

ทฤษฎีการเรียนรู้ภาษา LANGUAGE LEARNING THEORIES

ชยานิน บุญส่งศักดิ์^{1*}
Chayanin Boonsongsak^{1*}

มหาวิทยาลัยเชียงใหม่ 239 ถ.ห้วยแก้ว ต.สุเทพ อ.เมือง จ.เชียงใหม่ 50200
Chiang Mai University No. 239 Huaikeaw Road, Suthep Sub-district, Mueang District, Chiang Mai Province 50200

*Corresponding author E-mail: cchayanine@gmail.com

(Received: Mar 4, 2020; Revised: Sep 18, 2020; Accepted: Sep 29, 2020)

บทคัดย่อ

ภาษา ถือเป็นเรื่องสำคัญของมนุษย์ เป็นเครื่องมือ เป็นสื่อกลางของการรับรู้ทำความเข้าใจ และการแสดงออก เพื่อให้ผู้อื่นได้รับรู้และเข้าใจตรงกัน โดยอาศัยกระบวนการพัฒนาทางภาษา ซึ่งประกอบด้วย การรับข้อมูลและการส่งข้อมูลผ่านการคิดและสัญลักษณ์ต่าง ๆ ภาษาถือเป็นรากฐานสำคัญและมีความจำเป็นที่สุดต่อการดำรงชีวิต การพัฒนาศักยภาพของมนุษย์ และการพัฒนาทางด้านสติปัญญา เนื่องจากมนุษย์ใช้ภาษาเพื่อสื่อสารความคิด ความต้องการของตนเองกับผู้อื่น บทความ ทฤษฎีการเรียนรู้ภาษา (Language Learning Theories) ผู้เขียนได้รวบรวมและนำเสนอ ทฤษฎีการเรียนรู้ภาษาและเรียนรู้ภาษาตั้งแต่ช่วงวัยเด็กที่เรียนรู้ภาษาแม่เป็นภาษาแรก จนกระทั่งเติบโตและเริ่มเรียนรู้ภาษาที่สอง หรือภาษาต่างประเทศเพิ่มขึ้นตามลำดับ เนื่องจากการพัฒนาความสามารถทางภาษาของมนุษย์ถือได้ว่ามีความสำคัญ ไม่ว่าจะเป็นการพัฒนาความสามารถทางภาษาท้องถิ่น ภาษาของชาติ และภาษาต่างประเทศ อีกทั้งการเรียนรู้ภาษาที่สองหรือภาษาต่างประเทศกำลังเป็นที่นิยมอย่างมากในสังคมยุคปัจจุบัน และการเรียนภาษาใหม่สามารถเสริมสร้างชีวิตของมนุษย์ในหลาย ๆ เรื่อง เช่น หากเราย้ายถิ่นฐานเพื่อการศึกษา หรือที่อยู่อาศัยจำเป็นอย่างยิ่งที่จะต้องเรียนรู้ภาษาใหม่เพื่อการติดต่อสื่อสารและการดำรงชีวิต บทความ ทฤษฎีการเรียนรู้ภาษา (Language Learning Theories) จึงมีส่วนช่วยให้ทราบถึงกระบวนการเรียนรู้ภาษาพูดของมนุษย์ตั้งแต่วัยเด็ก ช่วงแรกเกิดจนกระทั่งสามารถใช้ภาษาในการสื่อความหมายได้ และเริ่มรับภาษาใหม่ ๆ เข้ามา ทำให้เห็นว่าการเรียนรู้ภาษาของเด็กและผู้ใหญ่นั้นจะต่างกัน และชี้ให้เห็นถึงการพัฒนาการเรียนรู้ภาษาของมนุษย์ว่าได้พัฒนาขึ้นตามทฤษฎีการเรียนรู้ภาษาดังกล่าว ซึ่งช่วยให้ผู้เรียนภาษาเองได้เห็นถึงกระบวนการการเรียนรู้ภาษาที่เปลี่ยนแปลงไปตามวัยและวุฒิภาวะ และได้ตระหนักรู้ถึงความสามารถในการเรียนรู้ภายในตัว อีกทั้งเป็นประโยชน์ต่อผู้สอนภาษาที่จะสามารถสร้างเงื่อนไขและสถานการณ์เรียนรู้ให้กับผู้เรียน โดยพิจารณารูปแบบการสอนที่เหมาะสมเพื่อสร้างปฏิสัมพันธ์กับผู้เรียน ตลอดจนผู้ที่สนใจเรียนภาษาก็สามารถนำความรู้ที่ได้ไปประยุกต์ใช้ในการเรียนรู้ภาษาใหม่ที่ตนสนใจต่อไป

