

THE ROLE OF CONTEXT-BASED VOCABULARY LEARNING IN ASSOCIATING SOCIOLINGUISTIC CONTEXT WITH PERCEIVED IMAGE FOR LEARNERS OF KOREAN

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Abstract

The study aims to investigate how learners acquire sociolinguistic context that vocabulary carries through context-based learning with a multimedia tool, and impact of this learning experience. Recently developed Motion dictionary by Dr. Park, Mihi was used for this study. Motion dictionary (MD) is a video-based dictionary that searches the entire video (drama) library, and returns every video clip which a particular word was keyed in. MD was initially developed with an aim to provide students authentic examples of vocabulary usage that are rich in context and culture. Observation from a pilot test with five Chinese learners of Korean allowed us to generate two hypotheses: 1) Exposure to various context-rich video clips with a target vocabulary will enhance understanding of sociolinguistic context and language culture. 2) and this experience will increase motivation, especially when a mismatch between previously perceived image of vocabulary and the newly acquired sociolinguistic context from MD is capture. Further study with a bigger group of advanced learners of Korean will be conducted to test hypotheses with a journal writing, interviews, and an elicited writing test as methodology.

1 Introduction

Multi-media learning has drawn attention not only because it allows learners to use multiple senses to receive information, but also it actively engages learners in the learning process. In many foreign language education studies, positive impact of multimedia learning has been reported. Among those studies, studies in Korean language learning with multimedia teaching materials, teaching methodology and curriculum are actively being carried out since 1990s. Previous studies revealed that the effectiveness of multimedia learning is not attributed to the characteristics of the multimedia itself, but to learners who are using the tool, particularly, how independent or self-regulated they are. Self-

regulated learning theory states that learners can improve their learning abilities by choosing an appropriate metacognitive and motivative strategies (Schunk et. al, 2013). From this perspective, it is necessary to understand what determines successful use of multimedia, and how learners make use of the materials to learn, for instance, strategies, or individual differences of learners in motivation. Although a body of works dedicated to studying learners in relation to multimedia learning, the main method of examination was limited to evaluating the role of multimedia learning for group learner with 30-40 students in *formal* and *specific classroom situations*. On the contrary, studies on the process of *the self-regulated learning* using multimedia in the *informal* situation of individual learners are not actively conducted to understand the individual aspects of how learners learn various information including video in relation to multimedia learning. The current study is interested how a media-based vocabulary learning tool play a role in studying for learners of L2 Korean. The following research questions were addressed based on 'video', 'information', and 'metacognition' which are expected to influence the self-regulated learning process using multimedia.

1. What is the impact of the availability of video inputs for learners of L2 Korean in studying vocabulary?
2. How an amount of multimedia information influence learner motivation?
3. To what extent does the metacognition of learners of L2 Korean successfully lead learning through media-based vocabulary learning tool?

2 Theoretical Background

2.1 Motivational theory and Self-regulated Learning

The self-regulated learning is fundamentally explained by motivational theory that was derived from cognitive constructivist's perspective. From the view of cognitive structuralism, there is an inherent motive of finding information about humans. In other words, humans are searching for information from birth to death and trying to understand things that are not equal to their current level of understanding. Although many constructivists acknowledge the importance of social guidance and direct instruction from others (Ref), the most important emphasis is that internal motivation is to review self, behavior, knowledge among others (Schunk et. al., 2013). Self-regulated learning particularly made a strong focus on internal motivation to explain success of learning because learners with strong internal motivation pay more attention to their learning processes and outcomes compares to those who are not internally motivated. On the other hand, the use of external rewards such as praise or prize for learning motivation will induce an immediate response but learners will not be engaged in tasks where such benefits are not given. As a result, the studies emphasize that internal motivation is more powerful than external motivation, hence, self-regulated learning interests learners in a learning environment that enables them to activate their own learning motivations. As a result, if the challenging task is presented to the learner, the learning motivation and achievement of the learner becomes significantly higher. Presenting easy and simple tasks to learners may cause immediate interest, as in the case of external rewards, but does not enable learners to develop learning skills to feel fulfilling (Zimmerman, et al., 2012).

2.2 Cognitive Theory of Multimedia Learning

According to the cognitive theory of multimedia learning (Mayer, 2001), learners are actively involved in learning by attending to relevant incoming information, by organizing selected information into coherent mental representations, and by integrating mental representations with other knowledge. For example, in multimedia messages, learners will have active learning to pay attention to certain words and images, and arrange them into a cause-and-effect chain, to relate the steps to prior knowledge (Mayer, 2001:52-53). In other words, learners do active participation in learning to construct knowledge, not the passive acceptance of messages presented through multimedia. This argument also relates to the theory of motivation for cognitive constructivism as discussed above, and is more relevant to the current study regarding that it explicitly presents what conditions learning happens in multimedia learning. It can be explained that a learner's active learning process in multimedia learning may reveal that 'meaningful learning' occurs only when these three learning conditions are followed. Therefore, it is necessary to focus on the learning process of individual learners who can self-regulating learning and to conduct case studies on which factors activate and prevent these three conditions from being performed.

