ABSTRACT

This article aims to explore and analyze a limited number of developmental differences among learners of French in at-home (AH) and study-abroad (SA) learning environments. This project compared eleven students of French who studied in the AH context versus eleven students of French who studied abroad in France. The students participated in both a listening and reading exercise. Both exercises were constructed to evaluate the awareness of the phonemes /u/ and /y/. A comparison was made to determine the changes (i.e., positive or negative) in recognition and production of these phonemes by the AH and SA groups. Although positive development—overall—was found to have occurred, the results indicate that the limited sample size will need to be increased in future research in order to determine if this data is generalizable or specific to these two groups of students.

Although there is not much substantial research on comparative student development in AH and SA contexts (because of the time and costs involved), the information acquired from this study is a good stepping stone for future research that could potentially include qualitative types of analysis such as interviewing, student journals, and field observation.
TABLE OF CONTENTS

Abstract ......................................................................................................................... 1

Table of Contents ..........................................................................................................2
  Introduction .................................................................................................................. 3
  Literature Review ....................................................................................................... 3-10
  Method .........................................................................................................................10-26
  Conclusion ................................................................................................................... 26-28
  References .................................................................................................................... 29

Appendices .....................................................................................................................
  Appendix A: Research Consent Form ................................................................. 30-31
  Appendix B: Questionnaire ....................................................................................... 32-33
  Appendix C: Reading Exercise ................................................................................. 34
  Appendix D: Listening Exercise ............................................................................... 35
  Appendix E: Statement of mentor approval ............................................................ 36
  Appendix F: Curriculum Vitae ................................................................................. 37-38
  Appendix G: Powerpoint Presentation ................................................................. 42-
INTRODUCTION

In today’s society it is not good enough to know merely one language. It is becoming more and more vital to have additional language skills and experiences. As a French major, I have a great interest in the acquisition of a second language, which is a rather broad field of inquiry. I have therefore selected a more specific topic: How does the development of language produce similarities and differences among students learning French in a study abroad (SA) program (in Caen, France) and students who are in a so-called at-home (AH) context learning French in Denton, TX (i.e., in different environments, with different motivations, and so forth). The current project is therefore a comparative analysis of phonetic awareness and development among learners of French both in SA and AH contexts.

LITERATURE REVIEW

There are three very different views that epitomize the discrepancies among most researchers in this field. The shifting perspectives on language learning have caused changes in our approaches, which include structural, cognitive, and sociocognitive theoretical frameworks.

The structural perspective has been strongly influenced by behavioral psychologists such as B.F. Skinner and John Watson. Language is perceived as an autonomous structural system that focuses on the spoken word rather than written language. Language was said to develop through internalization and memorization of structures and habits through reiteration of corrective feedback. Imitation of a regulatory
model was the idea encouraged in students in structural learning (Kern & Warschauer, 2000).

The cognitive perspective, on the other hand, argues that language competence could not be justified by behavioral reinforcement. Through the writings of the theoretical linguist Noam Chomsky and Stephen Krashen, language is viewed as a mentally constructed system. Chomsky has spent the last few decades developing theoretical linguistics as its own discipline and has gained great prominence. Unlike his predecessors who believed that the brain worked together in different areas, Chomsky posited that there was only one part of the brain that controlled language learning, and that the other parts of the brain were not involved. Theoretically, this cognitive viewpoint supports individualistic ideas. Language is said to grow, and is not learned. According to Chomsky, people have an innate capacity built into their brains. He had no interest in the study of second language (L2) performance and development, but rather focused his research solely on first language (L1) linguistic competence. His research was focused on his aspiration to find the underlying word order in the language acquisition device of the human mind (e.g., subject-verb-object; subject-object-verb; verb-subject-object; etc.). Universal Grammar is a popular term coined by Chomsky referring to the notion that there is indeed one underlying structure or representation of linguistic elements in the human mind. The Chomskyan view became mainstream, specifically in the teachings of L2 reading and writing (see Kinginger, 2001; van Lier, 2004), in spite of the fact that Chomsky’s theories and views of language never addressed L2 teaching, learning, or performance.
Although Chomsky seemed to have created a widely received view of language acquisition, a variety of other approaches have begun to influence L2 and foreign language (FL) teaching and learning. According to the theories of Lev Vygotsky, a Russian developmental psychologist in the early 1900's, Dell Hymes, an American sociolinguist and M.A.K. Halliday, a British linguist (Kem & Warschauer, 2000, p. 3), language is both a social and a cognitive phenomenon rather than merely a private entity or series of operational sequences that occurs solely in the head. Vygotsky was the first to elaborate sociocultural theory, although it was not discovered in North America and Western Europe until the mid 1980s.

