LANGUAGE EQUATION: ENCHANCING STORIES WRITING SKILL

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Abstract

This research paper was mainly focused on writing skill development amongst Thai second language learners. Many Thai English learners tend to concentrate on building examination skill; however, the four communicative skills (listening, speaking, reading and writing) are not focused. For many learners, writing is considered the hardest productive skill to acquire the Standard English writing. This research paper aims to introduce alternative pedagogical technique inspired by George Kelly's theory exploring humans' cognitive learning in simplified manners. This alternative technique proposed in this research is originally derived from the mathematical foundation to enhance writing skill; therefore, the name 'Language Equation (LE)' will be used in this paper to refer to the technique. The experiment was conducted to compare results between the subjects' pre-writing and post-writing test after learning LE within 36 hours. As a result, the subjects became more confident in writing and producing comprehensible stories with correct grammar.

Keywords: Language Equation (LE), communicative skills, productive skill, pedagogical technique

1. RATIONALE FOR THE STUDY

Different age of learning has different advantages in acquiring second language (Penfield and Roberts (1959) and Lenneberg (1967)). Children usually lose their plasticity in acquiring second language by the age of nine. Brains are usually shaped by certain experiences in the environment with in an age-related (Knudsen, 2004). Adult and adolescent learners in the short run, but young learners are better in the long run, due to the complexity in exposing to the new knowledge requires cognitive maturity and metacognitive abilities in acquiring (Long and Scaraella, 1979). Adult and adolescent leaners require problem solving skills and conscious attention in learning second language, while young leaners require less effort (Robert Bley-vroman, 1990). Writing will improve listening, speaking and reading skill (Tipawan Thongpak, 1991: 254:2), yet it has always been neglected and taught at the last stage (Bowen, 1994.143). Writing will enhance second language learners' skills in comprehending sentences structures, phrases and vocabularies. Second language learners will be able to apply the knowledge in expressing their ideas, stories and feeling (Raime, 1983:3). Accounting for the processes required in writing, second language learners would be able to give more analytical thought on the each structure written, which is coherence with Long (1981); in second language acquisition, it is important for second language learners to give (conscious) attention to form, or noticing through input and output, or corrective feedback to be efficacious. In addition, Schmidt (1983) posited that an explicit focus on form is believed to activate psycholinguistic processes.

1.1. The Nature Of Humans' Cognitions

The nature of humans' cognitions accounts for the problems found in Thai learners. In order to overcome this language phenomenon occurred in Thai learners, 'Language Equation' has been developed from the fundamental of Constructivism theory (George Kelly, 1955) which is the theory focused mainly on cognitive processes to create meaning. Symbols are created upon the agreement of members of a culture; therefore, it would be hard for a member of the non-ethnic groups to interpret.

When a symbol is given before a prototype has been created, humans cannot make a linkage to what it represents. When the word 'dog' is said, there is no direct or natural relationship between the word and the

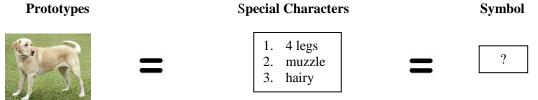
typical features of dogs. According to Fehr (1993), prototype is the broadest cognitive structure, are ideal or optimal examples of categories of people, situation, objects and so forth; therefore, it is important to create a 'Prototype' as a linkage to the symbol it represents.

Symbol		Special Characters		Prototypes
Dog	=	?	=	?

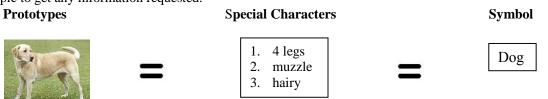
Likewise, when special character is given for the first time before a prototype or a symbol, humans also cannot make a linkage to what it represents.

Symbol		Special Characters		Prototypes
?	=	1. 4 legs 2. muzzle 3. hairy	=	?