In one of the studies focused on multimedia learning by learners, Plass, J. L., Chan, D. M., Mayer, R. E., & Leutner, D. (1999), the visual effects of multimedia learning are more effective in foreign language education. Moreno, R., Mayer, R.E., Spiers, H.A., & Lester, J.C. (2001) have shown that learners have meaningful learning when they interact with characters in multimedia video. Through these studies, we can also expect significant learning to occur when learning Korean as a foreign language under the following conditions. First, the learning effects of multimedia will increase when sensory information presented by multimedia is interesting. Second, learning effects will increase when learners give special meaning to certain contexts, characters, and lines that are shown through multimedia. However, not all learners will be able to perform such a successful task, and in addition, individual case studies can only confirm whether such generalizations can be made under special conditions in which learners perform self-regulated, multimedia learning in an informal classroom.

2.3 Metacognition in language learning

Research on metacognition in language learning has been started in the developmental psychology of the 1970s, but its theoretical framework and methodology have been established by cognitive psychologists in the 1990s. Since then, there has been an increased interest in how humans monitor their learning process, and this interest has led to concerns, especially in education, about how learners control their learning activities. As a result, the findings that metacognition maximizes the effectiveness of learning by many educators has been emphasized so far. In general, the metacognition theory focuses on individual differences in self-assessment, controlling cognitive development, and learning, knowledge and performance skills developed through experience, and constructive and strategic thinking. Accordingly, education is being discussed on the basis that can explain how the metacognition theory can reach a particular learning objective and what characteristics of thinking can

be seen in the process (Hacker, et al., 1998). Especially, in the language education, discussions about the teaching method have strengthened the role of metacognition in teaching and learning. Ellis (1997) also argued its importance by promoting metacognitive goals that emphasize inquiry thinking about a target language in foreign language education or second language education. In this study, based on this previous study, we will evaluate the role of learners' metacognition in the process of vocabulary learning using multimedia which can lead to successful learning, especially at what point and in what way.

3 Methodology

3.1 Participants

Based on the above discussion, we designed the qualitative study to investigate the role of multimedia in self-regulated learning outside classroom. The study involved a total of nine Chinese female learners of L2 Korean. Out of nine, eight participants are studying Korean language education in Korean, meaning that they are interested in learning and teaching Korean language to foreigners. Except one participant, eight participants obtained level 6 (the highest level) from TOPIK (Test of Proficiency in Korean) and have no problem communicating in Korean.

Table 1. Participations demographic

ID	Age	TOPIK level	Length of staying in Korea	Particular note
A	24	6	6 months	-Master's degree in the Korean language education
B	30	6	4 years and a month	-Master's degree in the Korean language education -Currently working for a Korean company in translation. -Only participated in the first study and interview.
C	33	6	7 years and a half	-PhD candidate in the Korean language education
D	25	6	1 year	-Master's degree in the Korean language education
E	29	6	2 years	-PhD candidate in the Korean language education
F	27	6	4 years	-PhD in the Korean language education -Proficient in English after studying English literature in college.
G	23	6	7 months	-Master's degree in the Korean language education
H	25	6	2 years and 4 months	-Master's degree in the Korean language education -Currently working as an English teacher at a middle school in China. -Less frequent use of Korean.

I	24	4	1 year	- Studied design at undergraduate and read only few Korean courses. - Not confident in speaking
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3.2. Material

Media-based vocabulary learning tool, namely Motion dictionary (MD) was initially developed by Dr. Park Mihi at the National university of Singapore with an external technical team to serve individual vocabulary learning for students in the courses. MD is a media-based dictionary that searches the entire video (drama) library to return video clips which a particular word was keyed in. It aimed to provide various usages of a word to learners, particularly who are outside a target-language speaking society to enhance their sociolinguistic competence.