Halliday proposed three main functions of language: ideational, interpersonal and textual. Ideational language is used to express content, interpersonal is used to conserve social interactions and textual implies the creation of situationally appropriate communication. Through these propositions came the recognition that ideational language was the most popular form and the rest were being ignored. Task based learning and collaborative interaction (e.g., solving problems and learning in environments that offer opportunities for assisted performance) became means of fostering sociocognitive development. Sociocognitive theories are based on the belief that the brain works together with social (i.e., exterior) influences as a whole rather than there only being one part of the mind used for language. It is through the use of social interaction and "social appropriateness of language" (a phrase attributed to Hymes) that this idea of a sociocognitive perspective develops.

Kinginger (2001) confirms the differences regarding a cognitive aspect of learning versus a sociocognitive one. She begins by differentiating the crux of the input
hypothesis (i + 1) from a construct central to Vygotsky's sociocultural theory, namely the zone of proximal development (ZPD). More often than not, these two metaphorical constructs are conflated in the second language acquisition (SLA) literature. Kinginger (2001) explains that the input hypothesis arose from the thoughts of Stephen Krashen in the tradition of a Chomskyan mainstream view of language. Krashen focuses on the progress learners make in language learning when presented with an almost unreachable level of information that they cannot possibly comprehend, regardless of the input they may be given. The goal of input processing is competence with an emphasis on sentence grammar, which comes from Chomsky’s Universal Grammar, in which he refers to language as a type of ‘organ’ that controls language development.

It is believed by Krashen, based on an extension of Chomsky’s theories, that language is developed as a result of mere exposure and is not something that is learned. It is innate. Krashen does however propose a dichotomy between acquisition (a vaguely defined concept involving innate and non-taught gaining of knowledge) and learning (formally learned knowledge and items) in order to perpetuate and extend Chomsky's dichotomy of competence (potential, abstract knowledge and ability) versus performance (real, actual, applied knowledge and use of the language). The use of such dichotomies appears at the outset to be very convenient. However, these contrasts and oppositions leave no room for overlap, symbosis, or mutual inclusion. They are exclusionary and cannot thus account for interdependency, collaboration, or the influence of one sphere or type of knowledge-gaining on the other and vice versa. Further discussion of these and other dichotomies used in scientifcist, utilitarian theoretical approaches and models of explaining knowledge is beyond the scope of the present article. (However, interested
readers can find the origins of these dichotomies in the writings of the linguist Ferdinand de Saussure and the philosopher René Descartes, whose thinking was heavily influenced by such paradigms. Critiques and explanations are offered, for example, in van Lier, 2004.)

Sociocultural theory, unlike the input hypothesis, has its roots in the writings of Vygotsky, a cognitive psychologist. Vygotsky's theory is one of cognitive development, which includes the mind and the brain instead of posting only one part of the brain as a language acquisition device. Vygotsky proposed a central construct known as the zone of proximal development (ZPD). This is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978). The ZPD represents on a metaphorical level the notion that development occurs in the mind as it is influenced by society and vice versa in a symbiotic, non-dichotomous relationship. Sociocultural theory is not one of language acquisition. It focuses on the importance of internalization and the development of mental processes. Learners are not independent, but they are unified. "Thinking, remembering, and attending are social phenomena, activities that individuals do and learn to do only through interacting with other people" (Kinginger, 2001). Kinginger clarifies that although many researchers and educators associate i + 1 with ZPD interchangeably, they are not from the same theoretical tradition.

Different theoretical traditions necessarily determine the direction, perspective, and explanatory power of the philosophical underpinning of any linguistic analysis. Most current writing in second language acquisition (SLA) uses a mainstream cognitive
approach to language learning (Collentine, 2004; Freed, 2004; Herschenson, 2003) or seeks to explain and clarify theoretical constructs that are central to understanding the professional SLA literature (e.g., Firth & Wagner, 1997; Kinginger, 2001; Lantolf, 2000; van Lier, 2004). In the current study, a sociocognitive framework provides a perspective for considering possible analyses and directions for further research. However, given the limited amount of data available to analyze each student's interactions, study sessions, class periods, out-of-class contact with and exposure to French, the current research seeks only to determine how the results could inform and guide future studies that compare SA and AH contexts.

The professional literature on foreign language learning in SA contexts is relatively small, yet increasing substantially every year. The prohibitive costs and enormous amounts of time required for doing on-site-pre and post-studies illustrate the reasons for a study like this to be difficult to achieve substantial proof. The perceived notion that studying abroad is naturally always a good thing can be controversial because there are not many studies to confirm exactly what was being learned or not learned.

