RESEARCH BULLETIN
OF NARUTO UNIVERSITY
OF EDUCATION
Volume 33 2018

## The Critical Period Hypothesis and English Language Education: EFL at primary and middle schools in Japan

KITA Yoko

(Keywords: English language education, CPH, age)

#### 1. Introduction

Age has long been considered a key factor for successful language learning. Consequently, many researchers have focused for a long time on age-related studies in second language acquisition. It is generally accepted that younger learners can acquire language relatively faster and easier than older learners, especially regarding acquisition of native-like pronunciation. Although successful adult language learners exist, almost invariably it is the younger learner that demonstrates the most proficiency in second language acquisition. So what exactly is the issue with age in language acquisition?

The Critical Period is a biologically determined period of life when learners can acquire language more easily and beyond this time language is increasingly more difficult to acquire (Brown, 2007). The Critical Period Hypothesis (CPH) for learning a second language claims that there is a biological timetable for second language acquisition. Until the Critical Period is over, learners acquire a second language easily, swiftly, and with minimal external intervention. Some researchers, in support of the CPH, have asserted that second language acquisition occurs best during early childhood before puberty and people tend to be incapable of naturally acquiring a second language after the Critical Period. If the CPH was applicable to all aspects of second language acquisition, then English Education in Japan would be unsuccessful since Compulsory English Education in Japan starts during the first year of junior high school at the age of twelve. This means that English Education as a prioritized foreign language in Japan starts after the Critical Period. The CPH seems to give a negative prognosis to English as a Foreign Language (EFL) learners in Japan. This could undermine learners and discourage them from being successful at acquiring English as a second language.

Although various research efforts support the CPH, does the CPH explain all the hurdles encountered during second language acquisition; or does the CPH only explain the challenge in acquiring a native-like accent? Are there other factors besides the Critical Period espoused by the CPH that affect second language acquisition? Most importantly, should we rely on the CPH as a legitimate reason to start English Education at earlier ages?

This paper aims to present the idea that the importance of the CPH should be assessed to determine how to help EFL learners in Japan. It will also examine past research on the CPH and discuss how English education has been conducted in Japanese schools.

## 2. The Critical Period Hypothesis

The CPH has been supported by many researchers in the field of second language acquisition. Lenneberg (1967) provides his statement that the ability to learn a language naturally by only being exposed to the language will disappear at puberty and one cannot learn a foreign language without being taught and learned through a conscious and labored effort. Lenneberg continues with the influential statement that one cannot erase his or her foreign accent easily after pubescent ages. It seems his statement caught the attention of the linguistic research community and triggered the beginning of the CPH era even though no one has been able to agree on an exact endpoint for the Critical Period. Many scholars have suggested different time intervals for the Critical Period; however, the general consensus seems to be the time interval leading from birth to puberty for optimal language acquisition. From a psychological perspective, it is mentioned that children are superior to adult learners in second language acquisition. Ellis (1994) states that children are more motivated and less anxious about using the target language. Also, Ellis (1994) mentions that children store L 1 and L 2 knowledge in different areas of the brain.

In a strong version of the CPH, Lenneberg (1967) states that it is impossible for anyone learning another language after puberty to have a native-like language performance, especially a native-like accent. Being influenced by the strong versions of the CPH, Tran (2009) summarizes the difficulty of native-like accent acquisition after the Critical Period and says, "If one learns a new language after the Critical Period, he or she can never easily erase his or her foreign accent despite how much effort and talent that person has" (p.3). This statement would be crucial to any EFL learners starting their language learning after the Critical Period. English Education in Japan is a good example of this since students start learning a second language after the Critical Period.

Some researchers have continued their research studies and have carefully reconsidered the idea of the Critical Period and have managed to find counter-evidence to the CPH. The researchers found successful second language learners that started learning a second language after puberty whose language proficiency was native-like. The experimental research in second language acquisition shows that native-like competence is achievable for even adult learners, at least in the grammatical domain. However, this still leaves the question of native-like accent acquisition after the Critical Period unanswered. Then, Bongaerts (1999) conducted an experiment which seemed to indicate that post-puberty learners of a second language could sound like native speakers. Also, Moyer (1999) states that many other interdependent factors such as instruction and motivation play a role in such effects, reflecting on the counter-evidence to the CPH research of native-like accent acquisition. The authors concluded that these learners were essentially successful in second language acquisition after the Critical Period.

