhat provide access to more job opportunities worldwide and is very difficult for native English speakers to learn
2. Students will be at least somewhat aware that Arabic language courses are taught at Purdue and that they are at least somewhat aware of the School and Languages and Cultures' offerings
3. Students will be likely not to be enrolled in Arabic language courses at Purdue nor plan to enroll in them in the future. If they do happen to be enrolled, this will be due to their academic programs' foreign language requirements or because there are job offerings

their desire which require the use of a foreign language. If they happen not to be enrolled, this will be because they have either fulfilled their academic program's foreign language requirements or because the field they desire to work in does not require the use of a foreign language.

4. Students will be more likely to enroll in language courses at Purdue if their academic programs required more language offerings and if there were more job offerings worldwide which required the use of a second language. They will be neither more likely nor more unlikely to enroll in foreign language courses at Purdue if they had more elective spots in their plans of study or had more free time and will be at most unlikely to enroll in foreign language courses at Purdue if the School of Languages and Cultures improved their marketing.
5. Students will report that their academic advisor is uninvolved in informing them about foreign language courses at the university and will believe that it is possible that increased advisor involvement would aid their foreign language enrollment decisions.
6. Students will offer few comments about other factors contributing to their decisions to either enroll or not enroll in foreign language courses and leave few comments for the researcher, the university or the university's college of languages and cultures.

Each individual hypothesis was addressed by identically-ordered sections of questions within the survey which answered the hypotheses quantitatively, though the questions themselves were qualitative in nature, to be described in detail in the following sections.

### 3.1.3 Variables

The variables which were evaluated, organized into separate sections in the survey, were as follows, included with the subject of the questions asked to determine their nature:

- Section 1 – Student background: class level and Purdue college enrolled in
- Section 2 – Student perceptions of the Arabic language: Rankings of Arabic in terms of popularity worldwide, popularity in the U.S., potential to give access to jobs worldwide and difficulty to be learned by native English speakers; Arabic will be ranked against Chinese, Hindi, Russian and Spanish
- Section 3 – Student perceptions of Purdue’s foreign language offerings: level of awareness of Purdue language offerings, selection of whether or not they are aware that Arabic language courses are taught at Purdue, rating of the efficacy of Purdue School of Language and Cultures’ marketing of their language offerings
- Section 4 – Student motivations for taking Purdue foreign language courses: enrollment or non-enrollment into foreign language courses at Purdue and reasons for doing or not doing so
- Section 5 - Student motivations to enroll in Purdue foreign language courses in the future: ranking of various suggested motives for enrolling in Purdue foreign language courses in the future
- Section 6 – Advising and student enrollment: ranking of extent to which academic advisors participate in student foreign language enrollment and extent to which

students believe that increased participation from advisors in this regard would be helpful

- Section 7 – Other factors: student comments about other factors which influence their decision to enroll or not enroll in foreign language courses and student comments for the researcher, , the university or the university’s college of languages and cultures

#### 3.1.4 Level of data

The respective levels of the data that were collected were as follows, as organized according to the section of the survey they correspond to:

- Section 1 – Student background: Nominal scale
- Section 2 – Student perceptions of the Arabic language: Interval scale
- Section 3 – Student perceptions of Purdue’s foreign language offerings: Interval scale
- Section 4 – Student motivations for taking Purdue foreign language courses: Interval scale
- Section 5 - Student motivations to enroll in Purdue foreign language courses in the future: Interval scale
- Section 6 – Advising and student enrollment: Interval scale
- Section 7 – Other factors: Nominal scale

#### 3.1.5 Population of inference

The population surveyed was that of all freshman and sophomore undergraduate students enrolled at Purdue University for the spring 2016 semester, whose number totaled 14,024 students (Purdue, 2016).

### 3.1.6 Sample

The sample gathered was a voluntary (non-probability) sample, as students had have the choice to answer or not answer the survey, which was sent to them via their Purdue email address. The researcher accessed data collected from the sample through Purdue Qualtrics, the medium through which the survey was be conducted.

In maintaining a 95% confidence rate with a 5% margin of error, the total number of survey responses which would sufficiently represent the Purdue freshman and sophomore classes together was 374 out of the total 14,024 students. Furthermore, the number of responses using the aforementioned confidence level and margin of error to represent the freshman and sophomore classes as separate entities would be 364 students for each class, with the freshman class totaling 7,043 students and the sophomore class totaling 6,981 students (Purdue, 2016).

### 3.1.7 Data sources

As mentioned previously, the data to accessed regarding freshman and sophomore perceptions of the Arabic language, Arabic language offerings and their motivations for taking or not taking Purdue language courses was only survey data, as accessed through Purdue Qualtrics and submitted via the students' Purdue email addresses.

### 3.1.8 Statistical tools

Statistical power, as used in determining the sample size for the survey, was  $\pi = 0.80$ .

### 3.2 Survey structure and administration

The 23-question survey administered tested Purdue freshman and sophomore students' perceptions of Purdue University's Arabic language offerings and their motivations for taking or not taking Arabic courses through questions involving both ranking and Likert scale participation. The sections of the survey and how they tested the desired variables are as follows:

- Section 1 – Student background: This section's questions asked them to provide their class level as well as the Purdue college their undergraduate major falls under. This would prove useful in determining the profiles of students who both take and do not take Arabic courses as well as language courses in general and was in no way a means to reveal the identities of student respondents.
- Section 2 – Student perceptions of the Arabic language: This section's questions asked them to rank the Arabic language in terms of their perception of its popularity worldwide, popularity in the U.S., potential to give access to jobs worldwide and difficulty to be learned by native English speakers. They ranked Arabic against the Chinese, Hindi, Russian and Spanish languages.
- Section 3 – Student perceptions of Purdue's foreign language offerings: This section's questions asked them to determine their level of awareness of Purdue language offerings and whether or not Arabic is a language taught at Purdue and also asked them to rate the efficacy of Purdue School of Language and Cultures' marketing of their language offerings.