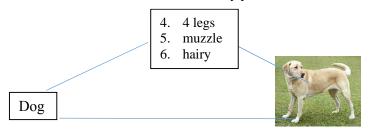
On the contrary, when humans perceive new things, we store the pictures of the object in our memory as prototypes. These objects will be recognized and categorized separately into groups with its special characters. This is because prototypes provide sufficient information for brains to extract for information.



Later on when a symbol is given to the prototype, our brains create a linkage between the symbol and the prototype which synchronized the whole information into one unit. This unit can be access from any topic to get any information requested.



The unit of information is rearranged by Ogden and Richards (1923) as a semantic triangle. At this stage, information can be accessed and retrieved from any point.



1.2. 'Language Equation' Fundamental

In learning English grammatical structures (a string of symbols), it is also hard for learners to make sense of unfamiliar symbols from the non-ethic group. According to Sington (1987) when there is a gap in Second Language knowledge, the best available solution is to rely on First Language

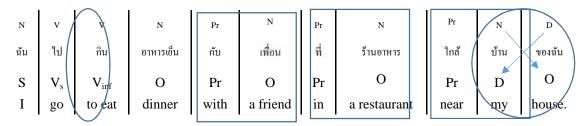
In Second Language Acquisition, Thai learners usually have the habit of forming up a prototype from the Thai language they are most familiar.

Example: a sentence being word-by-word translated from a source language (Thai) to the output language (English).

ฉัน	ไป	กิน	อาหารเย็น	กับ	เพื่อน	ที่	ร้านอาหาร	ใกล้	บ้าน	ของฉัน
I	go	eat	dinner	with	friend	in	restaurant	near	house	my.

Due to the differences between Thai and English grammar, many grammatical errors can be noticed. This usually causes confusion towards Thai learners who have little approaches to English in their everyday life. It is a very difficult for them to overcome these basic problems. Equalish uses this nature of Thai learners in boosting their writing skill.

Example: the same sentence being translated from a source language (Thai) to the output language (English) with 2 additional analysing processes with the understanding of Noun Phrase Structure order (Determiner Intensifier Adjective Noun), Verb type (the second Verb onwards is an 'Infinitive with to' in general cases.) and Complementary comes in a pair of Preposition and Object.



This time the result of the output language illustrates a grammatical sentence.

This process would be called 'Controlled Process'; a process which requires consciousness while being applied. Initially every human requires learning through 'Controlled Process' when no automatic routine has been learnt for each specific skill attempting to acquired.' This 'controlled Process' goes on until the skill becomes 'Automatic Process'. This transformation of 'Controlled' to 'Automatic' is called 'Skill Acquisition Theory' proposed by Bialystok and Sharwood Smith (1985); McLaughlin (1987). The most influential version would be 'Adaptive Control of Thought Theory' by John Anderson's. 'Skill Acquisition Theory' has clearly explained the transformation of 'Controlled' to 'Automatic' as a process required multiple numbers of relevant practice to acquire that certain skill. While brains are gradually passing through the process, the 'Controlled Process' is also gradually being withdrawn and taken over by the 'Automatic Process' in doing the same activity. These whole processes are called 'Proceduralisation' or 'Automatisation'. In other words, it is the process of changing knowledge (explicit) to ability (implicit). Example:

	_			_		_				
N	¥	¥	N	Pr	N	Pr	N	Pr	N	Đ
ฉัน	11	กิน	อาหารเย็น	กับ	เพื่อน	ត្តាំ	ร้านอาหาร	ใกล้	บ้าน	ของกัน
S	V_{s}	\mathbf{V}_{inf}	Θ	Pr	Θ	Pr	θ	Pr	Đ	θ
I	go	to eat	dinner	with	a friend	in	a restaurant	near	my	house.

1.3. Purpose Of The Study

The purpose of this research is to illustrate the 'Language Equation' teaching procedure and the development of 'Language Equation' learners by comparing from the result of the Pre-writing test and Post-writing test after the twin subjects has been taught via 'Language Equation' technique.

2. DATA COLLECTION AND ANALYSIS

2.1. Subjects

The research has been conduct on a pair of grade 6 Thai identical twins from the same school with similar language backgrounds to observe for the improvement in their English writing skill after a course of 4 chapters has been taken. The improvement will be judged on the selection of language structures, Nouns, Verbs, Determiners, and Prepositions.

