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**PERCEIVED AND PREFERRED METHODS  
TO ADULT LANGUAGE LEARNING**

by

Suzie Tse

A Thesis

Submitted to the  
Department of Educational Services and Leadership  
College of Education

In partial fulfillment of the requirement

For the degree of

Master of Arts in Higher Education

at

Rowan University

May 9, 2024

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## **Dedication**

I would like to dedicate this manuscript to my parents. Without their careful efforts to preserve and nurture my native language at my own pace, I would not have come to understand and love language as much as I do now. I would not be the bilingual I am today, conducting research, and writing this paper without them. While, it was a missed opportunity that they never placed me in Chinese writing school to become biliterate, it has opened a world for me to experience learning as an adult heritage language learner. My journey with its ups and downs, advantages and disadvantages, elation and frustration, and my love for language bore my desire to help other people with their language learning journey. I hope the fruits of my research can help students and educators alike in exploring different methods of language learning and appreciate the beauty of each language and speaker.

## **Abstract**

Suzie Tse

PERCEIVED AND PREFERRED METHODS TO ADULT LANGUAGE LEARNING  
2023-2024

Stephanie Lezotte, Ph.D.  
Master of Arts in Higher Education

The purpose of this research study is to understand the adult language learners in formal learning setting and know what do they perceive as the main methods of teaching and what do they prefer instead. If there is a gap between preferred methods of learning and perceived methods of learning, then there is a need that needs to be addressed. This is important because many students find language learning at best ineffective and at worst impossible. I hypothesize that there will be a difference between adult student perception and preference because student focuses more on speaking and listening skill over reading and writing skill. Likewise, I predict that students prefer entertaining media as lessons materials over traditional forms of learning. To conduct this research, I e-mailed students enrolled in language courses at Rowan University and invited them to fill out a quantitative survey. The results came back with most students placing pronunciation practice, talking to other speakers, and translating as their top methods of learning. This aligns with the hypothesis that adult students prefer speaking and listening skills over reading and writing skills. However, the use of entertainment media has shown mixed results, with the use of social media scoring lower than anticipated at near end of the list often times. Comparing preferences across different types of learners based on number of languages known and the script of the language they are learning has revealed that different groups have different preferences. It would be beneficial for instructors to adjust accordingly based on the student composition in the classroom.

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## **Chapter 1**

### **Introduction**

An estimate of over half of the world's population is bilingual (Grosjean 2014, 2020). In some countries, knowing and using two or more languages is a standard occurrence in everyday life (Grosjean et al., 2013). Being bilingual is nothing special to them because the majority are bilingual. On the other hand, remaining monolingual in such an environment seems more unusual. Our monolingual “normal” may not be “normal” to the rest of the world. Throughout history to the present day, we can see how knowing another language bridges communication, promotes trade, navigates politics, and fosters collaborative research (Grosjean, 2010; Grosjean et al., 2013). We lose out economically, socially, and educationally by not knowing another language in a globalized world. If we, as educators, want to develop students into becoming professionals, global citizens, and critical thinkers of the future, we need to take language learning more seriously.

### **Statement of the Problem**

Growing up in the New Jersey education system – in the state that invested the most in language learning (American Councils of International Education, 2017) – it was mandatory for me to take a foreign language starting from secondary and into my tertiary education. Like many of my peers, we were unable to acquire another language. I have seen many students over time adopt a quitter's attitude, being quick to say they were born without this language learning ability. Yet, every person who can speak knows their mother tongue. So, it is not a question of capabilities, but a question of what we are doing

or not doing that makes learning another language seem impossible. As an adult heritage language learner who is bilingual but not biliterate, my own personal journey has shown me that language learning is not impossible and that there are areas of improvement that can be made for more effective and efficient learning. If we do not explore this, we as educators are allowing students to continue struggling in learning another language.

### **Historical Background and Significance of the Problem**

America is known as the melting pot of culture. Immigrants from around the world can be found here, yet it is also known as “the zone of language extinction” where mother tongues get replaced by English (Rumbaut & Massey 2013, p. 141). However, this was not always the case. Historically, America was home to bilingual speakers of rich linguistic diversity from among the hundreds of indigenous languages (Ethnologue, 2023) to European and African languages of the early settlers and slaves (Rumbaut & Massey, 2013). Linguistic diversity declined because of colonizing forces, isolation, and the use of English as the language of instruction and governance (Chiocca, 2019). The interruption of war, global depression, and restrictive immigration policy by the turn of the 20th century further reduced bilingualism in American society. In particular, the National Origins Formula, which placed quotas on each nationality based on their share of the total population until its abolishment in 1965, fostered a generation of Americans who grew up in a monolingual environment. At its lowest, only 4.7% of Americans were bilingual (Rumbaut & Massey, 2013). The immigration wave after 1970 has helped raise the number of bilinguals to a little more than 20% of the country’s population (Rumbaut & Massey, 2013; Grosjean, 2020). However, history has shown that immigration is just one part of the solution and if America wants to maintain their current

linguistic strength, it needs to take a more proactive approach to the preservation and prosperity of such asset (Rumbaut & Massey, 2013). Education can help maintain and develop the linguistic diversity in America. Yet, based on 2014-2015 data, on average approximately 20% of students from K-12 are enrolled in language learning (American Councils of International Education, 2017). In postsecondary education, the number enrolled was 8.1% in 2013 and at 6.5% in 2021 (Modern Language Association, 2015, 2023). There is a drastic difference between the United States and other countries where language learning is compulsory or a compulsory curriculum option (Eurostat, 2023).

### **Study Objectives and Research Questions**

The objectives of this study are to understand: (1) what adult students perceive as the primary methods of formal language learning, (2) what adult students prefer as their method of language learning, (3) whether there is a gap between perceived and preferred methods of language learning, and (4) do factors such bilingualism and language being learned influence students' perception and preference? The goal is to identify possible areas of concern, so educators and students can reassess the methods they are using.

### **Assumptions and Limitations**

This study runs on the assumption that anyone of any age can learn a language if given the resources and support. It does not examine the efficiency of methods or student motivation for learning another language. Likewise, it does not ask for student's previous education, performance, or level of proficiency in the language they are learning. Additionally, the study does not ask what languages do bilingual or multilingual students know besides English. This is to reduce the risk of deducting the identity of the

participants and because it is beyond the scope of this study to analyze how each individual's language interacts with the language they are currently learning. Finally, because the target sample size was not reached, findings may not be representative of the adult language learner population.

### **Operational Definitions**

The loose definition of bilingualism is knowing how to speak more than one language. However, for this study bilingual(-ism) will strictly refer to the ability to speak two languages and multilingual(-ism) will be used for three or more languages. For those who understand a second language, but do not speak it they will be referred to as receptive bilingual. Since they do not know how to speak a second language, they will not be counted towards bilingual subgroup. When asking or referring to the number of languages the individual knows, the study refers to this as their lingual ability.

### **Hypothesis**

The hypothesis is that there is a gap between perceived and preferred methods of adult language learning. The gap is the result of students (1) favoring speaking and listening skills over reading and writing skills and (2) favoring entertaining media lessons over traditional book and paper lessons. Moreover, I hypothesize that simultaneous bilinguals share more similarities with monolinguals than their sequential bilingual counterparts because sequential bilinguals have the advantage of prior successful adult learning experiences while simultaneous bilinguals do not.

## **Outline of the Study**

The study invites readers who are interested in language learning to learn more about the subject. Chapter 2 contains the literature review and readers are recommended to read the Basic Terms and Concepts section as it provides basic understanding and definitions. The section Dimensions of Language provides information on the different modes of communication, its subparts, and how languages interact with each other. The section Age and Ability will explore how age is just one factor that influences language acquisition rate and section Formal Learning in college setting expands on why college students are an important group to study on. Chapter 3 details the methodologies used in this study and what were the considerations made when designing the survey. Chapter 4 will report the results collected from the data and Chapter 5 will explore what the results may imply, areas of improvement, and next actions.

## Chapter 2

### Literature Review

#### Basic Terms and Concepts

##### *What is Language?*

Language is the system we use to communicate with one another consisting of grammar and vocabulary. Grammar is the framework of language that gives certain utterances, words, and phrases meaning while separating the rest as nonsensical (Reis, 2011). Vocabulary are the meaningful units that give name to the myriad of thoughts, feelings, objects and experiences we encounter in life. These constraints are what makes each language unique. However, what constitutes language is more complex. The distinction between language and dialect is blurry and often debated, for there are no clear boundaries (Van Rooy, 2020). Like colors, language has a continuum. The most popular method is the mutual intelligibility test. If there is high similarity between languages or they are mutually intelligible then we are looking at dialects. If there is low similarity between languages or they are mutually unintelligible then we are looking at languages. However, there are flaws with this method. Would one label it a language or a dialect when there is asymmetrical intelligibility? What would that make of socially, culturally, and politically accepted languages and dialects disregarding mutual intelligibility (Van Rooy, 2020)? Therefore, there are no straightforward answers to questions like “How many world languages are there” or “How many bilinguals are there.” Not only is it difficult to collect complete data, but each nation defines language and dialect differently. To get a concrete answer, one would need to address the

language-or-dialect issue and, currently, researchers can only give estimates based on available data.

### ***Defining Bilingualism***

Language acquisition is one of the focuses of applied linguistics, which is the study of language for practical purposes like improving education and literacy. The terms first language, L1, native language, and mother tongue describe the language(s) the users were exposed to and learned as a toddler. Likewise, the terms second language and L2 are used to describe languages acquired later in life. Early bilingual research centered around the monolingual framework. However, more researchers have questioned the previous assumptions (Grosjean, 2008). Contrary to common belief, an individual can have more than one first language if they learned multiple languages between birth and early childhood, usually before schooling takes place (Cenoz et al., 2001; Grosjean, 2010). They are sometimes referred to as simultaneous bilinguals to differentiate them from sequential bilinguals who learned another language at a later age (Cenoz et al., 2001; Grosjean et al., 2013). Rarely are bilinguals perfectly balanced in both languages; nor is it given that a bilingual's dominant language has to be their first language (Grosjean, 2008). Losing the ability to understand a language is not uncommon. Language attrition can be seen in many immigrant families, where they lose the ability to understand their cultural language as they adopt the language of their host country (Grosjean, 2010). This should not be confused with losing the ability to speak the language, as there are passive bilinguals – also known as receptive bilinguals – who understand but do not speak another language (Grosjean et al., 2013; Sherkina-Lieber, 2020). Likewise, not every bilingual person knows how to read or write in each language



they know. Individuals who can read or write in more than one language are referred to as biliterate. Based on these statements, it is clear bilingualism looks different in each person. While each research may use a slightly different definition of bilingualism, it will always refer to someone who knows more than one language. However, for the context of this study, bilingualism will strictly mean the use of two languages and multilingualism for three or more languages.

## **Dimensions of Language**

### ***Spoken vs. Written Language***

The book, *The Idea of Writing* opens with a compelling statement, that borrowing is a central feature throughout the history of writing systems and only in three or four known instances was script invented independently without prior knowledge or exposure (De Voogt, 2012). Invented script gradually developed from signs into lexical items through incremental awareness of writing. On the other hand, the process from script to writing is relatively sudden for borrowed scripts as the majority of the work is completed for them before refitting the script to their language. Without script, writing cannot occur. When one combines this understanding with the knowledge that all writing systems are to some degree based on the phonology (sound inventory) of the language (Sproat, 2022), including logographic languages like Chinese (Demattè, 2022; Lurie, 2006) and constructed languages like Klingon (Punske et al., 2020), it is clear that for every written language there is the spoken equivalent, but not every spoken language has a written equivalent. This highlights a few differences between spoken and written language. There are more spoken languages than there are written languages, spoken languages are

quicker to change than written languages, and learning is different between spoken and written language due to their natural differences. With enough exposure, a child will naturally learn the spoken language of their parents, but unless taught, they will not naturally learn the written language as seen with illiterate adults.

### ***The Four Language Skills***

Listening, speaking, reading, and writing comprise the four skills in language. Theoretically, we separate the skills from one another, especially when assessing a student's performance. Truthfully, the four skills are interdependent. They can be divided into production skills (speaking and writing) and comprehension skills (listening and reading) (Nan, 2018). Comprehension serves as the basis of production, for production without comprehension would have no meaning. One should not assume because comprehension skills are receptive skills, they are passive ways of learning. On the contrary, comprehension skills require active participation to understand what is being communicated (Spataro & Bloch, 2018). It should not come as a surprise that listening skills are regarded as the most important and most utilized skill of language (Martinez-Flor & Usó-Juan, 2006). Likewise, instead of teaching each skill separately, it will be more effective to do it together since the skills are interdependent (Nan, 2018). Comprehension enables production while production enforces comprehension. Listening skills help speaking skills and, vice versa, speaking skills help listening skills. This applies to reading and writing skills too. Similarly, there is a positive transfer between the two comprehension skills, listening and reading, and production skills, speaking and writing.

### *Language Distance and Awareness*

Among the factors that make language learning difficult is the language distance between their known language and the language they are learning. The viewpoint that bilingualism can harm or benefit a child's linguistic development is rooted in the understanding that knowledge between languages transfers over to one another (Grosjean et al., 2013). The more two languages share phonologically, vocabulary, grammatically, or even script (Cook & Bassetti, 2005) the more the languages are similar and can mediate the learning and development of the L2 learner. Conversely, the more two languages differ from one another, the more the differences can interfere with the learning and acquisition of the language (Finn & Hudson Kam, 2008). It is an easy mistake to judge the language distance based on the script's appearance and geographic proximity to language origin. While it may point to a common genealogy, it does not tell everything. For example, based on the visual appearance of the script and geographic distance, Korean seems closer to Chinese than it is to English. However, Hangeul is an alphabetic writing system that is similar to English than Chinese logographs (Kim et al., 2016). This difference is shown in trilinguals' fMRI scans. Korean speakers showed greater assimilation to the English language while showing greater accommodation to the Chinese language due to the respective script's transparency and opacity to phonology. Yet, when analyzing word order, Chinese shares the same sentence structure, subject-verb-object (SVO), as English while Korean follows the subject-object-verb (SOV). Grammatically speaking, Chinese and English speakers will have an easier time learning and translating each other's language than they would if it were Korean because of the familiarity of word placement (Zheng & Park, 2013). Therefore, language distance

can be a good determinate for how difficult or easy language learning would be for the individual learner depending on what languages they already know and the degree of linguistic knowledge they can utilize. Although much of the emphasis was placed on L1's impact on L2's learning, the transfer of linguistic knowledge can go both ways and L2 could influence L1 (Grosjean et al., 2013).

The transfer of linguistic knowledge can have a positive or negative affect on the learning process, but if the learner is aware of why it is difficult and where the differences are then it can help mitigate some of the interference. This knowledge or awareness is what some may refer to as metalinguistic awareness. Metalinguistic awareness is the ability to view language outside the context of speech in order to reflect on language as a system of communication, analyze the working of its parts, and manipulate the forms and structures to create meaning (Reder et al., 2013). However, knowing another language is not the only way to increase the benefits of linguistic transfer. Students can increase their metalinguistic awareness through explicit knowledge of language (D'Angelo & Sorace, 2022).