- Section 4 – Student motivations for taking Purdue foreign language courses: This section’s questions asked students to reveal whether or not they were enrolled into foreign language courses at Purdue and their reasons for doing or not doing so.
- Section 5 - Student motivations to enroll in Purdue foreign language courses in the future: This section’s questions asked students to rank various suggested motives for enrolling in Purdue foreign language courses in the future in terms of their importance to them
- Section 6 – Advising and student enrollment: This section’s questions asked students to rank the extent to which academic advisors participated in their foreign language enrollment and the extent to which students believe that increased participation from advisors in this regard would be helpful.
- Section 7 – Other factors: This section’s questions asked students to voluntarily provide comments about other factors which influenced their decision to enroll or not enroll in foreign language courses as well as student comments for the researcher, the university or the university’s college of languages and cultures.

This survey was administered via Purdue Qualtrics and was distributed via the researcher’s forwarding of the survey to the secretaries of all 19 of Purdue’s colleges, 4 Purdue student organizations, the researcher’s Facebook page and the then current undergraduate Arabic language instructor during March of the spring 2017 semester.

Students were incentivized to take the survey with the offering of a \$25.00 Amazon gift card. The final question provided students with a separate link to a Google Form where they

entered their Purdue email addresses to enter the giveaway. This step was done to protect the identity of the students with regards to the answers they submitted in the language survey.

### 3.3 Analytical procedure and study validity

With regards to analysis, conclusions were be qualitative, but described quantitatively, as described in the following sections. The study's validity was be threatened both externally and internally, but at a relatively low threat level.

#### 3.3.1 Analytical procedure

The hypotheses mentioned in section 3.1 were addressed in terms of "benchmarking" student responses, as is discussed below.

#### 3.3.2 Hypotheses

1. Students will describe Arabic as a language which is spoken widely worldwide, not so widely spoken in the U.S., can at least somewhat provide access to more job opportunities worldwide and is very difficult for native English speakers to learn.
  - This will be supported if:
    - i. Arabic is ranked by at least 60% of students surveyed as being the 3<sup>rd</sup> or higher most-popular world language amongst the 5 languages given
    - ii. Arabic is ranked by at least 60% of students surveyed as being the 4<sup>th</sup> or lower most-popular world language in the U.S. amongst the 5 languages given

- iii. Arabic is ranked by at least 60% of students surveyed as being the 3<sup>rd</sup> or higher language which can provide access to several job opportunities worldwide amongst the 5 languages given
    - iv. Arabic is ranked by at least 60% of students surveyed as being the 3<sup>rd</sup> or higher most-difficult language for native English speakers to learn amongst the 5 given
- 2. Students will be at least somewhat aware of the School of Languages and Cultures' offerings, be at least somewhat aware that Arabic language courses are taught at Purdue and believe that the School of Languages and Cultures' marketing is at least fairly well-executed.
  - This will be supported if:
    - i. At least 60% of students surveyed acknowledge being either somewhat familiar or very familiar with the School of Language and Cultures' language offerings
    - ii. At least 60% of students surveyed list Arabic as a language that is taught at Purdue
    - iii. At least 60% of students surveyed rate the School of Language and Culture's marketing as being either fairly well-executed or well-executed
- 3. Students will be likely not to be enrolled in Arabic language courses at Purdue nor plan to enroll in them in the future. If students are enrolled in foreign language courses, this will be due to their academic programs' foreign language requirements or because there are job offerings their desire which require the use of a foreign language. If they

happen not to be enrolled in foreign language courses, this will be because they have either fulfilled their academic program's foreign language requirements or because the field they desire to work in does not require the use of a foreign language.

- This will be supported if:
    - i. At least 60% of students surveyed indicate that they are not currently enrolled in Arabic language courses at Purdue
    - ii. At least 60% of students surveyed indicate that they do not plan to enroll in Arabic language courses at Purdue in the future
    - iii. "1 - My academic program requires it of me" and "5 - There are job offerings requiring the language (s) that I study in my field" are the most-chosen enrollment motivations for students currently enrolled in Purdue foreign language courses
    - iv. "1 - I have fulfilled my academic program's language requirements" and "6 - The field/occupation that I plan to work in does not require the use of a foreign language" are the most-chosen non-enrollment motivations for students not currently enrolled in Purdue foreign language courses
4. Students will be more likely to enroll in foreign language courses at Purdue if their academic programs required more foreign language courses and if there were more job offerings worldwide which required the use of a second language. They will be neither more likely nor more unlikely to enroll in foreign language courses at Purdue if they had more elective spots in their plans of study or had more free time and will be at most

unlikely to enroll in foreign language courses at Purdue if the School of Languages and Cultures improved their marketing.

- This will be supported if:
  - i. At least 60% of students surveyed indicate that they would be at least somewhat likely to enroll in foreign language courses at Purdue in the future if their academic programs required it of them
  - ii. At least 60% of students surveyed indicate that they would be at least somewhat likely to enroll in foreign language courses at Purdue in the future if there were more job offerings worldwide which required the use of a second language
  - iii. At least 60% of students surveyed indicate that they are neither likely nor unlikely to enroll in foreign language courses at Purdue in the future if they had more elective spots in their plans of study
  - iv. At least 60% of students surveyed indicate that they are neither likely nor unlikely to enroll in foreign language courses at Purdue in the future if they had more free time
  - v. At least 60% of students surveyed indicate that they are at most unlikely to enroll in foreign language courses at Purdue in the future if the School of Languages and Cultures better communicated their offerings to undergraduate students
- 5. Students will report that their academic advisor is uninvolved in informing them about foreign language courses at the university and will believe that it is possible that

increased advisor involvement would maybe or potentially aid their foreign language enrollment decisions.

- This will be supported if:
  - i. At least 60% of students surveyed indicate that their advisor is uninvolved in informing them about foreign language courses at the university
  - ii. At least 60% of students surveyed indicate that increased advisor involvement would maybe or potentially aid their foreign language enrollment decisions
  
- 6. Students will offer few comments about other factors contributing to their decisions to either enroll or not enroll in foreign language courses and leave few comments for the researcher, the university or the university's college of languages and cultures.
  - This will be supported if:
    - i. Less than 40% of students surveyed offer comments about other factors contributing to their decisions to enroll or not enroll in foreign language courses at the university
    - ii. Less than 40% of students surveyed provide comments for the researcher, the university or the university's college of languages and cultures

The entire of the data analysis to be conducted was conducted through Purdue Qualtrics using data input from Purdue Qualtrics.

