

**Education in a Non-Native Language:  
The Effects of Age and Emotion on Learning and Reasoning**

by

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### **Abstract**

Many researchers in education, psychology, and linguistics have focused on challenges that non-native language students (NNLS) experience during their academic trajectory. They have focused on education policies that may impede the learning process, lack of language proficiency, social contexts (immigration, socio-economic status, inadequate learning environments), or negative emotions, but there is no account that has brought together all these potential factors that may impact learning in a second language (SL). In this review paper, all these burdensome challenges are explored. I started by presenting 1) a brief overview of education in a non-native language (NNL), including methods of bilingual instructions, 2) English language learning, including challenges faced by NNLS in acquiring the NNL before attending college, 3) policies in education affecting NNLS, 4) age of second language acquisition (SLA) in NNLS, including certain critical period hypotheses and language components and skills, 5) social contexts affecting NNLS, including socio-economic and socio-emotional factors, and 6) the impacts of emotion on NNLS' learning and reasoning. Finally, I propose some solutions that can help eradicate challenges faced by NNLS and enhance their learning conditions and outcomes. Strengths, weaknesses, and limitations are discussed, but I conclude that these findings could inspire further research on education in a NNL.

**Key words:** education, non-native language students, age, language acquisition, social contexts, social emotional, learning, reasoning.

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**Chapter 1: Introduction**

As of 2005, 25% of young children in the United States were from immigrant families (Castro, 2011). Some of these children were born and raised in the US, whereas others were brought to the country at an earlier age (Castro, 2011; Perez & Morisson, 2016). Although they may have the basic English skills needed to interact with friends or use in daily activities, they still need to develop academic language skills—specialized language, both oral and written, used in academic settings that facilitates communication and thinking about disciplinary content (Nagy & Townsend, 2012). Additionally, some adult immigrants or foreign-born Americans intend to attend school or pursue their higher education (Perez & Morisson, 2016). This growing ethnic/racial diversification and desire to learn promote the inception of bilingual approaches in the U.S., which aim at providing instructions in English and in the native language of the students. However, despite such bilingual instruction, focused learning conditions and preparation techniques specifically designed to ensure high quality teaching of English language learners (ELLs) are limited (Bell, 2010; Bell & Borgan, 2013), which leads to a lack of confidence, low motivation, and limited English skills in learners (Krashen, 1982, 1985, 1988; Lin, 2008).

While most of the concerns about non-native language students (NNLS) have been centered on bilingual instruction and teaching conditions of language learning, there are a number of other factors, such as language proficiency, socio-economic status, and socio-emotional features that present obstacles in learning. For instance, Perez (2009) suggested that NNLS deal with discrimination, fear of deportation, and financial concerns. Further research has

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shown that students with limited English skills who have a thicker accent are subject to discrimination, ridicule, and harassment from students, teachers, and administrators (Peguero, 2008; Peres & Morrison, 2016). These burdensome issues can elicit negative emotional responses (high anxiety, low motivation, lack of self-confidence), acting as blockers that impede the process of learning, which Stephan Krashen, a prominent second language acquisition (SLA) scholar, called an “affective filter” (Lin, 2008). The term SLA refers to the process by which second language is acquired (Hoque, 2017). Instead, language teachers should create a comfortable, lower affective filter, and stimulating study environment, where learners can develop higher self-esteem and greater sense of confidence and fulfillment (Lin, 2008).

Many researchers in education, linguistics, and psychological fields have argued that these issues (language proficiency, socioeconomics, and socio-emotional status) deeply harm ELLs and advocated for better approaches towards these students (Castro, 2011; Perez & Morisson, 2013). Therefore, they have made important contributions in understanding the dimensions to which these factors hurt the NNLS and made some recommendations to get rid of these challenges (Krashen, 1982, 1985, 1988; Lin, 2008; Peguero, 2008; Castro, 2011; Bell & Borgan, 2013; Peres & Morrison, 2016). But there is no research study that has brought together all these potential factors. This is a very complex issue, with no single cause and no single solution. Therefore, to fully address the issue, we need to consider all of the many causal factors simultaneously. That is what this paper aims to do.

In this review paper, all these burdensome challenges are explored in the order of 1) brief overview about education in a NNL, including bilingual instructions and its goals and outcomes, 2) challenges faced by NNLS in acquiring the NNL, including some learning conditions, 3) policies in education affecting NNLS, 4) age of SLA in NNLS, including certain critical period

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(CP) hypotheses and language components and skills, 5) social contexts affecting NNLS, including socio-economic and socio-emotional factors, 6) the impacts of emotion on NNLS' learning and reasoning, and 7) solutions proposal to eradicate challenges faced NNLS and enhance their learning conditions.

However, the sine qua non condition to solve any challenging situations is identify the causes of this issue and seek what can be done to get rid of it in order to bring good and durable solutions to this matter. Therefore, this paper will explore each challenge mentioned in the previous section separately by starting with an overview about education in a NNLS. However, to better understand the paper, the key factors that pose barriers to the NNLS and some proposed solutions that may help solve these issues are summarized in the following tables (table 1 and table 2) respectively.

