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ISSUES IN EFL

Issues in EFL

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MISSION STATEMENT

Issues in EFL is a semi-annual, entirely student-run academic journal which aims to support Sookmyung students in their study by providing insightful and up-to-date community-based articles on areas of interest within the Sookmyung MA TESOL course and beyond.

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The Issues in EFL Journal Committee is open to all current Sookmyung Women's University MA TESOL students, and relies on their support. There are a variety of roles available, regardless of experience. Please check the MA TESOL message board for information on when the next committee opens. Email enquiries can be made to tesolma@sookmyung.ac.kr.

Community Contributions

Compiled by
Alexandria Malfitano

Alumni Column

This semester, we asked a number of alumni to tell us how the practicum aided them or how they viewed the benefits of taking the practicum after graduating. These were the responses collected.

Alexandria Malfitano, Fall 2018

When I initially enrolled in the graduate program, I had never actually held a full-time or professional teaching position. Where normally the lack of experience would hinder the post-graduation job search, I found my practicum experience did a lot to overcome where I was lacking. Having the experience on my resume and being able to include a well-constructed teaching philosophy and online portfolio in my submitted documents to teaching positions boosted my value as a new teacher and opened many doors. When I met my current employers, they were impressed with the nature of my action research I completed during the practicum, and despite the lack of hagwon experience, found my overall research and practicum experience valuable and offered me a position with them. For any teachers really looking to boost their resume to make a jump to a new position, the practicum does nothing but help.

Jeehee Kim, Fall 2018

I joined the practicum teaching after graduating the program in order to gain some experience of teaching university students. What helped me the most as a teacher in practicum was the lesson planning. Before the practicum, it was still difficult to smoothly apply teaching methods that I learned from courses to my actual lessons since the traditional, boring method was still the most familiar and easy to implement. However, through the practicum, I got more used to designing lessons where students play an active role as a learner and can gain practical skills through a variety of engaging and well-structured activities. It was surprising to see myself getting better and better at lesson planning, making reading homework, and teaching in English week by week. The practicum gave me the confidence that I can actually make my own lessons and materials using theories and better teaching methods that we learned from MA courses. I cannot say it was easy, but it IS WORTH it!

Charles Williams, Fall 2018

Whereas the thesis lets you really focus on your own points of interest, I felt the Practicum let me draw from all my previous classes and apply those lessons in a real class. I think the challenge is adapting the methods to each new teaching situation.

Bernadette Manalastas, Spring 2018

My aim after graduation was to acquire a university teaching position and the practicum played a huge role in achieving that goal. First, the practicum helped me polish my resume, I created my first professional webpage (portfolio), and refined my teaching philosophy - which held the possibly of sparking the interest of employers. Second, during my job interviews, I emphasized my experience teaching university students and talked about how Professor van Vlack and Professor Rozells would provide feedback to improve my teaching skills. Finally, I adapted many techniques I learned from practicum to my classes such as the needs analysis, lesson planning, connecting with university students, and lastly, reflecting on my skills as a teacher and my students' improvements.

Do you have questions for the alumni? Ask your journal committee next semester and they'll see what they can do to get your questions answered!

By Jeehee Kim

HOW TO APPLY FOR PhD OVERSEAS

> For those who enjoy studying in the MA program and want to study more in the field, pursuing for PhD can be a great next step. A PhD program can be considered similar to the last semester of a MA program. It seemed similar, at least, to me. However, there are a few differences when it comes to application processes. Since I had not known that it would take much time and effort, I delayed starting the procedures and then rushed all the procedures in three months. I hope this article where I present application procedures and share my personal experience of applying for a PhD program in Education University of Hong Kong can give you a good idea of what it is like to apply for a PhD so that you can prepare with enough time.

01 Find your research interests

In the UK system, research starts right away, which means that you should have a thorough research plan before the program starts. This is why a research proposal is required and matters in applications and why identifying your research interests is important. Put a good amount of time and effort thinking about what motivates you to study more and what interests you. Without a clear idea of what you want to research, the whole application process can be harder. In my case, I was going to apply for a PhD in the same year I graduated from the MA, but I was not sure about what I want to research.

Therefore, I decided to have more teaching experience for one more year. The experience of teaching all different age groups helped me see the problems in English education policies and motivated me to study about them. Now that I got certainty about what I wanted to do, every process seemed easier and clearer. This first step of identifying your research interests is the most difficult but most important process. Thus, take enough time for finding your research interests and remember that reading articles, attending workshops, talking with professors, and gaining more teaching experiences can help you get ideas.

02 Research

Once you have found your interests, it is time to research! It does not mean starting an academic research on the topic, but means searching for PhD programs, professors to guide you through the PhD journey, and scholarships to support you financially. It is better to narrow down the country first since the US model is different from the UK one. First, the duration of a program is different. Doing a PhD in the US usually takes 5 years with courseworks for two years in the beginning whereas the UK model usually consists of one-year coursework. If you want more courseworks to sophisticate your research ideas, the US model will be better. In addition, admission requirements are different.

For example, PhD programs in the US require GRE score for which people usually go to a private institution and study. Considering several factors such as duration of the program, quality of the program, the number of available scholarships for you, general living conditions and so on, choose a country and start browsing programs, professors, and scholarships. This process also takes a while as you have to visit several university websites, check the ranking of the university and the program, read or at least skim through professors' research, and check the eligibility of scholarships. Once you narrow down the professors who you want to work with, you have to contact them and see whether they are willing to take you as their research student.

I chose to apply for this specific university for several reasons. At first, I only thought about doing a PhD in the US because I was more familiar with American culture. However, I thought I would not need more courseworks after majoring in TESOL in both BA and MA and I wanted to get the degree fast. Then, I got to know a national scholarship in Hong Kong (Hong Kong PhD Fellowship Scheme), and it seemed Asian context would fit my research interest better. After deciding to studying in Hong Kong, I looked through the universities participating in the Fellowship Scheme. Fortunately, I found a professor whose research works interested and inspired me. I contacted the professor, showing my interest and asking if she could be my supervisor. The sequence of narrowing down the programs you would apply for depends on where you put emphasis on: prestigious programs, potential supervisors, or scholarships.

03 Check admission requirements thoroughly and prepare the documents

Once the professor you have contacted shows willingness to take you as his or her student, you should check the admission requirements of the school thoroughly. Each school has different admission requirements and application process. Check the deadlines for each step for each school, and make sure that you read all the instructions carefully.

Prepare required documents. Documents that are usually required by many schools are official transcripts of BA and MA, resume, letters of recommendation, and English proficiency test score such as TOEFL or IELTS. Some schools require Statement of Purpose (SOP) or Research proposal. Before writing either SOP or research proposal, read the instructions and guidelines carefully in order to cover what the school wants. In my case, the school required a three-page-long research proposal, and research plan vision statement which is similar to SOP was required for the national scholarship. The research plan vision statement asked about past research experience, reasons for wishing to pursue PhD studies in Hong Kong, long-term career plan, aims, and interests for future developments after graduation, and contribution that I would like to make to society.

Since I had a clear vision, goal and research plan, writing the research plan vision statement was pretty doable. However, as for the research proposal, it took about two months for me to narrow down the research topic, read relevant articles, and write up the proposal. In addition, the first research idea was rejected by the professor because there were already many similar studies done. I kept thinking about the new research topic constantly and read news about English education in Korea, and the new research topic came to mind finally. Then, I spent several hours reading and writing again in Sookmyung library every Tuesday and Thursday and some Saturdays, and finally got confirmation from the professor that the research proposal was good.

Getting copies of diplomas and transcripts is not difficult. Asking professors or other eligible people for a letter of recommendation can be also quite easy if you have a good relationship with them. It is writing up SOP and research proposal that really takes time and effort and most of all, matters much in admission.

04 Apply

Having all the documents ready, finally it is time to actually apply for it! Usually, schools have their own application portal system and specific guidelines for each step. Read them carefully, go ahead and apply.

When applying for a PhD, it takes quite amount of time to find the programs and professors that match your interest, to prepare different documents, to take a test if necessary, and to write SOP and research proposal. Therefore, I suggest **starting the first two steps in advance whenever you have time and make a note of your research ideas, the programs and the professors, and the application requirements for each program if you are interested in pursuing PhD. This will help you feel less rushed and nervous when actually applying for one. I hope the article helps people who think about getting PhD understand the procedures and prepare well in the future.**

Final Papers

Associations and Learning

Jessica Steyn

Human Learning and Cognition

1. Introduction

The following paper is a conceptual exploration of how associations underlie learning and memory, and how this can be better understood to aid language learning. The research question posed by this paper is: **How do associations affect language learning?** The basic assumption of this paper is that associations are links between items/ events/ properties, this is at work at a macro level and at a micro level. For instance, at a micro level LeDoux (2002) discusses how neurons are linked when they are activated together, this is mirrored to a larger degree in that neural networks are linked when they are activated together. At the level of language, Bybee (2008) discusses how words are linked cognitively through use, so, hearing two words used together frequently will lead to them being linked cognitively e.g. Good + morning. This paper will explore in depth how these associations are made and how these processes affect language learning. The words association, link and connection are used interchangeably throughout this paper.

This paper is guided by theoretical frameworks of neurocognitive approaches to learning and memory and cognitive linguistics (CL) approaches of language. Both neurocognitive approaches and CL view the brain, and its functions as a connected network of systems. Both approaches view human's language ability as a product of our cognitive capabilities, emerging out of domain general processes. Both approaches view learning (in general and learning related to language) as a change in behavior as a result of experience (LeDoux, 2002, and Bybee, 2008). Reviewing of literature from both theoretical frameworks, this paper finds that associations are at work on all levels of learning, from a cellular level (learning involves the association of neurons), to a conceptual level (learning involves building categories and networks through associations). Taking seriously the role of associations might aid pedagogical approaches to language learning (second language and foreign language learning will further be referred to as L2 learning).