### 3.3.3 Study validity

Threats facing the validity of the study were both internal and external. The study's internal validity was threatened by selection of subjects, as only freshman and sophomore perceptions and motivations were measured. The study's external validity was threatened by the reactive/interactive effects of testing, as this test of language enrollment motivations and language offering perceptions possibly influenced student responses. Additionally, external validity was threatened by the interaction effects of the selection biases and the experimental variables.

### 3.4 Summary

This chapter provided an in-depth look at the methodology to be used in determining the nature of Purdue freshman and sophomore students' perceptions of the Arabic language offerings at Purdue and their motivations for taking or not taking Arabic language courses at Purdue. All areas of the methodology, including framework, survey structure and administration, analytical procedure and study validity have been sufficiently addressed and will undergo no further revision. It is expected that the successful administration of this survey and analysis of its results will aid the Purdue Arabic department in developing strategies to both attract and maintain increasing numbers of undergraduate students in the future.

## CHAPTER 4 RESULTS

This chapter explains the data gathered from the study, including overall participation, question data and the support or non-support of the hypotheses posed in the third chapter.

### 4.1 Participation

Overall, a total of 42 students participated in the survey, 16 of whom were enrolled as freshmen and 26 of whom were enrolled as sophomores. A remarkable 39 out of the 42 students surveyed were enrolled in programs under the Purdue Polytechnic Institute, while there was only one student participant per college for the Colleges of Science, Engineering and Health and Human Sciences. There were no students from the Colleges of Agriculture, Education, Liberal Arts, Pharmacy, Veterinary Medicine, Exploratory Studies nor the Krannert School of Management who participated in the survey.

Unfortunately, this response total did not meet the required response total which would have sufficiently represented the freshman and sophomore classes together with a 95% confidence rate with a 5% margin of error, which was a total of 374 out of the total 14,024 freshman and sophomore students enrolled at Purdue for the Spring 2017 semester. Additionally, it did not meet the required response total to sufficiently represent the freshman and sophomore classes as separate entities, which was a total of 364 students per class, again with a 95% confidence rate and a 5% margin of error.

Despite this, however, the survey was not redistributed for the sake of time constraints and, as is covered in the following discussion section, meeting the required response totals would most likely not have occurred without the survey being made mandatory for students.



## 4.2 Question Data

Below are the student responses as gathered via Purdue Qualtrics:

### Section 1 - Student background

#### 1. What year of undergraduate are you currently in?

#	Answer	%	Count
1	Freshman	38.10%	16
2	Sophomore	61.90%	26
	Total	100%	42

#### 2. What college is your undergraduate major under?

#	Answer	%	Count
1	College of Agriculture	0.00%	0
2	College of Education	0.00%	0
3	College of Engineering	2.38%	1
4	College of Health and Human Sciences	2.38%	1
5	College of Liberal Arts	0.00%	0
6	College of Pharmacy	0.00%	0
7	College of Science	2.38%	1
8	College of Veterinary Medicine	0.00%	0
9	Exploratory Studies	0.00%	0
10	Krannert School of Management	0.00%	0
11	Purdue Polytechnic Institute	92.86%	39
12	Other	0.00%	0
	Total	100%	42

### Section 2- Student perceptions of the Arabic language

**3. How would you rank the following foreign languages in terms of popularity worldwide? (1 being the most-spoken foreign language in the world and 5 being the least-spoken foreign language in the world)?**

#	Question	1		2		3		4		5		Total
1	Arabic	4.76%	2	21.43%	9	35.71%	15	26.19%	11	11.90%	5	42
2	Chinese	59.52%	25	30.95%	13	7.14%	3	2.38%	1	0.00%	0	42
3	Hindi	2.38%	1	11.90%	5	26.19%	11	40.48%	17	19.05%	8	42
4	Russian	0.00%	0	2.38%	1	14.29%	6	16.67%	7	66.67%	28	42
5	Spanish	33.33%	14	33.33%	14	16.67%	7	14.29%	6	2.38%	1	42

**4. How would you rank the following foreign languages in terms of popularity within the US? (1 being the most-spoken foreign language in the US and 5 being the least-spoken foreign language in the US)**

#	Question	1		2		3		4		5		Total
1	Arabic	4.76%	2	14.29%	6	40.48%	17	33.33%	14	7.14%	3	42
2	Chinese	2.38%	1	76.19%	32	16.67%	7	4.76%	2	0.00%	0	42
3	Hindi	0.00%	0	4.76%	2	35.71%	15	33.33%	14	26.19%	11	42
4	Russian	0.00%	0	0.00%	0	7.14%	3	28.57%	12	64.29%	27	42
5	Spanish	92.86%	39	4.76%	2	0.00%	0	0.00%	0	2.38%	1	42

**5. How would you rank the following foreign languages in terms of their ability to give you access to the most job opportunities worldwide? (1 being the language which would enable you to apply for the most jobs worldwide and 5 being the language which would least enable you to apply for jobs worldwide)**

#	Question	1		2		3		4		5		Total
1	Arabic	4.88%	2	17.07%	7	51.22%	21	17.07%	7	9.76%	4	41
2	Chinese	36.59%	15	48.78%	20	14.63%	6	0.00%	0	0.00%	0	41
3	Hindi	0.00%	0	4.88%	2	14.63%	6	43.90%	18	36.59%	15	41
4	Russian	0.00%	0	2.44%	1	17.07%	7	36.59%	15	43.90%	18	41

5	Spanish	58.54%	24	26.83%	11	2.44%	1	2.44%	1	9.76%	4	41
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**6. How would you rank the following foreign languages in terms of their difficulty to learn for native English speakers? (1 being the most difficult language for native English speakers to learn and 5 being the easiest language for native English speakers to learn)**