The four main types of second language learning are the following: a formal classroom at-home context, an intensive immersion program, study abroad, and distance learning. Results from these varied learning styles produce a wide range of outcomes.

The formal classroom in an AH context of learning is probably the most prevalent means of studying a foreign/second language. In Freed (2004), 28 students of French participated in research investigating the benefits and disadvantages of learning in various contexts. Students were exposed to twelve weeks of two to four hour a week French classes in literature, theater, history and civilization. Freed's curriculum
emphasized a communicative approach that would provide students with the tools to interact in the world of French speakers. Through recorded interviews and out-of-class contact, Freed analyzed her students by giving them pretests and posttests to accurately measure their performance. "There did not seem to be a strong trend toward either improved or worse performance over time" (Freed 288). This type of study appears to be similar to the one I plan to administer.

Using a similar design, Herschensohn executed a study between two young women studying French at the same level. One student, Chloe, studied abroad in France for six months. The other student, Emma, remained in the US and continued to take French classes at the same academic level as Chloe. Herschensohn concludes that although Emma spoke slower and was not as fluent as Chloe, she was more grammatically accurate. These findings demonstrate the gains in fluency that SA students seem to acquire compared to AH students who fall behind in this category. SA students tend to have better lexical (i.e., word-level, vocabulary) growth and retain more native-like organization of discourse.

An SA context presents different results in language ability than does an AH context. Students who study abroad are immersed in the language and therefore often spend a majority of their time conversing in the foreign language. For example, a student who studies at home in a classroom environment is only exposed to 5 hours of that foreign language per week, while a student studying abroad for six months is exposed to only 5 hours of English per week and the rest of her time is spent conversing in French (Herschensohn). Because of this potential difference in language immersion, a study
abroad student will often have a more enhanced rate of fluency. But does fluency necessarily suggest accuracy?

There is a discrepancy regarding the definition of the term fluency. It has many definitions, one being “ready or facile in speech, effortlessly smooth and rapid” (M-W). Student definitions of fluency differ greatly from the definition given by a native speaker of that language. Terms such as “communicative competence” and “language proficiency” are other definitions (Freed). Fluency also refers to efficiency in getting meaning across, while accuracy measures the amount of error produced. One of the most important aspects about fluency is that it is not equivalent to accuracy. Study abroad students who have become fluent tend to make more grammatical mistakes than a student who studied at home in a classroom (Herschensohn 2003).

METHOD

Since this study aims to evaluate development of students at comparable levels in French to see how able they were to differentiate among the phonemes /u/ and /y/, students who had approximately the same amount of formal learning experience were recruited to participate. This specific comparison was chosen because it seems to give many students problems. The phoneme /u/ is a sound that we have in the North American variety of the English language (and, certainly, in other varieties as well), while the phoneme /y/ is only found in the French language. Therefore, the /u/ sound is more easily produced than the /y/ sound. For example, the phoneme /u/ is used in the word couvre. The vowels ou together make a sound similar to the /u/ we have in the word pool (although the English vowel sound is quite a bit longer). The phoneme /y/, as
mentioned above, does not exist in English. It can be produced by pronouncing the
English letter $e$ and then, while holding the sound out, sliding from the $e$ sound to the
English $u$ sound. The /y/ is somewhere in the middle of the two sounds. Testing two
phonemes is only a miniscule part of evaluating development, but since the current
research on the SA versus AH contexts is minimal, it is necessary to analyze such a
distinction between two commonly mispronounced phonemes.

The participant population comprised twenty-two undergraduate students: six
males and seventeen females. Eleven of these students, two males and nine females,
remained on campus and studied at the University of North Texas, while the other eleven
students, composing of three males and eight females, went abroad to study in Caen,
France. The students were at the same general level of French, determined by the class
level in the NT group and the placement level with the SA group.

Before administering the surveys, it was necessary that a brief consent form (see
Appendix A), and questionnaire (see Appendix B), be filled out first to ensure that the
students participating in this subject were aware of the risks and that they were qualified
to be a part of this study. The consent form required the signature of each participant to
verify that he/she was aware of the risks and purpose of this study. The questionnaire,
which provided the background information and current standing of each participant in
the French language, was to also be completed to confirm the relevancy of each student.
This only took approximately five to ten minutes for each student to complete both
forms.