Table 1. *List of the key factors, along with the explanations and relevant references, that pose barriers to NNLS.*

| <b>Factors</b>   | <b>Explanation</b>   | <b>References</b>  |
|--|--|--|
| 1 – Second language acquisition  | Essential to attend any colleges or university in the U.S.   | Bell & Borgan, 2013; Perez, 2009; Cook, 2015; Menken & Kleyn, 20210. |
| 2 – Diverse bilingual education programs in the U.S. for NNLS  | Instructions in both English and native language; Goals: preserving native language while acquiring English, leading to weak and strong outcomes             | Wallace, 1975; Baker, 2011.  |
| 3 – Learning conditions: internal factor (motivation, persistence, anxiety) and external factor (institution, classroom, teachers, second language (L2) curriculum). | Key factors influencing learning. Unfortunately, insufficient educational resources, unqualified teachers, crowded classroom, lack of peer interaction, etc. | Han & Bridglall, 2009; Rrenner, 2011; Lin & Chien, 2009.             |
| 4 – Educational policies (Elementary and Secondary education Act, Every Student Succeeds Act, NO Child Left  | Sources of the major issues require high stakes testing of English language, while the NNLS have not mastered the  | Perez & Morrison, 2016; Menken, 2010.                                |

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| Behind Act).<br>5 – Age and language proficiency.             | language yet.<br>Essential factor in SLA. The younger, the better, but long exposure to the target language can demonstrate the fluency level in older Adults. However, the language components and skills can make difference (accent, for instance) between earlier and late starters. | Oyama, 1979; Johnson & Newport, 1989; Dong & Ren, 2013; Vanhove, 2013; Ozfidan & Burlbaw, 2019; BJorklund & Causey, 2018. |
| 6 – Social contexts (social status and socioeconomic factors) | NNLS have faced: national recognized legal identity, bias, deportation, challenge to work after the study, and limited access to resources and privileges.   | Kanno & Cromley, 2015; Perez, 2009; Perez & Morrison, 2016.   |
| 7 – Emotion   | Elicited by bias due to accent, social contexts including internal and external factors, and unfilled expectations after being judged as failure, which blocks NNLS' learning and reasoning.   | Perez, 2009; Krashen, 1982; Lin, 2008.  |

Table 2. *Solutions proposal that may alleviate the learning conditions of NNLS.*

| <b>Factors</b>                               | <b>Proposed Solutions</b>   | <b>References</b>  |
|--|---|--|
| 1 – Second language acquisition.             | Provide the students with language assistance program, even in college because they still need help.  | Cook, 2015; Menken & Kleyn, 2010.  |
| 2 – Bilingual education programs in the U.S. | Eliminate bilingual programs that lead to weak outcomes, but back up the stronger ones (maintenance, immersion, and dual immersion programs).   | Lambert, 1975; Baker, 2011.  |
| 3 – Learning conditions                      | Positive classroom environment; put adequate learning materials available for learning process, assign qualified and well-trained teachers; create learning activities between peer; assign students to the tasks, give | Han & Bridglall, 2009; Rrenner, 2011; Lin & Chien, Perez & Morrison, 2016; Menken, 2010; 2009; Perez, 2009; Krashen, 1982; Lin, 2008; Bensharef, 2009. |

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| 4 – Educational policies         | <p>them feedback, and make them feel they are valued members of learning.</p> <p>Repeal the English test requirement, which elicits too much anxiety in NNLS; promulgate the laws to reinforce the educational system by providing more funds to the schools to assist the students.</p> | Perez & Morrison, 2016; Menken, 2010.                       |
| 5 – Age and language proficiency | <p>NNLS should not be judged based on accent or language proficiency level, because even native accents in other inner circle of the same country can differ from region to region.</p>  | Levis & Zhou, 2017; Vanhove, 2013.                          |
| 6 – Social contexts              | <p>Provide direct assistance to the students, create conducive condition to permit the students to reside after the study in order to serve the country with knowledge acquired, change DACA in permanent status.</p>  | Kanno & Cromley, 2015; Perez, 2009; Perez & Morrison, 2016. |
| 7 – Emotion                      | <p>As all learning conditions are met, the NNLS' appraisals will be perceived as positive outcomes. Therefore, their learning and reasoning abilities will be great.</p>   | Perez, 2009; Krashen, 1982; Lin, 2008.                      |

## Chapter 2: Education in a non-native language (NNL)

Education in a NNL refers to the process of learning in a language that is different from the mother tongue, which is the first language learned during infancy. This NNL is known as second language, which refers to any other languages learned later after the mother tongue (Hoque, 2017). Students who take classes in a NNL are more likely to be international students or immigrants who attend school in a country where the education setting requires partially or

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totally the language spoken by most residents. For instance, in a country with a large immigrant population like United States, there are diverse cultural and ethnic groups of students coming from different countries across the world. According to Migration Policy Institute (2018), the U.S. remains the country of choice for the largest number of international students, hosting about 1.1 million of the 4.6 million worldwide in 2017. They speak hundreds of different languages from many parts of the world (Perez & Morrison, 2016). This growing size of NNLS encourages the government to implement bilingual education in primary and secondary schools in the U.S. (Roberts, 1995). This is to help NNLS with limited English proficiency to master the language, while preserving their first language, and preventing them from falling behind their peers in academic areas such as math, science, and social studies (Cummins, 1981; Baker, 1993; Roberts, 1995; Gándara, & Escamilla, 2017). English language proficiency is an essential aspect of higher education in the U.S., ensuring that adult English language learners receive the focused and effective instruction they need to access states' academic content standards (AIR, 2016).

However, there are a variety of program models in bilingual instruction, which are associated with different learning outcomes. Roberts (1995), Baker (2011), and Gándara and Escamilla (2017) described some of these models: 1) *submersion model*: a program in which the minority language students are mainstreamed into a regular English-speaking classroom with no special support services (U.S. Dept. of Ed., 2020), 2) *separatist bilingual*: a program where the minority language students are segregated from the mainstream society, using their native language, 3) *English second language (ESL) pull out*: a program in which minority students are pulled out of some classes in order to receive English class as second language (Roberts, 1995), 4) *transitional bilingual education*: a program, also known as early-exit bilingual education, in which students receive initially instructions in their primary language and move to the second



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language (U.S Dept. 2020), 5) *maintenance or developmental or late-exit bilingual education*: this approach differs fundamentally from a transitional approach because it aims to maintain the minority language of the student, strengthen the student's sense of cultural and linguistic identity, and affirm their individual and collective ethnolinguistic rights while acquiring the second language (May, 2017), 6) *dual-language program or two-way immersion program*: a program in which NNL speakers and native language speakers receive instruction in English and another language in a classroom that is usually comprised of half non-native English speakers and half native speakers (U.S. Dept. of Ed., 2020, and finally, 7) *immersion bilingual education*: a program that involves teaching the regular curriculum to some extent in the target language or majority English language. This program is more likely to be structured and supported, contrary to the submersion program (Bostwick, 2004). However, this immersion program can be total or partial.