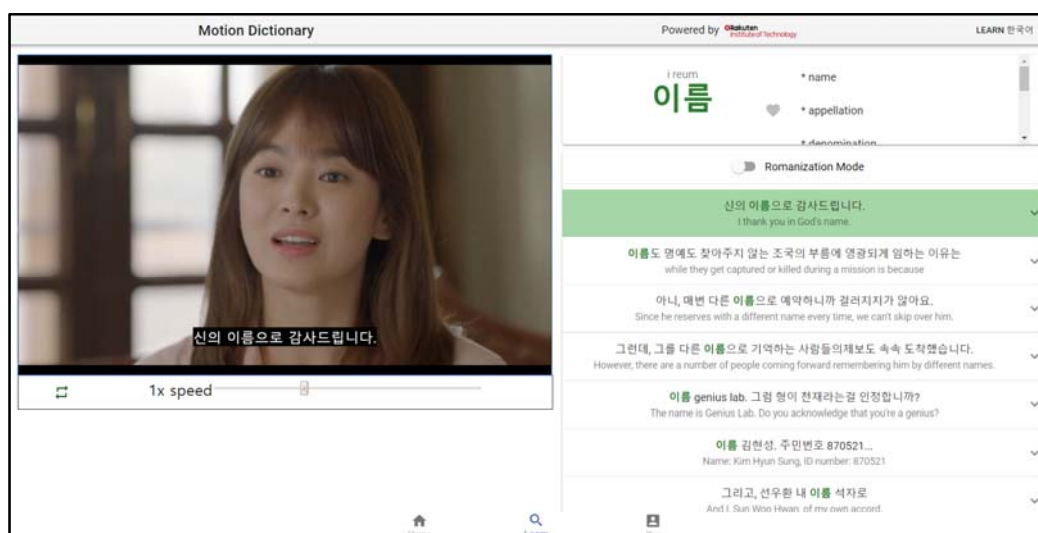


Fig. 1. The presentation of results to *ilum* (Name) in Motion dictionary

As shown in Figure 1, the target vocabulary is shown at the upper right corner of the screen with the Romanized pronunciation and English translated meaning of the word. This information is to support novice learners who have minimal knowledge in Korean. In the lower right corner, the list of video clips with the word mentioned are shown, and when clicked, the scene of 10 seconds to be shown on the left. Learners are able to watch the video repeatedly and adjust the speed of speech.

3.3 Data collection

Two studies were conducted for the current work: Study 1 with the self-selected vocabulary, and Study 2 with the selected list of vocabulary. For the first study, nine participants used MD to study vocabulary at their own choice for a week, at least four hours altogether. While studying, the participants were asked to keep a journal to record what they newly learned, what they were unaware

before, and what they already knew, in the hope to identify how learners make use of newly available resources in learning. An interview was followed by to understand the individual learning results and discuss about the journal.

The second study was designed to further investigate the findings of the first study. The first study revealed that two groups of participants; 1) those who were greatly influenced by visual inputs, and 2) those who are not affected by the visual inputs. Therefore, the second study aimed to examine potential factors such as individual differences or multimedia characteristics. In the second study, participants were asked to study again with a list of 30 selected vocabulary at least 12 hours. The 30 target words were selected based on the first interview where we were able to identified commonly interested words and expressions. The list of 30 words are shown in Table 2.

Table 2. Qualified vocabulary for secondary learning

1	office worker <i>hoysawen</i>	2	book <i>chayk</i>	3	eat <i>mekta</i>	4	cinema <i>yenghwa</i>
5	father <i>apeci</i>	6	university student <i>tayhaksayng</i>	7	attend <i>tanyeyo</i>	8	office <i>hoysa</i>
9	soup <i>kwukmwul</i>	10	job <i>cikep</i>	11	bank clerk <i>unhayngwen</i>	12	train <i>kicha</i>
13	take <i>kellyeyo</i>	14	cat <i>koyangi</i>	15	fish <i>mwulkoki</i>	16	fresh fish <i>sayngsen</i>
17	hit <i>chita</i>	18	leg <i>tali</i>	19	trash <i>ssuleyki</i>	20	listening <i>tutki</i>
21	vibes <i>cintong</i>	22	match <i>kyengki</i>	23	performance <i>kongyen</i>	24	price <i>kakyek</i>
25	officetel <i>ophisutheyl</i>	26	red bean fish pastries <i>pwungeppang</i>	27	flower viewing <i>kkochkwukyeng</i>	28	buble <i>kephwum</i>
29	subtract <i>ppayta</i>	30	military <i>kwuntay</i>				

The second study required a journal keeping with structured questions before studying, during studying and after studying.

Before Studying

1. Background knowledge: Write as much as you know about each word.
2. Image: Write the first image or perception that comes to mind when you see this word. You also can write how you feel about it.
3. Expectations: Write down what usage you expect to see of a word from Motion dictionary.

During Studying

4. What's New: Please write down any new usages that you find out from video clips.
5. Increasing motivation: Write down what interests you from the video clips and what

motivates you to study further.