คำสำคัญ: การเรียนภาษา, ทฤษฎีการเรียนรู้ภาษา, ภาษาแม่, ภาษาที่สอง, ภาษาต่างประเทศ

¹ อาจารย์ ภาควิชาภาษาไทย คณะมนุษยศาสตร์

ABSTRACT

Language is important for mankind. It is a tool and a medium that makes one understands another, and allows one to express his idea. Understanding among people can be done by language development process which consists of information perceiving, and transferring of thoughts and symbols. Due to human uses language to transfer their thoughts and needs, language is the most important fundamental factor for living, ability development, and wisdom development. The article titled as 'Language Learning Theories' was conducted to collect and present theories on learning and perceiving languages used in children and adults. Children mainly learn their mother tongue, and respectively learn foreign languages or second language. Improving of language ability is also important, regardless of whether it is local language, national language, or foreign languages. Additionally, learning second language or foreign languages is already becoming popular at the present time. Learning new language can also lift up human's life quality in many aspects, especially when one newly moved to new place that requires him to learn new language for communication and surviving. 'Language Learning Theories' explains how children learn spoken languages from being infant till being able to communicate. The article also indicates the process of new language perceiving. Thus, this work is showing the differences between the learning processes of children and adults, is pointing out that every step of learning usually goes consistently with the theories. The theories allow language learners to understand language learning process which varies depending on ages. Also, learners shall understand the proper processes for people that have different ages and maturities. Furthermore, they shall realize their inner abilities. The theories also allow teachers to create a situation or condition to teach properly in order to improve students' language skills and to interact with students. This will eventually allow students to be able to adapt the knowledge learned to study more new languages in future.

KEYWORDS: Language Study, Language Learning Theories, Mother Tongue, Second Languages, Foreign Languages



Introduction

Language can be perceived as sound, behaviors, and symbolic systems created by human to be collectively understood, agreed upon, and perceived. It's used purposely for communication, interaction, transmission, and inter-person exchange of idea, feeling, knowledge, and emotion. Those activities can be conducted through one or various means. Hence, language is an important tool for human to communicate and coexist together. Language learning is an important activity that allows human to live together harmoniously in a particular society. Communication is necessary to allow human to share their thoughts or facts as they desire, so that all have to learn language. Starting from a mother tongue, and stepping forward to a second language or foreign languages, these are the way to utilize languages on purposes of study, trade, or friend making. Human create languages for their life. Pintip Tuaycharoen (1985 as cited in Rungrudee Plaengsorn, 2017, pp. 31–32) viewed that there were three natural differences between mother tongue learning and second language or foreign language learning. Firstly, all language learners had to learn their mother tongue before starting second language or foreign language. Learners tended to logically have the idea consistent with their mother tongue which obstructed second language or foreign language learning. Secondly, language learners often faced with cultural situations that were different from cultural situations found in their mother tongue. These differences were out of linguistic issues, such as classifications of times, places, behaviors, persons, and characters. Thirdly, aging also did matter. Aging made people became familiar with their mother tongue structure and used such structure in a second language. It was called mother-tongue interference. Hence, old people needed more efforts than young people in this regard.