### **Age and Ability**

When it comes to age and the ability to learn a language, nothing is as well-known as the critical period hypothesis (CPH) (Grosjean et al., 2013). It is believed that if language learning does not take place during the critical window of time, then the constraints of brain development will prevent the individual from acquiring the language. However, the beginnings of CPH stem from understanding a child's first language acquisition, not second language acquisition (SLA). It is difficult to study a child's first

language development under isolation because such research is unethical to conduct. While researchers can analyze preexisting cases of feral and confined children, it is hard to separate the impact trauma has on their linguistic development. In comparison, the effects of age on second language acquisition are easier to study and results yield significant practical benefits. For second language acquisition, it is more accurate to describe the window of opportunity as the sensitive period instead of the critical period. Age of acquisition influences the level of fluency and pronunciation of L2 (Norrman & Bylund, 2016); however, the sensitivity period might be longer than assumed. Performance hits a plateau until it sharply declines around the age of 17-18 (Hartshorne et al., 2018). There are speculations on whether age is as big as a contributing factor for why there is a decline in second language acquisition rate than previously thought. Another explanation for the decline is due to ages 17-18 being associated with social changes of becoming an adult in many cultures (Hartshorne et al., 2018). The increase responsibilities and commitments in life decrease the opportunities to learn a language. Hence the low acquisition rate of adults. However, native pronunciation is just one aspect of measuring performance. Grammar and vocabulary, as well as efficiency are important metrics to consider when comparing adult and children language learning. Depending on the assessment, adults can score better than children (De Jong, 2016; Newport, 2020). Additionally, age is just one factor of many for adult learners as education level and years of exposure have similar influences on language performance (Rumbaut & Massey, 2013). Therefore, age should not be the determining reason as to why an individual cannot or should not learn a language. Age may decrease one's chances of acquiring

another language or becoming fluent, but the challenge does not make it impossible to learn.

### **Formal Learning in College Setting**

Evidently, being an adult language learner has its advantages and draw backs, and educators should leverage the difference for optimal learning. Since adults cannot outperform children when it comes to implicit language learning, adults should capitalize on their explicit learning advantage (Bialystok, 2011; Ellis, 2011). Implicit and explicit learning are not mutually exclusive and like the four language skills mentioned before, the two can influence each other by aiding the other's process (Bialystok, 2011; Chang et al., 2012; Ellis, 2011). Therefore, when adults expand on their explicit knowledge it helps them take notice and gain better implicit understanding of the language they are trying to learn. In other words, adults and children should use both types of learning to maximize their linguistic gain. However, it is where they focus on and excel at that are different.

Still, having knowledge is not enough for language acquisition. Learners must transform knowledge into automatic or controlled process (Ellis et al., 2009). Formal learning can provide adult students the explicit knowledge, intentional practice, and meaningful feedback they need to help with their language development. With this perspective in mind, instructors serve an important role that cannot be filled by just anyone. Although it may be the students first instinct to find a native speaker to be their teacher, relying on native speaker proficiency is not a sufficient qualification for a profession that requires greater knowledge, understanding, patience, and teaching experience (Reis, 2011). Immersion and informal learning are good ways to learn a

language, but one should not totally discount classroom learning because each has their merits and cons.

## **Summary**

Language is more than the encoding of information. What separates language from other forms of communication is grammar and vocabulary. Language is a continuum of dialects and the mutual intelligibility test is not enough to determine whether something is a language or a dialect. There can be social and political reasons as well as asymmetrical intelligibility at play. Therefore, bilingualism may look different depending on how each nation or individual defines language and dialect. Likewise, there are different forms of bilingualism; the ability to understand but not speak two languages is known as receptive bilingualism, the ability to speak two languages one was exposed to during early childhood is known as simultaneous bilingualism, and the ability to speak two languages learned at a later age is known as sequential bilingualism. Bilingualism has also been loosely used to refer to those who speak three or more languages.

When an individual knows how to read or write in more than one language, we refer to them as biliterate. This leads to the two modes of language communication; spoken and written. Spoken language can be learned through enough immersion, however written language cannot be learned through immersion and must be taught. Also, written language cannot exist without script nor can they exist without their spoken language equivalent because all writing system is in part derived from the sound inventory of the language. Each mode of communication has two skills; comprehension skills and production skills. Comprehension skills are listening and reading, while production skills

are speaking and writing. Do not mistaken comprehension skills as passive learning simply for being receptive skills because it requires active involvement to understand what is being said or written. When one is able to focus and reflect on language beyond the literal to analyze and manipulate its parts to create meaning, we call this metalinguistic awareness. We can develop this ability with implicit or explicit knowledge through knowing language(s) or linguistic. Linguistic knowledge can be transferred from one language to another (assimilation) and reconcile the differences (accommodation) depending on the language distance of the known and learnt language. Language distance and metalinguistic ability can be indicators as to how difficult learning a specific language could be.

Therefore, age is just one of the many factors that impact language acquisition rate. Yet, its prevalence can be contributed to critical period hypothesis (CPH) that explains the effects age has on language acquisition including obtaining native pronunciation. However, CPH's original focus was on first language acquisition and not second language acquisition. For second language learners, it would be more accurate to refer to it as the sensitive period instead of critical period. Likewise, lacking an accent is just one way to assess proficiency. Other measures of performance include, but are not limited to grammar, vocabulary, and speed of processing. These are areas adults may score higher than children. Hence why researchers do not focus solely on children language acquisition, but study adults as well. Since adults learn differently from children, instructors should find out what adult students want and implement teaching methods that works with their strengths and weaknesses to achieve those goals. For these reasons, I find adult learning and formal learning so important that I chose to focus on it



in this study with college students enrolled in a language course. Almost all college students are 18 or older and in order to be a language professor one must complete extensive training. Both of which fulfills the adult learning requirement and formal learning requirement. Chapter 3 describes the methodology I designed to understand this research.

## **Chapter 3**

### **Methodology**

#### **Context of the Study**

The study took place at Rowan University after IRB approval. Rowan University is a public research institution located in south New Jersey. They have a large and predominately White student population with approximately 22,000 students enrolled in 2023-2024 school year. Nearly all the students are New Jersey residents. Here, students are not required to take a language course to graduate. Therefore, students voluntarily registered themselves to a language learning. The language classes they offered for spring 2024 semester are; Arabic, American Sign Language, Chinese, French, German, Italian, Japanese, Latin, Quechua, Russian, and Spanish.

#### **Population Criteria**

The study is on adult learners' perception and preference for language learning methods. While adult learners in higher education typically refer to nontraditional students of age 25 and older, Hartshorne's (2018) research has shown that the ability (or opportunity) to learn another language sharply declines at age 18. The basis of this study is the belief that adults can still learn a language despite the decline in fluency. Hence, I used the age of majority to define adult learners. For our first population criteria, I limited the research to respondents 18 or older. The second criterion is students must currently be enrolled in a language course. This targets students who have an interest in language learning, especially since students are not required to take a language course to graduate at the recruitment site. Likewise, the data collection instrument asks for students'

perception of formal learning and would be best to ask them while still in class. However, I limited my study to spoken language. As a result, I did not survey students enrolled in American Sign Language. Because I do not want to imply who should and should not learn a language or who can and cannot learn a language, I included individuals with learning or neurological disabilities to participate in my survey.

### **Sample and Recruitment**

Since one of the study objectives of this research is to find out if different factors like lingual ability influence perception and preference of learning methods, surveying the whole population ensures I get representative data for each subgroup. I used the section tally to find out what language classes are offered and to estimate the population size. Based on previous years' enrollment, I estimated the population size to be no more than 1,200 with the actual numbers being less when considering some students may be double counted for enrolling in multiple language classes. With a population of approximately 1,200, I would need to obtain 292 survey responses with a 95% confidence level and 5% margin of error to ensure my data are representative of the population.

Participants were recruited through Rowan email based on the language courses they were enrolled in. Using IRB approved recruitment language, participants were sent an email explaining why they were emailed, the purpose of the research, and invited them to participate in a survey by clicking on the anonymous link to the Qualtrics survey. The survey reiterated the same information and by selecting the checkboxes, they confirmed

their eligibility and consent to their participation in the survey. No personal identifiers are collected and no monetary incentive were provided.

### **Survey Design**

This is a quantitative research study to understand adult student perception and preferences in formal language learning. Research was conducted through an online survey with three sections. The first section was basic multiple-choice, demographic questions asked for their age, learning or neurological disability, lingual ability, and language enrolled in. The second section and third section involved a matrix rating scale question. The first matrix in the second section asked students how frequently do they perceive the following methods to be used in class. The options were: often, sometimes, and rarely/never. The second matrix in the third section asked students how agreeable would they be to the following methods if used in class. The options were: preferred, maybe, and not preferred. The final design was a short 5-minute or less survey.

A few considerations were made during the design process of the survey such as taking into account of survey fatigue, privacy, and the tradeoff between accuracy and understandability (Fowler & Cosenza, 2009; Story & Tait, 2019). First, I assessed the risk of deducting student identity based on certain demographic questions asked. After careful consideration, I made the deliberate choice not to ask students what language beyond English do they know. Student identity can be easily deduced based what they know and the language course they are enrolled in. Furthermore, analyzing how known language interacts with learning another language is beyond the scope of this research anyway.

Likewise, I considered how much do participants know about bilingualism and the different types out there. I needed to provide an explanation that ensures consistent understanding without harming the response rate. Based on the research reviewed in Chapter 2 *Defining Bilingualism and Age and Ability*, there is no agreed upon cutoff age separating simultaneous and sequential bilingual (Cenoz et al., 2001; Grosjean, 2010; Grosjean et al., 2013). In addition, researchers have moved away from mindset that two monolinguals' mind reside in a bilingual. In fact, it is common for bilingual children to experience uneven development of two languages that does not properly showcase their true abilities (Grosjean, 2010; Grosjean et al., 2013). With this in mind, I focused on what that learning experience was like. This works in favor of increasing response rate because it takes into the consideration that participants may have difficulty in recalling age of first exposure towards their known language (Fowler & Cosenza, 2009). In my survey, simultaneous bilinguals are defined as individuals who learned to speak two languages at the same time and sequential bilinguals are defined as individuals who learned a second language after learning their first language. The survey question asked participants to select the response that best describes them with the most demanding answer first and the least demanding answer at bottom. The order goes as (1) multilingual, (2) simultaneous bilingual, (3) sequential bilingual, (4) receptive bilingual, (5) monolingual. Each answer follows the "I am [insert type of lingual]." format followed by a brief description defining each ability.

### **Collecting Data**

Data were gathered from the survey responses and responses were collected from the participants through an online anonymous survey. The survey ran from February to

March 2024, and reminders were sent on February 15, February 26, and March 18.

Responses were kept only on secure, Rowan-approved storage options and only myself and my thesis advisor had access to the data. After completion of the thesis, the data will be destroyed.

### **Data Analysis**

The analysis has three parts to it. The first part analyzes what do students perceive to be the main methods of language learning used in classrooms. The second part analyzes what do students prefer to be the methods used in language learning. The third part analyzes if there are differences between what students want (prefer) minus what they are experiencing (perceive). The three-part analysis would be applied to all the student responses to get a general view of trends. It would also be applied to different subgroups based on what the data collected can viably offer. This means possibly looking at different age subgroups, learning or neurological disability, lingual ability, and the language they are currently learning at Rowan. All data would be presented in percentages and unless otherwise noted.

Data will be organized in the following fashion. Tables will list out the percentage of each response with the methods always listed in the same order for easy comparison. For the difference between preference and perception, positive numbers are the percentage increase of students wanting to see the method being utilized more. Conversely, negative numbers are the percentage decrease. To better visualize the data bar charts and stacked bar charts were use. Both charts will list the methods from most preferred to least preferred. Stacked bar charts show how each method are perceived or

preferred. Meanwhile, bar charts show the difference in preferences with the larger bars representing bigger change and the smaller bars representing little change. The differences are between preferences and perception of the whole population to find general trends and areas of improvement. It will also look for any differences between the subgroups and general population.

## **Chapter 4**

### **Findings**

#### **Profile of the Population**

Only 35 students answered the survey. Majority of the participants was 19-22 years old (n = 31) with a few older students (n = 4), the oldest being 42 years old. Monolinguals comprised a third of the group (n = 12) as with bilinguals (n = 11). Broken down, there are nine sequential bilingual and two simultaneous bilinguals which matches with simultaneous bilingual being the minority of bilinguals (Grosjean, 2010). Receptive bilinguals comprise 20 percent of the participants (n = 7) and multilinguals comprise approximately 15 percent (n = 5). Of the languages courses offered at Rowan, a close third of the students were taking Spanish classes (n = 10) followed by Japanese (n = 7), French (n = 6), and Italian (n = 5). Tied near second to last with two participants are Arabic, German, and Russian. Finally, one participant was taking Chinese. The languages French, German, Italian, and Spanish use the Latin alphabet for their writing system. Collectively, 60 percent (n = 21) are learning a Latin script language. The remaining 40 percent of students taking Arabic, Chinese, Japanese and Russian were learning a non-Latin script language.

#### **Perception and Preference of Students**

Table 1 shows students perception of how frequently utilized are the following methods in class alongside their preference. Practice pronunciation is the most utilized method at 85.7 percent, followed by reading-out-loud at 80 percent, translating at 65.7 percent and talking to other speakers at 62.9 percent. Learning linguistic and transcribing



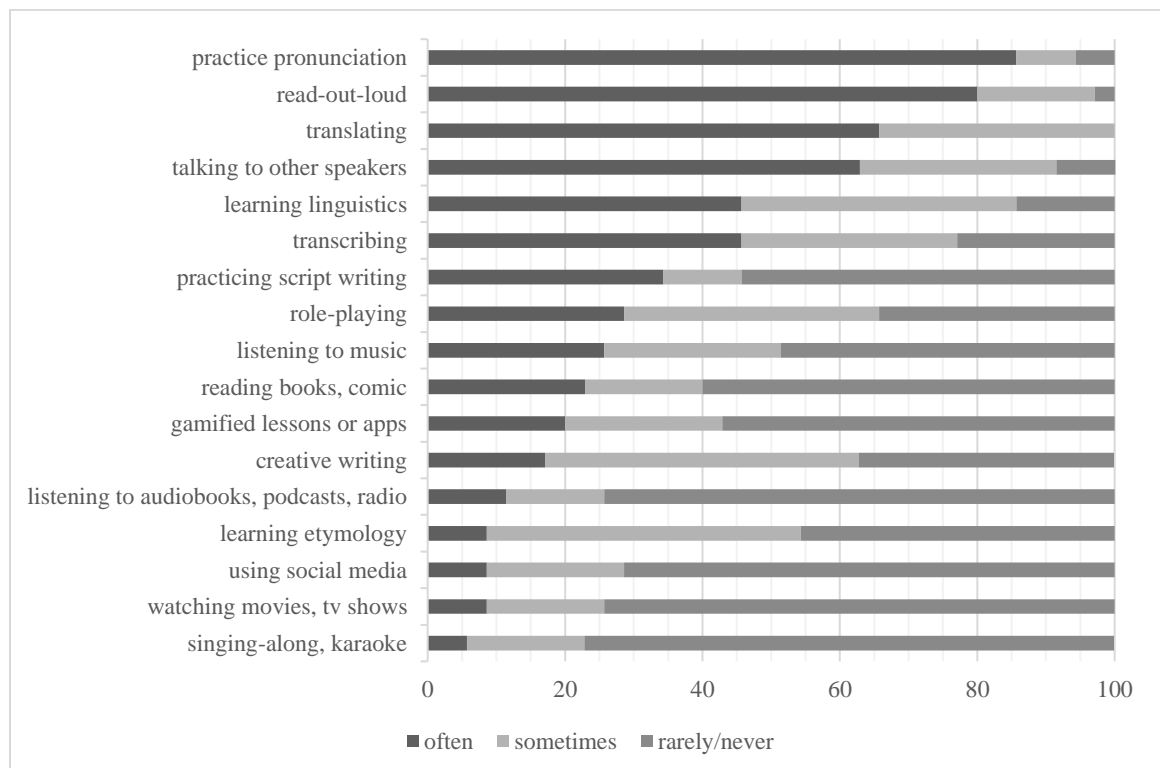
comes close to being utilized often half the time at 45.7 percent. Practicing script writing is either utilized often or rarely/never. Only 11.4 percent responded with sometimes, 34.3 percent responded with often and 54.3 percent responded with rarely/never. This aligns closely with my population of 40 percent learning a non-Latin script and 60 percent learning a Latin script. Conversely, the largest responses for sometimes are creative writing (45.7 percent), learning etymology (45.7 percent), and role-playing (37.1 percent). Do note that learning etymology is evenly split between sometimes used and rarely/never used at 45.7 percent with only 8.6 percent responding with often used. While the methods are not used often, they are being utilized at least half the time. The least utilized methods in class are singing-along activities at 77.1 percent, both watching movies and listening to audiobooks at 74.3 percent, using social media at 71.4 percent and reading books or comics at 60 percent for rarely/never.