6. Degraded motivation: Write down anything demotivates you in studying a word.

After Studying

7. Please write down what impacted you while studying.
8. Please write down the most memorable word you, and the reason of it.
9. Please write down the words you experienced challenges and difficulties in staying focused, and the reason of it.

Questions before studying were prepared, firstly to understand the background of target words that learners already have, secondly to awaken learners of consciousness of background of the words. Also, the questions are intended that learners are cognitively ready to maximize the impact of multimedia in studying. Questions during studying are designed to identify what factors in multimedia affect motivation in studying. Lastly, questions after studying are designed to determine what type of knowledge (e.g. audio, video, familiarity) is likely to be stored in learner's long-term memory. In other words, we can identify what caused a meaningful 'learning' to happen, not just 'fun' to learners.

4 Results

4.1. Study 1

The first individual interview was conducted while reflecting experiences with their own journals. It was aimed to identify participants' attitudes, learning styles, and motivation. Firstly, the findings based on the structured interview questions are shown in Table 3, followed by five commonly asked questions.

Question 1. What is your language use dynamic in everyday language use, between Chinese and Korean?

Question 2. Among four skills (e.g. listening, speaking, reading, and writing) of Korean, what is the most frequently used skill

Question 3. Do you make an effort to acquire new vocabulary consciously in everyday setting?

Question 4. How do you make use of newly learnt vocabulary?

Question 5. Please describe your exposure to Korean media.

Table 3. Common questions and responses from the first post interview

	Question 1	Question 2	Question 3	Question 4	Question 5
A	Korean 70%, Chinese 30%	Listening	Yes	I try to use it only when I found it practical, and interesting.	Enjoy dramas
B	Korean 50%, Chinese 20%, Cantonese 40%	Listening	Yes	As a translator, I always try to take notes and remember the sophisticated vocabulary that could useful for work.	Enjoy dramas

C	Korean 20%, Chinese 80%	Listening Reading	No	I don't use newly learned words or expressions until I am perfectly sure how to use them.	Only sometimes.
D	Korean 30%, Chinese 70%	Reading	Yes	I am eager to use newly learned words and expressions immediately.	Enjoy dramas and TV Shows
E	Korean 50%, Chinese 50%	Reading	No	Strategically, I visualize the potential situations to use a word and tried to construct a conversation with it.	Enjoy dramas
F	Korean 20%, Chinese 80%	Listening	No	I can remember words and expressions that I found interesting.	Enjoy TV Shows but only with Korean subtitle
G	Korean 70%, Chinese 30%	Speaking	No	When I learn very interesting colloquial expressions from TV shows, I right away make use of them in a conversation.	Big fan of Korean dramas and TV Shows
H	Chinese 100%	Not using it at all	No	I don't spend time for studying Korean anymore because I am teaching English in China now.	Enjoyed Korean dramas a long time ago, not now
I	Korean 50%, Chinese 50%	Reading	Yes	As I am preparing for TOPIK, I try to form sample sentences immediately after learning anything new.	Enjoy TV Shows but only see in Korean subtitle

4.2 Study 2

The second interview took place after the participants had completed their learning, at least 12 hours, or up to three days later. At the beginning of the second interview, the interviewer asked participants to answer what is the most memorable word or expression and why. Participants were asked to answer these researchers' questions without reflecting their journal. The participant's comments are likely to be stored in a long-term memory, which can be seen as an indication of meaningful learning. The details are summarized in Table 4.

Table 2. The most memorable things and the reason

	The most memorable things	reason
A	1. 오피스텔 Officetel 2. 냄새가 진동하다 The smell spreads everywhere. (It smells bad.) 3. 도둑고양이 A street cat	1. Because it was not shown in the video, I wondered what kind of space the office teel is like, so it is most memorable. 2. Because I thought it was a very interesting expression. 3. Because I had an image of a cat being gentle.
B	She didn't participate in the second study and interview.	-
C	1. 생선에 물려 죽을 놈! You should get eaten by a fish, you jerk! 2. 구닥다리 Outdated/Old-fashioned	1. I couldn't understand why fish were suddenly mentioned in the scene. So it is most memorable. 2. It was an expression I had heard, but I did not know how to use it.
D	1. 운반책 Transporter 2. 입에 거품 물다 Bubbles in the mouth. (speak with a great deal of emotion) 3. 사람을 달고 다니다 Hang on with people (Go around with someone)	1. I did not expect that the word "transporter" would come out in relation to the word "book." 2. Because I thought it was a very interesting expression. When I hear the expression, it comes to my mind. 3. I did not know that wearing a bell would mean the same thing as going with someone.
E	생선 가시를 발라 주다 Take the flesh off the bones from fish on one's rice	I happened to see the expression in the drama before. I did not understand it at the time, but I remembered this time.
F	도둑 고양이 A street cat	The heroine's image in the clip perfectly matched that of the stray cat. So it remains in my memory.
G	가족은 붕어빵 같은 거다. Families are like red bean fish-shaped pastries. (The family is bound to resemble each other.)	I am really enjoying the drama and I remember that scene.
H	고양이 쥐 생각해 준다. Look at a cat being considerate towards a mouse. (pretend to think the other person's situation)	It is intuitive to know what it means. And there is a similar expression in Chinese.
I	꼬리 치다 Wag a tail (seduce)	I only knew the expressions 'play the piano' and 'play tennis' in relation to the word 'hit'.