Language Learning

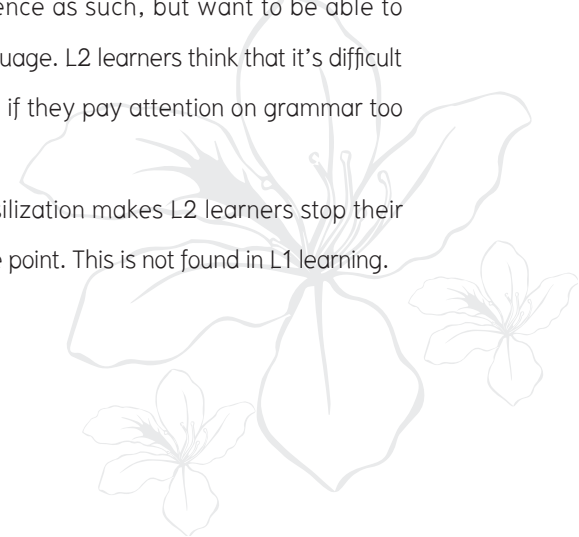
Language can be classified into 2 groups, namely first language (L1) learning which is learning of mother tongue/native language, and second language (L2) learning which includes learning of foreign language (FLA). Kanungnit Chanturat (2011, pp. 39–41 cited in Rungrudee Plaengsorn, 2017, pp. 35–36) explains as the follows.

1. Children easily and perfectly learn L1 very fast. No one cannot use language if he stays in a language environment. After being able to talk, children absolutely develop language skill at the age of 5 years old. This success is of language understanding and language using. Meanwhile, L2 learners mostly can only be most likely to native speaks. L2 learners can be successful in only one aspect, e.g. one can speak and communicate fluently, but do grammatical errors sometimes, or do unclear pronunciation.

2. If one does not have a disorder brain or body, and is able to interact with people surrounding, he will be successful on learning his L1. That is slightly different in each person. However, two groups of people cannot properly use L2 at the same level even if they started learning at the same time. Some of them might be able to communicate fluently, some of them probably cannot even to understand.

3. L1 learners basically focus on competence which allows them to understand grammar rules and can make a good performance in using L1. Meanwhile, L2 learners usually don't pay attention on the competence as such, but want to be able to fluently use language. L2 learners think that it's difficult to communicate if they pay attention on grammar too much.

4. Fossilization makes L2 learners stop their learning at some point. This is not found in L1 learning.



5. L1 learners likely have an instinct to tell if a sentence is correct. L2 learners cannot easily tell if a sentence is correct if they have never seen or heard it.

6. L1 can be learnt from the language environment. Classroom is not a factor to make one able to use L1. L1 can be improved also varying to age. L2 mostly can be learnt by teaching in classrooms.

7. In L1 learning, correction is not mandatory because learners can correct it by themselves. On the other hand, correction is better for L2 learners' improvement.

8. Emotion, feelings, perspective, and motivation are not factors for L1 learning. However, those significantly affect L2 learning. Hence, there are plenty differences within L1 learning and L2 learning, so that teachers must understand this point and teach L1, L2, and FLA properly.

Language Learning Theories

There are two methods of language learning: formal and informal. Formal or unnatural learning requires teachers to organize the course orderly. Teachers have to explain vocabularies, grammar rules, and exercises. Also, teachers have to evaluate learners. Informal or natural learning requires teacher to teach based on a supportive and sufficient environment (Achara Wongsothorn, 1995, pp. 31–35). This allows learners to do self-learning and keep knowledge in their long-term memory and use it later. Language learning theories describe the learning processes since the beginning stage until communicable stage. Learning is improved based on theories. L1 learning theory focus on the first language that children learnt or practice. Some people may have more than one mother tongues, e.g. Thai-Muslim in the 3 southern borderline provinces, people can speak both Thai language and Malayu language. There are three theories within this L1 theory: Behaviorism Learning Theory, Innatism Learning Theory, and Cognitive.