As for student preferences, practicing pronunciation remains the most preferred method of language learning at 91.4 percent. Translating and talking to other speakers maintain top spots at 88.6 percent and 85.7 percent. Following in fourth place is transcribing at 74.3 percent with reading-out-loud being tenth place at 62.9 percent. Singing along and karaoke remain the least popular method of learning whether it is students' preference or its utilization in class. However, if we include the students who might be open to the learning method (those who selected maybe) then it is not in last place. In last place would be practicing script writing, role-playing, and using social media at 42.9 percent, 40 percent, and 37.1 percent respectively. That is more than singing-along and karaoke with 34.3 percent of students responding not preferred. In fact, student responses are almost equally distributed among preferred, maybe, and not

preferred. In addition, role playing and using social media are almost evenly split between preferred method of learning and not preferred method of learning with approximately 40 percent of students responded preferred or not preferred and approximately 20 percent of students responded with maybe preferred. Lastly, creative writing had the most students responding with maybe preferred at 45.7 percent.

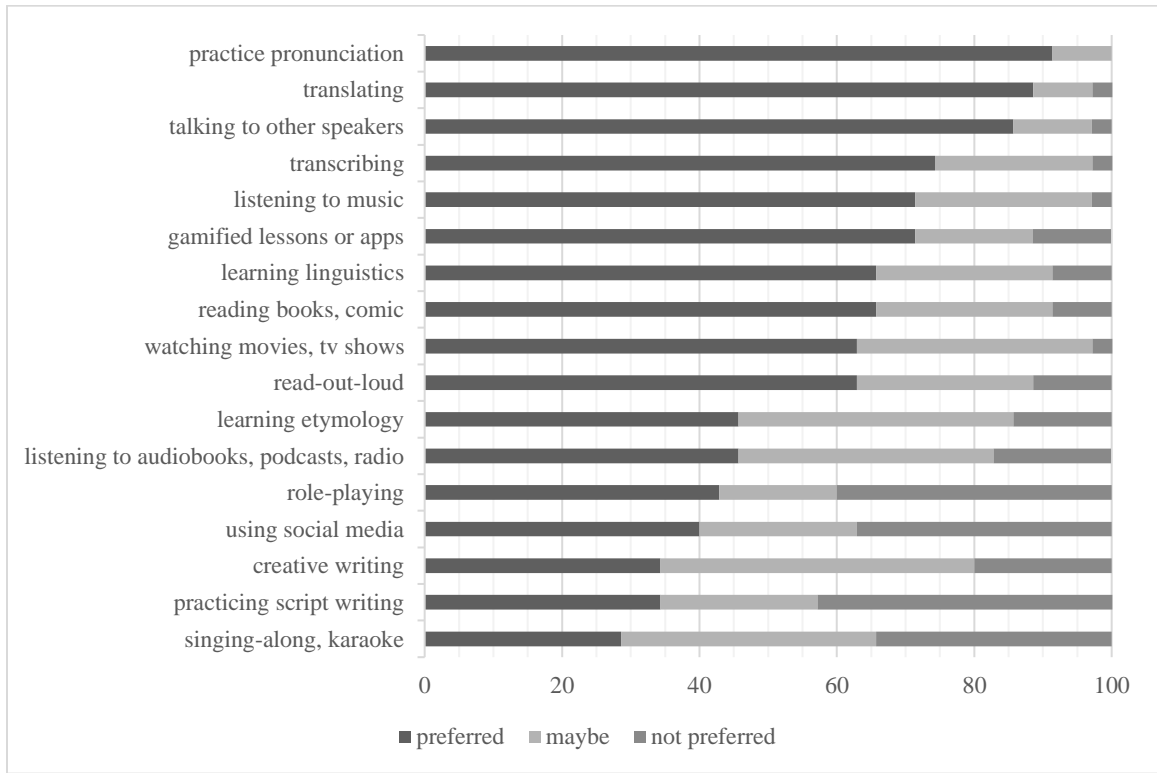
Comparing Figure 1 and Figure 2, we can see that generally speaking students are open to most of the methods shown on the list. Students would not be against seeing the listed methods being utilized more often and are open to trying some out. The only exception to this is the reading-out-loud method for majority of students, besides multilinguals, find the method overutilized and would prefer to being used less often.

**Figure 1**  
*Perceived Language Learning Methods*



**Figure 2**

*Preferred Language Learning Methods*



**Table 1***Students' Perceived Versus Preferred Methods of Language Learning*

Methods	Perception			Preference		
	often	sometimes	rarely/never	preferred	maybe	not preferred
watching movies, tv shows	8.6	17.1	74.3	62.9	34.3	2.9
listening to audiobooks, podcasts, radio	11.4	14.3	74.3	45.7	37.1	17.1
listening to music	25.7	25.7	48.6	71.4	25.7	2.9
reading books, comic	22.9	17.1	60.0	65.7	25.7	8.6
role-playing	28.6	37.1	34.3	42.9	17.1	40.0
read-out-loud	80.0	17.1	2.9	62.9	25.7	11.4
creative writing	17.1	45.7	37.1	34.3	45.7	20.0
practicing script writing	34.3	11.4	54.3	34.3	22.9	42.9
singing-along, karaoke	5.7	17.1	77.1	28.6	37.1	34.3
learning etymology	8.6	45.7	45.7	45.7	40.0	14.3
learning linguistics	45.7	40.0	14.3	65.7	25.7	8.6
practice pronunciation	85.7	8.6	5.7	91.4	8.6	0.0
talking to other speakers	62.9	28.6	8.6	85.7	11.4	2.9
using social media	8.6	20.0	71.4	40.0	22.9	37.1
gamified lessons or apps	20.0	22.9	57.1	71.4	17.1	11.4
translating	65.7	34.3	0.0	88.6	8.6	2.9
transcribing	45.7	31.4	22.9	74.3	22.9	2.9

## Differences Between Preferred and Perceived Learning Methods

Looking only at the difference between preferred methods of learning and often utilized method of learning, Table 2 shows almost all methods having positive difference meaning students would agree to the method being used more often in class. In other words, majority of the methods are being underutilized. The only exception is reading-out-loud having negative difference meaning students would prefer the method being utilized less often.

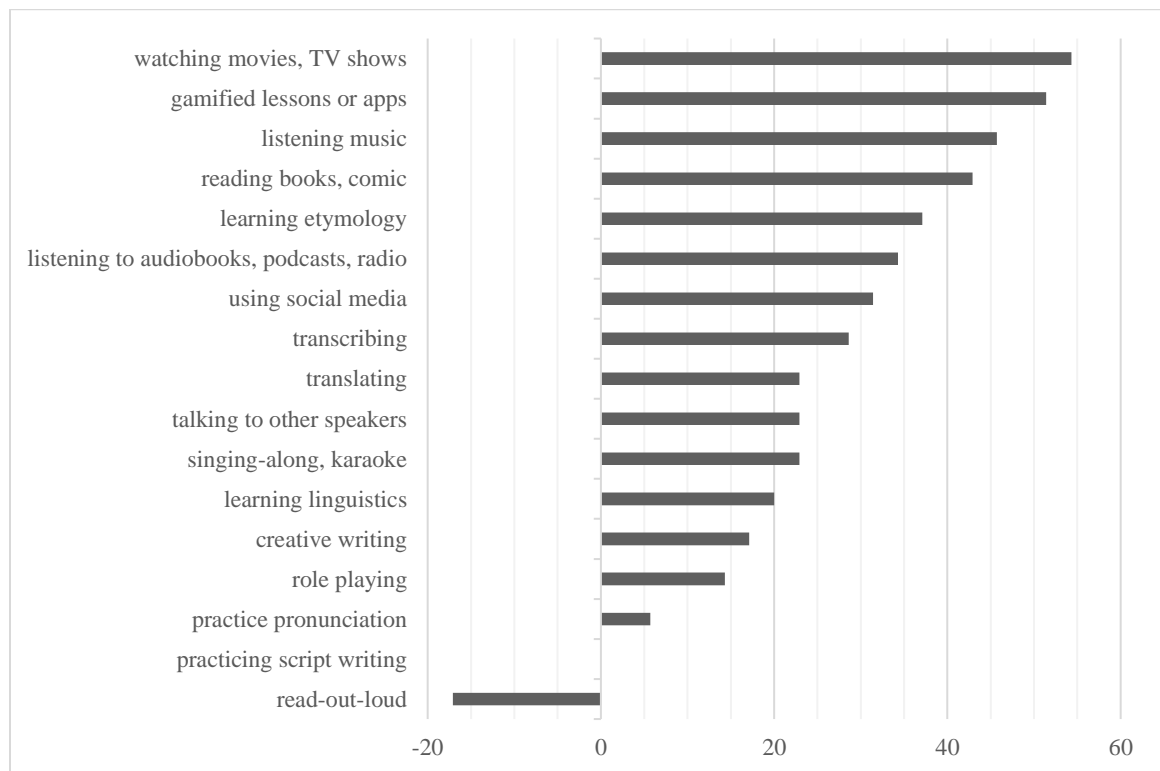
Figure 3 sorts the differences from largest to smallest. The biggest differences were watching movies and TV shows at 54.3 percent, gamified lessons or apps at 51.4 percent, listening to music at 45.7 percent, and reading books and comics at 42.9 percent. Referring back to Figure 1, watching movies and TV shows was the only method to be often utilized at less than 10 percent, almost 75 percent of the time being rarely or never used. The other three methods saw almost twice the amount usage at 20 percent, 25.7 percent, and 22.9 percent.

Table 2 and Figure 3 seem to show no differences between preference and perception for practicing script writing. It would imply that instructors are utilizing this learning method in class at just the right amount for students to feel satisfied. However, referring back to data in Table 1, 11.4 percent more students (totaling to 22.9 percent) would be open to the idea of practicing script writing (those who selected maybe). Seeing as how learners of other scripts make up 40 percent of the population and 34.3 percent already selected preferred, it makes one wonder where the extra numbers are coming from. Upon closer inspection, it is revealed that the 11.4 percent of students were learners of Latin-script language. There might be a positive connection between practicing script

writing in class and preferring it as a learning method. As seen in learners of non-Latin script, if students do not practice script writing in class (those who selected rarely/never) then they do not prefer it as their learning method. In contrast, if learners of non-Latin script do practice script writing (those who selected often or maybe) then they would prefer it as their learning method.

**Figure 3**

*Differences Between Students' Most Preferred and Often Perceived Learning Methods*



**Table 2***Differences Between Students' Most Preferred and Often Perceived Learning Methods*

Methods	Preference preferred	Perception often	Difference
watching movies, tv shows	62.9	8.6	54.3
listening to audiobooks, podcasts, radio	45.7	11.4	34.3
listening to music	71.4	25.7	45.7
reading books, comic	65.7	22.9	42.9
role-playing	42.9	28.6	14.3
read-out-loud	62.9	80.0	-17.1
creative writing	34.3	17.1	17.1
practicing script writing	34.3	34.3	0.0
singing-along, karaoke	28.6	5.7	22.9
learning etymology	45.7	8.6	37.1
learning linguistics	65.7	45.7	20.0
practice pronunciation	91.4	85.7	5.7
talking to other speakers	85.7	62.9	22.9
using social media	40.0	8.6	31.4
gamified lessons or apps	71.4	20.0	51.4
translating	88.6	65.7	22.9
transcribing	74.3	45.7	28.6

## **Preferences of Students Based on Their Lingual Ability**

Common trends found across all language learners were preferring translating over transcribing, preferring to learn linguistics over etymology, preferring gamified lessons or apps over social media, and practicing pronunciation placed in first or second place as preferred learning method.

Looking at Figure 4, monolinguals prefer gamified lessons and listening to music over talking to other speakers. Here are the following numbers from Table 3: 83.3 percent for gamified lessons, 75 percent for listening to music with 25 percent as maybe, and 75 percent for talking to other speakers with 16.7 percent as maybe. Yet they are also the most willing to try singing-along and karaoke as a learning method with only 16.7 percent of students being against it.

Receptive bilinguals value learning linguistics and etymology the highest out of all speakers with etymology tied with practicing pronunciation and talking to other speakers at 71.4 percent. Placed even higher was learning linguistics at 85.7 percent of students saying they would prefer this method as shown in Figure 5. Additionally, receptive bilinguals would rather do creative writing with 14.3 percent not preferring it than compared with the 42.9 percent of students against listening to audiobooks, podcasts, or the radio.