From the findings, we can confirm that, as expected, there is a case where 'background knowledge' (I's "Wag the tail"), 'image' (A and F's "A street cat"), and 'expectation' (D's "Transporter") are

influenced by learning process. Beyond this, there is a statement which the interesting parts of the collocation (A's "The smell spread everywhere", D's "Hang on with people"), and similar expressions in the mother tongue (H's "Look at a cat being considerate towards a mouse.") are influenced by learning process.

In Study 2, participants had to study 30 given words while writing answers for the questions, unlike the first study which they were free to select words of studying. This research design had an impact on learner behavior by allowing learners to focus more on the 'word' rather than the 'video' itself. Therefore, if even under these task-focused condition, learners are affected by the video, which may suggest that the video played a role more significantly compared to the first study. In line with this finding, we can also explain that motivation was increased because learners only got limited information through the video (A's "Officetel", C' "Fresh fish"). And there was also a case where the images were helped to embody the meaning of a target word (F's "A street cat") and the learners watched their favorite drama, so the scene and related expressions were remembered at the same time (G's "red bean fish-shaped pastries").

5 Discussion

5.1 The impact of video input on vocabulary learning

Participants who were greatly influenced by video inputs in the course of their learning shared that they enjoy watching Korean TV shows and even can pick their favorite drama. They also showed a common characteristic of watching TV shows without Korean subtitles or Chinese subtitles.

Participants in this group were able to display a vivid description of the scene and sentence in the video when they mentioned new discoveries. Participants reported that they could remember the video clip after watching it just once. Most of these cases were possible because they had already watched the entire episode prior to studying with MD. However, they were able to talk about the video clip with detailed description even though that particular drama episode is new to them. This means the significance of context being available even though it only provides 10 seconds of context.

(1) First interview with participant A

[00:05:00~00:05:41]

Interviewer: Have you experienced any previously known words become more specific while studying with MD?

Participant A: I thought the line (*taysa*) was used to identify an actor's script line, but in the video clip, a boss said *nay taysaka nemwu kinka?* (Is my speech too long?).

[00:13:16~00:13:41]

Interviewer: By the way, can you remember it by watching it just once?

Participant A: Yes, I watched it once only.

Interviewer: Wow, it is fascinating!

Participant A: I enjoy learning things that interest me. It was so much fun to learn the new usages through Motion dictionary.

(2) First interview with participant B

[00:16:28~00:17:01]

Participant B: I can repeat every line that I have seen from video clips perfectly.

Interviewer: Why do you think you can still remember them so perfectly? I can't believe it.

Participant B: Believe me, I've watched it only once.

[00:28:26~00:29:03]

Participant B: Korean words that I don't understand well are loan words. I remember a loan word 'nonstop' from the first episode of the drama, 'Boys Over Flowers.' It said that, "*Sinhwa hakkyoeyse cinhakhanun salamtulun ilehkey yuchiwenpwuthe iphakhamyen nonsuthop(non-stop)-ulo tayhakkaci cinhakhal swu issa.*" (Those who attend Shinhwa School can go to college from kindergarten straight away.)

(3) First interview with participant E

[00:36:33~00:36:52]

Siktang cal tanyeyo? (Are you doing well in the restaurant?) was an expression I didn't expect to come out. It doesn't mean you go to a restaurant and eat, but it means one works in a restaurant.

On the other hand, participants who were not significantly affected by the video in the learning process were reminded of a phrase without context. They had a common characteristic that they usually read Korean subtitles or rely on subtitles translated into Chinese when watching Korean TV programs.

(4) Second interview with participant F

[00:13:50~00:14:39]

Participant F: My friend couldn't speak Korean well, so she asked me how to use *kwukmwul* (soup) and *thangkwuk* (broth) in a different setting or for different food items. But I couldn't explain the difference but I realized that the *kwukmwul* should be the word to be used for that situation while studying with MD.

Interviewer: I see. Do you also remember the scenes from the drama together with the word?

Participant F: No, I don't.