1. Behaviorism Learning Theory

B.F. Skinner is a psychologist in behaviorism school and a leader of the theory supporters. He wrote a book named Verbal Behavior which essentially says that language is used when the user gets incited by an operant conditioning. The learning will be going on if learners get awarded or reinforced. Such award or reinforcement shall push learners to keep continuously learning in the same way. This will create a habit of learning which will create behaviors. To illustrate this, children tend to keep using some particular words if they get praised from saying those words. Skinner categorized language factors into 3 factors, namely 1) operant conditioning, 2) speaking behaviors, and 3) supportive consequences. The proper learning method is to find a proper operant conditioning for learners in order to motivate them to learn (Rungrudee Plaengsorn, 2017, p. 40). For example, a mother always hugs her kid, smiles to him, and gives him milk, when he says “mother”. This’s called positive reinforcement. Contrarily, the same kid will get condemned if he wrongly says something like “ด้า” (Daa) instead of “ต่า” (Taa). Eventually, the kid will say correctly. This’s called “negative reinforcement”. It can be drawn from this theory that children are born with pure brain. They learn language by imitating language behaviors of surrounding people. They try to imitate those behaviors along with getting reinforced at the same time. However, the author views that language has no limitation in its characteristic. Sentences are able to be created unlimitedly. Imitation can only make children capable to use language in the ways they have heard. Imitation does not allow them to create new ways of speaking that can be different from their parent’s. Thus, if imitation is the only way of learning, children might be able to only speak in the same way like they previously experienced.

2. Innatism Learning Theory

Noam Chomsky disagrees with Skinner. He views that language learning behavior is more complex than stimulation response or operant conditioning as explained by Skinner. Chomsky explained that a language is composed of rules or grammars that were originally born with human. Language is not created by stimulation response. Language learning can be regarded as a mechanism within human like an organ. Therefore, to learn language is to learn human's thought. He proposed the theory called the "universal grammar theory". The theory explains that all human was born with an ability to learn language, and all languages in the words have similar rules of grammars. Human are able to set their system called "language acquisition device" (LAD) to adapt themselves to be comfortable with the language environment they are in (Rungrudee Plaengsorn, 2017, pp. 42–44). So, they can finally learn that language. He divides language skills into 2 sides, namely performance skill and language competency. Office of the Royal Society of Thailand (2010, pp. 262, 265) explains that the "competence" is the knowledge that allows language learners to decide whether a sentence is grammatically wrong or acceptable. Some sentences are acceptable even though they are grammatically incorrect, while some thereof are unacceptable even though they are correct. This knowledge also allows language learners to know which sentences are ambiguous. Meanwhile, the dictionary describes "performance" as language usages in various situations that are affected by social factor, psychological factor, and other factors, e.g. misspeaking. Some mistakes make language performance incompliant to language competence (Generative linguists usually don't pay attention on language performance. They claim that performance does not truly represent knowledge or competence). This theory explains that all

children similarly have ability to improve their language skills. Language learning in children doesn't occur from imitation. Children can develop their skill and use some words never been heard before. They can also creatively create long sentences. It could be said that, according to Noam Chomsky's theory, all children are naturally born having linguistic structures. Chomsky views that imitation is not mandatory at all.

3. Cognitivism

Learning Theory Jean Piaget is a Swiss psychologist who brought this theory up in order to argue with Noam's theory which expresses that human have an organ for language development (LAD). Jean Piaget argues that language learning is children's age-based development which has no organ particularly working on language learning. What really make human able to learn language are their natural intelligence and environments. Children can learn language when their intelligence get ready (Kanungnit Chanturat, 2011 pp. 31–32 as cited in Rungrudee Plaengsorn, 2017 p. 45). The focal idea here is that there is a mechanism in children's brain that allow them to learn languages. Also, external factors contribute on stimulating children to organize their thinking system and process ability. This allows children to develop their learning rules. Hence, it could be said that languages represent human's intelligence, and human are capable to learn languages as a tool for communication. Human learn many things by interacting with those things. Jean Piaget studied into child development steps based on age spans. It is called "intellectual development theory".

3.1 Sensorimotor Stage (newborn – 2 years old): Children can learn relations between movements and senses. They can learn existences of objects.

3.2 Preoperational Stage (2 – 7 years old): Children can use symbols in representing things. They know that a round shape item can be represented by

a ball. They can express their idea by using languages, but still cannot understand other people's thought.

3.3 Concrete Operational Stage (7–11 years old): Children in this stage start to use rational thinking. They start to understand rules, measurements, relations, comparisons, classifications, and subsequences.