#### 3. English Education Past and Current

Globalization has brought a drastic change to English Education, since English is now considered an International language in Japan. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) released an Action Plan to cultivate "Japanese with English Abilities." It states, "For children living in the 21 st century, it is essential for them to acquire communication abilities in English as a common international language" (MEXT, 2002). Then MEXT established a new "Course of Study" in 2008 in order to foster communication abilities in English as well as to improve English lessons (MEXT, 2008). In order to further foreign language education, MEXT released "The Revisions of the Courses of Study for Elementary and Secondary Schools" in 2011. In this revision MEXT (2011) decided to implement English Activities in Japan at an earlier age, specifically the fifth and sixth grades.

According to a teacher survey given out in Japan by MEXT in 2016, English lessons to foster integrating the four skills were being conducted nationwide in junior high school. That is to say, English learning is considered an important priority in Japanese Education. The new Courses of Study encouraging English Activities and Education for elementary schools have just been released in 2017.

Compulsory English Education in Japan starts the first year of junior high school at the age of twelve and continues for three years. If a student attends high school, which is voluntary after the age of sixteen, then the student must take another three years of English. This curriculum is expected to foster four skills: listening, reading, writing and speaking abilities through a six-year English education program in school. The textbooks used for English in junior high school classes are decided by MEXT. Traditionally, teachers conducted English lessons based mainly on grammar and translation (Yamaguchi, 2004). This method of instruction was often criticized as a teacher-centered approach to teaching. That classic style of instruction

is not recommended anymore because MEXT encourages English teachers to conduct communicative approaches to their teaching. Therefore, English teachers struggle to design new methods which meet the MEXT requirements. Consequently, it has been reported to MEXT that various communicative approaches have been implemented nationwide to satisfy the requirement they have established.

Among the remaining problems with English Education, two main ones needed to be examined. Firstly, all seventh graders officially must learn the alphabet, both its phonetics and writing. English Education officially starts in the first year of junior high school. At this early stage, there are already different abilities in students' English level. Some students have already learned the alphabet and common English expressions in private cram schools. English lessons are conducted by using textbooks in which dialogues are written to focus on acquiring proper grammar usage. Students are expected to memorize grammatical sentences and vocabulary through examples given in the textbooks. A great example would be students learning the usage of plural and singular nouns. The grammatical exercise in the textbook asks, for example, "How many books do you have?" The correct answer is, "I have five books." Such rote examples tend to be misleading to students for two important reasons; English has many grammatical exceptions and native English speakers often don't talk like that. At the seventh grade level, teachers focus on fostering the four basic skills- speaking, listening, reading and writing, although English lessons are conducted only four hours per week. Seventh graders have more opportunities to speak and to listen in English as well as to read and to write than do eighth and ninth graders. Teachers face difficult situations in the eighth and the ninth grade because dialogs and grammar are more complicated compared to those covered in the seventh grade. In truth, teachers are eager to concentrate on communicative approaches to language learning (Morimoto, 2008). However, due to the fact that students must cope with entrance examinations in order to enter high school, which mainly focus on grammar and reading comprehension and listening skill, almost all students prefer to focus on reading comprehension and grammar knowledge in the ninth grade. The students lose interest in speaking activities because there is no oral part in the entrance examination.

Secondly, grammar, like speaking, was taught the old-fashioned way, which was by mastering rules just like when one memorizes dates in a history class. Students should learn English through communicative approaches that make language a part of life. By communicative approaches, for the purpose of brevity in this paper, I mean the teaching of languages emphasizing the ways in which native speakers communicate. The biggest difference between English and other subjects is that English is a live language that students can use to promote understanding in the cultural and social background of English-speaking people. Simply learning grammar and English comprehension would be the same as memorizing formulas in mathematics. I believe that English education needs to fill in the gap between acquiring the four skills for competent English usage and the understanding of cultural and social background of English-speaking people. Due to the fact that the learning of English involves no understanding of the cultural and social background of English-speaking people, which the English language should provide, most teaching activities presently taught in Japan do not have any practical relevance to life. The students learn to memorize target grammar sentences but the systems fail to teach students how to carry on English conversations. The students seem to be able to communicate, but they lack real context for any communication. If a language is stripped of the very fabric of human life, in a sense, it is no longer a language since there is no communication. Therefore, although they speak in English, their conversations are meaningless.