As an EFL teacher, pedagogical approaches that take into consideration the actual physical processes happening in the learner's brain and the effects of context on these processes with regards to language learning is highly beneficial. In the TESOL course, Human Learning and Cognition, the process of association emerged as highly distributed in all processes of learning, memory and language. Generally, it can be argued that more meaningful associations and more diverse associations will result in better learning (encoding and retrieval of

information). Typically, in my EFL class, associations are explicitly made between the learners L1 (Korean) and the target language (English), so an English form is explicitly associated with a Korean form. For Example, 개 - dog, these associations are usually reinforced through listen and repeat drills, the goal is to imitate native speaker pronunciation with a focus on form rather than meaning in context. While these are useful at first, it is clear that learners make implicit associations at all levels of learning. A problem that L2 learners might come across in the language classroom is interference between cross-cultural and cross-linguistic associations typical of the L1 and the target language (TL), further, increasing global diversity and proliferation of multilingualism means that learners will likely encounter high degrees of variation of L2 use. What may be necessary in my class is a pedagogical approach that extends the associations away from linking Korean forms to English forms, and look to aid L2 learners in making meaningful associations based on actual use, drawing on pragmatic and contextual meaning/ functions.

The following sections review current literature on the brain, learning, and language in order to answer the research question posed by this paper. The literature review in section 2 starts with an exploration and conceptualization of learning and memory from a neurocognitive perspective, reviewing literature by Terry (2006), LeDoux (2002), Alberini and LeDoux (2013) and Lieberman (2000, 2004). Expanding from the physical nature of associations to the conceptual nature of associations, a Usage-based model of construction grammar is explored (Bybee 2013,), the discussion then moves to explore frequency effects and the nature of L2 learning (Bybee 2008, Ellis 2006). CL is a useful departure from the neurocognitive theory as it is based on two chief principles; 1) aiming to make explicit general principles that are true for all features of language and 2) relating language processes and structures to cognitive processes and structures. Section 3 will discuss the findings in the literature review with regards to the research question posed above, and point to possible pedagogical approaches that take seriously the role of associations, memory reconsolidation and retrieval (Albernini and LeDoux, 2013, and Kang, Gollan, and Pashler, 2013) as a means to aid L2 learning.

2. Literature Review

2.1 What is learning?

2.1.1 Learning and behavior

Neurocognitive frameworks view learning as driven by experience. Terry (2006) defines learning as "a relatively permanent change in behavior, or behavioral repertoire that occurs as a result of experience" (p.7). This definition points to some important points, the first is that when learning occurs it is a physical thing, a change in our cognitive processes leading to a change in behavior. Second, learning results in having stored the new knowledge or behavior in our long-term memory. Memory can be divided into 3 stages/ processes; encoding, storage and retrieval. From a neurocognitive perspective the act of learning involves encoding information in our memory. This information is stored and later

retrieved. Following is a discussion of the physical result of learning, because this paper is informed by recent neurocognitive theories, it is important to discuss what happens when information is encoded in our memory, specifically, what happens in our brains when we learn something. Later, the retrieval process and its role in learning will be taken into consideration too. As the following discussion will show, associations between neurons are at the center of learning.

2.1.2 Synapses

Simply put, when we perceive stimulus, neurons in our brains activate, this is a physical process. LeDoux (2002) describes this process as synaptic transmission/ neuronal firing. According to the publication, Brain Facts (2018), we have around 86 billion neurons in our brains. These neurons potentially connect with thousands of other neurons, and through their connections they create neuronal networks across our brains. LeDoux (2002) argues in his book *The Synaptic Self*, that who we are is a result of the "patterns of interconnectivity between neurons in [our] brains" (p.2). Neurons are connected by synapses; these synapses are responsible for the storage and flow of information in the brain. LeDoux (2002) states that synaptic transmission/ neuronal firing is incredibly important for most cognitive functioning, "most of what the brain does is accomplished by synaptic transmission between neurons, and by calling upon the information encoded by past transmission across synapses" (p. 2).

LeDoux (2002) describes synaptic transmission as the process where by a neuron is activated (pre-synaptic terminal) and sends electrical signals down the axon, the axon releases a chemical neurotransmitter, this chemical travels across the synaptic space and is received by the dendrite of the receiving neuron (post-synaptic terminal), this chemical then triggers electrical signals in the receiving neuron. "Much of what the brain does involves [this] electrical-to-chemical-to-electrical coding of experience" (LeDoux, 2002, p. 47). The incredible thing to note is that neurons can have thousands of dendrites and each dendrite can have thousands of synapses (Brain Facts, 2018). Synapses are key to our discussion in this paper as synapses are where associations are physically formed.

2.1.3 Learning, Synaptic plasticity, and networks

Understanding learning requires an understanding of what happens in the brain when we learn. We have the ability to learn because of the brain's plasticity. Plasticity means that the connections that exist between neurons in the brain are susceptible to change, this change is a reaction to experience and the environment (Brain Facts, 2018). As LeDoux (2002) describes, the brain is plastic, and as such "modifiable by experience, which means that the synapses involved are changed by experience" (p. 8). Both Lieberman (2004) and LeDoux (2002) discuss the phenomenon of long-term potentiation (LTP) with regards to how synapses change. LTP shows that the connection between two neurons in a pathway is strengthened when a high electrical signal is sent to the first neuron, this potentiation remains after a long period of time. The synapses that are involved in the

potentiating experience are changed, not the entire pathway. If two pathways are stimulated electrically (have a potentiating experience at the same time) along with a weak stimulus, the strong and weak stimuli are associated, and the result is that LTP occurs in both pathways. This process strengthens the response to a weaker stimulus because it has been associated with the stronger stimulus. LeDoux (2002) states that LTP occurs in learning, and this leads to a discussion synaptic plasticity. According to Brain Facts (2018) synaptic plasticity is "the ability of synapses to alter their strength by changing their size, shape, number of receptors, and amount of neurotransmitter released" (p. 126).

LeDoux (2002) states that synaptic plasticity (the change in synaptic connections) "underlie learning and that memory is the stabilization and maintenance of these changes" (p. 134). LeDoux draws on Donald Hebb's oft cited notion of 'neurons that fire together wire together' (also called Hebbian plasticity) to explain how connections between neurons are made, how changes in synaptic connections occur and how these are strengthened. According to Hebb (1949);

> When an axon of [neuron] A is near enough to excite [neuron] B or repeatedly and consistently takes part in firing it, some growth process or metabolic changes take place in one or both [neurons] such that A's efficiency, as one of the [neurons] firing B, is increased.
>
> (As cited in LeDoux, 2002, p. 135).

So, for two perceived stimuli to be associated together in the mind, the neural representations of the two stimuli must be connected. An association is formed between the two stimuli because "a neuron (or set of neurons) receives information about both stimuli" (LeDoux, 2002, p. 135). Lieberman (2004) also discusses the neural basis for learning and synaptic plasticity. Lieberman states that "the strength of these [neural] connections can be altered by experience" (p. 78), and that learning depends on the synaptic connections between neurons. The two ways that connections between neurons can be strengthened are "an increase in the ability of the first neuron to produce neurotransmitters or an increase in the ability of the second neuron to detect these neurotransmitters" (Lieberman, 2004, p. 79).

LeDoux (2002) discusses the theory of neural selectionism/ neural Darwinism, this theory shows how synapses compete to stay alive. Synapses that are used survive, while those that are not used die. Our experiences result in the selection of certain synapses "by initiating and reinforcing patterns of neural activity that involve them" (LeDoux, 2002, p. 73). Because people have different experiences, they end up having different patterns of connectivity in their brains. So, as per selectionism, synapses and their connections are kept if they are active, and connections that are not used are lost. The other relevant theory discussed by LeDoux (2002) is an instructional model, in accordance with this theory, neuronal activity also results in synaptic complexity, and thus results in new connections as well as stabilizing preexisting connections. Here, we can see how important associations between neurons are as neurons depend on associations (with other neurons) for activation, strengthening and survival.

Mirroring LeDoux's (2002) discussion of action potential, our lectures touched on the notion of the threshold level of synapses, it is an important note here regarding the preceding discussion of reinforcing associations between neurons, as they may potentially be lost. According to Brain Facts (2018), action potential is "an electrical charge that travels along the axon to the neuron's terminal, where it triggers the release of a neurotransmitter" (p. 121). This occurs when the neuron's dendrites receive enough signals to trigger the action potential, the electrical signal (the action potential) travels along the neuron's axons (positively charging the neuron) and towards the next neuron in the network (Brain Facts, 2018). Simply put, the threshold level of a synapse is the amount of electricity required to activate a neuron and its synapses. When a synapse is activated often this threshold level decreases because action potential is generated, meaning that some energy is left over, and can be used the next time it is activated. Thus, the reactivation of that synapse will require less energy, and will be easier to activate. This demonstrates frequency effects at work at the level of neurons. The frequent activation of a neuron and its synapses will result in a lower threshold, further, a lower threshold will result in easier activation next time around. Drawing from earlier discussions, synapses that are used survive, while those that are not used die. Synapses that are not used will have a high threshold level and thus will require more energy to activate, further, this could lead to even more inactivity and ultimately, synapse loss. The fact that connections/ associations can be lost is important because it shows that learning is not a simple matter of just making associations.

There are many reasons why a connection can be lost, or why an association can be weak. Important to recognize here is the role that weak associations, or inhibitory neurons/ neurotransmitters may play in learning and memory. According to Brain Facts (2018) about 80 percent on neurons are excitatory (produce neurotransmitters that make it more likely to fire, activate other neurons and associate) and 20 percent are inhibitory (produce neurotransmitters that reduce the likelihood of firing, activating other neurons and associating). It is easy to see how the feedback between excitatory and inhibitory neurons, neurotransmitters and processes is especially important in learning. For instance, perceptual stimuli that activate neurons will also have inhibitory neurons acting on them, so because all experiences are encoded in the network, inhibitory processes will support the activation of relevant neurons in relation to the context of the experience. For example, if a learner hears the utterance "good morning" in the morning, what will generally be activated more strongly is the relevant neurons and associations for that context, not every single instance of the word "good" that they have ever experienced, inhibitory processes will work to decrease the likely hood of an utterance like "good grief" from being activated, if it is not strongly associated with that context. Essential here, is that context drives activation and inhibition.

The interaction and feed-back system of excitatory and inhibitory neurons work together to organize neural networks on the brain. The next subsection will

show how association plays an important role in the organization of the brain's networks.