Now, knowing these types of bilingual approaches in the U.S., the question has been raised among scholars about the outcomes of these programs. However, to assess the outcomes, it is crucial to better understand the goals, which Baker (2011) identified and classified into *assimilationist* and *pluralistic* goals. The assimilationist goal refers to the idea that the minority language speakers should be assimilated into the majority language and culture, while the pluralistic goal aims to affirm and preserve individual and group language rights (Roberts, 1995). Based on these goals, Lambert (1975) categorized the outcomes into 1) additive, which refers to the maintenance of the first language while acquiring the second language in a balanced manner and 2) subtractive bilingualism, which refers to the situation where NNLS learn the second language to the detriment of the first one. This means that the submersion, pull out, and transitional bilingual approaches fall into assimilationist goal, whose outcome is subtractive,

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leading to monolingualism with loss of the native language. Meanwhile, maintenance, two-way, and immersion approaches fall into pluralistic group, whose outcome is additive bilingualism, leading to bilingualism and biliteracy (Baker, 1993). It should be noted that these outcomes are typically categorized as that which results from bilingual education programs, or even from bilingualism as a result of societal forces (Roberts, 1995). However, additive outcome leads to greater metacognitive ability and mental flexibility (Cummins, 1981), which allows NNLS to succeed. Table 3 summarizes these bilingual approaches, including the goals and outcomes.

Table 3. *Summary of bilingual instruction including goals and outcomes* (Baker, 2011).

| <b>Bilingual instructions</b> | <b>Students types</b>          | <b>Languages used</b>    | <b>Goals</b> | <b>Outcomes</b>                    | <b>Weak/Strong</b> |
|-------------------------------|--------------------------------|--------------------------|--------------|------------------------------------|--------------------|
| Submersion                    | Minority Students              | Language majority        | Associative  | Monolingualism (subtractive)       | Weak               |
| Separatist                    | Minority Students              | Language minority        | Detachment   | Limited bilingualism (subtractive) | Weak               |
| Pull-out                      | Minority Students              | Language majority        | Associative  | Monolingualism (subtractive)       | Weak               |
| Transitional                  | Minority Students              | L. minority to Majority  | Associative  | Monolingualism (subtractive)       | Weak               |
| Maintenance                   | Minority Students              | Bilingual emphasis on L1 | Pluralistic  | Bilingualism                       | Strong             |
| Immersion                     | Majority Students              | Bilingual emphasis on L2 | Pluralistic  | Bilingualism                       | Strong             |
| Dual Immersion                | Minority and majority Students | Minority and Majority    | Pluralistic  | Bilingualism                       | Strong             |

*L1 = first language, L2 = second language*

However, besides bilingual instructional methods, research has shown that language acquisition is associated with specific, appropriate learning environments (Roberts, 1995). But what are these appropriate learning conditions?

### 2.1 Challenges faced NNLS in acquiring Second Language.

Gagne (1985) suggested that “learning conditions” are the key factors influencing learning. The author proposed two sets of learning conditions: internal and external. Based on

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this proposition, some researchers were deeply interested to identify the nature of these conditions and how they affect the learning process. Mirhadizadeh (2016) suggested that internal conditions refer to cognitive and affective factors like intelligence, persistence, motivation, and anxiety. Meanwhile, external conditions come from outside the individual, including educational environment, social class, peer interaction, teachers, first language, and second language curriculum (Mahmoudi & Mahmoudi, 2016).

To relate these concepts back to the bilingual education programs described above, the programs associated with weak outcomes, which lead to monolingualism or limited bilingualism, would be a consequence of non-appropriate external conditions. Roberts (1995) provided some evidence about this non-appropriate condition that weakens the instructional approaches and argued that 1) submersion bilingualism is practiced in the smallest schools with low populations of NNLS, 2) NNLS receive insufficient hours of English class (Pull out program, for instance), 3) some schools face limited financial resources to find and assign qualified bilingual professors in a large ethnic area, and 4) in some homogenous areas or communities, it is difficult to find some bilingual instructors. Gándara and Escamilla (2017) were more specific and argued that transitional bilingual programs do not foster the development of multicultural perspectives or cross-cultural competence.

Similarly, Wilson and Peterson (2006) suggested that learning is a process of active engagement, a social phenomenon, and that learner differences are resources, not obstacles. For instance, in a classroom, there are different group of students, regarding of race, gender, culture, or prior experiences. These individual differences can produce and share a range of ideas and problem-solving strategies for students' discussion and reflection (Gardner, 1983; Stigler & Hiebert, 1999). The authors argued that learners should be trained to respond to stimuli and

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engage in sharing concerns and beliefs. Therefore, teachers should be responsible to diagnose the students' interpretations and help them if errors occur. Han and Bridglall (2009) went further and suggested that schools that have crowded classroom space, lack sufficient educational resources, and a responsive school climate may inadvertently promote the failure of students that come from minority sub-groups. Unfortunately, some second language teachers lack preparation and training for working with second language learners (Bell, 2010). And, since the teachers lack necessary skills to diagnose ELLs, they may believe that the students are proficient in English (Bell & Borgan, 2008). As said above, there are a variety of bilingual education programs in the U.S., which provide different outcomes (weak and strong) in the same country, due to some issues displayed above. However, education in any countries around the world is a matter of laws enacted by the authorities to regularize and uniformize the educational system. But what do the laws or policies related to educational system in the U.S. say? And how do they impact NNLS?