Educational leaders do realize the problem of rote learning versus communicative teaching. To this end, MEXT brings in native English speakers through the Japan Exchange and Teaching Programme (JET program). An English speaking Japanese teacher and a native English speaker work together and conduct English lessons according to what they believe to be the most beneficial. In this manner, students learn to appreciate the cultural background of English-speaking people through livelier English lessons. In addition, students feel the necessity of speaking in English to communicate with people from other countries. There are about 5000 JET program participants from 40 countries (JET program, 2017). However, this is still not a sufficient number to effectively enrich communicative English lessons in all junior high schools in

Japan. I strongly believe that English speaking Japanese teachers could enhance their communicative approach as well as their effective team-teaching methods by pairing up with native speakers.

In the practical communicative competence approach, teachers would provide authentic situations for students to communicate. In addition, one of the best lessons taught to Japanese children would be by modeling the language actively and hearing Japanese teachers who fluently speak English. This communication style will help change the students' view that they should only study English for the purpose of passing their high school entrance examination. English lessons should emphasize activities that provide students with many opportunities to communicate through English. For instance, students could give speeches, hold discussions, and exchange e-mail, or do interviews with native speakers. New technology such as pod-casting makes communicative teaching easier than ever. In this way, I believe students can not only learn the joys of English, but also gain practical communicative competence. A lesson's effectiveness must always be considered when making a lesson plan.

We have to face the difficult reality in middle school English education, wherein the national curriculum supports official English Education only four times per week. In addition, age is another major concern that may discourage boosting English education in Japan.

## 4. Elementary School English Education and the Critical Period Hypothesis

MEXT has adopted several approaches to foster English competence in Japanese students. However, compulsory English Education in Japan starts during the first year of junior high school, at the age of twelve, and only continues for three years. Could it be possible for Japanese students, in an EFL environment, to master the four major skills in four lessons per week in only three years? This means that English Education as a prioritized foreign language in Japan starts after the Critical Period.

If the CPH is applicable to all aspects of second language acquisition, then English Education in Japan would unfortunately be unsuccessful. Does the CPH imply that English Education should be started at an earlier age such as elementary school; at the age of six years old? According to the MEXT, they revised their curriculum guidelines for elementary schools and already began implementing English Activities in Japan in 2011. This effectively makes English compulsory for all fifth and sixth graders. It's assumable that MEXT's decision was influenced by English educators who have emphasized the importance of integrating English education at an earlier age (Nakamura, 2004; Sakakibara, 2004).

As I mentioned at the beginning, age has long been considered a key factor for successful language learners. It is generally accepted that younger learners can acquire language relatively faster and easier than older learners, especially regarding acquisition of native-like pronunciation. Although various research efforts support the CPH, I question if the CPH explains all the hurdles encountered during second language acquisition; or does the CPH only explain the challenge in acquiring native-like accent? Are there other factors, besides the Critical Period espoused by the CPH, that affect second language acquisition? My biggest concern is how much English Educators in Japan should rely on the CPH as a legitimate reason to integrate English Education at an earlier age.

If the CPH theory is applied as a legitimate reason for early age English education, we should start English Education systematically in the first grade. Considering the EFL situation in Japan, it would be too overwhelming to simultaneously develop reading, listening, writing and speaking skills for every student at elementary schools (Hasegawa, 2005). Especially, reading and writing would be the biggest challenge at an early age for Japanese students. Kitano states that Japanese students get used to reading Chinese characters so it is easier for them to visually identify Chinese characters than combinations of letters of the alphabet (Kitano, & Kitano, 1986). As many researchers indicate in their studies, native–like pronunciation is always the main focus in linguistic English proficiency. Therefore, as a practical matter, it makes sense to bring the two ESL skills–speaking and listening–together at an early age in Japan.

Uncertainty still remains as to whether the CPH is a legitimate reason to rush bringing English Educa-

tion to an earlier age in Japan. As many researchers indicate, the CPH neglects some important concepts: the validity of methods used by the theorists and non-biological differences such as motivation and cultural empathy and desire (Takahashi, 2010). We can apply the theory of Birdsong (1992) who found successful second language learners who started learning a second language after puberty, and their language proficiency is native-like, at least in the grammatical domain. Especially notable is Tran, who makes a very important point for second language learning saying, "It should be more realistic to try to help learners to be able to function successfully in the target language, rather than to try to help learners to be able to speak as well as native speakers of the language" (Tran, 2000, p 12). To focus on an extremely high level of English proficiency in adult learners, Brown (2007) famously described the *Arnold Schwarzenegger Effect*; a person who came to the U.S. at the age of 21 with little English but is arguably as linguistically proficient as any native speaker although his accent is noticeable. Those opinions would indicate that beyond biological factors there are other important factors involved in successfully learning a second language. These include motivation, effort, and high exposure to the second language.