#	Question	1	2	3	4	5	Total					
1	Arabic	26.32%	10	47.37%	18	21.05%	8	0.00%	0	5.26%	2	38
2	Chinese	60.53%	23	13.16%	5	18.42%	7	5.26%	2	2.63%	1	38
3	Hindi	2.63%	1	23.68%	9	44.74%	17	28.95%	11	0.00%	0	38
4	Russian	2.63%	1	13.16%	5	13.16%	5	63.16%	24	7.89%	3	38
5	Spanish	7.89%	3	2.63%	1	2.63%	1	2.63%	1	84.21%	32	38

### Section 3 - Student perceptions of Purdue's foreign language offerings

**6. How aware are you of Purdue's undergraduate foreign language offerings? (1 being very aware of the foreign languages offered at Purdue and 5 being completely unaware of the foreign languages offered at Purdue)**

#	Answer	%	Count
1	Very aware	17.07%	7
2	Somewhat aware	51.22%	21
3	Neither aware nor unaware	12.20%	5
4	Unaware	9.76%	4
5	Very unaware	9.76%	4
	Total	100%	41

**7. Which of the following foreign languages are taught at Purdue University? (Select all that apply)**

#	Answer	%	Count
1	Arabic	62.50%	25
2	Chinese	90.00%	36
3	Farsi	10.00%	4
4	French	97.50%	39
5	German	92.50%	37

6	Greek	40.00%	16
7	Hebrew	52.50%	21
8	Italian	77.50%	31
9	Japanese	77.50%	31
10	Latin	70.00%	28
11	Portuguese	62.50%	25
12	Russian	57.50%	23
13	Spanish	95.00%	38
14	Turkish	15.00%	6
	Total	100%	40

**8. How would you rate the Purdue School of Languages and Cultures' marketing of its foreign language offerings to undergraduates? (1 being well-executed [undergraduates are made very aware of language offerings] and 5 being poorly executed [undergraduates are completely unaware of language offerings] )**

#	Answer	%	Count
1	Well-executed	7.32%	3
2	Fairly well-executed	14.63%	6
3	Neither well-executed nor poorly executed	41.46%	17
4	Poorly executed	26.83%	11
5	Very poorly executed	9.76%	4
	Total	100%	41

**Section 4 - Student motivations for taking Purdue foreign language courses**

**9. Are you currently enrolled in foreign language courses at Purdue?**

#	Answer	%	Count
1	Yes	14.63%	6
2	No	85.37%	35
	Total	100%	41

**10. If yes, which foreign language (s) are you currently studying at Purdue? (Select all that apply)**

	Answer	%	Count
	(I am not currently enrolled in any foreign language courses at Purdue)	78.13%	25
	Arabic	3.13%	1
	Chinese	3.13%	1
	French	6.25%	2
	German	3.13%	1
	Greek	0.00%	0
	Hebrew	0.00%	0
	Italian	3.13%	1
	Japanese	0.00%	0
	Latin	0.00%	0
	Portuguese	0.00%	0
	Russian	0.00%	0
	Spanish	6.25%	2
	Total	100%	32

**11. Do you plan to enroll in foreign language courses at Purdue in the future?**

#	Answer	%	Count
1	Yes	22.50%	9
2	No	77.50%	31
	Total	100%	40

**12. If yes, which foreign language (s) do you plan to study at Purdue? (Select all that apply)**

#	Answer	%	Count
1	(I do not plan to study any foreign languages at Purdue)	69.70%	23
2	Arabic	6.06%	2
3	Chinese	6.06%	2
4	French	12.12%	4
5	German	0.00%	0
6	Greek	0.00%	0
7	Hebrew	0.00%	0
8	Italian	0.00%	0
9	Japanese	0.00%	0
10	Latin	0.00%	0
11	Portuguese	3.03%	1
12	Russian	6.06%	2
13	Spanish	6.06%	2
	Total	100%	33

**13. If yes, why have you chosen to study a foreign language at Purdue? (Select all that apply, select 6 if you are not enrolled in foreign language courses at Purdue)**

#	Answer	%	Count
1	(I am not currently enrolled in any foreign language courses at Purdue)	74.29%	26
2	My academic program requires it of me	0.00%	0
3	I have open elective spots to fill in my study	11.43%	4
4	I have more free time (or less extracurricular activities, including jobs, volunteering, etc.)	5.71%	2
5	I enjoy learning about other languages and cultures	25.71%	9
6	There are job offerings in my field requiring the language(s) that I am studying	8.57%	3
	Total	100%	35

**14. If no, why have you chosen not to study a foreign language at Purdue? (Select all that apply, select 7 if you are currently enrolled in foreign language courses at Purdue)**

#	Answer	%	Count
1	(I am currently enrolled in foreign language courses at Purdue)	13.89%	5
2	I have fulfilled my academic program's language requirements	41.67%	15
3	My academic program does not require foreign language credits	38.89%	14
4	I do not have enough elective spots in my plan of study	22.22%	8
5	I do not have enough free time to devote to learning a foreign language	36.11%	13
6	I do not enjoy learning about other languages and cultures	16.67%	6
7	The field/occupation that I aspire to work in does not require the use of a foreign language	8.33%	3
	Total	100%	36

Section 5 – Student motivations to enroll in Purdue foreign language courses in the future

**15. How much more likely would you be to enroll in foreign language courses at Purdue if your academic program required it of you? (1 being very likely and 5 being very unlikely)**

#	Answer	%	Count
1	Very likely	75.61%	31
2	Somewhat likely	9.76%	4
3	Neither likely nor unlikely	4.88%	2
4	Unlikely	2.44%	1
5	Very unlikely	7.32%	3
	Total	100%	41

**16. How much more likely would you be to enroll in foreign language courses at Purdue if you had more elective spots available in your plan of study? (1 being very likely and 5 being very unlikely)**

#	Answer	%	Count
1	Very likely	19.51%	8
2	Somewhat likely	31.71%	13
3	Neither likely nor unlikely	17.07%	7
4	Unlikely	17.07%	7
5	Very unlikely	14.63%	6

	Total	100%	41
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**17. How much more likely would you be to enroll in foreign language courses at Purdue if you had more free time (or less extracurricular activities, including jobs, volunteering, etc.)? (1 being very likely and 5 being very unlikely)**