3.4 Formal Operational Stage (above 11 years old): Children in this stage can imagine of an abstract concept beyond the information they have. They can make an assumption. Intelligence development can occur subsequently continuously. The development will go to the last stage which is measure thinking that allows them to learn things surrounding them. In conclusion, in some development spans, human need to use intelligence to learn language and other matters. This allows human to understand things, behaviors, and abstract concepts, such as difficulty, easiness, beauty, handsomeness, affection, democracy, and so-on. Children need to creatively interact with surrounding people in order to learn languages. This allows them to understand more things based on their experiences, so that they can accumulate such experiences in the form of language structure. Eventually, they will be able to use languages.

L2 Learning Theory

L2 and FLA are what human learn after knowing their first language. These languages take roles in official uses, communication, education, business, tourism, and politic. Office of the Royal Society of Thailand (2010, p. 397) explains that Second language acquisition means learning of other languages besides the first. Thus, it includes also third language, fourth language, and other foreign languages that human use them less than their L1. Some Thai people also learn English, Chinese, and Japanese particularly on purposes as said above. Rungrudee Plaengsorn (2017, pp. 39–53) pointed out a popular L2 & FLA learning

theory generated by Stephen Krashen which contains 5 assumptions (Krashen and Terrell, 1983, pp. 26–132) as the follows.

1. Acquisition Learning Hypothesis

This assumption is consisted of “language acquisition” and “language learning”. Language acquisition is the learning process that is similar to learning process of mother tongue. Learners usually and naturally learn through this method without realizing that they are learning. This method allows learners to informally learn unlike another method called “language learning” which allows learners to formally and realizing learn through forms and rules of languages. The latter allows learners to be able to explain the rules and be knowledgeable in the languages being learnt. This could be called “formal learning” method. Learners using this method do not use spoken languages like used in daily life. Contrarily, people using “language acquisition” method do not think that they are learning while they are using language because they focus on daily life communication. For example, if a mother says “drink milk” every time she feeds her kid, the kid shall understand the meaning of “drink milk” without any explanation. This is natural and informal learning.

2. Natural Order Hypothesis

This theory views that language learning has natural subsequent processes, regardless of the ages of learners. Learners learn language rules orderly. There is no point to teach or fix a particular rule for them if they are not ready to learn the rule in such stage.

3. Monitor Hypothesis

This hypothesis says language accepting differs from language learning. Language accepting allows learners to be fluent in using languages, while language learning allows learners to be able to prove (monitoring) the language's correctness. Hence, languages rules do not make learners speak fluently like assumed by the first hypothesis. The rules only contribute to monitoring process.

4. Input Hypothesis

The key factor for language learning is language information which is regarded as “inputs” under this theory. Inputs can be obtained from reading and learning. Learners must understand the information obtained. Besides, the information must have meanings, not merely language rules or structures. Involvements between learners and information shall make the information attractive toward learners. Lastly, in order to achieve the fruitful result, language information obtained should contain a little bit higher level than the information already acquired by the learners.

5. The Affective-Filler Hypothesis

This hypothesis declares that perception and attitude significantly contribute language learning, e.g. study determination, relaxation, and study readiness.

Learning style as Rungrudee Plaengsorn (2017, p. 55) defines it as a person’s individual learning behavior characteristics. Everyone has different skills on thinking, learning, expressing, and problem solving. Learning style can be taught and advised by teachers. This can be done by fixing the experiences to be accordant with a learning style, so that learners shall have good study results.

According to Watcharapol Wiboolyasarin (2013, pp. 88–91), said that there are 2 types of interesting learning styles.

1. Cognitive Style

There are 2 types thereof.

1.1 The style of Witkin, Moore, Good enough, and Cox.

This style can be divided into 2 more types, namely “field dependence” and “field independence”

1.2 The style of Kolh, Rubin, and McIntyre. This style can be divided into 4 more types.

1.2.1 Divergent type

Learners are good at imagining and see the big concept. This type goes good with a situation that requires diversity of ideas, e.g. brain storming.

1.2.2 Assimilative type

Learners are capable to summarize principles. They are more interested in abstract principles than experiences. They don’t like practicing and implementing.

1.2.3 Convergent type

Learners can apply abstract ideas, and can find the best practical solution. They don’t like being emotional while solving problems. They prefer working with objects more than people. They are focusive in a particular field and are expert in that field.