After the consent form and questionnaire were completed, brief texts with a
variety of linguistic and discursive features to be read in order to measure and evaluate
pronunciation and comprehension were then administered (see Appendix C). Students were asked to read eleven sentences at what they considered to be a normal conversational speed. The directions were read to the students in advance by either myself or my thesis advisor. This one survey took approximately five minutes of each student’s time. In addition, students were engaged briefly in a listening activity (in French), which provided additional data for comparison with other discourse samples (see Appendix D). Ten words were read to the students in French, and they had to choose which phonemes (/u/ versus /y/) they heard. For example, the word *masculin* uses the phoneme /y/ while the word *couvre* uses the phoneme /u/. Making this distinction was the purpose of the tests that the participants were given. This section took each student approximately five minutes as well, for a combined total of 15-30 minutes to complete all the sections. I administered half the surveys to the eleven North Texas students in the beginning and my thesis advisor finished collecting the data from the remainder of the students in North Texas at the beginning of the semester as well as collecting the data from all the North Texas students at the end of the semester. I administered the surveys at the beginning and the end of the semester for the eleven participants studying in France.

Specifically, the tests focused on the pronunciation and linguistic discrimination of the French phonemes /u/ and /y/ in order to answer, at least partially, the following questions: Do learners of French improve their phonetic realization (i.e., pronunciation) of those phonemes? Do students perhaps need more instructional focus on these important sounds? Although the first question will be more easily answered by the
current study, the second question will provide a starting point for considering directions of future research based on the results of the current data set.

Each person’s responses were taped so that I could further evaluate my findings in a more methodical, accurate manner with the assistance of my thesis advisor. The semester-initial and semester-end data for the North Texas group were recorded with a digital voice recorder, while the semester-initial and semester-end data for the Study Abroad group were recorded with a laptop and an external microphone, using the freeware Audacity.

This type of study that I initially set out to conduct was qualitative. After the data analysis had been done, the study became very quantitative since all of my data was reduced to numbers. The problem with a small study such as this one is the small sample size. There were only eleven participants from the NT group and eleven participants from the FR group, totaling twenty-two total participants. Due to the huge expenditure of time and resources, it was impossible to get a very large sample size. However, this pilot project will allow me to refine the design and methodology so that a larger-scale project can be conducted in the future. The small sample size has resulted in only using descriptive statistics to show some of the developmental differences that are already obvious. In a future study with a refined task design and a much larger sample size, it will be possible to measure for statistical significance by using the score on the pronunciation test (x number of correct pronunciations out of the total possible tokens of /u/ and /y/) as the dependent variable and the learning environment as the independent variable. The variables for the listening test will be parallel: the dependent variable will
be the score on the identification of /u/ versus /y/, and the independent variable will be the learning environment.

The listening exercise was a less ambiguous indicator of whether or not the student was able to hear the differences between the /u/ and /y/ phonemes because they had to make a choice between the two. After analyzing the responses of both the North Texas students and those in France, it was apparent that both groups in general improved their ability to differentiate the two different sounds. It is clear that, overall, there was no decrease in ability to realize and distinguish these phonemes. There was, however, only one case in which a student did much better the first time and failed to perform at the same level or better the second time. It is quite possible that this was due to overcorrection—sometimes referred to as hypercorrection—of the /y/ phoneme (a phenomenon in foreign language education that is not limited to phonetics and phonology, but is commonly found in production and use of morphology and syntax).

Because we have the /u/ sound in English, it is much easier to pronounce. Therefore, many students have the tendency to overcorrect the /y/ sound because it is harder to make and therefore takes more effort and concentration.

Listed below in Table 1 are the raw scores for the North Texas students for the listening exercise. The NT represents those students from North Texas. Each person was assigned a code number, in order to keep the records confidential. The uC represents the number of times the phoneme /u/ was answered correctly. The ul represents the amount of times the phoneme /u/ was answered incorrectly. The yC indicates the number of times the student correctly identified the /y/ phoneme, and the yl indicates the number of times the student incorrectly identified the /y/ phoneme. In total, there were eight /u/
phonemes and eight /y/ phonemes that were read in the exercise. The first row of data per student contains the semester-initial results, while the second row of data shows the semester-final test scores.