2.1.4 Networks

According to Lieberman (2000) neurons are organized and function within a distributed and parallel network. In his discussion of distributed neural networks, Lieberman draws on Hebb's (1949) theory of synaptic plasticity, as discussed earlier, to make a case for a distributed network model of the brain. Lieberman discusses how in this view the neural network being exposed to repeated stimuli will strengthen the signals in those pathways that are repeatedly fired and the connection between those neurons will strengthen. In the distributed neural network model these pathways that are activated to send signals in response to stimuli "attain higher conduction values" (p. 25), and these strengthened pathways hold the network together. Lieberman also states that distributed neural networks are redundant in that representation is distributed throughout the network. So, every instance of a stimuli is stored, and is stored all over the network depending on what neurons have been activated, and connected in varying strengths. 'Rules' are formed/ emerge out of the categorization of these stored instances, and represented in the form of exemplars (discussed in section 2.2). According to Lieberman, "learning involves structural change, the modification of synaptic weights that build up a representation of rule-governed processes in the network's hidden layers" (p. 26). Synaptic connections change as a result of experiences. All experiences are represented in a distributed manner in the neuronal network, from which information is categorized in radial networks in relation to the strength of their connections to one another. When a person has a new experience, this can change synaptic connections, and alter the network, and as a result learning occurs. Out of these connections between neurons, networks emerge. On a larger scale than associations between neurons, whole networks can become associated and linked. So, associations are made within networks and across networks. Networks are self-organizing in their formation and association, particularly, this process is context driven (Lieberman, 2000). The emergent network is redundant in that all experienced are encoded, but this 'redundancy' is meaningful and builds connected networks. The cognitive system emerges out of this network organization. Neural and cognitive networks are self-organizing, these networks emerge from the connection and associations made between experiences and already stored information, this is implicated the important role retrieval plays in learning. Associated networks are driven by use and experiences, input is processed and interpreted in relation to existing structures and information. It is easy to see how processing new information and extrapolating meaning in a network of associations will be more efficient that of a lesser established network. There will be more information to draw from in which to make sense of incoming information. According to Brain Facts (2018) "to make sense of our moment-to- moment perceptions, the brain relies on its complex network of associations assembled from prior experience. These connections enable your brain to deal with variable perceptions" (p. 39).

The above discussion draws attention to two important points, the activation / retrieval of already stored/ associated information and the self-organizing nature of networks. Considering the latter in regards to language education, a teacher will organize and associate concepts and information in certain ways, but learners will ultimately be reorganizing that information in ways that correlate with their experience and their already stored information. Meaningful learning may then require the exposing of learners to new information and linking it to pre-existing knowledge. The organization of networks and categorization of information into associative networks is context, function and meaning driven. Teachers should train learners to draw out relevant information from the contexts to discover meanings/ functions, and move away from a reliance on form. Considering retrieval, learners also need to be able to activate and retrieve important information in relation to their experiences. The next section will take a closer look at this process and the role it plays in learning.

According to LeDoux (2002), humans generally have similar brain systems and around the same number of neurons, what makes each person's brain unique is the way that these neurons are connected. The experiences that people have, alter the synaptic connections in our brains. These synaptic connections form the systems and networks of our brains. Synaptic plasticity occurs in all brain systems. The cognitive processes and functions of the brain rely on these networks, and so rely on connections. This connectivity has implications for all cognitive activity, "change the synapses in one area, and like dominoes in a line, synapses in others will be altered as well" (LeDoux, 2002, p. 307).

Two principles discussed by LeDoux are relevant to this paper. 1) Different systems experience the same world, and 2) synchrony coordinates parallel plasticity. The 1st principle argues that although the different neural systems in the brain have different functions, they will all be involved in processing and learning and encoding stimulus, as they all experience the same events. But because each system is different, they process different aspects of these events. The 2nd principle argues that neural networks don't exist in isolation, networks communicate with other networks via synaptic transmission. Neuronal synchrony is the simultaneous firing and binding of neurons. Hebbian plasticity (as described previously) "binds simultaneously active cells together so that next time the same or similar stimulus occurs, the same cells and connections will be activated" (LeDoux, 2002, p. 310).

2.1.5 Memory and learning

So far, this paper has focused on the importance of encoding information into memory, and the resultant associations that emerge in neuronal networks as well as organizing these networks. As mentioned earlier the main processes involved in memory are encoding, storage and retrieval. The idea so far has been that good encoding (I.e. meaningful associations) will lead to good retrieval. Alberini and LeDoux (2013) show that retrieval has an important role to play in the formation of these networks too. As discussed earlier, in order to make sense of incoming perceptual information, cognitive processes wok to encode

contextual features and activate/ retrieve already encoded information. Retrieval is function driven, and it can be argued now that learning (while reliant on associations made for encoding) is as reliant on retrieval. For instance, if a person learns a word, all perceptual information relating to the experience of the word will be encoded, at the same time, information that has been associated to different features of that context will be activated and retrieved and now also associated to the new incoming information. In this process more information is encoded than is retrieved so retrieval is a highly selective process. All information relating to the context is not retrieved because the actions of inhibitory processes at work. This interaction between encoding and retrieval is a function of memory.

Alberini and LeDoux (2013) discuss memory reconsolidation, to show that the act of retrieving information from memory in effect changes that memory. Specifically, reconsolidation describes what happens to memories that are retrieved, "when memories are retrieved they are susceptible to change, such that future retrievals call upon the changed information" (p. 746). In this view, each time a memory is retrieved or activated, it is open to change. When a memory is activated, the last 'version' encoded in the last retrieval, instead of the original memory, is retrieved and consequently changed again. In terms of associations, retrieved information is then 're-associated' in regards to the incoming new information and contexts, and the networks of associations expand and change. The retrieval and activation of a memory essentially entails the process recoding that memory in a similar way that new memories are encoded. The implications of this is that memory is a dynamic system in which memories are not stable or fixed, even long-term memories. Alberini and LeDoux (2013) state that reconsolidation acts on all kinds of memories, and can happen multiple times. In line with the concerns of this paper, Alberini and LeDoux (2013) argue that memory reconsolidation and the resultant possibilities for "trace strengthening or weakening ... for qualitative modifications... [As well as] the updating of memory content" (p.746), provide opportunities for designing efficient and adaptive learning and memory pedagogical strategies.

Alberini and LeDoux (2013) state that memories reconsolidate as a means to be able to respond and adapt to changing environments. Drawing on LeDoux's (2002) discussion of synaptic plasticity, he states that synaptic plasticity (the change in synaptic connections) underlies learning and that memory is the stabilization and maintenance of these changes, but here we see that memory is also not as stable as previously thought. Alberini and LeDoux (2013) discuss the neural mechanisms involved in memory reconsolidation and state that the same mechanisms that promote synaptic plasticity are at work during the process of memory reconsolidation. Alberini and LeDoux (2013) state that "similar to that which takes place during the consolidation of a new memory, reconsolidation is accompanied by synaptic morphological changes" (p. 749).

Further, in terms of learning, "if a learning experience reoccurs, memory may become labile, and over time,

through mechanisms of reconsolidation, be re-stabilized and strengthened" (Alberini and LeDoux, 2013, p. 746). So, retrieving and the resultant reconsolidation of the memory of a learning experience allows for the memory to be strengthened and adapted without the need to be re-exposed to the original learning experience. Alberini and LeDoux (2013) discuss how different types of learning and retrieval cases will result in the instantiation of different storage patterns and activation of different networks. If the learning experience is repeated with little variation, the reconsolidation will be similar and activation of similar networks will occur. However, "reconsolidation evoked by other types of experience, such as retrieval events that are different from the original learning experience are likely to activate and recruit different networks" (Alberini and LeDoux, 2013, p. 747). In effect, new learning results from exposure to variable experiences, whereas memory updating results from exposure to similar experiences.

The preceding sections have shown that learning is the result of how experienced stimuli are associated at the level of neurons. Effective learning entails frequent stimuli experienced together that have been associated, and that can be drawn on/ retrieved for processing new experiences. Moving this discussion toward language learning, LeDoux (2002) states that "language radically alters the brains ability to compare, contrast, discriminate, and associate on-line, in real time, and to use such information to guide thinking and problem solving" (p. 197). The following section reviews literature framed by CL. CL is guided by its commitment to explain language on the basis of domain general processes in the brain and to draw from what is currently known about cognition and neurological processes. Neurocognitive theory of learning discussed above draws parallels with CL theory of language in many ways, specifically with how experience impacts the kinds of associations made, and the effects of frequency on the strength of associations. The following section draws on CL approaches in an attempt to move the discussion of associations as physical processes in our brains, to associations as cognitive processes, particularly those processes involved in language and language learning. This discussion will explore explicitly, how cognitive associations underlie language learning.

2.2 What is language learning?

2.2.1 Usage-Based Model of Constructions

This section illustrates how learning entails associations between experiences. Robinson and Ellis (2008) argue that language learning involves determining the structure from use, and that this involves "the full scope of cognition" (p. 3). One of the main processes driving language learning is the ability to make associations. The associations made in language learning occur across multiple forms and systems. For instance, experiencing language in use will lead to associations being made across multiple modes, namely linking sounds, forms, contextualized experiences, functions, perceptual input etc., which all aid in the extrapolation of meaning. Leading from the discussion above, we can deduce that language learning, like other kinds of learning, results in a change in behavior or behavioral repertoire. Further, language learning involves encoding all aspects of

language knowledge; from the individual phonemes all the way up to larger chunks, patterns between stimuli, patterns of sequence, patterns of use, and all contextual/ pragmatic information. The domain general processes at work in language are categorization, cross-modal association and neuromotor automation (Bybee, 2013). Bybee (2013) states that the individual units and sequences of language are susceptible to repetition (frequency effects), "it is repetition that leads to conventionalization of categories and associations, as well as the automation of sequences" (p. 50).