### 5. Suggestions for English Education in Japan

There seems to be no easy answers as to whether the CPH is a legitimate reason to start English Education in Japan at an earlier age. As many linguistic researchers have shown, there are many cases of successful learners who started learning a second language after puberty, which means learners who start late, can overcome the CPH barrier. We would point to this result as a rationale to counter the premise that CPH is a legitimate reason for earlier age English Education in Japan. However, critical facts remain in the Japanese school's English Educational system. Although MEXT admits to the importance of English Education, the national curriculum supports official English Education only four times per week. It is unrealistic to expect EFL students, in an EFL environment to master the four major skills in the four lessons per week in only three years. To solve this problem, it would be beneficial to break the learning process into two phases.

The first phase is the Critical Period defined by the CPH – Elementary School. The second phase is the time period after the CPH – Junior High School. In the first phase, have students start learning English at elementary school level, which is limited to only speaking and listening skill acquisition. This prepares the student to be successful in the second phase.

In the second phase, after the Critical Period, the students focus on writing and reading skills although we attempt to foster the four language skills simultaneously. It is important to keep in mind that the total amount of output and input is limited in the EFL environment. Effective EFL learning requires significant exposure to English communication. We should note that technology is facilitating English language acquisition by connecting people, resources, and media all over the world. Substantial personal effort, including viewing English movies and talking or corresponding with native speakers for greater comprehension, is still required to help overcome the CPH and to be a successful language student.

#### 6. Conclusion

Considering all the evidence of the EFL environment in Japan and the CPH, I would recommend introducing English Education at an earlier age in Japan, which should be at the age of six (1 st grade of elementary school), not the fifth grade. An earlier age English education would be also helpful for students to be engaged in the cultural background of English-speaking people through livelier English lessons. Japan is a homogeneous country; therefore, learning English is a great way to learn about other cultures. Learning other languages and learning about other cultures from an earlier age would help make Japanese students more aware of their own culture.

In conclusion, it would be beneficial for English education to start at an earlier age in Japan so that

students will gain a native-like accent, which seems to be the only part of second language acquisition that cannot be overcome after the Critical Period. After carefully examining the EFL situation in Japan in which the total amount of output and input is limited in the EFL environment, I strongly recommend starting English education in first grade, or at least earlier than it is currently being taught.