(5) Second interview with participant I

[00:05:51~00:06:25]

Participant I: I remember the *kkolilul chita* (seduce) in connection with the word *chita* (hit).

Interviewer: Do you remember only an expression or the scene together?

Participant I: I only remember the expression, cause I memorized it.

Interviewer: Why did you memorize it?

Participant I: Because I've never seen that expression before.

However, some participants could easily recall the details of the video input but failed to pay attention to the content to be learned. One participant reported that she had watched most of Korean TV entertainment shows and drama, and understood almost everything without subtitles. She had more specific memories of the video than any other participants, including all the contexts that were not presented in the video clips from MD due to her previous full watches of those episodes. However, she

reported that she did not know what the target expressions mean.

(6) Second interview with participant G

[00:01:33~00:01:44]

Participant G: This is the actress, Jun Ji-hyun's line in the drama, *The Legend of the Blue Sea*, "*Kacoktulkkili pwungeppang kathayyo.*" (Family members look just like red bean fish-shaped pastries).

Participant G: Firstly, I have watched the drama. So, I felt that I kind of know what this scene is about when I encountered it from MD. This drama impressed me a lot in the past.

Interviewer: So it means that this expression is not new to you.

Interviewee: No, I've seen it before.

Interviewer: Do you understand that expression?

Interviewee: I do not know the meaning of that.

Interviewer: So, are you guessing its meaning?

Interviewee: The video did not display whole context, so I don't know what the expression means.

This statement shows a limitation in studying vocabulary with MD, especially computer-selected video clips. The challenge identified here was that the length of the video clip (currently 10 seconds) is not sufficient for some expressions to understand, or the scene is not directly associated with a sentence uttered by an actor concurrently. What another participant D wrote in the journal, before, during and after studying with MD about 'red bean fish-shaped pastry' also support this limitation. She thought of a lot before MD use, but in the course of her studying it with MD, what remains is a scene of a certain drama.

(7) Journal from Study 2 written by participant D

Before Studying

: It costs 1,000 won for three pieces. Street food in autumn or winter. Something like fish. It's like bread with cream in it. I remember buying a red bean fish-shaped pastry in winter. Warm and cozy feeling. There will be a scene where someone will buy the red bean fish-shaped pastries.

During Studying

: Nothing, I have enjoyed the video clips. The scene of selling it (the red bean fish-shaped pastries) in real life came to mind.

After Studying

: I have seen this frequently from the drama series of 'Response, 1988'.

Such examples suggest that availability of video inputs to provide context may be supportive for successful vocabulary learning, but not sufficient. In order to ensure successful vocabulary learning, conscious attention to the target word or expression is necessary. The following comments confirm this idea.

(8) Second interview with participant D

[00:19:35~00:20:07]

Interviewer: Do you remember this scene of the drama?

Participant D: Yes, I remember. There's a lady and a son together. But a man came in and told to the

son, "You look really like your mother."

Interviewer: How do you remember the scene of the drama?

Participant D: I didn't know the meaning of this word before. So I looked up the dictionary. Then I knew what it meant. After that, I viewed the scene again right away. That was the moment I realized how to use it.

This participant was motivated by the video clip to study further by using a dictionary to support and clarify her understanding. It is evident that, although video availability does not fully support a clear understanding of a word, at least it enhances self-regulated learning.

5.2 The impact of information on vocabulary learning

Providing limited information of the target vocabulary was expected to decrease learning motivation or become a challenge. However, it was found that limited information could motivate learning further, at least for some learners.

(9) First interview with participant A

[00:07:40~00:08:04]

When I saw the word *cipkey* (tongs), which I have not seen before. So I tried to find out more of the word. But there was no video clips available. It motivated me look up a dictionary. For me, I think the words that I searched in the dictionary remain in my memory.

[00:00:33~00:00:48]

Interviewer: Any words or expressions that you still remember?

Participant A: (Officetel.) I was very curious how officetel looks like because the video did not show how it is like. So I looked for some pictures of it after studying MD.

Perhaps, not all learners are motivated by limited information provided. But learners who perceived the lack of information desired to fill this information gap by further research on their own. If a learner is equipped with active and positive learning attitude, limited information is anticipated to motivate their independent self-regulated learning, ultimately long-lasting memory.

However, findings showed that no matter how important the information is, cognitively overwhelming information stressed learners, consequently decreased motivation. In addition, repeated familiar information would decrease motivation as shown in (10) and (11).

(10) Journal for Study 2 written by participant D

The most difficult word to learn: *ppayta* (take out), *chita* (hit)

Reason: These types of words are used in various contexts. The video showed such various contexts, but it was difficult to understand (differences) because it was mixed with a dialect. I was confused about which heading that I should use for a dictionary.