From the perspective of CL, constructions (form-meaning/function associations) are basic units of language representation (Robinson & Ellis, 2008). Bybee (2013) describes constructions as processing units/ chunks, they are sequences of units that have been used/ experienced together often enough that they have become associated and thus are accessed together. Constructions in language range from simple lexical words (e.g. *drive*), grammatical morphemes and the items they appear with (e.g. verb + past tense), fixed and partially filed idioms (e.g. *go in guns blazing* / *drive* < someone> *crazy*), to fixed and abstract constructions (Bybee, 2008).

Bybee (2008 and 2013) looks at the usage-based model of language to explain how experience impacts the cognitive representations of language. "As users of a language experience tokens of language use, they categorize them at varying degrees of abstractness. This categorization process creates a vast network of phonological, semantic and pragmatic associations." (Bybee, 2008, p. 216). In his discussion on Usage-Based theories of language, Ellis (2006) states that creative linguistic competence "emerges. from the collaboration of the memories of all the utterances in [the user's] entire history of language use and from the frequency-biased abstraction of regularities within them" (p. 101). The network resulting from these associations and categorized experiences contain specific and generalized information (both tokens and type are cognitively represented) about constructions as well as their form, meaning and context of use.

2.2.2 Exemplar representation of Constructions

Bybee (2008 and 2013) combines construction theory of grammar and a Usage-Based model of language to show that language structures/ grammar emerges "through experience with specific examples of constructions which are categorized in memory by a mapping process that [associates sequences] for similarity and difference" (p. 217-8). The emergent nature of grammar results in associations and categories that aren't fixed, and thus this model is able to account for gradual language change. Although governed by domain general processes, the resulting categories and units of language (constructions) are variable, and the emerging structure is re-created in the individual and in specific instances of use (Bybee, 2013).

Bybee (2013) argues that constructions are represented cognitively as exemplars. If, as the Usage-Based model suggests, language structure emerges from use, then all the token experiences of a construction contribute to the formation of a cognitive

representation (exemplar) of that construction (Bybee, 2013). An exemplar model representation of constructions aligns memory of linguistic experience with that of memory for other experiences; "each token of experienced linguistic behavior has an impact on cognitive representation; when stored representations are accessed in either encoding or decoding, the representations themselves change" (Bybee, 2013, p. 52). Further, contextual information along with form of the token experience of linguistic information is represented. So, form, meaning and context are all associated. Emerging out of these token experiences are general categories/ types, this is because of associations that categorize exemplars by similarity and because "contiguous experiences, such as meaning and acoustic shape, are recorded and linked to one another" (Bybee, 2013, p. 52).

Exemplar networks are formed on phonetic, semantic, pragmatic, or contextual basis. Bybee states that cross-modal association (based on the co-occurrence of experience) allows for any construction to have links across these different domains (phonetic, semantic, pragmatic, and contextual). The cross-modal association of these exemplars constitute the association between form and meaning/ function the same way that constructions do. Constructions are also associated across different contexts, so all instances of a construction experienced by a person are included in exemplars of that construction. This may seem like a lot of information to retain in memory, but as illustrated in in section 2.1, human brains have a large neural capacity, and further, the processes of categorization and association allow for highly structured storage of information (Bybee 2013). Bybee (2013) states:

> Highly structured storage of information results when categories are formed and similar items are stored in proximity to one another...[Further], from experience, memories for all types of sensory input can be lost when that information is not reinforced by repetition or recency" (p. 54).

This discussion will now turn to the effects that repetition has on the strength and productivity of cognitive associations. This mirrors the frequency effects at work at the level of neurons. The frequent activation of a neuron and its synapses will result in a lower threshold level, which will result in easier activation next time around.

2.2.3 Frequency Effects

Basically, exemplars are formed from associated tokens of experience, exemplars themselves are also associated based on similarities. Associated exemplars form categories/ types. Both token and type are represented by exemplars (Bybee, 2013). This means that exemplars emerge from both token experiences and type categorization, the implication of this is that each instance of language in use (token experience), and the diversity of these experiences, will ultimately change corresponding exemplar networks in that new associations emerge, type representation is also affected in that it is comprised of new tokens, and becomes associated with new contexts. Further, both association of token instances and type categories are subject to frequency and prototype effects. Frequency of type affects the

strength of associations and prototype effects are encountered because categories that emerge have different degrees of similarity. Moreover, frequency of token affects the strength of the exemplar, more token instances will result in stronger represented, more embedded exemplars. "The stronger exemplar or set of exemplars often forms the center of a category and other exemplars are more or less similar to the stronger exemplar or set of exemplars" (Bybee, 2013, p. 53).

Token frequency is the number of times a construction is experienced, and exemplars account for the frequency of occurrence of a token in linguistic experience. Every linguistic experience of a token alters the encoding of the constructions. Repetition of a construction will strengthen the exemplar representations of it and its constant parts, thus make them easier to access. Bybee (2008) refers to this as the conserving effect.

Bybee states that "constructions also have schematic slots which will be represented by the different exemplars and which form categories... These categories can vary in their type frequency" (p. 59-60). Type frequency refers to how many distinct items are represented by the pattern/ the number of items that occur in the schematic slots. Bybee (2013) argues that type frequency affects productivity, the higher type frequency of a construction the more productive it is. This productivity is the result of the availability of more types in a construction leading to more bases available for "item-based analogy that create novel instances of the construction" (Bybee, 2013, p. 62). Simply put, constructions that apply to a great deal of distinct items tend to be highly applicable to new items. Productivity (ability to appear with novel items) is constrained by two factors; "First, items with very high token frequency may have formed a more autonomous chunk and do not activate the constructions exemplar cluster... Second, the semantic properties of the schematic slot may restrict productivity" (Bybee, 2013, p. 62).

2.2.4 Frequency effects and L2 learning

Bybee (2008) argues that all language use involves procedural knowledge, "procedural knowledge is bound with neuromotor events and is knowledge of how to do something" (p. 220). Procedural knowledge is learned through the association of actions that occur together often and as a result are sequenced together; these actions are linked together and form a chunk of one action. Bybee (2008) states that chunking is important for L2 learning. Token frequency results in language knowledge as automized behavior. Further, according to the Usage-Based model, constructions are chunks, these chunks are formed through practice and use and become processed as single units/ actions. Bybee (2008) states that "chunking occurs naturally and unconsciously with practice... it is an ability that is necessary and fortunately available for L2 learning" (p. 220). While L1 speakers already have necessary components of chunks automized and available for use in new chunks, L2 learners many not have these necessary components chunked and automized as yet.

"A construction is built up from tokens with sets of items that occur in each position forming categories...A language user with adult like

experience... will have encountered a number of tokens of [a particular] construction" (Bybee, 2013, p. 60). But language learners won't have as strong representations of the tokens of the target language. Bybee (2008) argues that for language learners, "repeated exposure and practice are essential to the development of the cognitive structures that lead to fluent and grammatical speech" (p. 216). Noting from Bybee's (2008) discussion about the conserving effect of token frequency, the more exposure/ experience a language learner has to constructions, the stronger their exemplar representations will be. As an example, Bybee (2008) discussed a learner's experience with regular and irregular verbs in English (e.g. j*ump-jumped, weep-wept*), "the more exposure a learner has to irregular forms, the greater the chance that he/she will produce them correctly. Less frequent irregular forms are more likely to be treated by the learner as irregular" (p. 219), for instance **weep-weeped*.

Higher frequency forms may become the prototype that lower frequency forms are associated to at varying degrees depending on experienced similarities and differences. This points to earlier mentions of prototype effects. Exposure to natural target language patterns have the potential to result in the strengthening of target language prototypes. While productivity and variance are important for L2 learners (as the following discussion will show), frequent tokens that have strong exemplar representations can "serve as the analogical basis for forming novel instances of constructions. These novel instances are also represented in memory (although not so robustly) and may have an effect on the category, causing it to expand in new directions" (p. 228).

With regards to type frequency effects, we already mentioned that high type frequency correlates with high productivity of a construction. Bybee (2008) argues that this is the case because "when a construction is experienced with different items occupying a position, it enables the parsing of the construction" (p. 221). Parsing is the ability to analyze a construction into its parts/ units, for example being able to analyze the different parts of the construction *what's up*. Higher type frequency also results in a stronger exemplar representation, making the constructions easily accessible for productive uses. In L2 learning, if the learner has encountered a pattern before with different items in its schematic slots, they may have the ability to "apply the pattern productively to forms not necessarily encountered before" (Bybee, 2008, p. 221). So, exposure to many different types in a construction may be more helpful, in some cases, than repeated exposure to identical tokens. Moreover, Bybee argues that in order for a language learner to develop productivity in construction representation "regular patterns must be taught by methods that mirror to some extend natural exposure to the L2 patterns" (p. 225).

Ellis (2006) discusses frequency effects in L2 learning in conjunction with associative learning and activation threshold. Ellis states that the easier processing of high frequency constructions is proof of the importance of associative learning from usage. Ellis argues that language learner's accumulative

experiences will train their cognitive processes to expect constructions "according to their probability of occurrence" (p. 102). For instance, when a learner experiences a new word, is gets encoded in memory as a unit with other features that are associated with it (e.g. phonological, orthographic, functional, contextual features, form-meaning/function etc.). Ellis states that "a detector unit for that word is added to the learner's perceptual system whose job is to signal the word's presence, or 'fire', whenever its features play out in time in the input" (p. 102). This detector is has a threshold level that fires when it is exceeded, it is activated when the learner encounters the features that have been encoded and associated with the construction. As discussed before in section 2.1.3, every time the detector is fired, its threshold level will be lowered, and so less activation will be required for activation next time around. Ellis states that a language user's "pattern-recognition units for higher-frequency words require less evidence from the sensory data before they reach the threshold necessary for firing" (p. 102).

Further, the point to note here from Ellis is that, the effects of frequent practice and use will induce greater levels of learning at first for a particular construction and then asymptote. "The amount of learning induced from experience of a form –function association depends upon the salience of the form and the functional importance of the interpretation" (p. 102). Further, this association will be weak if the learner already has associations with another form that cues a similar interpretation of the form. This discussion could have implications for the interference of the L1 when making associations with forms and meaning/functions in the TL.