#	Answer	%	Count
1	Very likely	31.71%	13
2	Somewhat likely	12.20%	5
3	Neither likely nor unlikely	21.95%	9
4	Unlikely	24.39%	10
5	Very unlikely	9.76%	4
	Total	100%	41

**18. How much more likely would you be to enroll in foreign language courses at Purdue if foreign language offerings were better communicated to you by the School of Languages and Cultures? (1 being very likely and 5 being very unlikely)**

#	Answer	%	Count
1	Very likely	17.07%	7
2	Somewhat likely	26.83%	11
3	Neither likely nor unlikely	26.83%	11
4	Unlikely	17.07%	7
5	Very unlikely	12.20%	5
	Total	100%	41

**19. How much more likely would you be to enroll in foreign language courses at Purdue if there were more job offerings which required other languages worldwide? (1 being very likely and 5 being very unlikely)**

#	Answer	%	Count
1	Very likely	41.46%	17
2	Somewhat likely	43.90%	18
3	Neither likely nor unlikely	4.88%	2
4	Unlikely	4.88%	2



5	Very unlikely	4.88%	2
	Total	100%	41

### Section 6 – Advising and student enrollment

#### **20. To what extent is your academic adviser involved in informing you about foreign language courses at Purdue?**

Answer	%	Count
Very involved	2.44%	1
Somewhat involved	36.59%	15
Neither involved nor uninvolved	24.39%	10
Uninvolved	26.83%	11
Very uninvolved	9.76%	4
Total	100%	41

#### **21. Do you believe that it would be more helpful if academic advisers were required to inform their students of foreign language course options at Purdue?**

#	Answer	%	Count
1	Yes	29.27%	12
2	Maybe	48.78%	20
3	No	21.95%	9
	Total	100%	41

### Section 7 – Other factors

#### **22. Are there any other factors which influence your decision to enroll or not enroll in foreign language courses at Purdue?**

Amount of foreign language taken in high school

Not enough elective space in my plan of study

nope

Tested out of it prior to freshman year.

Quality of professors, expected difficulty of class

I already received credit for AP Spanish, and the foreign languages that I wanted (Norwegian and Polish) were not offered

Personal interest

no

no

None

N/A

No

More-so I don't feel its worth stressing myself over it right now in college. I'm definitely open to learning new languages, but this would probably be done on my own later down the line.

Grade in the class

Plan of study requirement only accepts continuation of language (200 level and above) - difficult to fit new language in plan of study

If you test into a class, you can't take a class below that level

Not good at it

I already dominate two languages and defend myself in another two

None

n/a

It's a waste of time

It's hard

They require too much memorization which I am not that great at, and the classes are always boring to me, I'd much rather take a million other courses.

The difficulty of the course

no

Just you, Tyler.

**23. Please leave any comments you have for the researcher, Purdue University or the School of Languages and Cultures**

Advertise the languages you can learn a little more!

none

N/A

N/A

I wish I could study Arabic but I don't think I have the skills.

N/A

Besides being told whether I need to take them or not, I was never informed about exactly which languages Purdue offered and it would have been great if there was a section about it (maybe during the STAR day or something).

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None

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n/a

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I had foreign language credits coming into college

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no

### 4.3 Hypotheses

With regards to the hypotheses proposed in the third chapter, their support or non-support is as follows. Statements that did not support the original hypotheses are underlined:

1. Students will describe Arabic as a language that is spoken widely worldwide, not so widely spoken in the U.S., can at least somewhat provide access to more job opportunities worldwide and is very difficult for native English speakers to learn.
  - **Partially supported:** Students described Arabic as a language which is spoken widely worldwide, spoken quite widely in the U.S., can at least somewhat provide access to more job opportunities worldwide and is very difficult for native English speakers to learn
  
2. Students will be at least somewhat aware of the School of Languages and Cultures' offerings, be at least somewhat aware that Arabic language courses are taught at Purdue and believe that the School of Languages and Cultures' marketing is at least fairly well-executed.
  - **Partially supported:** Students were at least somewhat familiar with the School of Languages and Cultures' offerings, were at least somewhat aware that Arabic

language courses are taught at Purdue and did not believe that the School of Languages and Cultures' marketing was at least fairly well-executed.

3. Students will be likely not to be enrolled in Arabic language courses at Purdue nor plan to enroll in them in the future. If students are enrolled in foreign language courses, this will be due to their academic programs' foreign language requirements or because there are job offerings their desire which require the use of a foreign language. If they happen not to be enrolled in foreign language courses, this will be because they have either fulfilled their academic program's foreign language requirements or because the field they desire to work in does not require the use of a foreign language.

- **Partially supported:** Students were overwhelmingly not enrolled in Arabic language courses at Purdue and did not plan to enroll in them in the future. Students who were enrolled in foreign language courses were enrolled mainly due to enjoyment of learning about other languages and cultures and having open elective spots in their plans of study. Students who were not enrolled in foreign language courses were not enrolled mainly due to their previous fulfillment of their major's language requirements or the non-requirement of foreign language credits by their major.

4. Students will be more likely to enroll in foreign language courses at Purdue if their academic programs required more foreign language courses and if there were more job offerings worldwide which required the use of a second language. They will be neither more likely nor more unlikely to enroll in foreign language courses at Purdue if they had more elective spots in their plans of study or had more free time and will be at most

unlikely to enroll in foreign language courses at Purdue if the School of Languages and Cultures improved their marketing.

- **Partially supported:** Students stated that they were more likely to enroll in foreign language courses if their academic program required it of them and if there were more job offerings worldwide which required the use of a second language. They were also somewhat likely to enroll in foreign language courses if they had more elective spots available in their plan of study and if they had more free time.
5. Students will report that their academic advisor is uninvolved in informing them about foreign language courses at the university and will believe that increased advisor involvement would maybe or potentially aid their foreign language enrollment decisions.
- **Partially supported:** Students were evenly split and indicated that their advisor is either uninvolved, neither involved nor uninvolved or somewhat involved in informing them about foreign language courses at Purdue. Students believed that increased advisor involvement would maybe or potentially aid their foreign language enrollment decisions.
6. Students will offer few comments about other factors contributing to their decisions to either enroll or not enroll in foreign language courses and leave few comments for the researcher, the university or the university's college of languages and cultures.
- **Supported:** Students offered few comments about other factors contributing to their decisions to either enroll or not enroll in foreign language courses and left

few comments for the researcher, the university or the university's college of languages and cultures.