#### References

- Birdsong, D. (1992). Ultimate attainment in second language acquisition. Language, 68(4), 706-755.
- Bongaerts, T. (1999). Ultimate attainment in L 2 Pronunciation: The Case of Very Advanced L 2 Learners. Birdsong, D (Ed.), *Second Language Acquisition and The Critical Period Hypothesis* (pp.133-159). Mahwah, NJ: Lawrence Erlbaum Associates.
- Brown, H.D. (2007). Principles of language learning and teaching. New York, U.S.A.: Pearson Longman.
- Ellis, R. (1994). The Study of Second Language Acquisition. Oxford, England: Oxford University Press.
- Kitano, K, & Kitano, S.K (1986). Difficulties Japanese have in reading English. ED 278214, 1-35.
- Lenneberg, E. H. (1967). Biological Foundations of Language. New York, NY: John Wiley.
- Ministry of Education, Culture, Sports, Science and Technology. (2011)
  - The Revisions of the Courses of Study for Elementary and Secondary Schools. Retrieved from http://www.mext.go.jp/en/policy/education/elsec/title 02/detail 02/\_\_icsFiles/afieldfile/2011/03/28/1303755\_001.pdf
- Moyer, A (1999). Ultimate attainment in L 2 phonology: The critical factors of age, motivation, and instruction. *Studies in Second Language Acquisition*, 21, 81-108.
- Tran, H. T. (2009). The Critical period and second language acquisition. ED 507240, 1-17.
- Yamaguchi, C. (2004). ELT in Japan Beyond Negative fallacies. Bulletin of the Research Institute of Regional Area Study, 2(1), 23-27.
- 尾上利美(1997)「第二言語習得における複数の敏感期について-日本における早期英語学習者の英語習得度調査の概観より-Sensitive periods in second language acquisition: -A review of hypotheses and research regarding age-related differences in Japan.」『奈良女子大学文学部教育文化講座年報』 第 2 号, 43-54.
- 榊原洋一(2004) 『子どもの脳の発達 臨界期・敏感期 ─早期教育で知能は大きく伸びるのか?』東京:講談社 高橋基治(2010) 「第二言語習得研究からみた発音習得とその可能性についての一考察 ─臨界期仮説と外国語訛 りを中心に─Re-assessing Critical Period Hypothesis: From the Viewpoint of Attaining Native-like Phonological Performance」『東洋英和女学院大学人文・社会科学論集』第28号,33-55.
- 中村典生(2004)「小学校英語活動とその周辺 A holistic investigation of the EFL educational needs in the Elementary School Curriculum」『岐阜市立女子短期大学研究紀要』第53号,47-63
- 長谷川信子(2005)「小学校での英語教育」反対論検証—「先ず会話」からの英語導入、やる価値は十分ある—」 小林美千代編『早期英語教育の指導者養成及び研修の実態と将来像に関する総合的研究 科学研究費(基盤研究(B)研究報告書)』pp.11-27,東京:神田外語大学
- 森本治子(2008)「中学英語における実践的英語教育の取り組み―体験学習プログラムを通したコミュニケーション能力の育成
  - A Communicative Approach to Junior High School English Education: Promoting English Communication Skills Through Interactive Learning Programs」『Mejiro University』第44号, 193-208
- 文部科学省(2002)「英語が使える日本人の育成のための戦略構想の策定について Regarding the Establishment of an Action Plan to Cultivate "Japanese with English Abilities"」Retrieved from http://www.mext.go.jp/b\_menu/shingi/chousa/shotou/020/sesaku/020702.htm
- 文部科学省(2011)「国際共通語として英語力向上のための5つの提言と具体的施策について」
  - Retrieved from http://www.mext.go.jp/b menu/shingi/chousa/shotou/082/houkoku/1308375.htm
- 文部科学省(2014)「今後の英語教育の改善・充実方策について~グローバル化に対応した英語教育改革の五つの 提言~」
  - Retrieved from http://www.mext.go.jp/b\_menu/shingi/chousa/shotou/102/houkoku/attach/1352463.htm

文部科学省(2016)「外国語ワーキンググループ(第 10 回)資料 4」

Retrieved from http://www.mext.go.jp/b\_menu/shingi/chukyo/chukyo 3/058/siryo/attach/1373471.htm 文部科学省(2016)「外国語ワーキンググループにおけるとりまとめ 案」Retrieved from

http://www.mext.go.jp/b\_menu/shingi/chukyo/chukyo 3/058/siryo/\_\_icsFiles/afieldfile/2016/09/14/1373448\_1.pdf
The Japan Exchange and Teaching Programme(2017) 「参加国/JET プログラム」Retrieved from

http://jetprogramme.org/wp-content/themes/biz-vektor/pdf/countries/2017\_jet\_stats\_j.pdf

文部科学省(2017)「小学校学習指導要領解説外国語編」Retrieved from

http://www.mext.go.jp/component/a\_menu/education/micro\_detail/\_\_icsFiles/afieldfile/2017/06/27/1387017\_13\_1.pdf 文部科学省(2017)「中学校学習指導要領解説外国語編」Retrieved from

http://www.mext.go.jp/component/a\_menu/education/micro\_detail/\_\_icsFiles/afieldfile/2017/07/04/1387018\_10\_2.pdf

# The Critical Period Hypothesis and English Language Education: EFL at primary and middle schools in Japan

## KITA Yoko

(Keywords: English language education, CPH, age)

#### Abstract

English learning is considered an important priority in Japanese Education. The new Courses of Study encouraging English Activities and Education for elementary schools has just been released in 2017. In regards to successful language learners, age has long been considered a key factor. Many researchers have focused for a long time on age-related studies in second language acquisition. This paper examines past research on the Critical Period Hypothesis (CPH) and discusses how English education has been conducted in Japanese schools. Finally, considering all the evidence of the EFL environment in Japan and the CPH, ideas that help EFL learners in Japan overcome the CPH and become successful learners will be presented.