Table 1. NT Group Listening Exercise Raw Scores

<table>
<thead>
<tr>
<th>Student</th>
<th>uC</th>
<th>ul</th>
<th>yC</th>
<th>yl</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NT01</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>NT02</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>NT03</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>NT04</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>NT05</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>NT06</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>NT07</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>NT08</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>NT09</td>
<td>7</td>
<td>1</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>NT10</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>NT11</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>16</td>
</tr>
</tbody>
</table>

The raw scores from the tables were used in the figures below to show the changes in students’ scores that took place. Table 2 contains the same format as Table 1. The FR represents those students that studied abroad in France, and the rest of the symbols continue to have the same meaning. Many of the student’s responses remained similar or slightly improved.
Table 2. SA Group Listening Exercise Raw Scores

<table>
<thead>
<tr>
<th>Student</th>
<th>uC</th>
<th>ul</th>
<th>yC</th>
<th>yl</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR01</td>
<td>7</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>FR02</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>FR03</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>FR04</td>
<td>7</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>FR05</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>FR06</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>FR07</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>FR08</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>FR09</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>FR10</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>FR11</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>16</td>
</tr>
</tbody>
</table>

After analyzing the raw scores from the listening exercise (as shown in Table 1 and Table 2), the amount of change between each individual student's initial beginning score versus his/her ending score was determined. The number of /u/ phonemes the students identified correctly and the number of /y/ phonemes correctly identified for this particular figure, were compared (See Figures 1A, 2A below).
Figure 1A. Listening Analysis – Rate of Change for North Texas Students

The above Figure 1A shows that most of the students had a zero rate of change between the semester-initial test and the semester-end test. For student NT04, an impressive improvement was made for both the phonemes /u/ and /y/. The students NT06, NT09, and NT11 also made progress throughout the semester.
Figure 1B. Listening Analysis – Rate of Change for Study Abroad Students

In Figure 1B (see above), the majority of the students achieved a zero rate of change. The students FR01, FR04 and FR05 improved their semester-end scores. An unexpected negative rate of change occurred in student FR08. This direction of movement is unusual, but can be easily explained. It is most likely the emphasis put on the phoneme /y/ that caused its overuse by the student.

The next figure (2A below) was created using the same type of configuration. First, the total of all the students’ correct responses to the /u/ phoneme and the /y/ phoneme the first time were added, and then they were compared to their end of the semester responses to illustrate the progress made throughout the semester. The blue represents the semester-initial data and the purple represents the semester-end data. The North Texas group began with a raw score of 77 correct /u/ responses, and rose to an end-total of 83 correct /u/ responses, exhibiting a six point increase. At the beginning of the
semester, the students collectively produced 79 correct /y/ responses, and they produced a score of 84 at the end of the semester, improving by five points.

![Listening Analysis - NT Group](image1)

Figure 2A. Listening Analysis – North Texas Group

The Study Abroad group generally achieved similar scores to the North Texas group, as seen below in Figure 2B.

![Listening Analysis - SA Group](image2)

Figure 2B. Listening Analysis - Study Abroad Group
This group (SA) started out with a combined total that was a bit higher, with the initial /u/ correct scores totaling 80 and the final /u/ correct scores at the end of the semester totaling 81, leaving a one-point increase from the beginning to the end. The initial /y/ correct scores were equivalent to the North Texas group, at 79, but their ending scores were slightly lower, totaling 83 /u/ correct responses. The students studying in France achieved a four-point increase.

The listening exercise was only half of the collected data. The students were also asked to read eleven sentences containing multiple /u/ and /y/ phonemes. This proved to be a much more difficult task to accomplish and analyze. It was more confusing because the letters and words were preceded by and followed by other letters and words, which could have very easily influenced (i.e., confused) participants. During the analysis of the data, it was apparent that many students had difficulty pronouncing the /u/ phoneme when they saw it written with another vowel. For example, one way the /u/ sound is made is by putting the letters “o” and “u” together, such as in the word boule. It is very possible that students were confused by the vowel pairs or clusters since this type of reading (i.e., for pronunciation) is not the type of reading (i.e., for meaning) the average person undertakes and is in the habit of doing. Therefore, it was necessary to add a section in the data for unidentifiable sounds. If the sound was neither an /u/ phoneme nor an /y/ phoneme or if it was simply unclear as to which sound the student was trying to make, then it was placed into a category referred to as other. Tables 3 and 4 below display the raw scores from the reading exercise (see Appendix C) for the NT Group. There were eighteen /u/ phonemes and twenty-two /y/ phonemes within the eleven sentences, totaling forty possible sounds.
### Table 3. NT Group Reading Exercise Raw Scores

<table>
<thead>
<tr>
<th>Student</th>
<th>uC</th>
<th>uI</th>
<th>yC</th>
<th>yI</th>
<th>Other</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</tr>
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<td></td>
<td>15</td>
<td>3</td>
<td>13</td>
<td>3</td>
<td>6</td>
<td>40</td>
</tr>
</tbody>
</table>