The most popular method for bilinguals was talking to other speakers (100 percent preferred). This was placed above practicing pronunciation as shown in Figure 6. Practicing pronunciation was tied with watching movies and translating at 90.9 percent. They are the only group to prefer movie watching than listening to music. Bilinguals

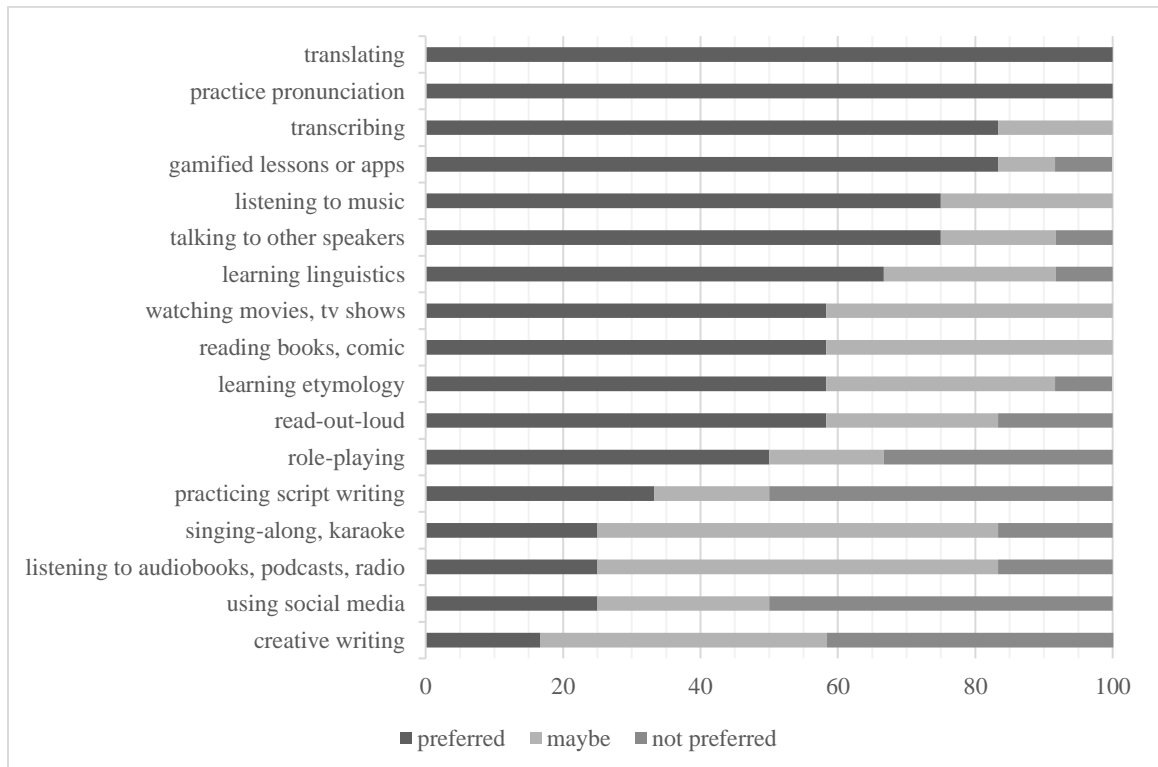


were also the most receptive using social media as a learning method compared to other speakers at 18.2 percent of students being against with multilinguals coming in second at 20 percent. Additionally, bilingual speakers were the most receptive to practicing script writing at 27.3 percent of students responding not preferred in comparison to the other groups of students responding with 40 percent or more as seen in Table 3.

Multilinguals are very receptive to reading-out-loud as method of learning, tying with practice pronunciation and talking to other speakers as seen in Figure 7 (100 percent preferred). However, role playing is their least preferred learning method at 80 percent of students being against it. They are the only group of speakers that would prefer singing-along and karaoke than role-playing.

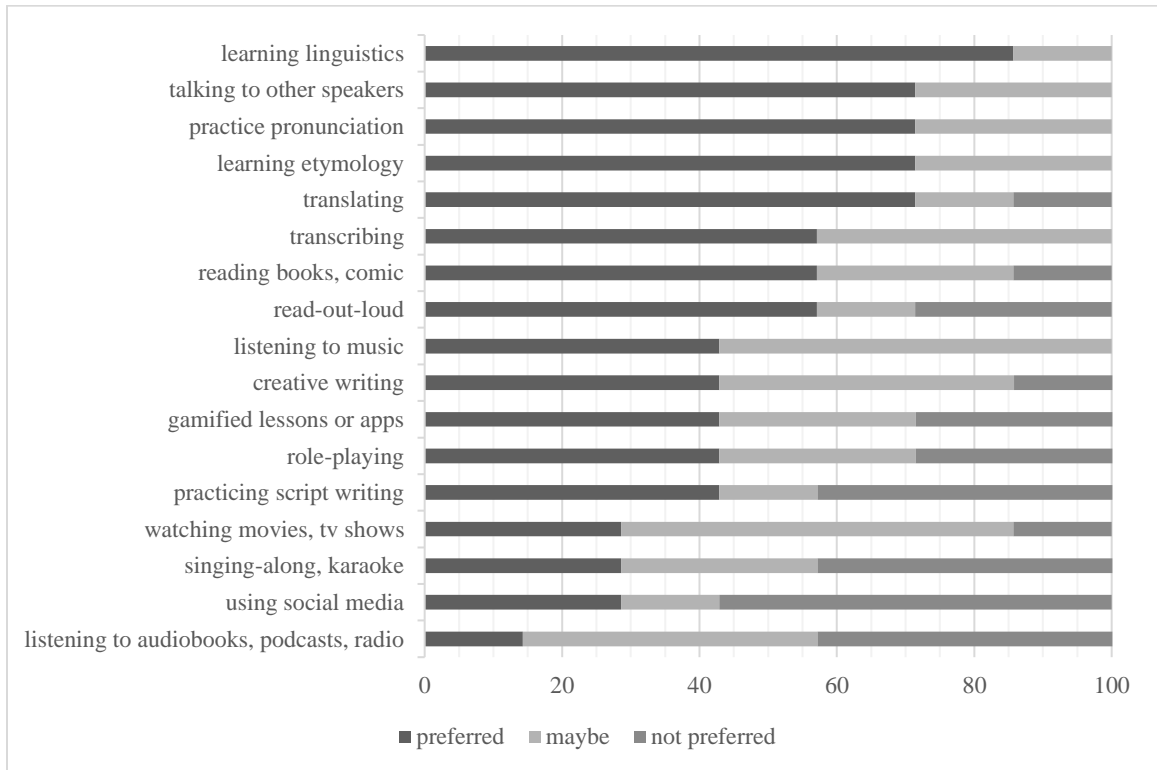
**Figure 4**

*Preferred Learning Methods for Monolingual Students*



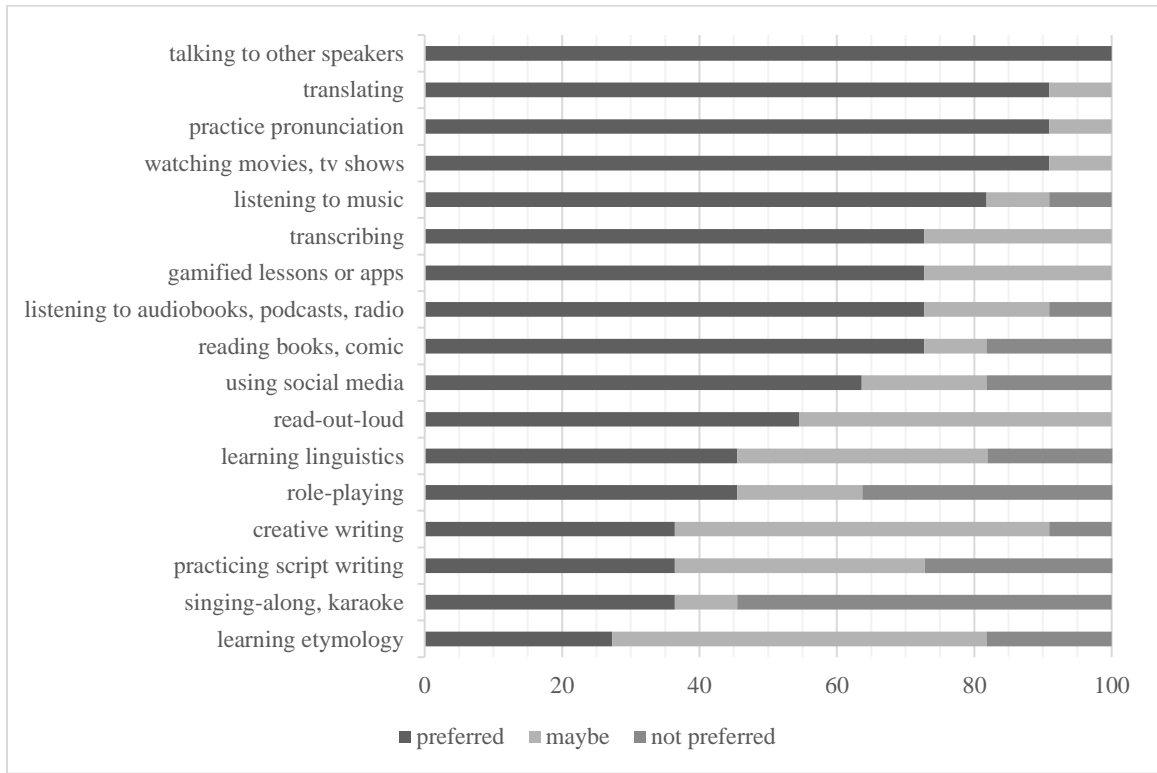
**Figure 5**

*Preferred Learning Methods for Receptive Bilingual Students*



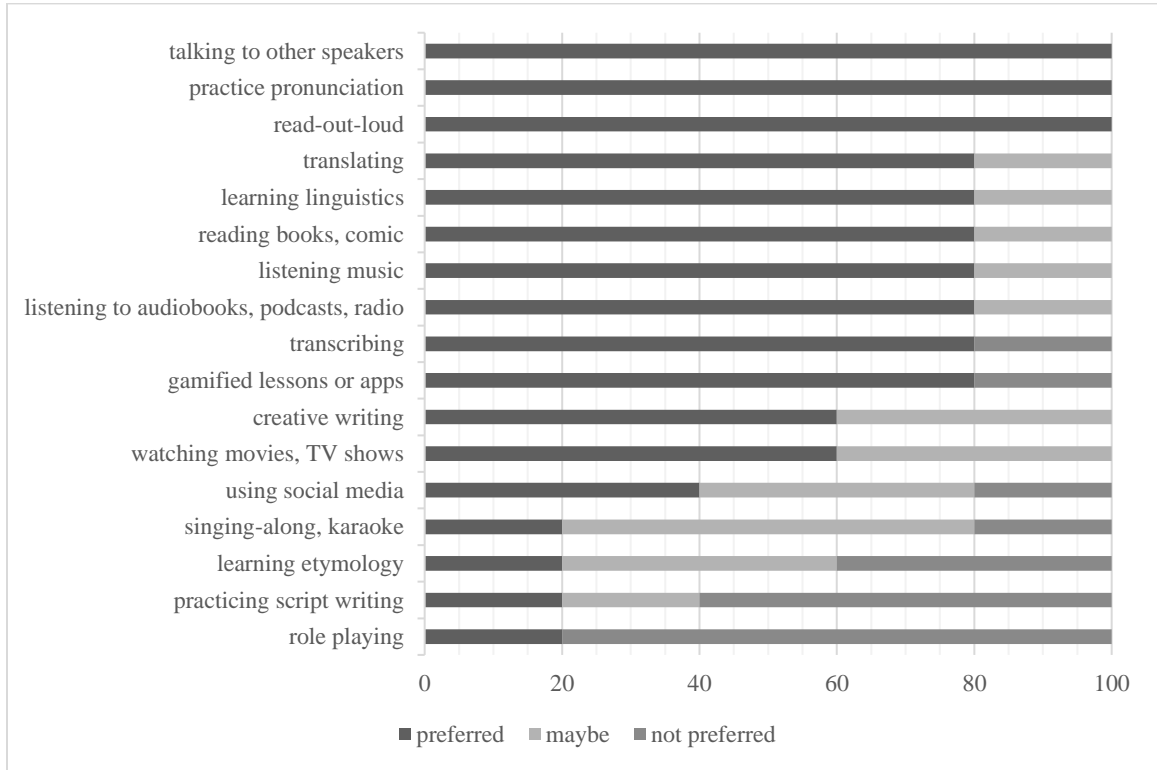
**Figure 6**

*Preferred Learning Methods for Bilingual Students*



**Figure 7**

*Preferred Learning Methods for Multilingual Students*



**Table 3***Learning Method Preferences of Students Based on Their Lingual Ability*

Methods	Monolingual (n = 12)			Receptive Bilingual (n = 7)		
	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	58.3	41.7	0.0	28.6	57.1	14.3
listening to audiobooks, podcasts, radio	25.0	58.3	16.7	14.3	42.9	42.9
listening to music	75.0	25.0	0.0	42.9	57.1	0.0
reading books, comic	58.3	41.7	0.0	57.1	28.6	14.3
role-playing	50.0	16.7	33.3	42.9	28.6	28.6
read-out-loud	58.3	25.0	16.7	57.1	14.3	28.6
creative writing	16.7	41.7	41.7	42.9	42.9	14.3
practicing script writing	33.3	16.7	50.0	42.9	14.3	42.9
singing-along, karaoke	25.0	58.3	16.7	28.6	28.6	42.9
learning etymology	58.3	33.3	8.3	71.4	28.6	0.0
learning linguistics	66.7	25.0	8.3	85.7	14.3	0.0
practice pronunciation	100.0	0.0	0.0	71.4	28.6	0.0
talking to other speakers	75.0	16.7	8.3	71.4	28.6	0.0
using social media	25.0	25.0	50.0	28.6	14.3	57.1
gamified lessons or apps	83.3	8.3	8.3	42.9	28.6	28.6
translating	100.0	0.0	0.0	71.4	14.3	14.3
transcribing	83.3	16.7	0.0	57.1	42.9	0.0

Methods	Bilingual (n = 11)			Multilingual (n = 5)		
	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	90.9	9.1	0.0	60.0	40.0	0.0
listening to audiobooks, podcasts, radio	72.7	18.2	9.1	80.0	20.0	0.0
listening to music	81.8	9.1	9.1	80.0	20.0	0.0
reading books, comic	72.7	9.1	18.2	80.0	20.0	0.0
role-playing	45.5	18.2	36.4	20.0	0.0	80.0
read-out-loud	54.5	45.5	0.0	100.0	0.0	0.0
creative writing	36.4	54.5	9.1	60.0	40.0	0.0
practicing script writing	36.4	36.4	27.3	20.0	20.0	60.0
singing-along, karaoke	36.4	9.1	54.5	20.0	60.0	20.0
learning etymology	27.3	54.5	18.2	20.0	40.0	40.0
learning linguistics	45.5	36.4	18.2	80.0	20.0	0.0
practice pronunciation	90.9	9.1	0.0	100.0	0.0	0.0
talking to other speakers	100.0	0.0	0.0	100.0	0.0	0.0
using social media	63.6	18.2	18.2	40.0	40.0	20.0
gamified lessons or apps	72.7	27.3	0.0	80.0	0.0	20.0
translating	90.9	9.1	0.0	80.0	20.0	0.0
transcribing	72.7	27.3	0.0	80.0	0.0	20.0

## **Differences in Preference for Students Based on Their Lingual Ability**

Some interesting patterns are revealed when comparing the preferability of methods between the subgroups based on lingual ability and the general population. To begin, monolinguals and receptive bilinguals favor learning etymology more than bilinguals and multilinguals. There is a preference difference of +12.6 percent for monolinguals and +25.7 percent for receptive bilinguals. As for bilinguals and multilinguals, those figures are -18.4 percent and -25.7 percent. Refer to Tables 4, 5, 6, and 7 for complete data. This pattern is reversed for listening to audiobooks, podcasts, or radio. Monolinguals and receptive bilinguals show a decrease in preference while the opposite is true for bilinguals and multilinguals. The percentage of difference is as follows: -20.7 percent for monolinguals, -31.4 percent for receptive bilinguals, 27 percent for bilinguals and 34.3 percent for multilinguals. The same pattern can be found with the method talking to other speakers. Monolinguals and receptive bilinguals do not prefer this method, while bilinguals and multilinguals prefer this method.

Monolingual make up the majority of the student population and therefore, it makes sense that their data will closely resemble the general population. None of the methods show a greater than 20 percent difference between preferences for monolinguals and the general population. This can be seen in Table 4 and Figure 8. They have almost equal number of methods they would prefer more to methods they would prefer less of being utilized in class in comparison to the general population. They are also the only group to not favor creative writing as a learning method while all the other subgroups shown increased openness towards using it as a learning method (multilinguals being the group that favors it the most).