#### 4.4 Summary

This chapter summarized the overall rate of participation in the survey, provided the responses given by student participants and elucidated the confirmation or non-confirmation of the author's proposed hypotheses. Overall, only one student enrolled in Arabic language courses at Purdue participated, despite what could be considered a decent survey response rate, and the author's hypotheses were, for the most part, partially supported by student responses.

## CHAPTER 5 - DISCUSSION

This chapter explains the significance of the study's findings, particularly concerning the impact the study has on the School of Languages and Cultures and its potential use as a template for future language studies. Additionally, it suggests potential structural and expansion changes that could have been made for the study as well as methods for conducting future studies on collegiate Arabic language enrollment.

### 5.1 Significance Of Results

Though unfortunately, this study gathered data from only one Purdue undergraduate student enrolled in Arabic language courses, the responses gathered from the survey highlight important motivations and concerns freshman and sophomore undergraduates at Purdue have for enrolling in foreign language courses in general. Such information can still be used by Purdue's Arabic Department in their strategic planning and marketing functions.

Overall, students' Indications about the Arabic language and language courses at Purdue can be categorized into insights about personal motivations and competency (representing internal student background, perception and motivation factors) and administrative issues (representing external academic and career factors). Additionally, the conduction and results gathered from this survey have positive implications for the future of undergraduate language enrollment studies based in the U.S.

### 5.1.1 Internal Student Background, Perception And Motivation Factors

With regards to internal student background factors, the largest percentage of students who elected not to study a foreign language at Purdue (41.67%), chose so because of fulfillment of their academic program's language requirements. Additionally, in the comments provided in the last two questions of the survey, students commented that they had insecurities about their general ability to learn foreign languages and their particular ability to memorize vocabulary.

Given this, Arabic language departments can expect that students who have experience with foreign languages in the past may not necessarily be motivated to enroll in courses if they fulfill their program's requirements. This cannot be changed much through marketing by Arabic language departments. However, students' lack of belief in their own language abilities could potentially be addressed by Arabic departments offering free seminars on Arabic basics, so students could safely test their abilities without feeling the burden associated with official course enrollment.

With regards to internal student perception factors, students perceived Arabic as a popular language worldwide that could provide access to jobs across the world, but as a language which is very difficult for native English speakers to learn. Again, these issues could be addressed through free seminars or perhaps informative flyers or discussions about the Arabic language's links with Romance languages, in particular the Spanish language, which it would be expected that the majority of undergraduate students would have experience with from high school.



Additionally, students did not perceive the School of Languages and Cultures' marketing campaigns to be effective and requested that the school market its language offerings during orientation weeks on campus. One student also provided doubts about the quality of the professors instructing foreign language courses at Purdue. As such, it would be wise for the school and the Arabic department to connect with those responsible for Boiler Gold Rush and other Purdue student orientation activities to foster increased interest from undergraduates. Also, as per the students' comment, this involvement would ideally include presentation of the qualifications of the language instructors and have the instructors present in order to make students more familiar with them.

Finally, with regards to internal student motivation factors, students who were enrolled in foreign language courses were enrolled mainly due to enjoyment of learning about other languages and cultures (25.71%) and a good number of students also indicated that they would be more likely to enroll in foreign language courses if they had more free time (43.91%). While the Arabic department could not affect students' amount of free time, it would do well to advertise the means through which language is a tool to discover other cultures, such as through the translation and interpretation of popular literature and films.

#### 5.1.2 External Academic And Career Factors

With regards to external academic factors, the non-requirement of foreign language credits by their students' academic programs was marked as significant for students, as 75.61% of students indicated that they would be more likely to enroll in foreign language courses if their academic program required it of them. Additionally, a fairly substantial number of

students (50.22%) indicated that they would be either somewhat or very likely to enroll in foreign language courses if they had more open elective spots in their plans of study. Indeed, the single student respondent who was enrolled in Arabic language courses at Purdue indicated that they did so because of the presence of open elective spots in their plan of study. Finally, indicated that their academic advisor is either uninvolved, neither involved nor uninvolved or somewhat involved in informing them about foreign language courses at Purdue and believed that increased advisor involvement would maybe or potentially aid their foreign language enrollment decisions.

Taking all of this into account, it would be wise for the Arabic department to coordinate with those in charge of curriculum in other departments to make a case for Purdue's academic programs to both increase foreign language requirements or create more elective spots for their students. Additionally, the department could seek to work hand in hand with academic advisors in different departments to ensure that their offerings are being communicated on a regular basis to undergraduate students.

Finally, with regards to external career factors, 85.56% of students indicated that they were at least somewhat more likely to enroll in foreign language courses if there were more job offerings worldwide which required the use of a second language. While the Arabic department cannot affect the amount of jobs available worldwide which require the use of the Arabic language, it can further its advertisement to its students and to students participating in student orientation about the number of positions worldwide which require the use of Arabic, including details about what fields they're in and what organizations require the language.

It should be noted that the external economic factors mentioned in Chapter 2 were not surveyed for nor were voluntarily mentioned by the students surveyed. Future research into undergraduate Arabic language enrollment may find investigation of these factors helpful in further rounding out the profiles of undergraduates with regards to their enrollment.

## 5.2 Study Limits, Recommendations And Implications For Future Research

This study surveyed only freshman and sophomore students currently enrolled for one semester at one Big 10 university, and from a mixed-methods standpoint. As such, the insights gained from this study apply to a relatively small population of students when compared both to the number of students at Purdue University as well as the total number of undergraduates currently enrolled in U.S. institutions. Additionally, the survey was not made required for freshman and sophomore students in general, nor Arabic language students in particular, hence the retrieval of data from a very small pool of students and the subsequent addressing of only a portion of its research questions. Finally, students were informed that the Purdue Arabic Department and its School of Languages and Cultures would have access to the survey's responses, which could have affected student responses.