### **2.2 Policies or laws in education affecting NNLS.**

Research has shown that NNLS face challenges from the beginning of their trajectory to college. Therefore, Menken (2010) and Perez and Morrison (2016) discussed the barriers NNLS face that impact their learning or career access and attainment. The authors suggested that certain laws or policies on education enacted by the authorities are one of the major issues among all other obstacles. For example, the "Elementary and Secondary Education Act" (ESEA, enacted in 1969) and the "No Child Left Behind Act" (NCLBA, enacted in 2002), which is a version of ESEA, represented a big challenge for ELLs to enter college and to succeed (Perez & Morrison, 2016). However, these laws were apparently aimed at providing equal protections and opportunities for all America's disadvantaged and high-need students in order to fully prepare them for success in college and beyond (U.S. Dep. of Ed., 2017). The term "apparently" here is

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used to refer to certain findings that indicate that these laws have failed to achieve their main purpose. For instance, NCLBA requires high stakes testing of ELLs before officially attending any schools or colleges (Menken, 2010). What is alarming is that the exams are structured in Standard American English, meanwhile most of these students are not ready yet to take part in this English language test required by NCLBA (Menken, 2010), which leads to failure or low grades on the test. Sadly, the authorities do not take into account all the difficulties encountered by ELLs in ESL (English as a Second Language) classrooms, which impedes them from becoming proficient in this language.

Based on this understanding, Perez and Morrison (2016) suggested that these policies harm more ELLs than help since the results on the test can negatively impact the students. It is not because they are less knowledgeable, but it is because they have not yet mastered the English language due to all burdensome challenges displayed in the previous sections. The U.S. Department of Education (2006) also criticized NCLBA and stands for a new initiative to accurately measure the progress of Limited Proficient Students. Further research by Menken (2010) states that NCLB has done more harm than good to the ELLs because not only they do not master English yet, but also the tests are inappropriate and contain complex and unknown words used more likely in an attempt to penalize ELLs. Due to these longstanding commitments among scholars (U.S. Dept. of Ed., 2006; Menken, 2010; Perez & Morrison, 2016), the “Every Student Succeeds Act” (ESSA, 2015), which is the latest version of ESEA, was enacted and signed into law (U.S. Dept. of Ed., 2017). These new policies aim at providing equal chance to all students, making more funds available for the schools and students, and eliminating “Adequate Yearly Progress” (AYP) and “Highly Qualified Teacher” (HQT) (U.S. Dept. of Ed.,

2017). The term AYP refers to the amount of annual achievement growth to be expected by students in a particular school, district, or states (NASSP).

While NNLS face challenges acquiring the NNL from the beginning of their trajectory towards colleges, due to certain reasons mentioned in tables 1 and 3, previous research has demonstrated that the age at which second language learners start their second language (Oyama, 1976; Johnson & Newport, 1989; Dong & Ren, 2013), the duration of exposure to the target language (Vanhove, 2013), and how well their native language is developed in school (Menken & Kley, 2010) can be key elements contributing to proficiency that affects students' academic trajectory and their career.

### **Chapter 3: Age of Second Language Acquisition in non-native language students.**

Research has shown that the age at which SL learners start their second language has a strong influence in SL ultimate attainment level, which refers to all SL end points including nativelike proficiency (Birdsong, 2009). For instance, Ozfidan and Burlbaw (2019) suggested that age is an essential factor in SLA, impacting the success of students and instructional methods. This general age effect is taken as evidence for a so called "Critical Period" (CP) for language acquisition (Vanhove, 2013). The term CP, derived from biology, was introduced for the first time by Penfield and Robert in 1959 (Vanhove, 2013; Dong & Ren, 2013; Li, 2018). The idea is that until puberty, human brains remain especially plastic. Because this is a period in which both hemispheres (left and right) of the brain are involved in language learning, this enables children to learn languages faster and more effortlessly (Li, 2008; Ozfidan & Burlbaw, 2019). This plasticity later declines due to a lateralization process of language function to the left hemisphere of the brain (Vanhove, 2013; Li, 2018; Ozfidan & Burlbaw, 2019). This means that, after puberty, the brain undergoes certain structural reconfiguration and reaches its maturational

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process, shifting most language learning activities to one side of the brain, which makes any languages acquired later more difficult to be processed. In 1967, Erick Heintz Lenneberg, a German linguist and neurologist, refined the “critical period hypothesis” (CPH) proposed by Penfield and Robert (Li, 2018). According to Lenneberg’s (1967) CPH, language could be acquired only within a critical period, extending from early infancy until puberty (Johnson & Newport, 1989; Vanhove, 2013; Li, 2018).

Since this CPH was proposed, researchers have been divided about how young and older learners differ in the language learning process (Ozfidan & Bulbaw, 2019), and how the age at which second language students start their SL affects SLA. So, these questions have already been answered by the previous scholars in the field of linguistics, but the conclusions have been controversial. Some of them suggested “the younger, the better,” referring to those who support the CPH (Oyama, 1976; Johnson & Newport, 1989). Meanwhile, others disagree with this assessment (Birdsong & Molis, 2001; Vanhove, 2013; Vanhove, 2016). Due to this controversy, it is crucial to separately discuss certain CPH pros and cons for better elucidation.