Receptive bilinguals were the most selective with their learning methods with less students responding with preferred and more students responding to maybe or not preferred. This can be seen when comparing Figure 9 to Figure 8, 10, and 11. Most notable was watching movies and listening to audiobooks having a -34.3 percent and -31.4 percent difference. Both gamified lessons and listening to music had a -28.6 percent difference. Receptive bilinguals were also the only group to prefer these methods less than the general population. All the other speakers shown more interest in using it as their preferred learning method. The only exceptions were learning etymology at +25.7 percent difference alongside with linguistics at +20 percent. Creative writing and practicing script writing saw a smaller difference at +8.6 percent. See Table 5 for more details.

Bilinguals, unlike receptive bilinguals, are more open to using many of the learning methods as seen by comparing Figure 9 and Figure 10. One difference is bilinguals prefer learning through watching movies and TV shows at 28.1 percent more than general population. Beyond listening to audiobooks, podcast or radio, bilinguals also prefer using social media and talking to other speakers as method of learning. More precisely, there is a +23.6 percent and a +14.3 percent difference in preference as shown in Table 6. However, bilinguals do not prefer learning linguistics (-20.3 percent) as much as they do not prefer learning etymology (-18.4 percent).

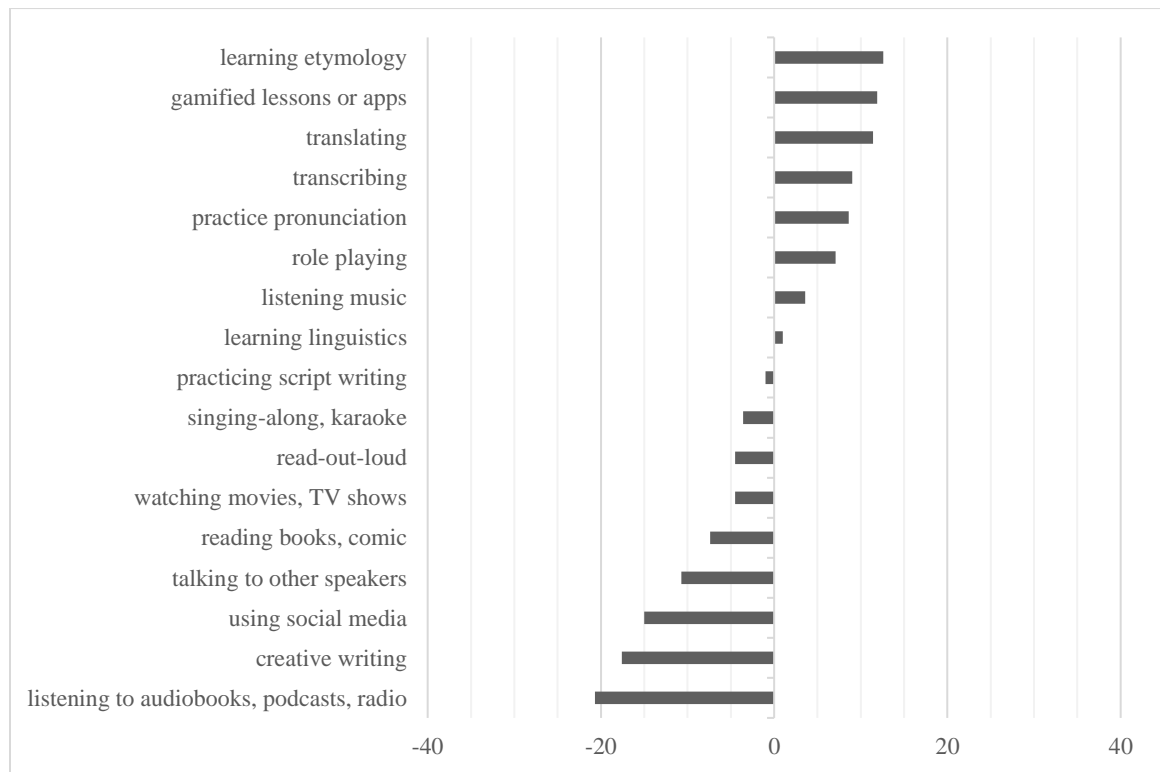
Multilinguals are similar to bilinguals in that they are open to many learning methods as shown in Figure 11. Besides reading-out-loud and listening to audiobooks, about 25 percent more students prefer creative writing. That is the highest out of all the speakers. In addition, there is 14.3 percent more students who prefer learning linguistics,



although 25.7 percent more students do not prefer learning etymology. Multilinguals are the only group to have a opposite preferences between learning linguistics and etymology. The data in Table 7 also reveals that multilinguals do not prefer practicing script writing as much as the general population with -14.3 percent difference. However, the difference does not compare to multilinguals’ dislike towards role playing with a 40 percent difference in not preferred. This is by far the largest difference in preference between speakers and general population.

**Figure 8**

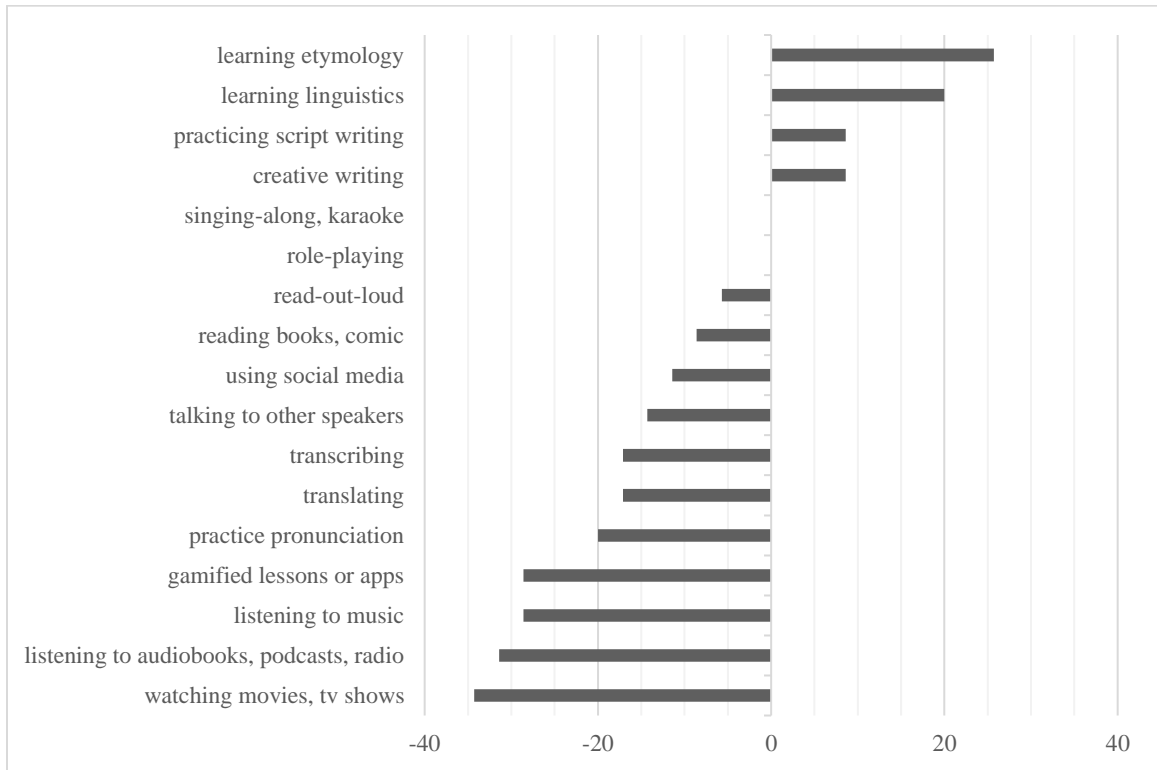
*Differences in Most Preferred for Monolingual Students*



*Note.* Difference from monolingual students (n = 12) and student population (n = 35)

**Figure 9**

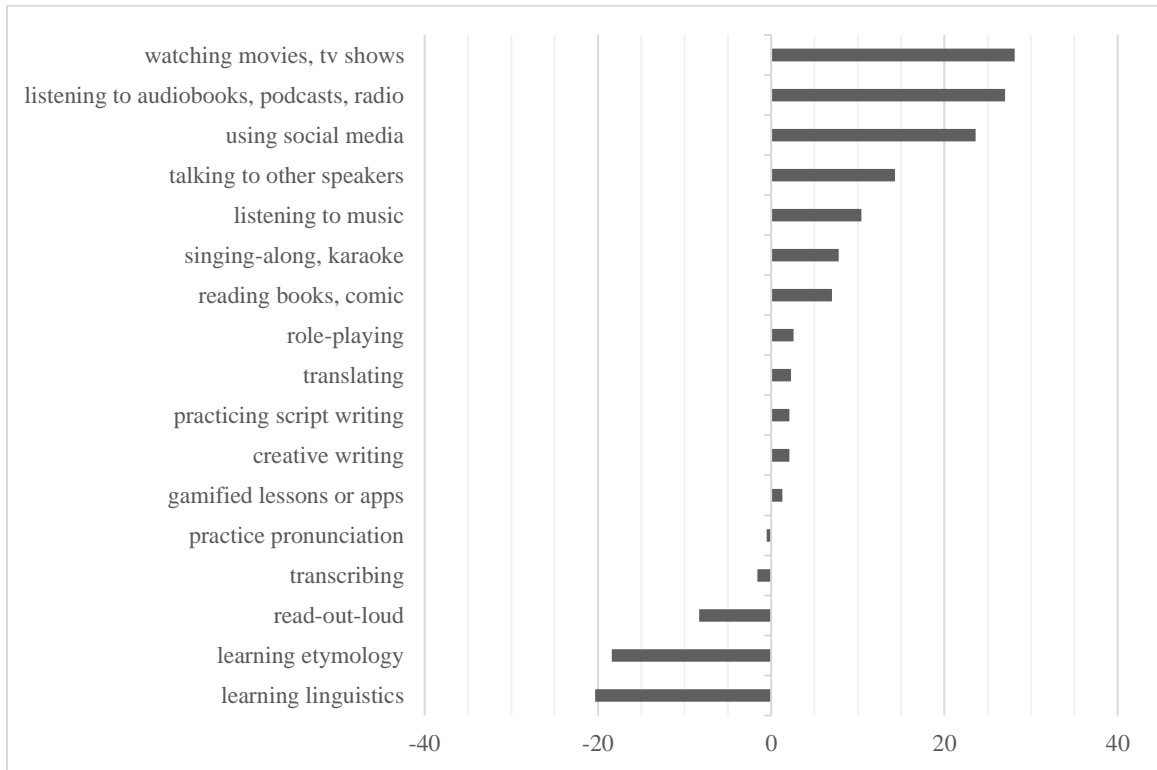
*Differences in Most Preferred for Receptive Bilingual Students*



*Note.* Difference from receptive bilingual students (n = 7) and student population (n = 35)

**Figure 10**

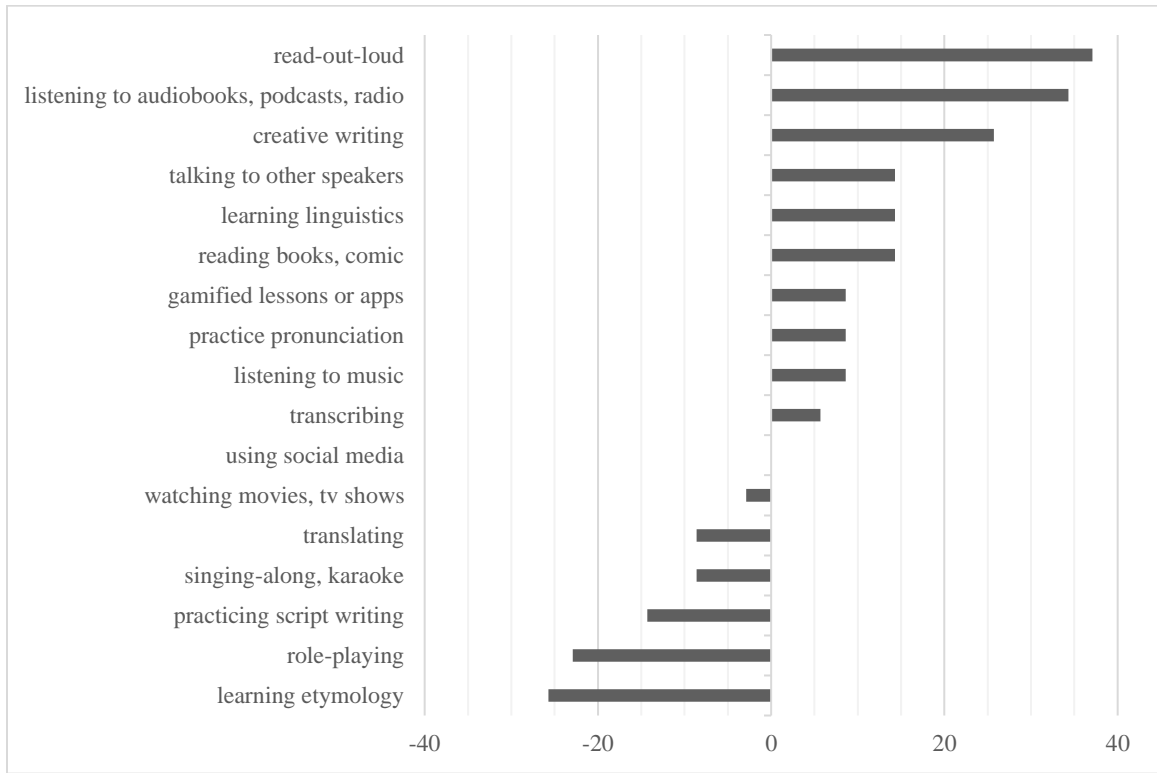
*Differences in Most Preferred for Bilingual Students*



*Note.* Difference from bilingual students (n = 11) and student population (n = 35)

**Figure 11**

*Differences in Most Preferred for Multilingual Students*



*Note.* Difference from multilingual students (n = 5) and student population (n = 35)

**Table 4***Differences in Preference for Monolingual Students*

Methods	Monolingual (n = 12)			Student Population (n = 35)			Differences		
	preferred	maybe	not preferred	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	58.3	41.7	0.0	62.9	34.3	2.9	-4.5	7.4	-2.9
listening to audiobooks, podcasts, radio	25.0	58.3	16.7	45.7	37.1	17.1	-20.7	21.2	-0.5
listening to music	75.0	25.0	0.0	71.4	25.7	2.9	3.6	-0.7	-2.9
reading books, comic	58.3	41.7	0.0	65.7	25.7	8.6	-7.4	16.0	-8.6
role-playing	50.0	16.7	33.3	42.9	17.1	40.0	7.1	-0.5	-6.7
read-out-loud	58.3	25.0	16.7	62.9	25.7	11.4	-4.5	-0.7	5.2
creative writing	16.7	41.7	41.7	34.3	45.7	20.0	-17.6	-4.0	21.7
practicing script writing	33.3	16.7	50.0	34.3	22.9	42.9	-1.0	-6.2	7.1
singing-along, karaoke	25.0	58.3	16.7	28.6	37.1	34.3	-3.6	21.2	-17.6
learning etymology	58.3	33.3	8.3	45.7	40.0	14.3	12.6	-6.7	-6.0
learning linguistics	66.7	25.0	8.3	65.7	25.7	8.6	1.0	-0.7	-0.2
practice pronunciation	100.0	0.0	0.0	91.4	8.6	0.0	8.6	-8.6	0.0
talking to other speakers	75.0	16.7	8.3	85.7	11.4	2.9	-10.7	5.2	5.5
using social media	25.0	25.0	50.0	40.0	22.9	37.1	-15.0	2.1	12.9
gamified lessons or apps	83.3	8.3	8.3	71.4	17.1	11.4	11.9	-8.8	-3.1
translating	100.0	0.0	0.0	88.6	8.6	2.9	11.4	-8.6	-2.9
transcribing	83.3	16.7	0.0	74.3	22.9	2.9	9.0	-6.2	-2.9