3. Intruments

3.1. Instructions

The teaching material is designed to teach learners four different parts of speech required in forming sentences. In each chapter, the exercises were carefully deigned to focus on the objects related to the chapter; however, they were also designed to work coherently with other another; the knowledge gained in the first chapter is to be applied to the second chapter and so on.

- 1. Chapter 1: Nouns 6 types of Nouns will be taught
- 2. Chapter 2: Verbs 7 types of Verbs will be taught
- 3. Chapter 3: Determiners 5 types of Determiners will be taught
- 4. Chapter 4: Prepositions 4 types of Prepositions will be taught

This instrument was used as one of the exercises in the learning procedure. The subjects were to complete in series of steps:

1 | ฉัน | ไป | กิน | อาหารเย็น | กับ | เพื่อน | ที่ | ร้านอาหาร | ใกล้ | บ้าน | ของฉัน

Firstly, parts of speech are to be defined at basic levels. This is to be taught at the introduction level.

Secondly, parts of speech are to be defined at the second level with the aid of the first step.

2	N	V	V	N	Pr	N	Pr	N	Pr	N	/ D
1	ฉัน	ไป	กิน	อาหารเย็น	กับ	เพื่อน	ที่	ร้านอาหาร	ใกล้	บ้าน	ของฉัน
3	S	$V_{\rm s}$	V_{inf}	О	Pr	О	Pr	О	Pr	D	О

Finally, apply the 'Language Equation' English corresponding to the parts of speech defined.

2	N	V	v	N	Pr	N	Pr	N	Pr	N	/ D
1	ฉัน	ไป	กิน	อาหารเย็น	กับ	เพื่อน	ที่	ร้านอาหาร	ใกล้	บ้าน	ของฉัน
3	S	$V_{\rm s}$	V_{inf}	O	Pr	O	Pr	O	Pr	D	О
4	I	go	to eat	dinner	With	a friend	in	a restaurant	near	my	house.

The results would be collected from each twin's Pre-writing test and Post-writing test result (Post-writing test are available in all 4 chapters). The subjects were taught two hours a day and three days a week to sum up the 36 hours course.

Initially, the subjects were asked to complete a form which they have to expose their names height, weight, age and birthdate. Then they were asked to complete a Pre-writing test paper which seeks for their writing ability before taking the course. The topic given to the subjects were open; they could write on any topics which they are comfortable for a time limit of 15 minutes. Every subject required to have a Pre-writing test in order to keep records of their English writing before 'Language Equation' begins as their skill milestone.

After 'Language Equation' learners had gone through several exercises, they were tested their understanding with the Post-writing test; the topic given to the subject were 'free writing' on a condition that the knowledge gained on each chapter must be applied to see the improvement. This time 'Language Equation' the subject were to write under a constrain which was to utilise all Noun functions, Subject and Object Pronoun, Reflexive Pronoun, Possessive Adjective and Pronoun, learnt to create a story. In this exercise, 'Language Equation' learners were not required using the 4 'Language Equation' steps, unless they did not know where to start. During the Post-writing test, if the learners have problems with vocabularies, they are provided upon request. This exercise was designed to enhance 'Automatisation'; to move away from 'Controlled Process' or 'Working Memory' in other words. Once 'Language Equation' learners were qualified, they will be assigned to the next stage 'Verbs'. If not, they would be asked to repeat.

3.2. Pre-Writing Test And Post-Writing Test

The Pre-writing test and Post-writing test was designed to collect information based on the subjects writing skill. The topic given to the subject were 'free writing' on a condition that the knowledge gained on each chapter must be applied to see the improvement in:

- 1. Sentence structures
- 2. Conjunctions
- 3. The four parts of speech taught

4. FINDING

Research question 1: Would there be any improvement in the subjects writing skill based on the Postwriting test result?