1.2.4 Accommodation type

Learners like doing experiment and trial by their own methods. They like coordinating and are able to adjust themselves.

1.3 Fleming’s Learning Style.

This style can be broken down into 4 types based on learners’ 4 senses called “VARK”.

1.3.1 Visual type

Learners look at things in order to memorize and learn. In this type, learners learn from symbols and picture. All information shall be recognized and memorized in the form of picture, graph, or map. This process fits well with people who are good at seeing the big concept first and get deeply into details afterward. Stories and sequences shall be merged and memorized in the form of picture as well. Learners are better at this than learning from narrative or characters.

1.3.2 Aural type

Learners listen to sounds in order to learn. They like learning from listening to conversations, lectures, or even self-communicating. They like one-way learning which is input. However, it does not mean they are unable to respond. They

can do what they are told to do. The author views that this group of learners are better at learning second language or foreign languages comparing to the other groups, because they like listening and are able to follow the explanations. Effective language learning needs perceiving data from various sources, such as music, movies, and news. Thus, good listening skill related to this 'Aural Type' is so required.

1.3.3 Reading/Writing

Learners learn by reading texts on documents. They mainly learn from alphabets and characters. They perceive by reading, and respond by writing. They like doing researches and noting up information to gain knowledge.

1.3.4 Kinesthetic type

Learners use all 5 senses to perceive data, and organize it to memorize learn. This learning type require direct practices, including real situation and simulations. They need to be always active because they will have to do it participate in activities.

2. Learning Style based on Response or Behavior

2.1 Man's system

There are 8 types of styles within.

2.1.1 Compliant type

Learners work in compliant with order. They don't like lack of discipline in their class.

2.1.2 Anxious-dependent type

Learners think they are not competent, have no ability, and are always anxious about the assignment. They need assistants from teachers.

2.1.3 Discouraged worker

Learners lack of self-esteem. They always feel embarrassed and blame themselves whenever there is a mistake. They like being isolated and have negative attitude toward themselves.

2.1.4 Independent type

Learners are highly intelligent and confident. They are not afraid of being assigned. They are creative and know their roles.

2.1.5 Heroic type

Learners are well-known among other people. They are good at studying and have achievements in both creative. This can dramatically cause dissatisfaction on other people. Learners are interested in power gaining and identity building by having performance.

2.1.6 Sniper type

Learners are pessimistic. They only pay attention to themselves, and unreasonably cause conflicts with teachers. They don't confront with teachers, and be hostiles toward teachers.

2.1.7 Attention-seeking type

Learners like making good relations with teachers and friends by all possible means. They like being accepted. They don't like people to pay attention to their intelligence, and won't be happy if they have to work by their own capability.

2.1.8 Silent type

Learners are non-talkative and quiet. They rarely have a role in classrooms.

2.2 Grasha & Reichman's Learning Style

This can be broken down into 6 types.

2.2.1 Independent type

Learners like thinking and working on their own, but still listen to other people's ideas. They highly pay attention to any subject deemed important to them. They are confident in their ability.

2.2.2 Dependent type

Learners only learn what they are required to learn. They don't seek for additional courses or knowledge. They have low academic curiosity. They usually rely on teachers and classmates.

2.2.3 Collaborative type

They like discussing in the classes and grouped working. They strongly collaborate in classrooms.

2.2.4 voidance type

Learners don't like participating in any activities in classrooms, and don't pay attention to the courses. They don't like interacting with teachers in the courses.

2.2.5 Competitive type

Learners like competing with their friends, awards, compliments, or scores. They want to be a winner in classrooms.

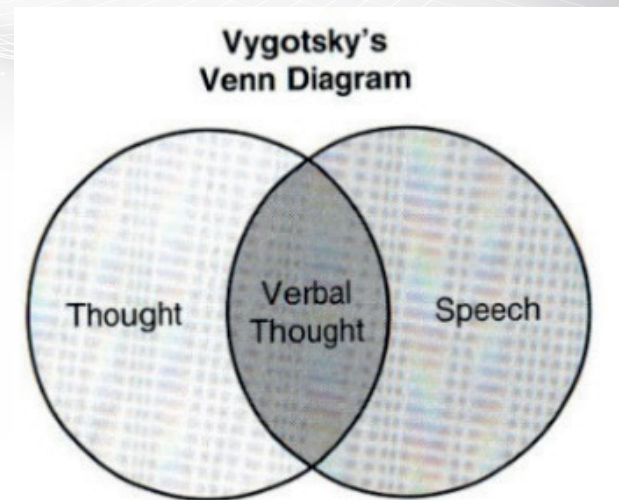
2.2.6 Participant type

Learners highly pay attention to the courses. They are responsible, and like internal-class activities, but don't like external-class activities that are not in the academic courses.