### **3.1 Proponents of critical period hypothesis in SLA**

Researchers in the field of language, including neurologists and psychologists, have been interested in analyzing and investigating Lenneberg’s (1967) CPH to find out how reliable it is. For instance, Oyama (1976) was interested to know how well immigrants in general acquire SL and whether age influences the phonological aspect of SLA. The author investigated 60 Italian male immigrants between six and 20 who had been living in the U.S. between five and 18 years. Two independent groups were constituted: age-arrival (6-20 years old) and year-exposure (5-18 years). The subjects were presented a short reading paragraph to read. The author found that only

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people who came in the USA before 12 had a nativelike accent. However, the number of years of exposure to the targeted language had very little effect.

Further research was conducted by Johnson and Newport (1989) in which 46 immigrants from China or Korea took part. They arrived in the USA between three and 39 years of age and had lived there between three to 26 years from the date of the study. The main purpose of this study was to test their English proficiency based on age of arrival. The participants underwent a grammatical judgement task to test their proficiency and ultimate attainment level. The results showed that the earlier arrivals had better performance than the late arrivals. They noticed that there was a linear decline between the age groups. For instance, those who arrived before age seven had nativelike grammatical proficiency, while those who arrived between seven and 16 performed worse than the first group, and those who came after age 16 performed very poorly.

Similarly, both studies are aligned and support Lenneberg's (1967) CPH. Based on these findings, it is apparently convincing to say that age effects in SLA have been observed and younger learners outperform older learners in the final stages of attainment (Dong & Ren, 2013). Perhaps this suggests that the language abilities of those who learn their second language after puberty may never reach nativelike performance, which means they are naturally disadvantaged in school. However, other research has shown that older SL students, in contrast, have some advantages over younger learners.

### **3.2 Opponents of the critical period hypothesis in SLA**

As many scholars have focused on Johnson and Newport's (1989) study to favor Lenneberg's (1967) CPH, Birdsong and Molis (2001) replicated the same experiment by using the same materials with more participants of Spanish origin (61). They found evidence that nativelikeness among late learners is possible. The authors suggest that the outcome of SL



depends on how well and how proficiently the first language is acquired. Going on in the same lines with Birdsong and Molis (2001), Vanhove (2013) suggested that in long-term and immersion contexts, SL learners, starting acquisition early in life and staying exposed to input and learning over several years or decades undisputedly tend to outperform later learners. The author held this assessment after reanalyzing two datasets extracted mainly from previous papers that supported the CPH, stating that SLA is impossible after puberty. Vanhove (2013) concluded that age patterns in SLA are not governed by a CP.

This previous section has focused on the effects of age on SL ultimate attainment level. Therefore, I discussed certain previous findings on critical CP hypothesis to better assess these issues. The results are controversial. However, these controversial findings are based mainly on components and skills of the language, such as semantic, syntax, phonology, accents, pronunciation, speaking, reading, listening, and writing (Newport, 1989; Oyama, 1976; Birdsong, 2009; Birdsong, 2009; Vanhove, 2013; Ozfidan and Burlbaw, 2019). Therefore, it is vital to briefly discuss these aspects for better approaches.

### **3.3 Language components and skills in second language acquisition.**

According to Bjorklund and Causey (2018, 6<sup>th</sup>. Ed. Ch.9), there are at least five (5) aspects of language: 1) phonology, which refers to the sound of language, 2) morphology, which refers to the structure of words (the smallest unit of meaning in a language is called morpheme), 3) syntax, which describes the grammatical rules for how words are combined into sentences, 4) semantics, which refers to the meaning of a language, and 5) pragmatics, which describes how we use language in a social context. Besides these features, there are writing, listening, speaking, accent, and prosodic skills. The term prosody refers to the ups and downs of the tones and rhythms that people make when speaking (Bjorklund & Causey, 2018). This means that assessing

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ultimate attainment level in a language is much more complex than how certain scholars understand it. All these aspects displayed above should be taken in consideration if researchers really want to investigate age effects in SLA.

One clear example of this complexity comes from recent research by Ozfidan and Lyn (2019), who examined the age factor in SLA. The authors evaluated previous CPH theories for SLA and categorized participant age into three groups: children, adolescents, and adults. The results were different for each group. For instance, in the first group, the authors found that children are better in terms of pronunciation and morphosyntax (study word structure) than adolescents and adults; adolescents are good at listening and syntax; and adults are the best in reading and writing skills. This means that, even if the non-native learners apparently speak the second language proficiently, a simple differentiation in accent or pronunciation or other aspects of the language's components (i.e., phonology, morphology, syntax, semantics, or pragmatics) can make non-native speakers look different from the native speakers. Even native accents in other inner-circle countries can differ from region to region or town to town (Levis & Zhou, 2017), but it does not mean that these individuals do not reach their ultimate attainment level in this language.

Unfortunately, native speakers (inside and outside schools) have taken all these aspects (accent, pronunciation, syntax, semantic, prosody) into account to qualify or disqualify the SL students (Perez & Morisson, 2013). They have been judged based on, for example, their accent or how well or fluently they speak the NNL (Peguero, 2008; Peres & Morrison, 2016). Even in college or university, NNLS are not spared from these behaviors, which make them feel embarrassed, leading to negative emotions that may impair learning or motivation to learn (Perez, 2009). However, besides the language proficiency widely elaborated in the previous

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chapters, which represents the burdensome challenges for NNLS, some researchers have argued that some social contexts (social status, socioeconomic, and socioemotional factors) impact NNLS' learning process (Horwitz, Horwitz, and Cope, 1986; Young, 1991; McIntyre, 1999; Peres, 2009; Menken, 2010; Kanno & Cromley, 2015). Therefore, these social factors should be briefly discussed to enlighten the readers and all stakeholders about these issues.