The discussion of neuronal links and synaptic plasticity in section 2.1 and the exemplar representation of constructions and frequency effects in section 2.2 draw some obvious parallels. Following is a discussion of these parallels, as well as how neurocognitive and cognitive linguistic approaches to learning and language rely on associations to explain how these processes function to facilitate language learning.

3. Discussion and Conclusion

The literature reviewed in section 2 showed how learning is driven by experience and made possible by the associations made between experiences, moreover, language learning is the result of general cognitive processes and is also deeply affected by associating experiences. Taking seriously the previous discussions, language teachers are trying to help L2 learners learn a language, and as such help them change their behavior. This change in behavior is based on the learners' experiences. Language teachers need to help learners better encode new knowledge. The better knowledge is encoded, the better it can be retrieved. Retrieval aids in the processing and association of new information, and is driven by function and context. Better encoding and retrieval of linguistic, semantic, pragmatic and contextual knowledge relies on meaningful and productive associations. Ellis (2002) states that:

> Language learning is the associative learning of representations that reflect the

> probabilities of occurrence of form-function mappings. Frequency is thus a key determinant of acquisition because "rules" of language, at all levels of analysis (from phonology, through syntax, to discourse), are structural regularities that emerge from learners' lifetime analysis of the distributional characteristics of the language input. (p. 145)

The research question posed by this paper is: **How do associations affect language learning?** The answer to this question based on the literature reviewed is that associations affect language and language learning at all levels, from a cellular level (the associations of neurons through synaptic plasticity) to a cognitive level (associations forming constructions and categories).

Further these associations are drawn from and facilitated by all that the language learner experiences. As LeDoux (2002) describes, the brain is plastic, and as such "modifiable by experience, which means that the synapses involved are changed by experience" (p. 8). Experiences stimulate neurons, neurons that are stimulated by the same/ similar experiences are associated. The usage-Based model of language pays as much attention to experience in that language structures emerge from experience, and all experiences of language are represented in memory as exemplar representations. Frequency effects are at work on the strength of associations at the level of neurons and at the level of constructions and category construction. At all levels, frequent and contingent exposure to elements of an experience will strengthen their association and encoding, making them easier to access. This paper can be expanded on with further research into pedagogical approaches that take into account the effects of association on the brain and cognitive organization in language learning. In closing, Terry (2006) offers some insight into ways that teachers can use knowledge of associations to help learners better encode new knowledge. Kang, Gollan, and Pashler (2013) offers some insight into how the role of retrieval can be draw on for better pedagogical approaches.

Terry (2006) draws similar conclusions to Bybee (2008) with regards to how better associations can lead to better language learning in his discussion of paired-associative learning with regards to vocabulary. Learning vocabulary is a major part of L2 learning in my experience as a teacher. Better learning is "learning that is quicker, more durable, and more likely to be remembered- [and] is determined by the number and quality of the relations constructed between [stimuli]" (p. 170). Terry argues for meaningful relations to be made between items, as well as cognitive elaboration, and that this facilitates better learning. Terry states that associations between stimuli are affected (positively or negatively) by prior knowledge and cognitive elaboration. Prior knowledge refers to the preexisting associations between words, if these pre-existing associations are mirrored by the pair-associations then it is likely to facilitate learning. Cognitive elaboration demonstrates the effects that additional information/ context/ elaboration can have on linking stimuli. Terry warns that teachers should offer 'precise elaboration', this beneficial in that the added

information is assessed as useful. Terry also argues that learners can be encouraged to create their own cognitive mediators that relate to the stimuli. It makes sense as a teacher to encourage learners to make meaningful associations between vocabulary in their L1 (Korean) and new vocabulary items in the TL (English), and because prior associations have an effect on learning, the teacher should consider cross-linguistic as well as cross-cultural associations that learners may have already formed. It also makes sense that providing elaboration, and context to new items will further solidify the associations made between these words.

Kang, Gollan, and Pashler (2013) discuss the benefits of retrieval practice in foreign language vocabulary learning. The kind of retrieval practice studied by Kang et al. (2013), is when the learner is tasked with producing a specific word from memory (and receiving feedback) rather than simply listening and repeating a word after a native speaker, in order to form an association between the target word and its meaning/ referent. According to the results cited by Kang et al. (2013), retrieval practice "produced better comprehension of the L2 words, better ability to produce the L2 words, and no loss of pronunciation quality" (p. 1259), then that of a listening and repeating task. Teaching learners through retrieval practice tasks are appealing because in a sense that is that process that they will be using in real world L2 communication experiences, so the processes engaged during learning are the same ones that are engaged during production. Kang et al. (2013) argue that for competent L2 communication, pronunciation is not all important, specifically "one needs to associate the L2 words with the concepts that they express... [Further,] people learn more robust associations when they are required to actively the association, rather than having both of the associated elements presented together" (p. 1260).

Implicated in these results is that retrieval practice promotes the role of mediators, learners need to explicitly draw on mediators (between a target word and the associated cues) in retrieval tasks. According to Kang et al. (2013), when a learner is presented with a cue and attempts to retrieve the target word, information associated with the cue becomes activated (acting as a mediator between the target word and the cue), but simply presenting the cue and the target word together required less activation and mediation. Kang et al. (2013) argue that mediators and network activation allows for more effective retrieval later on. The point here is for language learning pedagogies to aim for more durable, effective learning strategies. In listen and repeat tasks, learners produce the target for quickly and accurately, and this is assumed to reflect a high degree of performance ability and competence. But as Kang et al. (2013) show, retrieval practice is an example of encouraging long-lasting learning and "incorporates desirable difficulties during training" (p. 1264) that mirror the difficulties faced in actual L2 communication experiences.

Associations affect language learning at all levels. That means that learners will be drawing on prior associations from which to map new information onto based on similarities and differences. These associative mappings draw from all aspects of the

new experience, and selective mapping of prior experiences. While the teacher may not have control over learners' prior associations, she has control over the context and types of experiences that learners have in her class. Being mindful of the associative nature of learning will hopefully encourage teachers to, at the very least, help learners form positive associations with the learning content and context. As a consideration for future research, associative learning and retrieval tasks can be implemented into L2 learning contexts, their effectiveness can be measured and discussed in line with the literature reviewed above, as a means to develop pedagogical strategies and framework that can support L2 learning.

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Reader Response Theory & Multiple Intelligences: An Emergent Reader Perspective

Eric Daubert

Current Issues in ELT

1. Introduction

Of the various pressing issues routinely facing English language teaching, one of the biggest challenges remains the ways in which learners themselves are able to express their developing language identity. As an emergence to pedagogical criticisms of teacher-centered approaches, mostly from the hindrance of student expression, approaches that embrace the ways in which individuals best learn, as well as those that give voice to student expression and thought, reflect the need for student's active participation in the construction of second language (L2) meaning.

In the traditional language classroom, the active participation of the construction of textual meaning is routinely hindered by a so-called telling approach in which the teacher enthusiastically shares their love of literature, and expresses their own opinions and interpretations of a text (Mitchell, 1993). While this form of educational approach attempts to impart students with a deeper understanding of reading materials, Mitchell (1993) notes that too often the teacher-centered, telling approach, fails to allow students to think critically and become deeply involved and connected to their own education. As such, a reader response theoretical approach has been suggested as a way for learners to construct knowledge by taking into account the numerous interpretations of a text through a student-centered meaning making process (Inan and Bolda, 2018).

Work by Gardner (1993; as cited in Chew 2006) describes intelligence as having multiple dimensions that must be first acknowledged by the educator in order for powerful learning to occur. Therefore, connections between the ideas of the student-centered reader response theory (RRT) can be additionally associated to the learning experience when considering how best, or the ways in which, individuals learn. As traditional teaching methodology neglects the dominant learning style of those in the educational setting by imposing prevailing, universal teaching styles upon learners, student attitudes towards the reading process in turn become inhibited (Chew, 2006). Consequently, in order to more deeply engage L2 learner's in their learning of texts, the combination of both a reader response approach, as well as considering the multiple intelligences (MI) of one's learners, should likely remedy the previous limitation to traditional language teaching.

Though preceding research has demonstrated positive effects for reader response theory and MI,

applications to a local Korean context are limited. Additionally, the use of my current reading program is in need of a revival as students often lack focus or sustained interest in English reading. Therefore, I am interested in seeing how the combination of these two theories interact to create an enhanced L2 reading experience amongst Korean L2 speakers of English. In particular, the purpose of this brief case study is to evaluate L2 reader perceptions of a lesson that employs both theoretical frameworks. As such, this paper will ask the following research question: how do student attitudes vary amongst an experimental group of L2 learners of English in a dual theoretical approach of RT and MI. First, relevant literature will be reviewed discussing the premise of both theories as well as their subsequent theoretical support and use. Next, a description of the methodological framework for this case study will be presented. Then, results of the study findings will be introduced followed by a brief discussion and concluding thoughts in relation to the research question.

2. Literature Review

2.1 Reader response theory

The premise of reader response theory is based upon the notion that the literature reading experience should help students discover textual meaning from a student-centered approach. Mitchell (1993) notes that many times, through overt instruction, teacher's direct student attention to forms, symbolism, images, or meaning of text. Though this passionate imparting of knowledge upon the students is perceived as beneficial to student awareness, the act of telling or scaffolding the students into noticing features neglects their ability to think critically and become involved in their own education (Mitchell, 1993). In RRT, a variety of ways to elicit student responses can be enacted through open-ended questions, use of non-evaluative stances, and activities that allow for student elaboration through self-reflection.

The allure of RRT in reducing the affective filter in L2 learners additionally has been studied in attempt to show improvements in reading comprehension, lexical awareness, and text anxiety over that of more traditional methods. In a study by Biglari and Farahain (2017) investigating sixty EFL students of intermediate level English proficiency, findings showed that RRT did not improve reading comprehension and vocabulary retention of EFL learners. Using an RRT approach, the students were told to read short stories through their own unique perspective. An analysis of pre and post study vocabulary and anxiety tests were administered to compare for the study analysis. Using a quantitative analysis, depicted that the difference between the performances of the groups was not prominent. However, given that the study included a small set of participants as well as focus on a single story genre, Biglari and Farahian (2017) note that further analysis should be made with different participant populations and contexts.