Future studies of this nature would do well to survey a larger population of students, with the incorporation of more in-depth qualitative and quantitative techniques and with official distribution and requirement by university officials. This could include the use of interviews in addition to surveys, the accompaniment of Arabic studies' historical local and national enrollment trends, the study of Arabic studies' current enrollment trends, the monitoring of the transition of undergraduate Arabic students to graduate Arabic studies and

more. Doing so would both broaden and deepen insights into undergraduate Arabic language enrollment trends and ideally gather student samples which would truly represent the undergraduate student populations of universities in particular and the U.S. in general.

Despite the study's narrow nature and the only partial fulfillment of its research goals, the latter being as a result of limited student participation, it marked the first attempt made to understand undergraduate foreign language enrollment trends in general and undergraduate Arabic language enrollment trends in particular. As such, the methods utilized in this study could indeed be used as a template for Arabic language departments and foreign language departments to conduct investigations into their enrollment trends. Doing so would further broaden and deepen the extent of enrollment studies as well as language course evaluation efficacy and provide avenues for interdisciplinary studies between the foreign language and university administration fields.

Specifically, this survey is expected to change how Purdue's Arabic department approaches its outreach, marketing and teaching methods and should only help improve its enrollment and retention rates as well as the satisfaction of both its students and faculty.

### 5.3 Summary

This chapter expounded the factors identified which influenced freshman and sophomore enrollment into foreign language courses at Purdue University, identified as internal background, perception and motivation factors and external academic and career factors. It additionally contained comments about the possibility for the expansion of the study's scope and depth which could have been conducted. Finally, it contained

recommendations for the conduction of future undergraduate Arabic language studies by U.S. universities, which require the use of both increased and more thorough study methods and the official involvement of university staff.

## CHAPTER 6 - CONCLUSION

This thesis was a mixed-methods case study of freshman and sophomore enrollment into an undergraduate Arabic language program at a Big 10 university in Indiana. At this university, the consistently small enrollment rates of undergraduates into Arabic language courses at the university, and foreign language courses in general, was of interest. The study sought to discover the motivations driving freshman and sophomore students at the university to enroll or not enroll in Arabic language courses. Despite low participation from Arabic language students, the survey still managed to discover key factors driving enrollment and non-enrollment into foreign language courses at the university, which could be inferred to be driving enrollment or non-enrollment into Arabic language courses. Of these, the most significant were the personal motivation to learn about other cultures and the requirement of foreign language proficiency by both students' academic departments and the fields they planned to work in . It is hoped that future studies about undergraduate Arabic language enrollment in the U.S. would involve official sponsoring and involvement by universities, so as to ensure the gathering of more representative samples of student populations and position Arabic language programs accordingly. Doing so could dramatically improve Arabic language departments' understanding of student perceptions of the Arabic language program and boost enrollment and retention rates in years to come, hence bringing more funding and diversity to any given U.S. institution.

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## APPENDIX A Survey

Section 1 - Student background**1. What year of undergraduate are you currently in?**

- 1 - Freshman
- 2 - Sophomore
- 3 - Junior
- 4 - Senior

**2. What college is your undergraduate major under?**

- 1 - College of Agriculture
- 2 - College of Education
- 3 - College of Engineering
- 4 - College of Health and Human Sciences
- 5 - College of Liberal Arts
- 6 - College of Pharmacy
- 7 - College of Science
- 8 - College of Veterinary Medicine
- 9 - Exploratory Studies
- 10 - Krannert School of Management
- 11 - Purdue Polytechnic Institute

Section 2- Student perceptions of the Arabic language**3. How would you rank the following foreign languages in terms of popularity worldwide? (1 being the most-spoken foreign language in the world and 5 being the least-spoken foreign language in the world)?**

- \_\_\_ Arabic
- \_\_\_ Chinese
- \_\_\_ Hindi
- \_\_\_ Russian
- \_\_\_ Spanish

**4. How would you rank the following foreign languages in terms of popularity within the US? (1 being the most-spoken foreign language in the US and 5 being the least-spoken foreign language in the US)**

- \_\_\_ Arabic  
 \_\_\_ Chinese  
 \_\_\_ Hindi  
 \_\_\_ Russian  
 \_\_\_ Spanish

**5. How would you rank the following foreign languages in terms of their ability to give you access to the most job opportunities worldwide? (1 being the language which would enable you to apply for the most jobs worldwide and 5 being the language which would least enable you to apply for jobs worldwide)**

- \_\_\_ Arabic  
 \_\_\_ Chinese  
 \_\_\_ Hindi  
 \_\_\_ Russian  
 \_\_\_ Spanish

**6. How would you rank the following foreign languages in terms of their difficulty to learn for native English speakers? (1 being the most difficult language for native English speakers to learn and 5 being the easiest language for native English speakers to learn)**

- \_\_\_ Arabic  
 \_\_\_ Chinese  
 \_\_\_ Hindi  
 \_\_\_ Russian  
 \_\_\_ Spanish

Section 3 - Student perceptions of Purdue's foreign language offerings

**6. How aware are you of Purdue's undergraduate foreign language offerings? (1 being very aware of the foreign languages offered at Purdue and 5 being completely unaware of the foreign languages offered at Purdue)**

- 1 – Very aware            2 – Somewhat aware    3—Neither aware nor unaware  
 4—Somewhat unaware        5—Very unaware

**7. Which of the following foreign languages are taught at Purdue University? (Select all that apply)**

- \_\_\_ Arabic

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| <input type="checkbox"/> Chinese | <input type="checkbox"/> Japanese   |
| <input type="checkbox"/> Farsi   | <input type="checkbox"/> Latin      |
| <input type="checkbox"/> French  | <input type="checkbox"/> Portuguese |
| <input type="checkbox"/> German  | <input type="checkbox"/> Russian    |
| <input type="checkbox"/> Greek   | <input type="checkbox"/> Spanish    |
| <input type="checkbox"/> Hebrew  | <input type="checkbox"/> Turkish    |
| <input type="checkbox"/> Italian |                                     |

**8. How would you rate the Purdue School of Languages and Cultures' marketing of its foreign language offerings to undergraduates? (1 being well-executed [undergraduates are made very aware of language offerings] and 5 being poorly executed [undergraduates are completely unaware of language offerings] )**