(11) Journal for Study 2 written by participant H

The most difficult word to learn: *tanita* (attend)

Reason: The word 'attend' was not difficult, but the context in which it was used was too complicated

to comprehend.

During the interview, further investigation on this journal report made to identify where this complication came from.

(12) Second interview with participant H

[00:46:48~00:47:33]

Interviewer: If the word has multiple meanings, would you find it fun and not complicated?

Participant H: It would be good if video clips for each meaning provided in a group, for instance, the first few clips are for one meaning, and the next few clips are for different meaning, like that.

The statement in (12) explains that, if information is delivered in a systematic manner, learners are able to digest it without cognitive block, moreover they will find it interesting rather than complicated.

5.3. The influence of metacognition in vocabulary learning

One of the most useful skill that required in all learning processes is metacognition. During studying vocabulary independently with the tool provided, learners who could apply relevant strategies, enjoyed the benefit greatly. Given that independent learning environment requires learner to be aware of what they know, and what they do not know to further proceed to the next step to explore additional information, this ability, metacognition is crucial to maximize the advantage of available information. The series of testimony how learners activated metacognition in the processing of learning were captured during the interview with participant C.

(13) First interview with participant C

[00:03:10~00:03:45]

What I know is *nwukwu* (who/someone). It's the most commonly used word to ask the subject of an action. I know it, but I never used it in my sentence, like "*nwuka kulayssnuntey* (according to someone)". I think I used *etten salam* (random person) rather than *nwukwu* (someone), for most of the time.

[00:04:09~00:04:33]

nwukwu (who), *nwuka nwukwulang sakwitun wulin wulintey*. (no matter who gets along with whom, we are remained as us) It sounds like *nwukwu* came twice here. The first is written as *nwuka*, I don't think I can produce such as sentence.

[00:05:51~00:06:11]

I knew the word *cey* to be used in *cey* (my), *yele* (various), *ceyilkwa* (the first lesson), as a prefix, "*nainun cey kakkak* (The ages of the people here are all various)." This expression was very new to me.

(14) Second interview with participant C

[00:14:00~00:14:29]

I don't think I'm going to combine two verbs like one verb stem with the word *tanyeyo* (to attend). I identified there was a sentence like "*mwuthiko tanita* (Why do you have food in your face?)." but I wouldn't be able to say that.

One notable evidence that a learner applied a strategy to structure mental lexicon while studying it with MD was a mind-map that a participant showed. Figure 2 is a note by participant I during the first learning process. The circle is the target learning vocabulary presented by MD, and the rest are written to network it with previously known words.

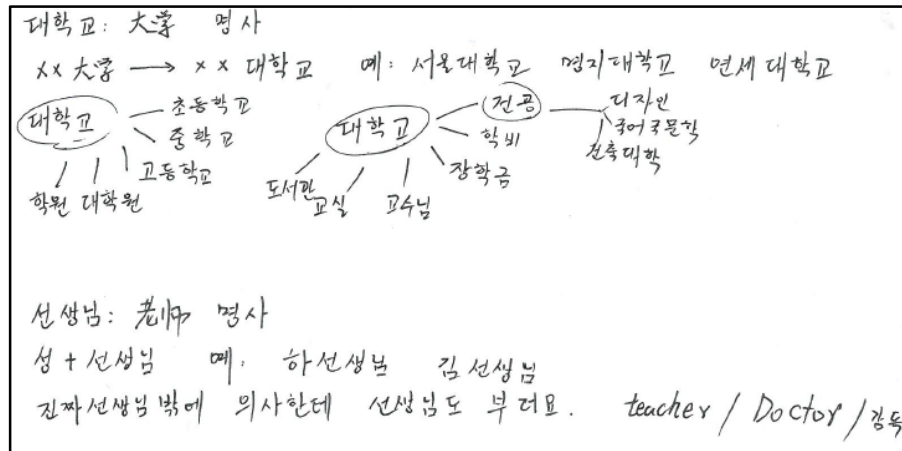


Fig. 2-1. The mind-map created by Participant I during the first study (the original document)