Based on the observation (figure 1 and 2), the two Pre-writing test papers illustrated the writing patterns which were arranged in the same manner. "My name is I am ... year-old. I study at... school. I like..., I don't like... " With this memorized pattern, 'Language Equation' learners usually write with precision; it usually contains no grammatical errors. On the other hand, whatever exceeded the memorized pattern usually contains higher change of committing errors. The explanation given by the twins was the patterns were taught from a textbook in class.

During the process, Subject A has higher concentration in class than Subject B. After few notifications by the teacher, Subject A started realising the mistakes she repetitively committed as following (table 1):

- 1. an article in front of a Singular Noun
- 2. capitalise
- 3. punctuation marks

A new criterion is added to every chapter to put more awareness to the subject gradually. On the first Post-writing test (figure 3), Subject A has illustrated comprehending and the knowledge achieved from the first chapter:

- 1. Different kinds of nouns learnt
- 2. Articles: the English language
- 3. Conjunctions: if and when

On the second Post-writing test (figure 5), Subject A has illustrated comprehending and the knowledge achieved from the second chapter:

1. Different types of verbs have been use: Gerunds

On the third and fourth Post-writing test (figure 6 and 7), subject A has illustrated the adoption of prior knowledge to different chapters and to the new knowledge.

Table 1: Subject A's result in all 4 Chapters

chapter	number of errors	percentage	time (hours)
1	15	18.75	6
2	37	30.8	9
3	29	24.1	9
4	42	28	12

Research question 2: Does it give the same result to the second twin subjects?

Subject B, on the other hand, takes more time in realising and making precaution of the next possible error. She had less concentration on the work assigned. As a result, Subject B did not qualify in passing to the next chapter, and she had to repeat the first chapter again (table 2). While Subject A passed through the all 4 chapters, Subject B had to repeat Nouns chapter 3 times. After Subject B had repeated the first chapter 3 times, she was asked to do a Post-writing test as shown on figure 6. In some sentences, a conjunction was learnt and used in explaining her ideas. Moreover different kinds of nouns learnt have been used in some sentences.

Table 2: Subject B's result in Chapter 1

chapter	number of errors	percentage	time (hours)
1	57	71.25	9
1	43	53.75	12
1	24	30	10

5. CONCLUSION

The outcomes illustrate two different results between the twin subjects which it was not as expected. As the information derived from the four Post-writing test result, Subject A has shown significant improvements in many perspectives: written structures, word type selection and punctual marks. From chapters to chapters, the improvement can be traced from visible results. However, subject B has shown little improvements comparing to subject A. This may not cause by the difference in each twin's cognition, but the difference may account for their maturity which it results in the amount of concentration given in class and how much learners are open for it. The major differences in this technique are the logical steps and the analytical thinking required in learning. This may initially cause of the uncomfortable feeling to some learner who are used to the world's standard technique which will require some times to make the learners feel comfortable.

5.1. Discussion

Equalish was derived from the prior study Constructivism theory (George Kelly, 1955) to make sense of the cognitive process. Moreover, Equalish initiates second language acquisition with writing skill which is coherent with the prior studies: Tipawan Thongpak 254:2, Raime, 1983:3, Emig et al. (1977: 366-367), Long (1981), Schmidt (1983), White (1989).

5.2. Pedagogival And Theiretical Implication

Equalish was consistently designed with the fundamental of symbolic which initiates the second language acquisition process with writing. Once writing skill is acquired, it will benefit the learners in acquiring other skills. The clear comprehension in cognition helps in clarifying the ambiguity of the unseen process. If teaching materials or techniques are designed with the pure understanding in humans' cognition, all learnings will be minimised.

5.3. Limitation And Suggestion For Further Inquiry

This research has been conducted on 2 subjects in order to test the effectiveness of Eqaulish on a pair of grade 6 Thai identical twins; therefore, the outcome may not be valid to the research. In the future, qualitative research should be conducted on different groups of Thai students to make the technique more validate.

APPENDIX



Figure 1: Subject A's Pre-writing test before beginning the course.