- 1 – Well-executed      2—Fairly well-executed      3 – Neither well-executed nor poorly executed  
 4—Poorly executed      5—Very poorly executed

Section 4 - Student motivations for taking Purdue foreign language courses

**9. Are you currently enrolled in foreign language courses at Purdue?**

- 1 - Yes      2 - No

**10. If yes, which foreign language (s) are you currently studying at Purdue? (Select all that apply)**

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| <input type="checkbox"/> Arabic  | <input type="checkbox"/> Italian    |
| <input type="checkbox"/> Chinese | <input type="checkbox"/> Japanese   |
| <input type="checkbox"/> French  | <input type="checkbox"/> Latin      |
| <input type="checkbox"/> German  | <input type="checkbox"/> Portuguese |
| <input type="checkbox"/> Greek   | <input type="checkbox"/> Russian    |
| <input type="checkbox"/> Hebrew  | <input type="checkbox"/> Spanish    |

**11. Do you plan to enroll in foreign language courses at Purdue in the future?**

- 1 - Yes      2 – No

12. If yes, which foreign language (s) do you plan to study at Purdue? (Select all that apply)

Arabic

Chinese

French

German

Greek

Hebrew

Italian

Japanese

Latin

Portuguese

Russian

Spanish

**13. If yes, why have you chosen to study a foreign language at Purdue? (Select all that apply, select 6 if you are not enrolled in foreign language courses at Purdue)**

- 1 - My academic program requires it of me
- 2 - I have open elective spots to fill in my plan of study
- 3 - I have more free time (or less extracurricular activities, including jobs, volunteering, etc.)
- 4 - I enjoy learning about other languages and cultures
- 5 - There are job offerings requiring the language (s) that I study in my field
- 6 - I am not enrolled in language courses at Purdue

**14. If no, why have you chosen not to study a foreign language at Purdue? (Select all that apply, select 7 if you are currently enrolled in foreign language courses at Purdue)**

- 1 - I have fulfilled my academic program's language requirements
- 2 - My academic program does not require foreign language credits
- 3 - I do not have enough elective spots in my plan of study
- 4 - I do not have enough free time to devote to learning a foreign language
- 5 - I do not enjoy learning about other languages and cultures
- 6 - The field/occupation that I plan to work in does not require the use of a foreign language
- 7 - I am currently enrolled in foreign language courses at Purdue

Section 5 – Student motivations to enroll in Purdue foreign language courses in the future

**15. How much more likely would you be to enroll in foreign language courses at Purdue if your academic program required it of you? (1 being very likely and 5 being very unlikely)**

- |               |                   |                               |
|---------------|-------------------|-------------------------------|
| 1—Very likely | 2—Somewhat likely | 3—Neither likely nor unlikely |
| 4—Unlikely    | 5—Very unlikely   |                               |

**16. How much more likely would you be to enroll in foreign language courses at Purdue if you had more elective spots available in your plan of study? (1 being very likely and 5 being very unlikely)**

- |               |                   |                               |
|---------------|-------------------|-------------------------------|
| 1—Very likely | 2—Somewhat likely | 3—Neither likely nor unlikely |
| 4—Unlikely    | 5—Very unlikely   |                               |

**17. How much more likely would you be to enroll in foreign language courses at Purdue if you had more free time (or less extracurricular activities, including jobs, volunteering, etc.)? (1 being very likely and 5 being very unlikely)**

- |               |                   |                               |
|---------------|-------------------|-------------------------------|
| 1—Very likely | 2—Somewhat likely | 3—Neither likely nor unlikely |
| 4—Unlikely    | 5—Very unlikely   |                               |

**18. How much more likely would you be to enroll in foreign language courses at Purdue if foreign language offerings were better communicated to you by the School of Languages and Cultures? (1 being very likely and 5 being very unlikely)**

1—Very likely                      2—Somewhat likely                      3—Neither likely nor unlikely  
4—Unlikely                      5—Very unlikely

**19. How much more likely would you be to enroll in foreign language courses at Purdue if there were more job offerings which required other languages worldwide? (1 being very likely and 5 being very unlikely)**

1—Very likely                      2—Somewhat likely                      3—Neither likely nor unlikely  
4—Unlikely                      5—Very unlikely

Section 6 – Advising and student enrollment

**20. To what extent is your academic adviser involved in informing you about foreign language courses at Purdue?**

1—Very involved                      2—Somewhat involved                      3—Neither involved nor uninvolved  
4—Uninvolved                      5—Very uninvolved

**21. Do you believe that it would be more helpful if academic advisers were required to inform their students of foreign language course options at Purdue?**

1- Yes                      2 – Maybe                      3 - No

Section 7 – Other factors

**22. Are there any other factors which influence your decision to enroll or not enroll in foreign language courses at Purdue?**

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**23. Please leave any comments you have for the researcher, Purdue University or the School of Languages and Cultures**

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Section 8 - Link to Google Form for \$50 Amazon gift card drawing

**24. Please click the following link to be directed to the Google Form where you will enter your Purdue email in the \$50 Amazon gift card giveaway – Thank you for your participation! : (link)**

## APPENDIX B IRB Approval

**Purdue University:** IRB Protocol Summary – Protocol Details**Protocol #: 1702018878****Expiration Date:****Last Approval Date:****Investigator:** NAIMI, LINDA L**Status:** Exempt**Sequence Number:** 2**Title:** Internal and external factors influencing enrollment into an undergraduate Arabic

language program in Indiana: A survey of university freshmen and sophomores

**Protocol Type:** Request for Exemption**Application Date:** 02/28/2017**Reference Num 1:****Organizations**

Type	Organization	Address
Performing Organization	Purdue University	155 N. Grant St., W. Lafayette, IN. 47907-2114 USA

**Investigators**

Person Name	Units	Affiliate	Training Flag
Naimi, Linda L.	41906000 -Tech, Leadership and Innovation	Faculty	N
Mallari, Tyler J.	41906000 – Tech, Leadership and Innovation	Non-Faculty	N



**Subjects**

<b>Subject</b>	<b>Count</b>
IRB Approved Max. Participants	1400