**Table 5***Differences in Preference for Receptive Bilingual Students*

Methods	Receptive Bilingual (n = 7)			Student Population (n = 35)			Differences		
	preferred	maybe	not preferred	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	28.6	57.1	14.3	62.9	34.3	2.9	-34.3	22.9	11.4
listening to audiobooks, podcasts, radio	14.3	42.9	42.9	45.7	37.1	17.1	-31.4	5.7	25.7
listening to music	42.9	57.1	0.0	71.4	25.7	2.9	-28.6	31.4	-2.9
reading books, comic	57.1	28.6	14.3	65.7	25.7	8.6	-8.6	2.9	5.7
role-playing	42.9	28.6	28.6	42.9	17.1	40.0	0.0	11.4	-11.4
read-out-loud	57.1	14.3	28.6	62.9	25.7	11.4	-5.7	-11.4	17.1
creative writing	42.9	42.9	14.3	34.3	45.7	20.0	8.6	-2.9	-5.7
practicing script writing	42.9	14.3	42.9	34.3	22.9	42.9	8.6	-8.6	0.0
singing-along, karaoke	28.6	28.6	42.9	28.6	37.1	34.3	0.0	-8.6	8.6
learning etymology	71.4	28.6	0.0	45.7	40.0	14.3	25.7	-11.4	-14.3
learning linguistics	85.7	14.3	0.0	65.7	25.7	8.6	20.0	-11.4	-8.6
practice pronunciation	71.4	28.6	0.0	91.4	8.6	0.0	-20.0	20.0	0.0
talking to other speakers	71.4	28.6	0.0	85.7	11.4	2.9	-14.3	17.1	-2.9
using social media	28.6	14.3	57.1	40.0	22.9	37.1	-11.4	-8.6	20.0
gamified lessons or apps	42.9	28.6	28.6	71.4	17.1	11.4	-28.6	11.4	17.1
translating	71.4	14.3	14.3	88.6	8.6	2.9	-17.1	5.7	11.4
transcribing	57.1	42.9	0.0	74.3	22.9	2.9	-17.1	20.0	-2.9

**Table 6***Differences in Preference for Bilingual Students*

Methods	Bilingual (n = 11)			Student Population (n = 35)			Differences		
	preferred	maybe	not preferred	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	90.9	9.1	0.0	62.9	34.3	2.9	28.1	-25.2	-2.9
listening to audiobooks, podcasts, radio	72.7	18.2	9.1	45.7	37.1	17.1	27.0	-19.0	-8.1
listening to music	81.8	9.1	9.1	71.4	25.7	2.9	10.4	-16.6	6.2
reading books, comic	72.7	9.1	18.2	65.7	25.7	8.6	7.0	-16.6	9.6
role-playing	45.5	18.2	36.4	42.9	17.1	40.0	2.6	1.0	-3.6
read-out-loud	54.5	45.5	0.0	62.9	25.7	11.4	-8.3	19.7	-11.4
creative writing	36.4	54.5	9.1	34.3	45.7	20.0	2.1	8.8	-10.9
practicing script writing	36.4	36.4	27.3	34.3	22.9	42.9	2.1	13.5	-15.6
singing-along, karaoke	36.4	9.1	54.5	28.6	37.1	34.3	7.8	-28.1	20.3
learning etymology	27.3	54.5	18.2	45.7	40.0	14.3	-18.4	14.5	3.9
learning linguistics	45.5	36.4	18.2	65.7	25.7	8.6	-20.3	10.6	9.6
practice pronunciation	90.9	9.1	0.0	91.4	8.6	0.0	-0.5	0.5	0.0
talking to other speakers	100.0	0.0	0.0	85.7	11.4	2.9	14.3	-11.4	-2.9
using social media	63.6	18.2	18.2	40.0	22.9	37.1	23.6	-4.7	-19.0
gamified lessons or apps	72.7	27.3	0.0	71.4	17.1	11.4	1.3	10.1	-11.4
translating	90.9	9.1	0.0	88.6	8.6	2.9	2.3	0.5	-2.9
transcribing	72.7	27.3	0.0	74.3	22.9	2.9	-1.6	4.4	-2.9

**Table 7***Differences in Preference for Multilingual Students*

Methods	Multilingual (n = 5)			Student Population (n = 35)			Differences		
	preferred	maybe	not preferred	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	60.0	40.0	0.0	62.9	34.3	2.9	-2.9	5.7	-2.9
listening to audiobooks, podcasts, radio	80.0	20.0	0.0	45.7	37.1	17.1	34.3	-17.1	-17.1
listening to music	80.0	20.0	0.0	71.4	25.7	2.9	8.6	-5.7	-2.9
reading books, comic	80.0	20.0	0.0	65.7	25.7	8.6	14.3	-5.7	-8.6
role-playing	20.0	0.0	80.0	42.9	17.1	40.0	-22.9	-17.1	40.0
read-out-loud	100.0	0.0	0.0	62.9	25.7	11.4	37.1	-25.7	-11.4
creative writing	60.0	40.0	0.0	34.3	45.7	20.0	25.7	-5.7	-20.0
practicing script writing	20.0	20.0	60.0	34.3	22.9	42.9	-14.3	-2.9	17.1
singing-along, karaoke	20.0	60.0	20.0	28.6	37.1	34.3	-8.6	22.9	-14.3
learning etymology	20.0	40.0	40.0	45.7	40.0	14.3	-25.7	0.0	25.7
learning linguistics	80.0	20.0	0.0	65.7	25.7	8.6	14.3	-5.7	-8.6
practice pronunciation	100.0	0.0	0.0	91.4	8.6	0.0	8.6	-8.6	0.0
talking to other speakers	100.0	0.0	0.0	85.7	11.4	2.9	14.3	-11.4	-2.9
using social media	40.0	40.0	20.0	40.0	22.9	37.1	0.0	17.1	-17.1
gamified lessons or apps	80.0	0.0	20.0	71.4	17.1	11.4	8.6	-17.1	8.6
translating	80.0	20.0	0.0	88.6	8.6	2.9	-8.6	11.4	-2.9
transcribing	80.0	0.0	20.0	74.3	22.9	2.9	5.7	-22.9	17.1

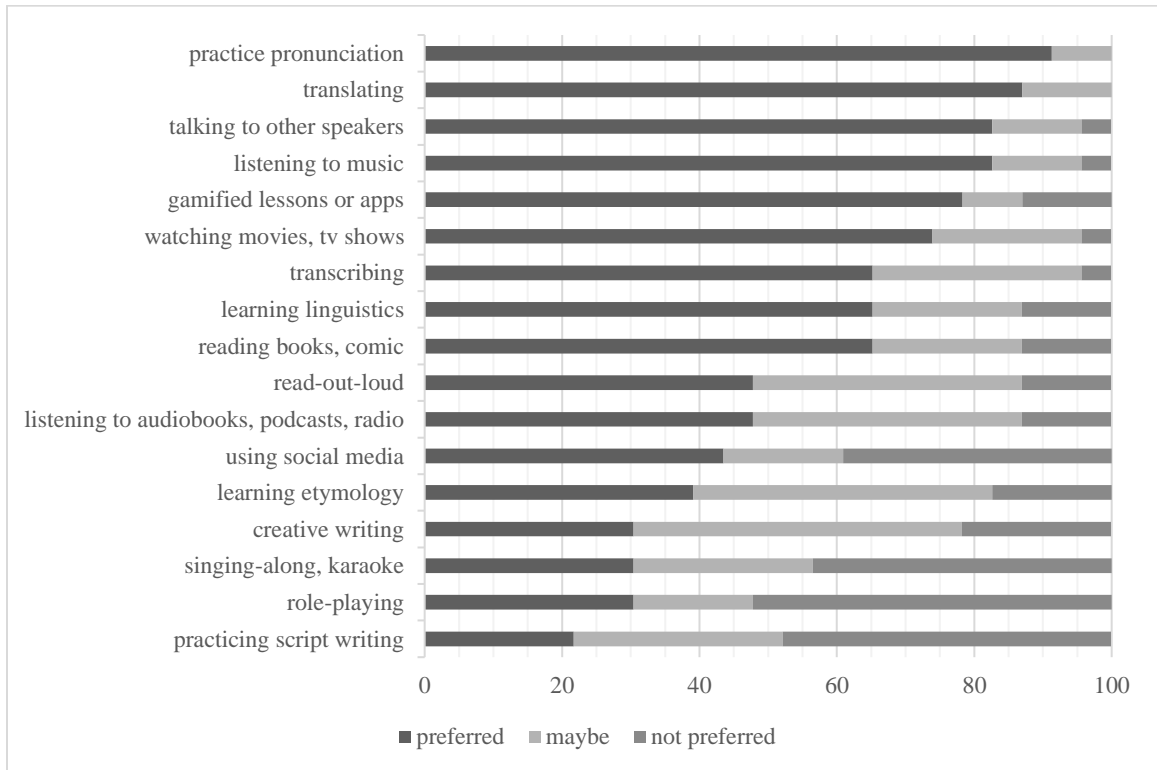


## Preferences of Students Based on Language Script

As one would expect, practicing script writing was the least preferred learning method for students learning a Latin script language at 21.7 percent (Table 8). In comparison, 58.3 percent of students learning a language that uses other scripts would prefer this method. That is almost triple the number of students. Although, learners of Latin script are not totally against the idea with 30.4 percent of students being open to using the method even if they do not prefer it. Latin-script learners prefer translating over transcribing as seen in Figure 12 while non-Latin script learners prefer transcribing over translating as seen in Figure 13. What they have in common were both groups not favoring singing-along and karaoke as a learning method and preferring learning linguistics over etymology. On the other hand, both groups enjoy reading books and comics at almost 65 percent as shown in Table 8. However, only non-Latin script learners prefer reading-out-loud over simply reading books. Interestingly, learners of other scripts were more open to learning through role-playing at 66.7 percent, preferring it over watching movies and TV shows at 41.7 percent. Learners of Latin script would much rather watch movies than to role-play, percentages as shown in Table 8. Learners of non-Latin script are also not as interested in using music as a learning method with only 50 percent of students preferring it compared to the 82.6 percent of students for Latin-script learners.