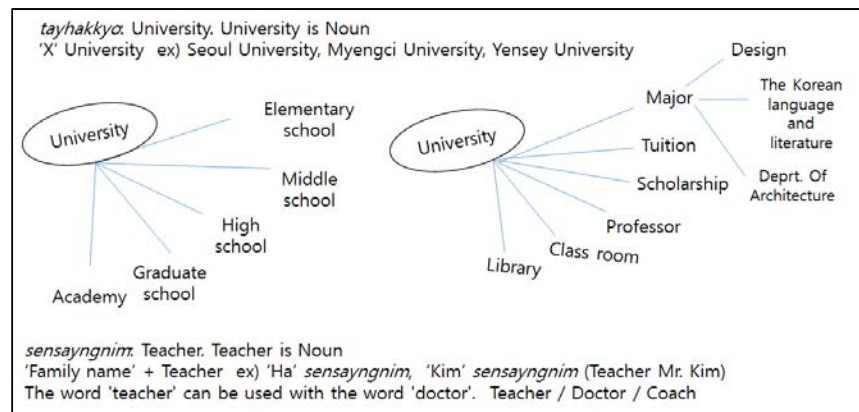


Fig. 2-2. The mind-map created by Participant I during the first study (Translated)

However, simply activating metacognition does not guarantee a successful learning. In addition to activating metacognition, building meaningful connection between knowledges (Mayer, 2006) is required to innate newly acquired knowledge. As the participant E reported in (15), the phrase *nosang kkalta* (to drink on campus grounds) is more in memory than the phrase *kyengki thata* (to be affected by the economy) because she valued the prior phrase highly to be more meaningful with her daily life in campus. Participants wrote that they were curious about what *nosang kkalta* meant during the second learning process, but could not remember the expression after the work was over. Although it was a newly discovered expression, it failed to build a meaningful connection with existing knowledge for participants E.

(15) Second interview with participant E

[00:35:20~00:35:58]

nosang kkalta is an expression that can be related to college life. On the other hand, *kyengki thata* is a word that can be mentioned in economic situations. So I felt distance from that expression. And I didn't explore the meaning further (cause it was not useful to me).

Meanwhile, we found that there was a large gap between the background, the image, the expectation and the prior knowledge, resulting in increased motivation to be significant in learning.

(16) Second interview with participant D

[00:38:57~00:39:12]

My idea of bubbles was fantastic, transparent, pretty. But “*ipey kephwum mwulta*” (bubble in mouth) is such a white bubble that it's so creepy disgusting. So it was impressive.

[00:40:24~00:40:48]

Interviewer: Don't you use that expression in Chinese?

Participant D: I say so. But I didn't think of it at all until I viewed the video clips from MD. I thought it would be an expression related to economics, but I never expected the word bubble to appear on the video in that way.

(17) Second interview with participant H

[00:03:48~00:04:23]

Participant H: The expression, *namsayka cintonghata* (It smells too bad) is impressive.

Interviewer: Why do you still remember that?

Interviewee: *cintonghata* literally means to vibrate, but I did not know that I could use this word to say “smell is bad”. So I could remember it.

In (16), participant D has come up with positive images that are transparent and fantastic before experiencing video clips from MD. After learning the new collocation, “bubble in one's mouths”, it added a new image that is totally different from what she has known, which enabled the learner to store it in long-term memory. It is anticipated that this long-term memory is attributed to metacognition that helped the learner to identify the gap between prior knowledge and newly acquired knowledge. The statement in (17) also displays that participant H is aware of the process of learning and tried to make sense out of known knowledge and new knowledge.

To sum-up, self-regulated learning occurred when learners identified a meaningful connection between various knowledges, which ultimately motivate them studying further. More importantly, those who are aware of learning process and knowledge gap could go beyond given materials to explore further information. In other words, learners who are equipped with metacognitive skills, found video clips useful, interesting, and helpful in learning due to its trigger to build meaningful connection.

6 Conclusion

The current study explored the impact of context-based vocabulary learning with multimedia for

learners of L2 Korean in expanding their understanding of known words. A qualitative study was conducted to investigate the impact of video inputs, and information in learning, in the form of journal writing and two individual interviews. Furthermore, the role of metacognition was investigated in how it affects learners' acquisition of vocabulary with multimedia inputs.

The study revealed that the availability of video inputs in vocabulary learning enhanced learners' understanding of context, ultimately various usages of a word. The discovery of new usage of a word motivated learners further researching a word with additional resources. Another benefit of using context-based vocabulary learning was long-lasting memory of the target word due to meaningful connect build with video inputs, and information. As stated in Mayer (2014), since not all forms of motivation are effective in enhancing learning, two things should be noted in the multimedia learning process: The first is that learners should not be cognitively overloaded by unnecessary processing, and the second is to ensure that they do not become too distracted in the process of processing essential information. Our findings support his argument in this regard.

The study also found that the key to maximize the benefit of context-based vocabulary learning with multimedia is metacognition. Learners who are enhanced in metacognition could successfully analyze newly acquired information in building meaningful connection with previously known facts about existing words. From pedagogical perspective, explicit encouragement for applying strategies in multimedia learning of vocabulary would support successful learning, further self-regulated learning for L2 learners.

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