Though the study by Biglari and Farahian (2017) signaled some doubt over assumed claims of the RRT approach, a previous study by Farahian (2014) showed that the application of RRT had a significant impact on students metacognitive reading strategies. Metacognition refers to the ability of individuals to think upon their own thinking. As such, learners who

are aware of the ways in which they think, are able to spot check their learning process and gain control over problem solving behavior (Farahian, 2014). When applying RRT to metacognition, readers are able to move beyond simple semantic understanding and towards critical appreciation. Farahian (2014) notes that previous research has shown that a combination of RRT into a curriculum leads to a greater appreciation by learners by taking into account learner differences, attitudes towards literacy, and the ways in which individuals learn. This personalization of the learning experience, activates learner background knowledge, which in turn, opens up connections to new metacognitive interactions. As such, the transactional relationship between the reader in the text has the ability to reduce the affective filter, and improve metacognitive interactions amongst learners (Farahian, 2014).

2.1 Multiple Intelligences

Work by Gardner (1993; as cited by Chew, 2006) moves the traditional thought of intelligence as a single universal subset of one's identity into a spectrum of seven distinct intellectual units. In this context, intelligence represents the capacity to solve problems that are valued in cultural settings (Chew, 2006). Therefore, from an educational standpoint, the role of the teacher is to find out what most interests their students, so that instruction can be tailored to meet the needs of a diverse group of individuals. The seven intelligences that have been thus far been identified include: verbal-linguistic, logical-mathematical, visual-spatial, musical-rhythmic, bodily-kinesthetic, intrapersonal, as well as, interpersonal intelligence (Chew, 2006). Given the unique individuality of each student in terms of backgrounds, preferences, etc., it is likely that each student will highly favor certain intelligence types over another. What this means from an educator perspective is that teachers need to find out what works best for the students, and then design subsequent materials based around those features.

In a study of 50 students regarding their perceptions and attitude on MI in the classroom, Bas and Beyhan (2010) discovered significant differences between the attitude scores of the experimental group, and that with the control. What is most striking is that the results showed that MI was more effective in the positive development of student's attitudes (Bas and Beyhan, 2010). Essentially what this equates to and signals is the need and importance of including a variety of MI activities into a lesson in order to increase student attitudes toward the learning of the L2. By including such variety into a lesson, students will indeed become more motivated to study and view their involvement in the acquisition of the L2 more positively. Students who are not engaged in their own learning, will be left behind, and will struggle to achieve higher levels of performance in the L2.

In another study by Akbari and Hosseini (2008) focusing instead on language learning strategies and MI, results revealed significant correlations between the use of language learning strategies and IQ scores. Comparative analysis between assessment scales revealed that MI and proficiency are strongly related. That is, the more representative a lesson was in

matching a variety of MI with student needs, the higher academic gains were achieved by the individuals. What is rather interesting is that metacognitive and cognitive strategies displayed the greatest correlations to elements of MI. These findings echo the results of Bas and Beyhan (2010) in that students are able to utilize higher levels of engagement through metacognition with MI, than of that of a learning experience devoid of the MI experience.

3. Methods

3.1 Participants and context

In the present study, data collection and analysis was based upon two after school English classes at Soong-Eui Elementary school in Seoul, Korea. Six third grade Korean students of lower L2 proficiency in English participated in the study. The ages of the students ranged from eight to nine years old. Once a week the third graders meet to practice their developing skills in English through guided reading, read-alouds, vocabulary and grammar development, peer-assisted learning strategies (PALS), and reading comprehension strategies. Given that the students are young learners and have lower English proficiencies, the class is conducted with a Korean co-teacher to assist when needed. The students are typically very energetic, but often reluctant readers as they quickly lose focus and need to be constantly stimulated through activity design to maintain focus. Provided that the class usually is taught using PALS, and the students are quite familiar with the process, this poses a unique opportunity for me see how the introduction of RRT and MI theories into my lesson will correlate to student attitudes about the lesson.

3.2 Activity design

In order to keep in mind with the frameworks of RRT and MI theories, I designed a lesson for a comic book unit that we are currently in the process of. Using the comic book, *Stinky* (Davis, 2009), in previous classes students would typically engage with the text using PALS reading strategies. PALS allows for a deconstruction of the typical top-down classroom, teacher-centered classroom instruction of reading (Fuchs, Fuchs, Mathes, and Simmons, 1997). Through the three central activities of PALS (partner reading with retell, paragraph summary, and prediction relay), the center of classroom instruction indeed does go back to the students. However, the challenge of the PALS program is that my students often lose focus and an equal English language proficiency footing makes student pairings difficult to administer. Additionally, the lack of total instructional time per semester is just 15 class sessions, so full implementation of PALS is limited. As such, throughout the semester the students have been reading through a modified form of PALS, in which I call, ‘buddy reading’ which works better for younger learners. The modified version consists of the teacher pairing the students up, and assigning reader and mentor roles to the students. While the reader is reading the story, the mentor role listens for mistakes and then provides the reader with the correct form, which is repeated back to the mentor. Though a vast wealth of research on PALS has been made showing positive links towards reading

comprehension and strategy use, within my own educational context, the students appear to be growing tired of the routines and structure of the program (Fuchs et al., 1997). Therefore, this lesson design gave me further motivation to model this study based upon the frameworks of MI and RRT.

As a form of pre-assessment given a week prior to the study implementation, I gave out a multiple intelligences survey for the students. The purpose of this task was related back to Chew's (2006) remarks on MI in which the stressing and importance of teaching in multiple ways is critical to developing the particular intelligence profiles of one's own learners. For reference, an example of the full MI survey given to the students is included in the appendix as *artifact 1*. Given that the survey was to be given to lower-lever English proficiency learners, I decided to change the original MI types into higher frequency word usage that they could better understand. The survey resulted in the following realizations, as shown in *table 1* (See appendix). In addition, I decided to include the students first and second best intelligence learning preferences to get a better view of how to construct my futures lessons.

As can be seen from the results of *table 1*, the most preferred intelligence learning style was visual spatial, followed by bodily kinesthetic for second, and musical-rhythmic in third. This data became crucial for the study design given how it directly was able to correspond to the way in which the lesson was to be organized. For instance, given that most of the students respond positively to visual-spatial MI learning styles, I decided to include several learning opportunities that best reflect this intelligence type in the lesson. As such, this research was able to be used to guide the lesson construction and subsequent analysis.

Next, provided that my learners additionally learn well from bodily-kinesthetic interactions, and as a brief way to start the lesson, the first activity consists of a vocabulary review from the previous class. Up to the point of this lesson design for the current study, the students have already read the first two chapters of the graphic novel, *Stinky*. As such, the students will take part in a game I call the 'fly swatter' game. On the white board, pictures are placed that represent a particular vocabulary word that has been studied previously. In teams, students line up parallel to one another. The student in the front listens to a description from the teacher regarding a vocabulary word, and the first person to hit the correct word with the fly swatter earns a point for their team. With young learners, the more physical activity they will need, and a higher use of their senses becomes crucial for the learning experience (Bas, 2008). By having the students learn through whole body, hands-on activities this activity reflects upon the needs of many of my students to fulfill their bodily-kinesthetic intelligence. At the same time, the pictorial representations of vocabulary words on the board connect back to a visual-spatial intelligence, as the learners need to link visualizations to links in their mental lexicon. Lastly, by listening to the teacher, those that favor a verbal-linguistic intelligence will strive in this task given that they need to listen carefully to the teacher's descriptions of the

vocabulary words. Thus a single, short activity is able to be implemented in such a way as to match several multiple intelligence aspects of learning.

After the warm up vocabulary activity, the students will move on to phase two of the lesson, which represents applications to RRT, as well as theoretical connection of MI. Mitchell (1993) notes that through RRT, the study of literature starts with the student's response. Therefore, as a pre-reading activity, the teacher will ask the students to write or draw pictures of things they like and don't like on their worksheet; evidenced as *artifact 2*. In this way the affective filter will be lowered while beginning the study with a student's perspective. After they complete this pre-reading task, the students will share their work with a partner before moving onto the next step of the lesson. Additionally, by giving the students a choice in writing or drawing their responses, as well as sharing their creations with others, the lesson can touch upon visual-spatial as well as interpersonal MI identities.

Turning now to the reading portion of the lesson, students will take out their reading tablets and review details from chapter one to describe things that the character Stinky likes. As illustrated in *artifact 2*, students draw out the things that Stinky likes. This is a simple task, but requires the ability of the participants in the study to locate and recall details from a text. Crucially however, this question connects back to the pre-reading statement and is essential to further understanding the antagonists character. Pellet and Myers (2016) write that the introduction of choice, amongst a pair of topics or possible selections, creates a sense of ownership and an authentic response become more likely. This idea directly correlates back to the tenants of RRT in which students are empowered to make contributions due to the multiple possibilities of literature interpretation (Mitchell, 1993). By being able to choose what they are drawing, the students are able to connect the L2 purpose for learning by engaging learners in interests, and providing control over the learning experience (Vandergriff, 2016).

Next, the students will use their tablets to read the second chapter of the story and complete the third part of the reading guide; *artifact 2*. Tablet readers were chosen in place of traditional paper-back copies due to the interactive nature, and the ability of affordances present in digital media. Darhower (2008; as cited in Thoms and Poole, 2017) note that affordances, such as digital tools of in-text translation or dictionary use, have the ability to provide linguistic information to a learner regarding language structure or meaning. As such, the students in the study will be able to have the choice of having the story read to them, they can click words for pronunciation practice, or they can simply read by themselves at their own pace. Thus, the multimodality of digital media allows for a more student-centered approach, with a variety of supports that may not be present in traditional text treading alone.

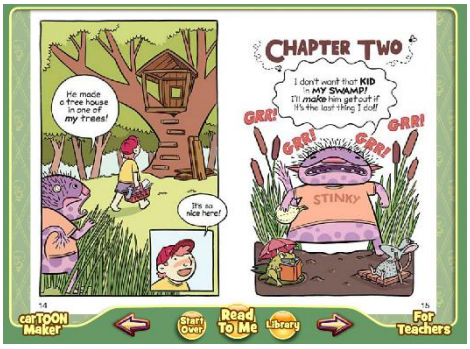

Figure 1: Example of e-book reading experience

As the students engage in their particular reading choice of the chapter, they will subsequently answer the last questions in part three of their worksheet; consult *artifact 2* for reference. The study participants will need to draw upon their knowledge of the story to answer questions. Given that Mitchell (1993) suggests that evaluative and judgmental stances should be best avoided in RRT, the questions remain open-ended, yet connected to central messages or traits of the story.