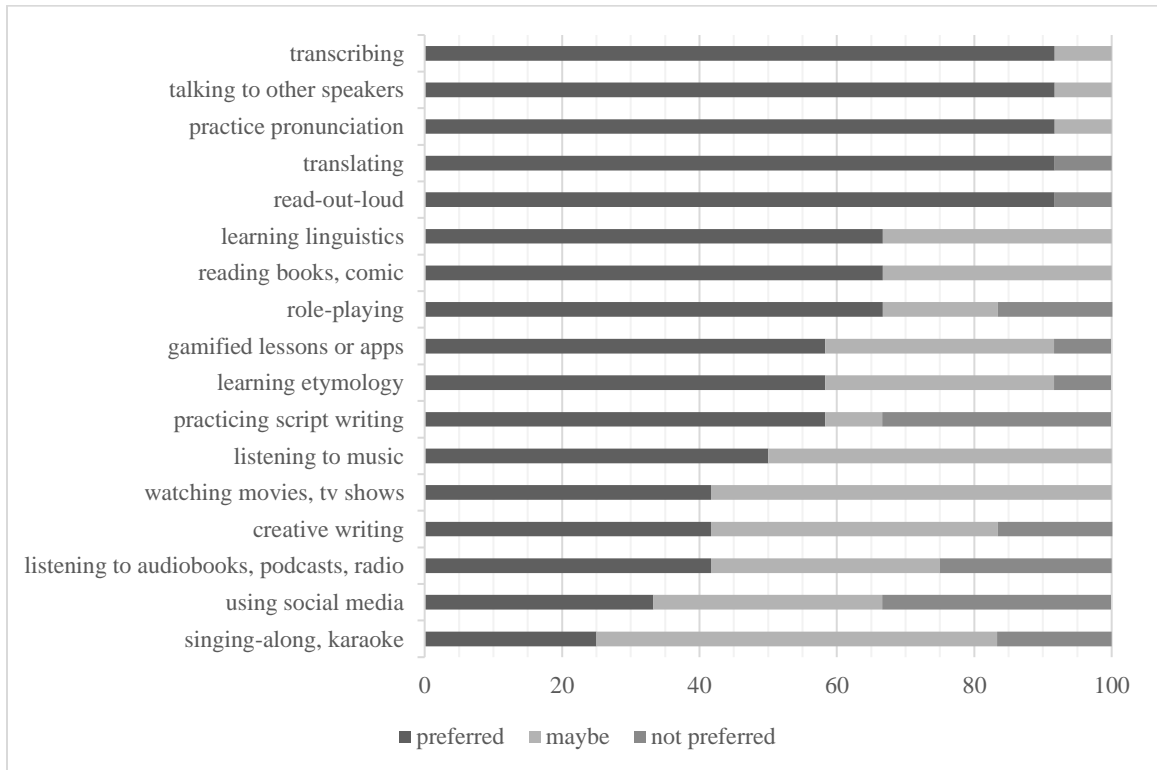
**Figure 12**

*Preferred Methods for Students Learning a Latin Script Language*



**Figure 13**

*Preferred Methods for Students Learning a Non-Latin Script Language*



**Table 8***Learning Method Preferences of Students Based on Language Script*

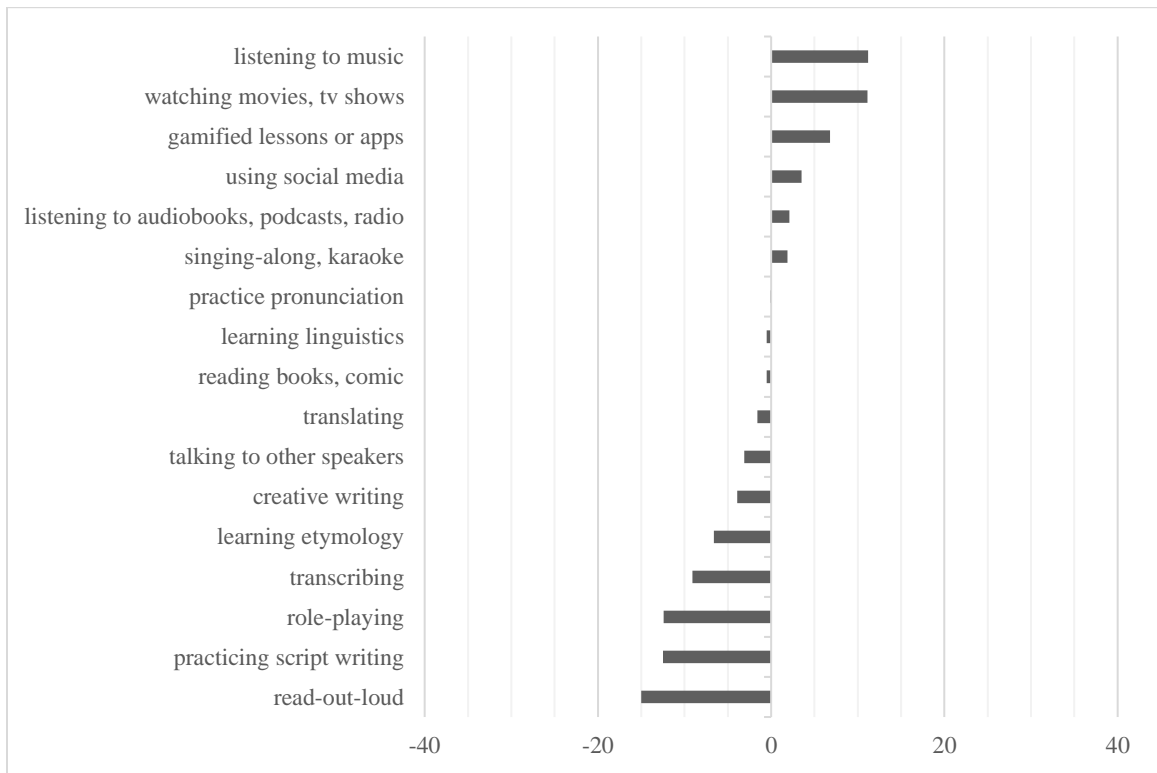
Methods	Latin Script (n = 23)			Non-Latin Script (n = 12)		
	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	73.9	21.7	4.3	41.7	58.3	0.0
listening to audiobooks, podcasts, radio	47.8	39.1	13.0	41.7	33.3	25.0
listening to music	82.6	13.0	4.3	50.0	50.0	0.0
reading books, comic	65.2	21.7	13.0	66.7	33.3	0.0
role-playing	30.4	17.4	52.2	66.7	16.7	16.7
read-out-loud	47.8	39.1	13.0	91.7	0.0	8.3
creative writing	30.4	47.8	21.7	41.7	41.7	16.7
practicing script writing	21.7	30.4	47.8	58.3	8.3	33.3
singing-along, karaoke	30.4	26.1	43.5	25.0	58.3	16.7
learning etymology	39.1	43.5	17.4	58.3	33.3	8.3
learning linguistics	65.2	21.7	13.0	66.7	33.3	0.0
practice pronunciation	91.3	8.7	0.0	91.7	8.3	0.0
talking to other speakers	82.6	13.0	4.3	91.7	8.3	0.0
using social media	43.5	17.4	39.1	33.3	33.3	33.3
gamified lessons or apps	78.3	8.7	13.0	58.3	33.3	8.3
translating	87.0	13.0	0.0	91.7	0.0	8.3
transcribing	65.2	30.4	4.3	91.7	8.3	0.0

## **Differences in Preference for Students Based on Language Script**

Understandably, students learning languages based on the Latin-script would resemble the general population more than those learning other scripts because they make up majority of the population ( $n = 23$  versus  $n = 12$ ). Comparing Figure 14 and Figure 15, one of the biggest differences beyond practicing script writing was reading-out-loud. Learners of the Latin script do not prefer it as their learning method with Table 9 showing only 47.8 percent of students preferring it. That is a 15 percent difference from the general population. On the other hand, learners of other scripts overwhelmingly prefer it at 91.7 percent (Table 10). That is a 28.8 percent difference compared with the general population and a 43.9 percent difference with learners of Latin script language. Likewise, non-Latin script learners viewed role-playing more favorably with 66.7 percent of students responding preferred. That is 23.8 percent more than the general population and 36.2 percent more than learners of Latin script language. Both learners follow the general trend of preferring music over watching movies. However, learners of Latin script language place the two methods near the top of preferred methods at 82.6 percent for listening to music and 73.9 percent for watching movies. Meanwhile, learners of other script languages placed the two methods near the bottom of preferred methods at 50 percent and 41.7 percent. Refer to Figure 12 and 13 for ranking and Table 8 for data.

**Figure 14**

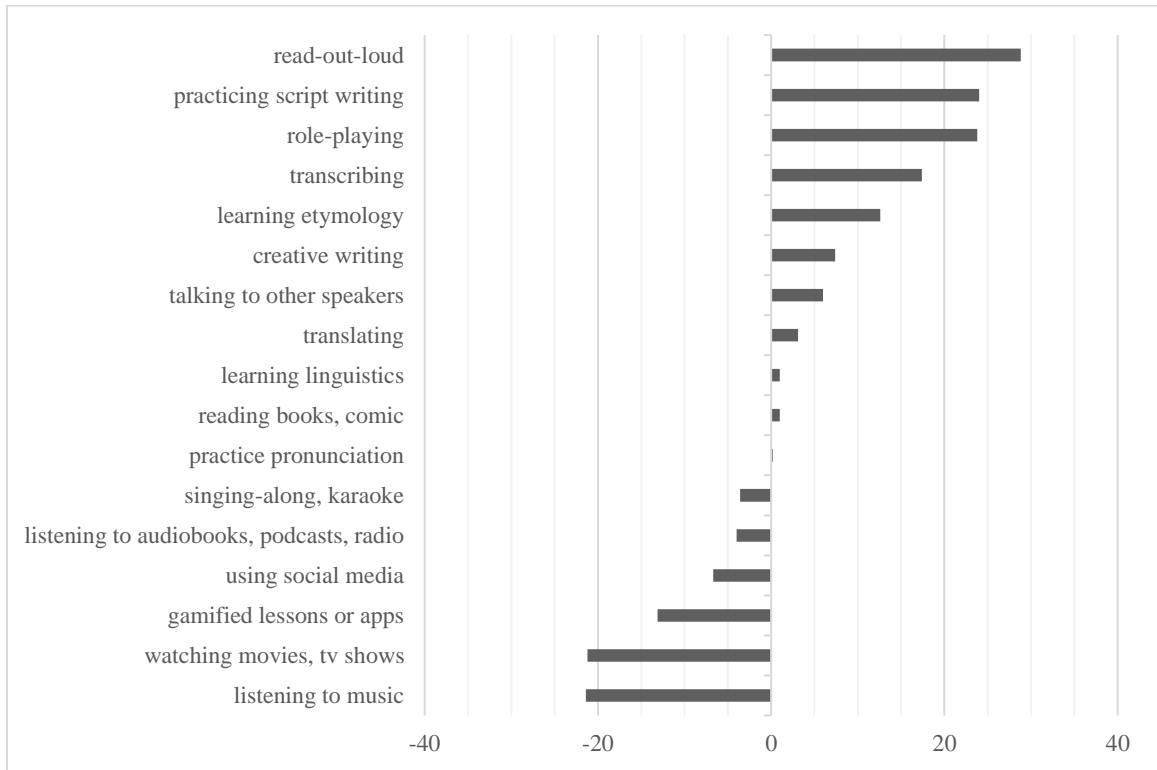
*Differences in Most Preferred for Students Learning a Latin Script Language*



*Note.* Difference from Latin script language learners (n = 23) and all scripts (n = 35)

**Figure 15**

*Differences in Most Preferred for Students Learning a Non-Latin Script Language*



*Note.* Difference from non-Latin script language learners (n = 12) and all scripts (n = 35)

**Table 9***Differences in Preference for Student Learning a Latin Script Language*

Methods	Latin Alphabet (n = 23)			Student Population (n = 35)			Differences		
	preferred	maybe	not preferred	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	73.9	21.7	4.3	62.9	34.3	2.9	11.1	-12.5	1.5
listening to audiobooks, podcasts, radio	47.8	39.1	13.0	45.7	37.1	17.1	2.1	2.0	-4.1
listening to music	82.6	13.0	4.3	71.4	25.7	2.9	11.2	-12.7	1.5
reading books, comic	65.2	21.7	13.0	65.7	25.7	8.6	-0.5	-4.0	4.5
role-playing	30.4	17.4	52.2	42.9	17.1	40.0	-12.4	0.2	12.2
read-out-loud	47.8	39.1	13.0	62.9	25.7	11.4	-15.0	13.4	1.6
creative writing	30.4	47.8	21.7	34.3	45.7	20.0	-3.9	2.1	1.7
practicing script writing	21.7	30.4	47.8	34.3	22.9	42.9	-12.5	7.6	5.0
singing-along, karaoke	30.4	26.1	43.5	28.6	37.1	34.3	1.9	-11.1	9.2
learning etymology	39.1	43.5	17.4	45.7	40.0	14.3	-6.6	3.5	3.1
learning linguistics	65.2	21.7	13.0	65.7	25.7	8.6	-0.5	-4.0	4.5
practice pronunciation	91.3	8.7	0.0	91.4	8.6	0.0	-0.1	0.1	0.0
talking to other speakers	82.6	13.0	4.3	85.7	11.4	2.9	-3.1	1.6	1.5
using social media	43.5	17.4	39.1	40.0	22.9	37.1	3.5	-5.5	2.0
gamified lessons or apps	78.3	8.7	13.0	71.4	17.1	11.4	6.8	-8.4	1.6
translating	87.0	13.0	0.0	88.6	8.6	2.9	-1.6	4.5	-2.9
transcribing	65.2	30.4	4.3	74.3	22.9	2.9	-9.1	7.6	1.5



**Table 10***Differences in Preference for Students Learning a Non-Latin Script Language*

Methods	Non-Latin Script (n = 12)			Student Population (n = 35)			Differences		
	preferred	maybe	not preferred	preferred	maybe	not preferred	preferred	maybe	not preferred
watching movies, tv shows	41.7	58.3	0.0	62.9	34.3	2.9	-21.2	24.0	-2.9
listening to audiobooks, podcasts, radio	41.7	33.3	25.0	45.7	37.1	17.1	-4.0	-3.8	7.9
listening to music	50.0	50.0	0.0	71.4	25.7	2.9	-21.4	24.3	-2.9
reading books, comic	66.7	33.3	0.0	65.7	25.7	8.6	1.0	7.6	-8.6
role-playing	66.7	16.7	16.7	42.9	17.1	40.0	23.8	-0.5	-23.3
read-out-loud	91.7	0.0	8.3	62.9	25.7	11.4	28.8	-25.7	-3.1
creative writing	41.7	41.7	16.7	34.3	45.7	20.0	7.4	-4.0	-3.3
practicing script writing	58.3	8.3	33.3	34.3	22.9	42.9	24.0	-14.5	-9.5
singing-along, karaoke	25.0	58.3	16.7	28.6	37.1	34.3	-3.6	21.2	-17.6
learning etymology	58.3	33.3	8.3	45.7	40.0	14.3	12.6	-6.7	-6.0
learning linguistics	66.7	33.3	0.0	65.7	25.7	8.6	1.0	7.6	-8.6
practice pronunciation	91.7	8.3	0.0	91.4	8.6	0.0	0.2	-0.2	0.0
talking to other speakers	91.7	8.3	0.0	85.7	11.4	2.9	6.0	-3.1	-2.9
using social media	33.3	33.3	33.3	40.0	22.9	37.1	-6.7	10.5	-3.8
gamified lessons or apps	58.3	33.3	8.3	71.4	17.1	11.4	-13.1	16.2	-3.1
translating	91.7	0.0	8.3	88.6	8.6	2.9	3.1	-8.6	5.5
transcribing	91.7	8.3	0.0	74.3	22.9	2.9	17.4	-14.5	-2.9

## **Chapter 5**

### **Summary, Discussion, Conclusion, and Recommendations**

#### **Summary of the Study**

In order to explore ways to improve language acquisition rate in adults, this research study surveyed college students enrolled in a language course on what they perceive to be the main methods of teaching and what their preferences would be if given the choice. If there exists a gap between perceived and preferred methods of learning then it might mean that students' needs are not being met. I hypothesized that there would be a difference between adult student perception and preference because students want to focus more on the speaking and listening skills over reading and writing skills. In addition, I predicted that students would prefer the use of entertainment and social media as lesson materials over traditional forms of learning like books. A total of 35 students responded to the study, majority of which were 19-22 years old.

#### **Discussion of the Findings**

To summarize, instructors are on the right track with utilizing pronunciation practice, translating activities, and talking to other speakers as their method of teaching. Students really prefer those methods. Instructors also made the right decision not to use social media and singing along or karaoke as learning method, since students prefer them the least. However, reading-out-loud activities may be overutilized and could be replaced with some other learning method. The top most underutilized methods in class that students seek are (1) watching movies and TV shows, (2) gamified lessons or apps, and (3) reading books and comics. Those methods see the biggest difference between

preference and perception. This aligns with my hypothesis that students tend to prefer speaking and listening ability over reading and writing abilities (Martinez-Flor & Usó-Juan, 2006). On the other hand, there has been mixed results as to whether students prefer entertainment and social media as learning materials over traditional media like books. Although students enjoy entertaining learning methods like listening to music or watching movies and TV shows, reading books and comics is not far behind in preference. Sometimes, reading books and comics are preferred over gamified lessons or apps. While instructors should consider adding more entertainment learning materials into their lesson plans, traditional forms of learning materials still have much value. Therefore, it is recommended for instructors to practice what best suits their classroom and students. Other general trends include students preferring translating over transcribing, gamified lessons over social media, and learning linguistics over etymology. However, this is for the general population of this research study and not every class will look the same.

If a classroom is comprised mostly of monolinguals or receptive bilinguals, instructors may find that students are not as receptive to talking to other speakers or using social media. For monolinguals, they would much rather listen to music or engage in gamified lesson plans and they are the most open using singing as a learning method. Both speakers also do not prefer listening to audiobooks, podcasts, or radio and receptive bilinguals would much rather do creative writing instead. However, both groups are open to learning linguistics and etymology with receptive bilinguals placing it as their most preferred method along with pronunciation practice. If we compare the two, receptive bilinguals are more selective of their learning methods, being the only speakers to

disfavor gamified lessons and listening to music more than the general population. Only 28.6 percent of students would prefer watching movies and TV shows as a learning method. For receptive bilinguals, instructors are better off teaching linguistics and etymology as there is a greater need for those methods.

On the other hand, if the classroom was comprised of bilinguals and multilinguals, instructors may find that they are more receptive to talking to other speakers, using social media, doing creative writing, and listening to audiobooks, podcasts, or radio. However, they both do not prefer learning etymology as much as monolinguals or receptive bilinguals who do prefer it. In addition, bilinguals are not as open to learning linguistics. It makes them the only group to favor it less than the general population. They do prefer watching movies and TV shows the most amongst all the speakers. As for multilinguals, role-playing is their least preferred method of learning, and they would much rather sing-along or do karaoke instead. They are also the most unreceptive to practicing script writing. It is evident the same tactics used on monolinguals and receptive bilinguals might not work on bilinguals and multilinguals (D'Angelo & Sorace, 2022; Reder et al., 2013). Even among those who speak more than one language, there is a difference in preferred learning methods that may be due to metalinguistic awareness.