### Table 4. SA Group Reading Exercise Raw Scores

<table>
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<tr>
<th>Student</th>
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<th>uI</th>
<th>yC</th>
<th>yI</th>
<th>Other</th>
<th>total</th>
</tr>
</thead>
<tbody>
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<td>0</td>
<td></td>
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<td></td>
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<td>40</td>
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</tbody>
</table>
According to the raw scores of the reading exercise (as shown above in Tables 3 and 4), the general rate of change between each individual student’s initial score versus his/her semester-end score was determined, which is identical to the design of the figure produced for the listening exercise. The number of /u/ phonemes correctly produced and the number of accurate /y/ phonemes for this particular figure were compared (see Tables 3 and 4). It was not uncommon for a student to have performed better during his/her first reading versus his/her final reading. This might be due to any number of reasons. First, because it was a reading exercise, each recording was different, leaving room for error each time. This does not necessarily mean that the student’s ability decreased, but it could be that his/her sound and/or voice was unidentifiable or undiscernable by myself and/or my thesis advisor. Also, as mentioned above, the /y/ phoneme is not a sound that is learned, heard, or used in the phonological repertory of the English language. When students improve their ability to pronounce this phoneme, it is quite common that a student will overcorrect the /u/ phoneme by using /y/ when it is not needed. While conducting this research, I have found that a majority of the students who had difficulties with the /y/ phoneme during the semester-initial readings had almost perfected the sound at the semester-end recordings, but that there were a few who, with their new knowledge of the /y/ phoneme, used it too broadly. This is a likely cause for most of the negative rates of change revealed by Figure 3A and Figure 3B.
Figures 3A and 3B follow the same pattern as the figures used in the listening exercise. Next, the total of all the students' correct responses to the /u/ and the /y/ phonemes in the semester-initial data were added and then compared to the semester-end
responses to demonstrate the semester’s progress. Identical to the previous figures (Figures 3A and 3B), the blue bar represents the semester-initial data and the purple bar represents the semester-end data. Figure 4B began with a raw score of 161 correct /u/ responses, and plummeted to an end-total of 144 correct /u/ responses, exhibiting a seventeen-point decrease. As explained before, this was most likely caused by an increase in the amount of unidentifiable sounds during the second recording versus the first recording. Another factor is the overuse of the /y/ phoneme, which takes more concentration and is a bit harder to pronounce. The students’ semester-initial /y/ responses started with a score of 176 and finished off with a score of 191, improving throughout the semester by a fifteen-point increase.

Figure 4B shows similar results to 4A. The semester-initial data of the /u/ phoneme showed 175 correct responses which grew to 191 correct responses during the semester-end data, totaling a sixteen-point increase. Following a similar pattern, the semester-initial data for the /y/ phoneme included 194 correct responses, which matured to 212 correct responses in the semester-end data. This totaled an eighteen-point increase.

The Study Abroad group started at a higher correct count on both phonemes during the semester-initial data than the North Texas group, and they also ended with a higher percentage of correct results.
Through this pilot project, I was able to draw a limited number of conclusions about the similarities and differences of development in the language skills of students that study abroad versus those that study in at at-home context. As a recent study-abroad student myself, it is apparent that, at least regarding the distinction between and
production of the phonemes investigated here, there are obvious differences in the
teaching style and emphasis of material. The North Texas students spend a minimum of
three hours a week speaking French, learning generally only one subject at a time. While
accuracy of the language is encouraged and enforced, it is the specific subject of the class
that is the most important. Outside of French class, the remainder of their time is spent
in an English-only type of environment. The Study Abroad students, unlike the North
Texas students, are completely immersed in a French-only environment for the majority
of their time. The curriculum is predominately focused on phonetics, pronunciation, and
accuracy of competence of the language itself. I think this can explain why the Study
Abroad group achieved better scores overall on the reading exercises.

The limited amount of collected data can only give us the slightest clue as to why
the results played out as they did. Qualitative research methods, such as interviewing,
journals, and observation are essential for analysis from a sociocognitive perspective such
as mine, and therefore this study will be expanded in the future to incorporate phenomena
such as peer assistance, collaborative problem-solving, and other possible influences
related to linguistic, social, and cognitive development of participants.

CONCLUSION

As I continue to research the phonetic awareness and development in learners of
French in the SA and AH contexts, I hope to answer the following questions: What are
the comprehensive differences between the students who studied French in Texas, and
those who studied French in France? What are the motivations in these environments
that might cause a difference? And finally, back to my original thesis question, how does
the development of language produce similarities and differences among students learning French in Caen, France and students learning French in Denton, TX?

The findings from my research still pose one of the greatest challenges to deal with in this project. The decision must be made regarding whether or not to compare just the reading results between the AH and SA students, or if the listening results should be included as well. I could also look for correlations between each student’s ability to produce versus his or her ability to hear/discern. Because of this, there are several possible studies that could develop from this depending on which area will be analyzed.