### **Chapter 4: Social contexts in non-native language students.**

Students who take classes in a NNL are more likely to be international students or immigrants. Although most NNLS are legal permanent residents or U.S. citizens, a small but important fraction of them are undocumented students (Kanno & Cromley, 2015; as cited in Garcia Kleifgen & Falchi, 2008). According to certain scholars, these students experience the greatest challenges to enter college and work in the USA (Peres, 2009; Menken, 2010; Kanno & Cromley, 2015; Peres & Morrison, 2016). Sadly, while many of them have been brought to the country at an early age and benefited from the DACA protection program, 31% of these undocumented students have limited English proficiency (Kanno & Cromley, 2015). The term DACA means Deferred Action for Childhood Arrivals, which is a protection program implemented by Obama's administration in 2012, sparing temporary immigrant students under 31 from deportation (NBC News, 2018)

Previous research has shown that only 10-20% of undocumented students get access to attend college after their high school graduation (Peres, 2009; Peres & Morrison, 2016). What is alarming is that the challenges faced by undocumented students are not much different from documented immigrant learners. For instance, Kanno and Cromley (2013) used the National Education Longitudinal Study of 1988 (NELS:88) to investigate the trajectory of ELLs to school until post-secondary education. The authors found that there is a significant difference in both

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enrollment and degree attainment in post-secondary education between ELLs and non-ELLs. This disproportion found in the study is the result of a) some bilingual instruction in the U.S., including certain learning conditions, b) the policies on education enacted by the authorities in order to punish ELLs, c) language proficiency required before attending any college or university, and d) policies on immigration established by lawmakers in the USA. Besides these aspects, socioeconomic status in NNLS should be investigated in order to better understand the burdensome challenges faced by these students.

### **4.1 Socioeconomic factors in NNLS.**

NNLS come from different regions or countries around the world. Although some of them are from developed countries, they may experience the same challenges as other students do because they are all foreigner students or immigrants. Therefore, they get limited access to some resources and privileges. However, it may even be worse for those who are from low-income families, even if these families have been living in the country. As Kanno and Cromley (2015) explained, approximately 75% of ELLs come from low-income families, but higher education in the U.S. is incredibly expensive. Besides tuition, there are some other obligations such as housing, meals, medical insurance, transportation, and some of these students have family concerns that worsen their situations.

Considering these additional challenges, low-income ELLs struggle to afford the rising costs of higher education (Peres & Morrison, 2016), which conditions them to drop out or attend college or university where the education is not as valued compared to the higher ranked schools in the U.S. Consequently, the problem of limited language proficiency, including its causes (see tables 1 and 3) may create dismay and frustration (anxiety) among NNLS, which may impair their learning or motivation to learn. However, many researchers have questioned how this

anxiety has been elicited to the extent that it evokes such kinds of negative emotions that can impair NNLS' learning and reasoning.

#### **4.2 Socioemotional factors affecting NNLS' learning and reasoning.**

There is a growing body of research on the relationship between emotions and reasoning, particularly where it pertains to learning (Johnson-Laird, 1999; Evans, 2017). Some of this research has been specifically focused on second language learning (Horwitz, 2002). For instance, Horwitz, Horwitz, and Cope (1986), Young (1991), McIntyre (1999), Horwitz (2001), Coryell & Clark (2009), Russo, Islam, and Koyuncu (2017), and Alnuzaili & Uddin (2020) all explored the nature of "language anxiety" in order to determine the relation between anxiety and second language learning. McIntyre (1999) defined "language anxiety" as the worry and negative emotional reactions aroused when learning or using a second language. Horwitz, Horwitz, & Cope (1986) and Horwitz (2001) went further and argued that language anxiety is a distinct complex of self-perception, beliefs, feelings, and behaviors related to classroom language, arising from the uniqueness of the language process. This means that this type of anxiety is specifically linked to language and elicited during language learning interactions (Coryell & Clark, 2009).

These learning interactions in the classrooms or in public context encompass speaking (including accents, pronunciation, fluency), writing (including syntax, semantic), reading, and listening (Horwitz, Horwitz, & Cope, 1986), which constitute the components and skills of a language (chapter 3, section 3.3). It should be recalled that the proficiency or non-proficiency level in these language components and skills is the results of bilingual instruction in the U.S., associated with certain learning conditions, as well as the age at which the learners start their L2 (see tables 1, 2, and 3). These language components and skills are essential for learning

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interactions, which may elicit negative emotion in NNLS (Horwitz, Horwitz, & Cope, 1986; Young, 1991; McIntyre, 1999). But the question is: how can this happen?

To provide a further understanding about how these learning interactions can elicit anxiety or negative emotion in NNLS, Ellsworth (2013) and Sherer (2009) drew on an “appraisal theory” of emotion, which states that emotions (positive or negative) are extracted from evaluations and interpretations of the situation based on the subjects’ individual perception (Moors, 2017). These evaluations and interpretations involve the struggle during the face-to-face interactions, due to language proficiency (Horwitz, Horwitz, & Cope, 1986; Young, 1991); fear of making mistakes in pronunciation (Llinas & Garau, 2009; Elaldi, 2016) or being evaluated as incompetent by their peers or instructors (Horwitz, Horwitz, & Cope, 1986); speaking with the thicker accent (Perez, 2009); low expectations regarding grades in their language course, low esteem, and, in other words, negative perception of the overall academic competences (Onwuegbuzie et al. 1999). And, of all these learning interactions, speaking or oral presentation is the most anxiety-provoking classroom activity (Koch and Terrell, 1991), because this skill is usually the first thing that learners compare with their peers, teachers, and native speakers (Kitano, 2001).