The ability to learn languages make human different from other animals. However, L1 learning is obviously different from L2 or FLA learning. Learners must apply the following knowledge in order to fruitfully and effectively learn L2 or FLA.

Differences between L1 and L2 Learning

Vygotsky, the Russian psychologist, expressed his attitude on languages that there is no relevance between language and thought at the first stage of language learning. The relevance is developed during children's development. These become more involved when children try to express their thought through language. Thus, expression becomes more sensible when children are grown up and logical (Vygotsky, 1986 as cited in, Dixon-Krauss, 1996, p. 19). Therefore, language is a tool to develop one's thought, while language skills can be improved through systematic thinking. Based on the relevance as such, it is believed that social activities involving with languages shall lead to the thinking development.



Picture 1 Expresses Vygotsky's idea on the relevance between speaking and thought.

Source: Wink & Putney, 2002, p. 86

This differs Vygotsky's idea from other psychologists at his age. He concludes that children can naturally learn L1 before learning the complexities of language, e.g. sounds, grammars, and language structure. Meanwhile, to understand L2, children necessarily have to systematically learn it by understanding and realizing the principles of that language. Learners have to learn a language's academic rules before getting fluent in utilizing such language.

Conclusion

Children all have ability to learn L1 (mother tongue / native language) and L2, including foreign language (FLA). Nevertheless, not everyone shall have a fruitful result on L2 or FLA. In term of methodology, human learn L1 from environment and people surrounding them. Children all the time get instructed and trained by people that guide them the proper ways of speaking. Contrarily, children are in completely different environment compared to the proper environment for L2 or FLA. Learners basically learn L2 and FLA in classrooms that are unnatural.

Nowadays, there are many teachers teaching foreign languages or their mother tongues to foreigners. Thus, they have to use at least one second language or English language. Therefore, teachers also have to learn more than their first languages. In order to learn and teach effectively, teachers must understand the theories, hypothesis, proficiency, and various interests of learners, including learners' behaviors that shall push them to be successful in language learning. The understanding as such shall allow teachers to

organize their course appropriately, and apply teaching techniques properly that makes a habit of learning to learners. It can be said that teachers must know theories so that they can help learners to possess learning skills. Nevertheless, there are many differences in many aspects of L1, L2, and FLA learnings, including languages, ages of learners, and motivations which give also obstacles toward effective language learning.

References

- Wongsothorn, A. (1995). *A guideline of creating language exams*. Bangkok: Chulalongkorn University Press.
- Chomsky, N. (1959). Reviews: Verbal behavior by B. F. Skinner. *Language*, 35(1), 26–58. doi:10.2307/411334, JSTOR 411334
- Dixon-Krauss, L. (1996). *Vygotsky in the classroom. Mediated literacy instruction and assessment*. White Plains, New York: Longman Publishers.
- Krashen, S. & Terrell, T. (1983). *The natural approach: Language acquisition in the classroom*. Oxford: Pergamon.
- Office of the Royal Society of Thailand. (2010). *Dictionary of linguistic vocabularies (Applied linguistics) Royal Society of Thailand Version*. Bangkok: Royal Society of Thailand.
- Plaengsom, R. (2017). *Thai language, as a foreign language, teachingology*. Bangkok: Chulalongkorn University Press.
- Wiboolyasarin, W. (2013). *Innovation and instructional medias in Thai subject*. Bangkok: Chulalongkorn University Press.
- Wink, J., & Putney, L. (2002). *A vision of Vygotsky*. Boston, MA: Allyn & Bacon. Retrieved from <http://www.joanwink.com/vygotsky.htm>