Now that my project is complete and a limited number of differences related to phonetic awareness and linguistic developmental among students learning in SA and AH contexts have been analyzed, I hope to continue my research in the area of study abroad. Because this is an expanding, innovative area of research, there are many directions to be taken to continue my studies. I am most interested in language learning and residence abroad. There are so many more variables that interfere with and promote this type of learning that it is extremely difficult to narrow the topic down to just one main question.

As a pilot project to determine which analyses and future areas of research might provide the clearest, most convincing and most interesting results, this study has demonstrated that even something as simple as the distinction between two phonemes can be very difficult to discern even through a relatively simple research design. Further, it is important to reiterate that language competence and performance are not stable. Measuring any student's production can only allow the research to guess—in the best of circumstances—if the student understood a rule or principle or whether he/she simply
misspoke at the particular point in time when the given linguistic item was being measured.

I plan to continue research in this area to develop a better understanding of the bigger picture by accumulating more data, which will add to my current findings and lead in new directions.
Sources


APPENDIX A: CONSENT FORM

UNIVERSITY OF NORTH TEXAS COMMITTEE FOR
THE PROTECTION OF HUMAN SUBJECTS

RESEARCH CONSENT FORM

Subject Name: Date:

Title of Study: A Comparative Analysis of Phonetic Awareness and Development in Learners of French At Home and Abroad
Principal Investigator: Lawrence Williams; Co-Principal Investigator: Lily Page

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the proposed procedures. It describes the procedures, benefits, risks, and discomforts of the study. It also describes your right to withdraw from the study at any time.

Purpose of the study and how long it will last: This study aims to analyze the ability of participants to listen to, identify, and produce French vowels. Your participation in this study will take approximately 30 minutes, total, depending on how long you spend on the questionnaires. You will be asked to participate for 15 minutes at the beginning of the Spring 2005 semester, then again for 15 minutes at the end of the semester. The listening and speaking tasks will be the same both times. The main purpose is to determine which vowels are most difficult for native English speakers to pronounce.

Description of the study including the procedures to be used: You will first be asked to fill out a questionnaire to provide information regarding your level of familiarity with the French language. Then, participants will be asked to perform two tasks. The first will be a reading exercise designed to evaluate pronunciation, rhythm, and general reading proficiency in French. The second will entail a listening comprehension exercise for participants to distinguish and differentiate a range of French vowels. The investigators will audio-record both exercises to further analyze the findings at a later time. Similar exercises will be administered both at the beginning and the end of the semester.

Description of Foreseeable Risks: There are no foreseeable risks.

Benefits to the subjects or others: After your participation in this study, the investigator will send you (by e-mail) an analysis of your personal development over the semester. This will allow you to gauge your knowledge of certain French vowel sounds and vocabulary items. The results of this study will allow the investigators to understand how students at similar levels of language learning develop differently based on the location of their studies. If either or both of the investigators publish work using data collected from this study, researchers and teaching in second/foreign language acquisition may benefit from the knowledge generated and shared by this study.
CONFIDENTIALITY OF RESEARCH RECORDS: Your name on this consent form will not be associated with your project code number. The audio recording of your session will be transcribed by the investigators on or before September 1, 2005, on which date the audio recordings will be erased permanently. Only the investigators will have access to the audio recording of your session. Any and all personally identifying remarks and references will be removed during the transcription of the audio recording in order to protect your confidentiality if excerpts are included in a publication related to this study.

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). If I have any questions regarding my rights as a research subject, I may contact the UNT IRB at (940) 565-3940 or sbourns@unt.edu.

RESEARCH SUBJECTS' RIGHTS: I have read or have had read to me all of the above. Lily Page and/or Lawrence Williams has explained the study to me and answered all of my questions. I have been told the risks or discomforts and possible benefits of the study.

I understand that I do not have to take part in this study, and my refusal to participate or my decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop my participation at any time.

In case I have questions regarding this study, I have been told I can call Lily Page and/or Lawrence Williams in the Department of Foreign Languages & Literatures at (940) 565-2404 or lfw@unt.edu.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I have been told I will receive a signed copy of this consent form.

__________________________          ________________
Signature of Subject                     Date

FOR THE INVESTIGATOR OR DESIGNEE:

I certify that I have reviewed the contents of this form with the person signing above, who, in my opinion, understood the explanation. I have explained the known benefits and risks of the research.