Relatedly, Horwitz, Horwitz, and Cope (1986) argued that language anxiety is commonly associated with language learning activities. As this anxiety is linked to learning and particularly to foreign language proficiency, the researchers called this kind of anxiety “foreign language anxiety,” which impairs NNLS’ learning and reasoning (Alnuzaili & Uddin, 2020). For instance, Alnuzaili and Uddin (2020) discussed a literature review related to anxiety and foreign language learning in order to investigate the causes and its effects on NNLS. The results revealed that anxiety negatively affects NNLS’ learning and achievement.

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Another socioemotional challenge faced by NNLS is stigmatization and social discrimination due to lack of perceived language proficiency. For instance, one study was conducted by Gluszek and Davido (2010), in which 203 individuals across the U.S. took part. The results of an online survey showed that non-native accented students experienced expectations of stigmatization, discrimination, and communication problems. These results led the researchers to extend this study in order to assess the effects of this stigma and communication issues on social belonging. The results showed that the non-native accented students experienced the feeling of less belonging among their peers. Based on these findings, Russo, Islam, and Koyuncu (2017) suggested that speaking with a non-native accent can lead speakers to feel excluded and devalued at work and assume an avoidance approach among peers.

Thus, speaking with a non-native accent can be emotionally challenging because, according to the “appraisal theory” of emotion defined above, these bad experiences can elicit negative emotional responses such as anxiety. One clear illustration is provided to better understand this issue. Individuals who attend and stay in school spend time, energy, and money. They sacrifice their life for two main reasons: gaining more knowledge and skills to serve their country efficiently and changing their financial situations for a better life in the future. If these expectations are not met, these challenging experiences (lack of English proficiency; social contexts, including immigration status, socio-economic status, discrimination, and segregation among peers in school or at work, due to accent, fluency, and pronunciation) will be perceived as failure. This will create frustration, dismay, and consternation, leading to negative emotion. Based on this understanding, Guiora (2006) concluded that language learning itself is “a profoundly unsettling psychological proposition” because it directly threatens an individual’s self-concept and worldview.

## **Chapter 5: Solutions proposal**

As said above, the sine qua non condition to solve any challenging situations is to identify the causes in order to generate good and durable solutions. In this paper, all burdensome challenges have been investigated (bilingual approaches, laws related to education, immigration status, learning environment, age of second language acquisition, socio-economic factors, etc.). In this section, I propose some solutions to these issues that may help alleviate the burdensome challenges faced by NNLS.

### **5.1 Solution proposal in term of immigration policies**

The case of the Plyler v. Doe of the Supreme court (1982) stated that children should not be judged based on immigration status to attend schools because all children have the right to an education regardless of legal status, and deserve a safe learning environment (NILC, 1982). This premise is misguided because, according to the research reviewed above, undocumented students do not have a nationally recognized legal identity, which is, at first glance, required by some States, such as Alabama, South Carolina, and Georgia. However, although most States welcome them, but it is still challenging because they are not eligible for financial aid (Vasilogambros, 2016). And the fact that they do not have a naturally recognized legal identity, they fear of being exposed and deported, which prevents them from attending college. It is important for lawmakers to promulgate the policies providing these undocumented students with legal documents enabling them to attend school without the fear of getting deported.

### **5.2 Solution proposal for positive learning environments**

To facilitate positive learning outcomes, it is recommended to:



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- 1) Back up the strong forms of bilingual education (Maintenance, Immersion, Dual Immersion programs) and eliminate the weak ones (submersion, separatist, pull-out, transitional programs), which lead to different outcomes across the same country,
- 2) Create a positive classroom atmosphere, which involves teachers' responsibilities. In this case, the teachers should be assigned based on their qualification. They should be trained and well-paid to do the job.
- 3) Make adequate materials available for teaching such as screens, videos, songs, music, and images. For instance, Li (2008) conducted a qualitative and quantitative research study based on Krashen's (1982) theory of affective filter (i.e., creating a safe and welcoming learning environment to increase motivation, self-confidence, and decrease anxiety). The author found that the pedagogies provided by Krashen (1982) are effective for learners' success of acquisition and learning.
- 4) Create learning activities between peers because social interaction is a powerful tool for learning success.
- 5) Make the students feel they are valued members of learning (Bensharef, 2009).
- 6) Give assignments, such as homework, to the students; provide feedback; and try not to undermine their work. It may lead to low motivation, low self-esteem, low self-confidence, and high anxiety, which will impede their learning process. Lin (2008) suggested that the right pedagogies would predict the language learners' success in acquisition and learning. Therefore, English educators have the responsibility to minimize learners' negative emotions that would cause anxiety or undermine confidence.
- 7) Repeal the entry exams required in some States before attending school.

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8) Continue providing the students with language assistance program, even in college (Cook, 2015), because they still require language support services (Menken & Kleyn, 2010).

9) Enact the laws that tend to reinforce the educational system by providing more funds to the schools to assist NNLS, and make sure the laws are consistently followed.

### **5.3 Solution proposal in term of Socio-economic assistance**

This paper showed that NNLS face economic challenges. Therefore, the authorities should provide direct assistance to the students, including housing, meals, tuition, health care, and academic materials. However, after completing their education, these learners should be appealed to stay in the country. Because the more experts a country has, the greater it is. If the authorities invest in these students, they should create conducive conditions to permit the students to reside, which enables them to serve the country with this knowledge they have acquired. Therefore, the DACA program should be reconsidered by lawmakers by transforming temporary status to permanent status. This will facilitate NNLS, after their study, to live a better life without frustration, despair, anxiety, and discrimination.

## **Chapter 6: Discussion**

This paper aimed at exploring the challenges faced by NNLS in the U.S. from the beginning of their trajectory to school. Therefore, bilingual instruction, conditions that promote learning, laws and policies related to education, the effects of age of SLA on fluency (including language components and skills), and social contexts, including social status and socioemotional factors, were all investigated.