As for what to expect from student preferences based on the language scripts being taught, since all participants are students with college level English the Latin script is familiar to them. The more familiar the students are with the script or writing system, the less they preferred practicing script writing. Conversely, the more unfamiliar they are with it, the more they would prefer practicing script writing. For multilinguals who may

be literate in multiple languages, the linguistic transfer across writing system may make them want to practice script writing less since many world languages' scripts are borrowed and refitted (De Voogt, 2012). Instructors may find that learners of Latin script languages may prefer watching movies and listening to music more and may want to switch reading-out-loud activities out to make room for the learning methods. However, for learners of non-Latin script languages, instructors should continue utilizing reading-out-loud method.

### **Recommendations for Practice**

There are two separate recommendations for language instructors depending on the type of class they are teaching. If instructors are teaching a language that is spoken by the local population, then they might be looking at a multinational and multilingual classroom with majority of the students being either immigrants or exchange students. Since failing to learn the language directly impacts their daily life, students may press for achieving immediate and practical results. Therefore, instructors should pay attention to which vocabulary should take priority in teaching. Likewise, students might not be as interested in methods from which they do not see direct results such as learning linguistics and etymology. If the classroom is comprised of students from diverse language and background, following the general preference will probably be their best choice. However, because the local population speaks the language that is being taught, it does open opportunities for instructors to incorporate immersive learning – a method not explored in this study because of how hard it is to replicate this environment-dependent learning method into a classroom.

On the other hand, instructors teaching a language that is not spoken by the local population may have a mix of possible classroom composition. If the classroom is comprised mainly of monolinguals, then instructors should try utilizing more entertaining learning methods and materials as it seems to be their preferred way of learning. If the classroom is comprised mainly of receptive bilinguals, the instructor may or may not be looking at a group of heritage language learners. These students have selective needs and likewise their preferred methods of learning reflect that. Instructors should take care in finding out their students' preferences. Otherwise, their preferred learning methods are practicing their speaking skills and learning linguistics and etymology. If the classroom is comprised of bilinguals or multilinguals, instructors could utilize the preferred learning methods of either group.

### **Recommendations for Further Research**

If this research were to be conducted again or further explored, surveying a larger sample may yield results that is more reflective of the population. In addition, there are natural limitations to a quantitative study. Therefore, it would be beneficial to do a qualitative or mixed-method study that allows participants to describe in detail what their needs and preferences are. It would work greatly with exploring student motivation for learning another language to see how it may impact preferred learning methods.

Likewise, learning what languages the participants can understand, speak, or write in would allow the research to capture more accurate understanding of how language distance and awareness plays a role in preferred learning methods. Since the results from this study have shown that students from different lingual abilities have different preferences for learning, this could mean that as a student develops their language

proficiency their learning preferences may also change. Following the growth and changes of language learners in a longitudinal study may reveal valuable insights that can help with designing adaptive and personalized lesson plans over the course of their learning journey.

## References

- American Councils of International Education. (2017). *The national K-12 foreign language enrollment survey report*.  
<https://www.americancouncils.org/sites/default/files/FLE-report-June17.pdf>
- Bialystok, E. (2011) How analysis and control lead to advantages and disadvantages in bilingual process. In C. Sanz, R. P. Leow, E. Bialystok, F. R. Eckman, N. Ellis, I. Finger, L. S. Gordon, F. G. Henshaw, H. E. Hilton, & D. Ingram (Eds.), *Implicit and explicit language learning: Conditions, processes, and knowledge in SLA and bilingualism* (1st ed., pp. 35-47). Georgetown University Press.
- Cenoz, J. & Genesee, F. (2001). *Trends in bilingual acquisition*. John Benjamins Publishing Company.
- Chang, F., Janciauskas, M., & Fitz, H. (2012). Language adaptation and learning: Getting explicit about implicit learning. *Language and Linguistics Compass*, 6(5), 259–278.  
<https://doi.org/10.1002/lnc3.337>
- Chiocca, E. (2019). *Language endangerment: diversity and specificities of Native American languages of Oklahoma*. Springer International Publishing. 10.1007/978-3-030-02438-3\_19
- Cook, V. & Bassetti, B. (2005). An introduction to researching second language writing systems. In V. Cook & B. Bassetti (Eds.), *Second language writing systems* (1st ed., pp. 1-68). Multilingual Matters. <https://doi.org/10.21832/9781853597954>
- D'Angelo, F., & Sorace, A. (2022). The additive effect of metalinguistic awareness in third or additional language acquisition. *International Journal of Bilingual Education and Bilingualism*, 25(10), 3551–3567.  
<https://doi.org/10.1080/13670050.2022.2064710>
- De Jong, N. H. (2016). Fluency in second language assessment. In D. Tsagari & J. Banerjee (Eds.), *Handbook of second language assessment* (1st ed., pp. 203-218). Gruyter-Mouton. <https://doi.org/10.1515/9781614513827>
- De Voogt, A. (2011). Invention and borrowing in the development and dispersal of writing systems. In A. J. De Voogt & J. F. Quack (Eds.), *The idea of writing: Writing across borders* (1st ed., pp. 1-10). Brill.
- Demattè, P. (2022). *The origins of Chinese writing*. Oxford University Press.



- Ellis, N. C. (2011) Implicit and explicit SLA and their interface. In C. Sanz, R. P. Leow, E. Bialystok, F. R. Eckman, N. Ellis, I. Finger, L. S. Gordon, F. G. Henshaw, H. E. Hilton, & D. Ingram (Eds.), *Implicit and explicit language learning: Conditions, processes, and knowledge in SLA and bilingualism* (1st ed., pp. 35-47). Georgetown University Press.
- Ellis, R., Elder, C., Erlam, R., Loewen, S., Philp, J. (2009). *Implicit and explicit knowledge in second language learning, testing and teaching*. Multilingual Matters. <https://doi.org/10.21832/9781847691767>
- Ethnologue. (2023). United States. <https://www.ethnologue.com/country/US/>
- Eurostat. (2023). *Foreign language learning increases among EU students*. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/edn-20230926-1>
- Finn, A. S., & Hudson Kam, C. L. (2008). The curse of knowledge: First language knowledge impairs adult learners' use of novel statistics for word segmentation. *Cognition*, 108(2), 477-499. 10.1016/j.cognition.2008.04.002
- Fowler, F. J., & Cosenza, C. (2009). Design and evaluation of survey questions. In L. Bickman & D. J. Rog (Eds.), *The SAGE handbook of applied social research methods* (pp. 375-412). Sage Publications, Incorporated. <https://doi.org/10.4135/9781483348858>
- Grosjean, F. (2008). *Studying bilinguals*. Oxford University Press.
- Grosjean, F. (2010). *Bilingual life and reality*. Harvard University Press. 10.4159/9780674056459
- Grosjean, F. (2014, November 30). *Chasing down those 65%*. Psychology Today. <https://www.psychologytoday.com/us/blog/life-bilingual/201411/chasing-down-those-65>
- Grosjean, F. (2020, April 4). *How many are we*. Psychology Today. <https://www.psychologytoday.com/us/blog/life-bilingual/201209/how-many-are-we>
- Grosjean, F., & Li, P. (2013). *The psycholinguistics of bilingualism*. Wiley-Blackwell.
- Hartshorne, J. K., Tenenbaum, J. B., & Pinker, S. (2018). A critical period for second language acquisition: Evidence from 2/3 million English speakers. *Cognition*, 177, 263-277. 10.1016/j.cognition.2018.04.007
- Kim, S. Y., Qi, T., Feng, X., Ding, G., Liu, L., & Cao, F. (2016). How does language distance between L1 and L2 affect the L2 brain network? An fMRI study of Korean–Chinese–English trilinguals. *NeuroImage*, 129, 25-39. 10.1016/j.neuroimage.2015.11.068

- Lurie, D. B. (2006). Language, writing, and disciplinarity in the Critique of the “Ideographic Myth”: Some proleptical remarks. *Language & Communication*, 26(3), 250-269. 10.1016/j.langcom.2006.02.015
- Martinez-Flor, A., & Usó-Juan, E. (2006) Toward acquiring communicative competence through listening. In E. Usó-Juan & A. Martinez-Flor (Eds.), *Current trends in the development and teaching of the four language skills* (1st ed., pp. 24-46). De Gruyter, Inc.
- Modern Language Association. (2015). *Enrollments in languages other than English in United States institutions of higher education, Fall 2013*.  
[https://www.mla.org/content/download/31180/file/EMB\\_enrllmnts\\_nonEngl\\_2013.pdf](https://www.mla.org/content/download/31180/file/EMB_enrllmnts_nonEngl_2013.pdf)
- Modern Language Association. (2023). *Enrollments in language other than English in US institutions of higher education, Fall 2021*.  
<https://www.mla.org/content/download/191324/file/Enrollments-in-Languages-Other-Than-English-in-US-Institutions-of-Higher-Education-Fall-2021.pdf>
- Nan, C. (2018). Implications of interrelationship among four language skills for high school English teaching. *Journal of Language Teaching and Research*, 9(2), 418-423. 10.17507/jltr.0902.26
- Newport, E. L. (2020). Children and adults as language learners: Rules, variation, and maturational change. *Topics in Cognitive Science*, 12(1), 153-169. 10.1111/tops.12416
- Norrman, G., & Bylund, E. (2016). The irreversibility of sensitive period effects in language development: Evidence from second language acquisition in international adoptees. *Developmental Science*, 19(3), 513-520. 10.1111/desc.12332
- Punske, J., Sanders, N., & Fountain, A. (2020). *Language invention in linguistics pedagogy*. Oxford University Press. 10.1093/oso/9780198829874.001.0001
- Reder, F., Marec-Breton, N., Gombert, J.-E., & Demont, E. (2013). Second-language learners’ advantage in metalinguistic awareness: A question of languages’ characteristics. *British Journal of Educational Psychology*, 83(4), 686–702.  
<https://doi.org/10.1111/bjep.12003>
- Reis, D. S. (2011). *“I’m not alone”: Empowering non-native English-speaking teachers to challenge the native speaker myth*. Routledge. 10.4324/9780203844991-10
- Rumbaut, R. G., & Massey, D. S. (2013). Immigration & language diversity in the United States. *Daedalus*, 142(3), 141-154. 10.1162/DAED\_a\_00224

- Sherkina-Lieber, M. (2020). A classification of receptive bilinguals. *Linguistic Approaches to Bilingualism*, 10(3), 412-440. 10.1075/lab.17080.she
- Spataro, S. E., & Bloch, J. (2018). "Can you repeat that?" Teaching active listening in management education. *Journal of Management Education*, 42(2), 168-198. 10.1177/1052562917748696
- Sproat, R. (2022). *Writing systems*. Oxford University Press. 10.1093/oso/9780198796800.003.0002
- Story, D. A., & Tait, A. R. (2019). Survey Research. *Anesthesiology*, 130(2), 192-202. <https://doi.org/10.1097/ALN.0000000000002436>
- Van Rooy, R. (2020). *Language or dialect? The history of a conceptual pair*. Oxford University Press.
- Zheng, C., & Park, T. (2013). An analysis of errors in English writing made by Chinese and Korean university students. *Theory and Practice in Language Studies*, 3(8), 1342. 10.4304/tpls.3.8.1342-1351

## Appendix

### IRB Approval Letter

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**DHHS Federal Wide Assurance Identifier:** FWA00007111  
**Rowan IORG/IRB:** Glassboro/CMSRU  
**IRB Chair Person:** Dr. Ane Johnson  
**IRB Director:** Eric Gregory  
**Effective Date:** December 7, 2023

#### Notice of Approval - Initial

**Study ID:** PRO-2023-348  
**Title:** Perceived and Preferred Methods in Adult Language Learning  
**Principal Investigator:** Stephanie Lezotte  
**Study Coordinator:** Suzie Tse  
**Co-Investigator(s):** Suzie Tse  
**Sponsor:** Internal  
**Study Sites:** Rowan University, Glassboro

**Submission Type:** Initial  
**Submission Status:** Exempt  
**Approval Date:** December 7, 2023  
**Review Type:** Exempt

**Exempt Category:** Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

**Pregnant Women, Human Fetus, and Neonates Code:** N/A  
**Pediatric/Children Code:** N/A

#### ALL APPROVED INVESTIGATOR(S) MUST COMPLY WITH THE FOLLOWING:

1. Conduct the research in accordance with the protocol, applicable laws and regulations, and the principles of research ethics as set forth in the Belmont Report.
- 2a. Continuing Review: Approval is valid until the protocol expiration date shown above. To avoid lapses in approval, submit a continuation application at least eight weeks before the study expiration date.
- 2b. Progress Report: Approval is valid until the protocol expiration date shown above. To avoid lapses, an annual

progress report is required at least 21 days prior to the expiration date.

3a. Expiration of IRB Approval: If IRB approval expires, effective the date of expiration and until the continuing review approval is issued: All research activities must stop unless the IRB finds that it is in the best interest of individual subjects to continue. (This determination shall be based on a separate written request from the PI to the IRB.) No new subjects may be enrolled and no samples/charts/surveys may be collected, reviewed, and/or analyzed.

3b. Human Subjects Research Training: Proper training in the conduct of human subjects research must be current and not expired. It is the responsibility of the Principal Investigator and the investigator to complete training when expired. Any modifications and renewals will not be approved until training is not expired and current.

4. Amendments/Modifications/Revisions: If you wish to change any aspect of this study after the approval date mentioned in this letter, including but not limited to, study procedures, consent form(s), investigators, advertisements, the protocol document, investigator drug brochure, or accrual goals, you are required to obtain IRB review and approval prior to implementation of these changes unless necessary to eliminate apparent immediate hazards to subjects. This policy is also applicable to progress reports.

5. Unanticipated Problems: Unanticipated problems involving risk to subjects or others must be reported to the IRB Office

(45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at:

<https://research.rowan.edu/officeofresearch/compliance/irb/index.html>

6. Protocol Deviations and Violations: Deviations from/violations of the approved study protocol must be reported to the IRB Office (45 CFR 46, 21 CFR 312, 812) as required, in the appropriate time as specified in the attachment online at: <https://research.rowan.edu/officeofresearch/compliance/irb/index.html>

7. Consent/Assent: The IRB has reviewed and approved the consent and/or assent process, waiver and/or alteration described in this protocol as required by 45 CFR 46 and 21 CFR 50, 56, (if FDA regulated research). Only the versions of the documents included in the approved process may be used to document informed consent and/or assent of study subjects; each subject must receive a copy of the approved form(s); and a copy of each signed form must be filed in a secure place in the subject's medical/patient/research record.

8. Completion of Study: Notify the IRB when your study has been completed or stopped for any reason. Neither study closure by the sponsor nor the investigator removes the obligation for submission of timely continuing review application, progress report or final report.

9. The Investigator(s) did not participate in the review, discussion, or vote of this protocol.

10. Letter Comments: There are no additional comments.

11. **NJDOH Approved Studies**: IRB approval granted per the Data Use Agreement. Upon receipt of the fully executed Data Use Agreement (DUA) from NJDOH, the Principal Investigator is responsible for ensuring an electronic, fully signed DUA is emailed to the Rowan University IRB.

**CONFIDENTIALITY NOTICE: This email communication may contain private, confidential, or legally privileged information intended for the sole use of the designated and/or duly authorized recipients(s). If you are not the intended recipient or have received this email in error, please notify the sender immediately by email and permanently delete all copies of this email including all attachments without reading them. If you are the intended recipient, secure the contents in a manner that conforms to all applicable state and/or federal requirements related to privacy and confidentiality of such information.**