__________________________          ________________
Signature of Principal Investigator or Designee                     Date
APPENDIX B: QUESTIONNAIRE

Questionnaire: A Comparative Analysis of Phonetic Awareness and Development in Learners of French At Home and Abroad

Dear Student of French,

Please take 5 minutes to fill out this questionnaire. (In addition to this questionnaire, you will be asked to participate in 2 exercises that will each take 5 minutes, for a total of 15-30 minutes for your participation in the study.)

The information that you provide is designed to help educators understand the ways in which students develop their phonetic awareness in learners of French at home and abroad. All data will be handled confidentially and used for research purposes only. Your participation is greatly appreciated.

1) Sex (please circle): Male Female

2) Age: _______

3) Current Class Rank (please circle): Fr. Soph. Jr. Sr. 1st yr. Master's 2nd yr. Master's

4) Major(s):

5) Minor(s):

6) Number of years of high school French: _______

7) Please list other languages taken in high school:

Language: a) _______________________

   Number of Years: a) ____________

b) _______________________

   Number of Years: b) ____________

8) Number of college/university semesters of French including this semester: _______

9) Please list number of college/university semesters of other foreign languages:

Language: a) _______________________

   Number of Semesters: a) ____________

b) _______________________

   Number of Semesters: b) ____________

10) Have you lived or studied abroad? YES _____ NO _______

    If so, where? _______________________

    For how long? _______________________

11) Is English your native language? YES_____ NO _____
If NO, then please list your first language(s):________________________
APPENDIX C : READING EXERCISE

A Comparative Analysis of Phonetic Awareness and Development in Learners of French At Home and Abroad

Reading Exercise

Thank you for your participation in our study. Please read the sentences below at what you consider to be a normal conversational speed. This should take approximately 5 minutes of your time.

1. Tu ne me feras pas croire qu’on vous paie uniquement pour que vous vous tourniez les pouces ?

2. Produire des cartes à puce est un métier complexe dans lequel la gestion de la sécurité joue un rôle majeur.

3. Lorsque le médecin vous recoud la peau du visage.

4. Vêtement masculin de dessus qui couvre de la ceinture aux genoux.

5. Être sûr du résultat, du succès.

6. C’était une guirlande de roses autour d’une touffe de violettes.


9. Couper le cou à un poulet.


11. Le jour sort de la nuit comme d’une victoire.
APPENDIX D : LISTENING EXERCISE

A Comparative Analysis of Phonetic Awareness and Development in Learners of French At Home and Abroad

Listening Exercise

Thank you for your participation in our study. You will hear 10 words read to you. Circle the appropriate phoneme that you hear. This will take approximately 5 minutes of your time.

Example: vous → /u/
vu → /y/

1. /u/ /y/
2. /u/ /y/
3. /u/ /y/
4. /u/ /y/
5. /u/ /y/
6. /u/ /y/
7. /u/ /y/
8. /u/ /y/
9. /u/ /y/
10. /u/ /y/
APPENDIX E: STATEMENT OF MENTOR APPROVAL
APPENDIX F: CURRICULUM VITAE

LILY PAGE

1030 DALLAS DR #1011 • DENTON, TX • PHONE (940) 300-4892
+ LSP0004@HOTMAIL.COM

OBJECTIVE

To obtain a position that utilizes my creative thinking skills, people skills, language skills and computer skills

EMPLOYMENT HISTORY

University of North Texas, Education Department Denton, TX
Student Assistant, October 2001-December 2004
• Handle basic office duties, including filing, phones, typing (75 wpm), errands
• Familiarity with Windows, MS Word, MS Powerpoint, internet
• Prepare, organize and research materials, create power point presentations for classes taught by Dr. Morrison
• Event planner (help organize and work annual conferences) for Velma E. Schmidt Programs in Early Childhood Education conference

Fremaux's Metropolitan Catering Denton, TX
Caterer, March 2003-present
• Food preparation, organization and service
• Weddings, corporate events, private homes

Susan Lawrence Catering Chappaqua, NY
Caterer, Summer 2002
• Food preparation and service
• Weddings, corporate events, private homes

VAC Corporation Middletown, NY
Data Entry, July 2000-July 2001
1. Organized and entered receipts/other documents into computer system for firm

EDUCATION AND HONORS

University of North Texas Denton, TX
Undergraduate 2001-2005 (GPA 3.5)
• Presidents List Fall/Spring 2001/2002
• Deans List
• Bachelor’s in French / Business Minor
• Study Abroad in Caen, France for the Spring 2005 semester
Honors Program/College 2002-2005

SKILLS AND ACCOMPLISHMENTS

2. Ability to fluently speak French
3. Type 75+ wpm
4. Alpha Phi Omega - member of service organization from 2002-2004