My name is Pub. I am eleven years old. I study at ... school. My favourite subject is English and math. I don't like science and social. My favourite sport is badminton. My favourite band is one- direction. I like to go to the library every day. My hobby is read an English book.



Figure 2: Subject B's Pre-writing test before beginning the course.

My name is Poob. I am eleven years old. I study at ... school. My favourite subject is science. I don't like social. My favourite sport is badminton. My favourite band is one-direction. I like to go to library everyday.

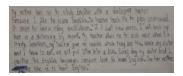


Figure 3: Subject A's Nouns Post-writing test

My mother take me to study English with a foreigner teacher because I like to learn English. My teacher teach me to play crossword in order to know many vocabularies. If I don't know words, I will look up them in a dictionary by myself. My teacher allow me to drink water when I'm thirsty. Sometimes, my teacher give me snacks which they are his. When my sister and I finish to eat, we will put litter into a bin. Every day, my sister and I practice the English language. Everyone love to learn English. So her mother and mine take me to learn English.

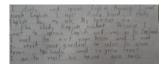


Figure 4: Subject B's Nouns Post-writing test

I study and speak English. Because I can't speak English. I must study heard. O study English by my self. My teacher me. I like study English subject. Because I want to speak English well and go to England. I want to visit your house and I want to visit your gardent in oder to graw trees. Nobody want to grow trees. I go to visit his house and hers.

Case upon a health one entity that his a should be all made he and that he has a graphy. It is a five, the law spike spike upon a health he are graphy and after training of a five-five health health as a grain spike upon a five-five health as a grain health and a five-five health as a grain health and a should have be the solid trains he as grain health and a five-five which is trained he with the solid trains he are man confidency the couldn't be solid trained he are man confidency the couldn't be solid trained he are man confidency the couldn't be solid to train the law bed a good highly, by him the relation to the law five trains and the solid health and the solid health and the five-five health and the solid health and the five-five health and the solid health and the five-five five-grain and law synthesis.

Figure 5: Subject A's Verbs Post-writing test

Once upon a time, there are many animals in a forest. All of animals love each other but one don't love anybody. It is a lion. The lion likes eating rabbit and other animals so all animals hate its. One day, the lion has a problem, the lion asks everyone to help him but nobody helps him. When the rabbit knows, the rabbit comes to meet the lion. The rabbit helps the lion everything. The rabbit try to solve a problem for the lion. The lion feels good with the rabbit. The lion stop eating other animals. Other animals live each other and the lion loves each other, too. The story teaches the lion that it should stop eating and does good things for everyone.



Figure 6: Subject A's first Determiners Post-writing test

In the sky, there is the sun, the moon and the stars. The sun is kind and the moon is bad. One day, the moon wants to bully the stars. The moon plans that it will steal the stars' picture which the stars love. In other day, the star are sleeping in their bedrooms, the moon comes and steals their pictures. In the morning, when the stars wake up, they see their houses that are stolen. The moon is happy that bully the stars success. The stars are crying. The sun is coming to see that why the stars is crying. The stars tell anything what is happen. The sun knows, the sun tells the moon that why the moon steals their picture. The moon tells anything. The sun tells to the stars what the moon says. The star plan to bully the moon by themselves. The next morning, the moon is going to apologize the stars this teaches the moon that it doesn't bully anybody because it makes people sad.



Figure 7: Subject A's Preposition Post-writing test

Once upon a time, there is a little girl. Her name is Kat. Kat is sorry for the orphan children so she tells her mom that she wants to donate to the orphan children and the poor children but her mother doesn't allow. Kat thinks that she must do something for her mother. She tells her friends that think same her in order to tells her mother that they want to donate too bit her mother doesn't allow. Kat tells her father in order to tells her mother that she does want to donate, her father agrees with her, he tells mother every day, then the mother changes her mind so she tells her daughter that she allows. Kat is very happy. Her mother tells her that she will donate for the charity, the orphan children and the poor children tomorrow the next morning, Kat tell her friends who want to volunteer for donating. In the end Kat and her friends donate to the poor children, the orphan children and charity, Kat and her friends are happy today.

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