In continuity with the work of the New London Group's (1996) approach to L2 language teaching, the culminating task of the lesson represents a slight adaptation of transformed practice. That is, being able to manipulate a text and draw explicit awareness to communicative and social contexts. Such a task, aligned to RRT and MI approaches, will be accomplished by having the students complete a summative and prediction based assignment that encapsulates elements from what they have already read, as well as being able to interpret the literary work from their own unique perspective. The students will be given a comic strip with some elements to fill in while the last half asks them to create an end to the story. Though the comic strip includes elements that ask for specific responses from the students about what they read, the later half remains purely RRT based as the elicitations are open ended, giving the participant the opportunity to decide, based on textual evidence, how the story will conclude. Additionally, a variety of MI representations can be evoked through drawing (visual-spatial), reflecting on ideas (intrapersonal), analysis of story features (logical-mathematical), and through the writing process (verbal linguistic). In *artifact 3*, an example of the transformed practice is shown.

3.3 Observation protocol

In order to assess the students in their perceptions of the lesson, student data will be analyzed by taking a perceptions survey. For reference, consult *artifact 4* in the appendix. The survey was given twice during the time period of the study; once a week prior with the traditional classroom instruction style, and second during the experimental phase. The only difference between the two surveys was that the later included an additional reflection piece asking students to compare their learning over that of previous classes. Below is a sample of the changes made to the student survey.

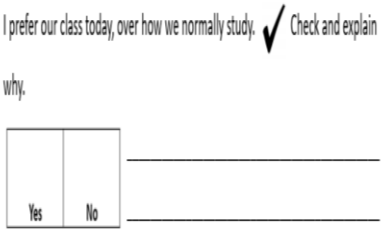

Figure 2: Additional question in second student survey

After each lesson, the students were given the survey to complete. In order to avoid confusion, a Korean co-teacher explained in the L1 what they need to do and translated each survey segment into Korean. In this way, the purpose of the purpose of the task was not restricted to the participant's ability to understand the survey written in the L2. In order for the students to give the best response, the survey was conducted anonymously. Additionally, while the students were

taking the survey, I left the classroom and the Korean co-teacher conducted the survey in my place. In this manner, it was my hope that the students would feel more comfortable interacting in their L1 and thus provide better responses. After collecting the survey results from both class periods, I tallied the results for comparison.

1) Results

Student preferences for lesson learning type were evaluated via an anonymous survey to provide a more quantitative assessment of its success. The numerical results of both surveys are presented as *artifact 5* in the appendix. In the pre-study survey, students were mostly divided in their responses. In particular, regarding vocabulary and grammar student responses were evenly distributed amongst the three response types. However, a majority of the students wrote that the activities were not fun using the non-RRT and MI approach.

Overall, I was surprised to find that the students reported that the experimental lesson did not supported their interests. In particular, almost half of the students responded that they preferred the way in which we have studied previously. That is, they preferred a lesson that was not RRT, or possibly, MI based. Over half of the students found the lesson to be unhelpful in learning new vocabulary and grammar as well as motivating them to read more. What was interesting was that none of the students said the lesson was interesting, fun or motivated them strongly to learn more.

An interesting note was that students seemed to prefer the traditional classroom approach over that of RRT and MI approach. Though, this was barely statically strong enough to show a compelling case. Another thought-provoking case was that with the experimental method, more students found that the approach was better able to stimulate their understanding of the story. However, because motivation for the experimental lesson decreased, connections between MI cannot be assessed clearly. It was assumed that a higher degree of motivation would correlate to MI, but this does not seem to be the case according to this study. Another data set that also seems to contradict expectations was the aspect of being fun and interesting. In the later experimental survey, more students had favorable opinions. However, this again contrasts with the student's remarks in the second survey that the lesson was not preferred.

2) Discussion and conclusion

The current study attempted to evaluate student perceptions of a lesson with both RRT and MI embedded into the design. RRT has been presented as a way to reduce the previous barriers and factors that deteriorate L2 acquisition and reading comprehension by placing the student at the center of textual awareness building activities (Biglari and Farahain, 2017). In addition, MI, as proposed by Gardner (1993; as cited in Chew, 2006) expands the previous limited perception of intelligence as being a range of learner best matches. That is, the way in which a student is best able to learn varies, and so instructional content should best match the intelligences of those that are being taught.

Given the scope and depth of the current study, very few conclusive distinctions can be made regarding learning preferences between a lesson with RRT and MI and that of a more traditional type. For instance, the limited nature of the study participants being so few compounds the need for further analysis in order for succinct associations to be made. However, besides the lack of study participants, the data did arrive to some isolated conclusions. For example, what was most surprising was that the students said the lesson activities were more fun or interesting in the experimental phase, but did not connect to an overall increased preference for the lesson style. This may suggest that the activities were more interesting to them because their MI results were matched to the lesson activities. By incorporating visual-spatial activities such as the comic drawing, or the multimedia presentation of the text, the students were able to have the MI types met.

In the experimental portion of the study, motivation for the lesson decreased whilst additionally being described as having more fun and interesting activities. It was assumed that there would be a strong connection between these two subsets, however, that does not appear to be salient. Perhaps external factors or individualistic factors can be used to explain the difference between a lack of motivation and what was previously described as a more fun activity. Further analysis needs to be made.

This study represents solely a beginning step into an analysis of student preferences in RRT and MI. Previous research has signaled various linguistic, affective, and other individualistic factors for the presentation of such approaches. Though, a lack of research into student's preferences for the use of RRT in combination with MI has been studied. Future analysis of student preferences should include a wider participant pool, include a control group, and perhaps be conducted over a longer time frame for best results. Nonetheless, this study represents a beginning attempt to investigate how learners perceive of their preferred learning type in the L2 English education.

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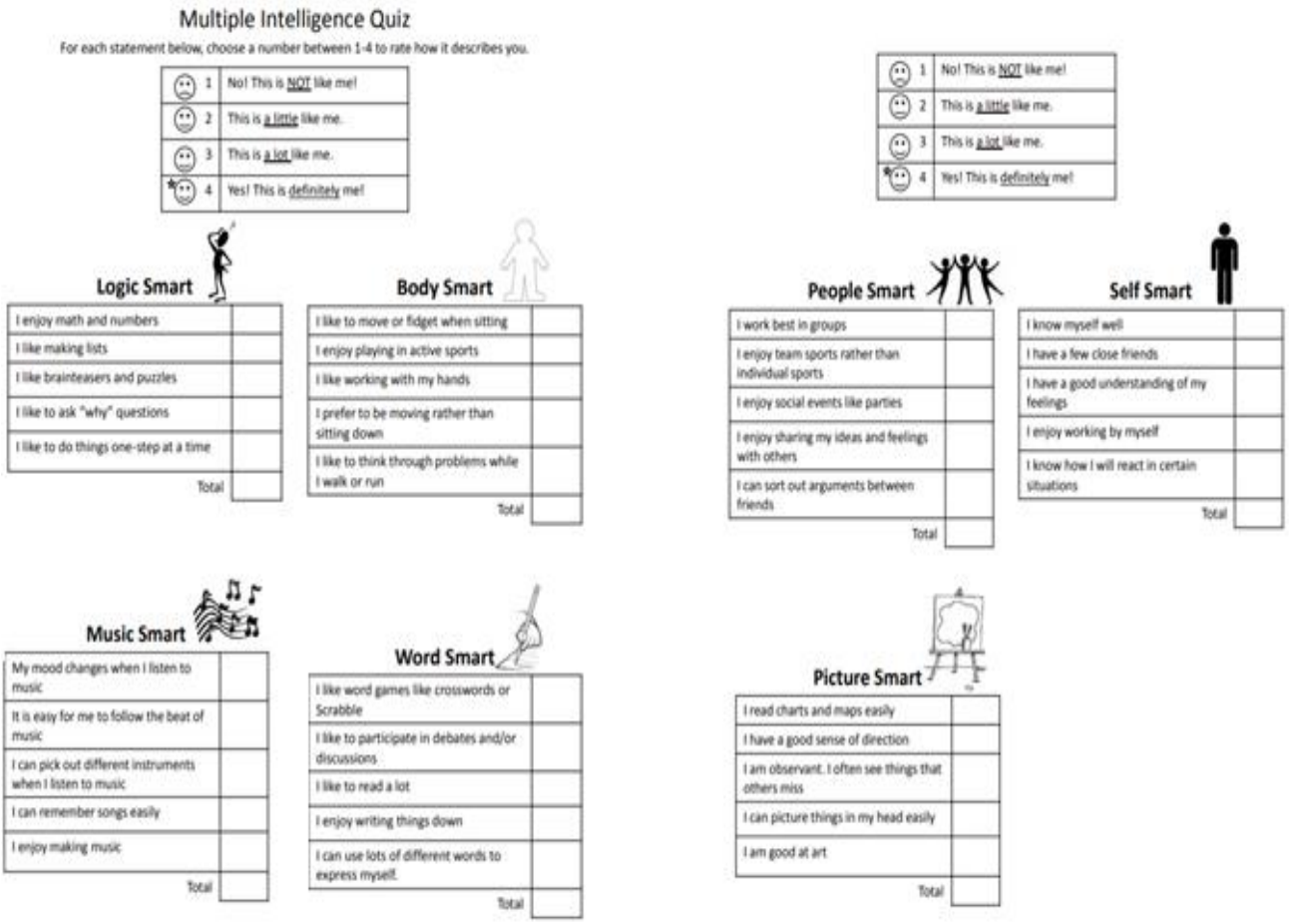
APPENDIX

Multiple Intelligences Type		
Picture Smart	(visual –spatial)	5
Self Smart	(intrapersonal)	1
People Smart	(interpersonal)	1
Word Smart	(verbal–linguistic)	0
Music Smart	(musical-rhythmic)	2
Body Smart	(bodily – kinesthetic)	3
Logic Smart	(logical-mathematical)	0
	Student's first and second learning preferences combined	Total number: 12

Table 1: findings from MI survey

Artifact 1: example of MI survey given to third grade readers



Multiple Intelligence Quiz

For each statement below, choose a number between 1-4 to rate how it describes you.