The results showed that bilingual education leads to a) assimilationist goals, whose outcomes are subtractive, monolingualism or limited bilingualism and b) pluralistic goals, whose outcomes are additive, bilingualism, and biliteracy. The assumption of bilingual programs is to

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promote efficient bilingualism among NNLS for academic contents (Roberts, 1995). Due to the variety bilingual instruction, this assumption fails to achieve its goals because some bilingual approaches in the U.S. lead to limited bilingualism. The paper continued to find out some other issues that might cause this language non-proficiency level in NNLS by investigating the age at which the learners start their second language. The results showed that age is an essential factor in determining language proficiency. However, even after puberty, if learners are consistently and frequently exposed to the target language, they can achieve fluency in this language.

However, as a language has different components and skills (syntax, accent, prosody, pronunciation, etc.), a lack of proficiency level in only one of these features can allow SL speakers to be perceived as non-native speakers. This differentiation is one of the detrimental factors for the NNLS, which leads to discrimination from their peers, some teachers, and outside of the colleges or universities.

This paper also investigated and identified other challenges faced by NNLS along their trajectory towards school, which may impede their cognitive and learning processes. The results found that internal and external factors weigh heavily on NNLS' learning and reasoning. For instance, the learning process is conditioned by certain factors that certain scholars attempt to categorize into 1) internal variables (pertaining to cognitive and affective factors like motivation, self-esteem, anxiety, etc.) and 2) external factors (socio-economic, immigration status, learning environments, language proficiency, etc.). Here, the term "attempt to categorize" is used to show that both factors contribute to the learning's process. As said Mahmoudi and Mahmoudi (2016), it is a mistaken idea to think that internal and external variables are separate because all these variables are inextricably intertwined in a rich, complex, and dynamic way in languages (Robinson & Ellis, 2008). Therefore, the purpose of categorization is only to understand the

situation better, but not to claim that these factors have nothing to do with each other (Mahmoudi & Mahmoudi, 2016).

These findings are aligned with some previous findings that explored the effects of internal and external factors in NNLS. For instance, one study conducted by Mahmoudi and Mahmoudi (2006), in which 140 post graduate students of English language teaching took part, investigated the impact of different variables affecting foreign language learning. The results showed that social contexts and cultural issues play key roles in the language learning process.

This paper went further to find out the causes that trigger negative emotions in NNLS and how this affects their learning and reasoning. The results indicated that emotions are elicited in NNLS because their expectations are not met due to burdensome challenges faced during their learning trajectory. Krashen (1982, 1985, 1988) argued that unfilled expectations lead to despair, lack of confidence, low motivation, and limited English skills in learners. This phenomenon triggers their affective filter, which blocks their learning and reasoning processes, leading to failure.

This research also was interested to know the main origin of these matters by investigating certain laws on education in the U.S. The results indicated several laws or policies enacted by the authorities or lawmakers are the source of the major issues, which constrain NNLS' learning process. Not only do these policies require unfair high stakes testing of ELLs before officially attending any colleges or universities, but also they do not take into account the lamentable conditions NNLS are struggling to overcome. For instance, Menken (2010) analyzed NCLBA, which was intended to provide equal educational opportunities for disadvantaged students, close the achievement gap, and make sure all students achieve academic proficiency (U.S. Dep. ED., 2004). Menken (2010), in contrast, argued that NCLBA failed to achieve its goal because it

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focused too much on testing that is structured in Standard American English, whereas NNLS have not mastered English yet.

This longstanding commitment against NCLBA allows ESSA to be promulgated by the government. The main purpose is to provide all children significant opportunity to receive a fair, equitable, and high-quality education and to close educational achievement gaps (NASSP). For instance, one the major alleviation is the removal of accountability measure scores established by NCLB, which represented one of the burdensome challenges faced by English language Learners. But it is still challenging for them because some schools still require the entry exams, such as national admission exam (ACT, SAT), national placement exams (COMPASS, Accuplacer), state- or system-wide placement exams (in certain states), or institutional-level placement exams before being admitted (CNA's Edu, 2017). And, besides the college entry exams, testing in reading and math for certain grades (three through eight, and high school) remains in this new policy.

Finally, this paper proposed some solutions to these issues, which can help alleviate the burdensome challenges faced by NNLS along their trajectory towards school and enhance their conditions of life. Some of these proposed solutions include revising educational policies (bilingual instructions, entry exams, etc.), improving learning conditions, and providing direct support to the NNLS (housing, meals, academic materials, etc.).

However, education in a country concerns everyone, including the government, educators, researchers, parents, and all students (native or non-native). Because it is a fundamental element for the development and growth of a nation. Based on this commitment, many researchers have focused on challenges faced by NNLS in the U.S. Most of them investigated language proficiency and attribute these issues to age of SLA (Oyama, 1976;

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Johnson & Newport, 1989; Birdsong & Molis, 2001; Vanhove, 2013). Some others focused on social contexts, including socio-economic, socio-emotional, culture, immigrant status (Krashen, 1982, 1985, 1988; Perez, 2009; Peres & Morrison, 2016; Mahmoudi & Mahmoudi, 2016), or laws and policies related to education (Menken, 2010; Peres & Morrison, 2016). But there is no research study that has brought all these factors together. This paper investigated all these burdensome issues in order to better understand the challenges faced by NNLS along their trajectory towards school. The results showed that all these factors mentioned above affect NNLS' learning process and, therefore, worsen their situation than one factor can do. This is the key strength of this paper. As these challenges may hit all NNLS across the world, unfortunately, this paper focused only on NNLS in the U.S., which is one weakness and limitation of this research. However, these findings could be used to inspire further research on education in a NNL, which would include all burdensome challenges that can impact NNLS other countries so that global leaders are better aware of these issues.

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