1	No! This is NOT like me!
2	This is a little like me.
3	This is a lot like me.
4	Yes! This is definitely me!

Logic Smart

I enjoy math and numbers	
I like making lists	
I like brainteasers and puzzles	
I like to ask "why" questions	
I like to do things one-step at a time	
Total	

Body Smart

I like to move or fidget when sitting	
I enjoy playing in active sports	
I like working with my hands	
I prefer to be moving rather than sitting down	
I like to think through problems while I walk or run	
Total	

1	No! This is NOT like me!
2	This is a little like me.
3	This is a lot like me.
4	Yes! This is definitely me!

People Smart

I work best in groups	
I enjoy team sports rather than individual sports	
I enjoy social events like parties	
I enjoy sharing my ideas and feelings with others	
I can sort out arguments between friends	
Total	

Self Smart

I know myself well	
I have a few close friends	
I have a good understanding of my feelings	
I enjoy working by myself	
I know how I will react in certain situations	
Total	

Music Smart

My mood changes when I listen to music	
It is easy for me to follow the beat of music	
I can pick out different instruments when I listen to music	
I can remember songs easily	
I enjoy making music	
Total	

Word Smart

I like word games like crosswords or Scrabble	
I like to participate in debates and/or discussions	
I like to read a lot	
I enjoy writing things down	
I can use lots of different words to express myself.	
Total	

Picture Smart

I read charts and maps easily	
I have a good sense of direction	
I am observant. I often see things that others miss	
I can picture things in my head easily	
I am good at art	
Total	

Artifact 2: Pre and during reading worksheet

Name: _____

Stinky:

by Eleanor Davis

①. Pre-reading: make a list or draw pictures of things that you <u>like and don't like</u>.

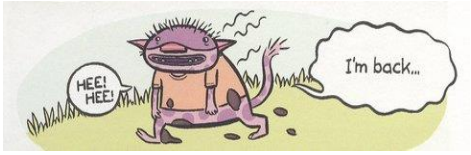
Things that I **like**…	Things that are **yucky**…

②. Review: 

1. (pages 6-8) What are some of the things that Stinky likes? Choose 3 and draw:

1	2	3

Eric Daubert



③. Read & answer: Chapter 2 on your tablet

1. Stinky tries to do many things to get rid of the boy. Why do you think he felt this way?

_____

_____

_____

2. What questions would you like to ask Stinky or the boy?

_____

_____

_____

3. Draw a picture of someone or something you think Stinky would be friends with:

Artifact 3: Example of transformed practice

Write Your Own Comic Strip

Stinky: The swamp monster, Stinky, hates children and creates 4 plans to get rid of the boy who plays in the swap. How would you get rid of the boy? Use the comic strip below to guide your plan.

Who is the antagonist? What does the character say?	Draw stinky meeting the boy.	Draw Stinky thinking of ways to get rid of the boy. What does Stinky think of the boy?	Plan A: What is the first plan Stinky has to get rid of the boy.
Plan B: What is the second plan Stinky has to get rid of the boy.	Plan C: What is the third plan Stinky has to get rid of the boy.	Plan D: What is the fourth plan Stinky has to get rid of the boy.	What is the end of the story?

Artifact 4: Student survey

Lesson Reflection

Directions: Read and circle the picture that best represents your opinion.

The lesson:	A lot	So so	Not at all
Helped me better understand the story "Stinky"			
Helped me learn new vocabulary or grammar			
Activities were fun and interesting			
Motivated me to read more.			
Had many activities to keep me interested.			

I prefer our class today, over how we normally study. ✔ Check and explain why.

Yes	No

_____

_____

Artifact 5: Pre and post survey results

Category (pre-survey)	A lot	So so	Not at all
Helped me better understand the story "Stinky"	(3)	(2)	(1)
Helped me learn new vocabulary or grammar	(2)	(2)	(2)
Activities were fun and interesting	(1)	(1)	(4)
Motivated me to read more		(3)	(3)
Had many activities to keep me interested		(5)	(1)
	Yes	No	No response
Preferred the experimental class over the traditional class	(3) Student comment- "I think 'stinky' so funny".	(3) Student comment-"I don't like smelly".	

Category (post-survey)	A lot	So so	Not at all
Helped me better understand the story "Stinky"	(2)	(4)	
Helped me learn new vocabulary or grammar		(2)	(4)
Activities were fun and interesting		(3)	(3)
Motivated me to read more.		(2)	(4)
Had many activities to keep me interested.	(2)	(4)	
	Yes	No	No response
Preferred the experimental class over the traditional class	(2) Student comment- "I think 'stinky' so funny".	(3) Student comment- "I don't like smelly".	(1)

The Potential of Digital Storytelling to Young EFL Learners

Imee B. Gabuyo

CTechniques in Working with 12s and Under

Abstract

The aim of this study is to examine the potential of digital storytelling to young EFL learners. A literature review of related studies is conducted to find out the benefits of utilizing digital storytelling to young EFL students, and also how it enhances their literacy skills. It is discovered that digital storytelling develops learners' motivation and engagement, listening comprehension, visual memory and writing skills. Furthermore, literacy skills such as research, writing organization, technology, presentation, interview, interpersonal, problem-solving, and assessment are increased because students are able to participate in the multiple steps of designing, creating and presenting their own digital stories. Literacy skills in language learning such as reading and writing are improved by working collaboratively with their peers in creating their digital stories. Therefore, digital storytelling is an effective instructional tool for achieving better language learning outcomes of young students.

1. Introduction

Research findings about children's fond of digital technology reflected methods, even in storytelling, but their tendency has not been applied in daily lessons, thus with this reason children are lack in motivation of learning language and low in participation in class activities. If millennial students are given a presentation slide with a graphic and text, they will look at the graphic first, then read the text and finally decide how the graphic fits the text. With this natural tendency towards rich multimedia stimuli, providing students with digital stories will give them exactly what they want, the motivation, the stimulation, and the revelation of the creation of a digital story. Using technology to enhance the storytelling in our classrooms seemingly is a key to learning today. Digital storytelling has been shown to be a valuable tool to help teachers encourage their students to engage in discussion, participate in instruction, and support the comprehension of content (Kosara and Mackinlay, 2013).

According to Campbell (2012), technology integration is a must in classrooms, but it must be done effectively by enhancing the learning of students, not for entertainment. Miller (2010) states that there are reasons demonstrated by elementary writers that give support of the use of digital storytelling in the classroom such as engages and empowers students of all levels; students become more invested in their writing and give more effort, projects build

community in the classrooms, strengthens the sense of audience, projects can be short and still be effective, can be used across the curriculum, projects teach writing and technology skills, and prior knowledge can drive the story and moviemaking.

Students in our classrooms today need to be motivated and engaged in ways that trigger their attention. In order to make students strongly engaged in classroom activities, it is significant to keep learning student-centered by using digital media (Roby, 2010). Hence digital storytelling allows students to become committed across the curriculum by the use of many forms of media that they are familiar and comfortable using.

Motivated students take ownership of their learning and are invested. Robin (2008) states that, "motivation is a critical ingredient for learning, and research studies that demonstrate increases in motivation by students that participate in digital storytelling and similar technologies should be designed and conducted". It is in this regard that the author wants to prove that using digital storytelling really has a vital role in education, particularly in language learning.

The present study is an attempt to explore the potential of digital storytelling to primary EFL learners by examining more than 10 journal articles to find answers to the following research questions: a) What are the benefits of using digital storytelling to young EFL learners?; and b) How can digital storytelling enhance young EFL learners' literacy skills?

2. Literature Review

2.1 Storytelling

Storytelling is a natural method of human communication and is prevalent in all aspects of human social interaction. People tend to make better sense of complex ideas, concepts, or information when it occurs via storytelling (Chung, 2007). In this context, Sadik (2008) states that storytelling can be used to enhance a student's higher-order thinking and literacy skills.

Storytelling has traditionally focused on telling folktales, fairytales, myths, legends, and other familiar tales, which have been passed down through generations (Foelske, 2014). These stories introduce students many genres and help develop an appreciation for other cultures and traditions. According to O'Byrne, Stone and White (2018), telling stories allows individuals to describe our own experiences, and explore foundational elements of our identity.

"Storytelling is a process where students personalize what they learn and construct their own meaning and knowledge from the stories they hear and tell" (Behmer 2005). Stories resonate in social settings, and have the potential to pass across backgrounds that often separate us (Alexander and Levine, 2008).

Storytelling in the classroom often provides a powerful opportunity to embed elements of narrative, identity, and writing into classroom pedagogy (O'Byrne WI, Stone R and White M, 2018). Through storytelling in the classroom, students are able to become more innovative and creative while focusing

on the message they want to communicate (Porter, 2005). Isbell, et al. (2004) stated that stories provide a realistic and authentic opportunity to capture students' attention and help them listen and learn more actively than other forms of instruction by providing a vehicle to bring facts to life, make the abstract concrete and, through meaning making, make disciplinary literacies more accessible.

In my own understanding, stories offer a genuine opportunity for students to be motivated and help create students' understanding, respect and appreciation for other cultures, and can promote a positive attitude to people from different lands and races.

2.2 Digital Storytelling

According to Lambert (2009), digital storytelling emerged at the Center for Digital Storytelling in California in the late 1980s as a method employed by community theatre workers to enable the recording, production, and dissemination of stories.

Digital Storytelling focus on the blend of storytelling with multimedia elements such as digital graphics, audios, videos and music to present information, and they have a certain theme and viewpoint as in the traditional stories (Porter 2005; Robin 2006). Different from traditionally linear narratives, digital storytelling shapes its power by integrating digital technologies, thereby giving a deeper dimension and vivid color to characters, situations, experiences, and insights.

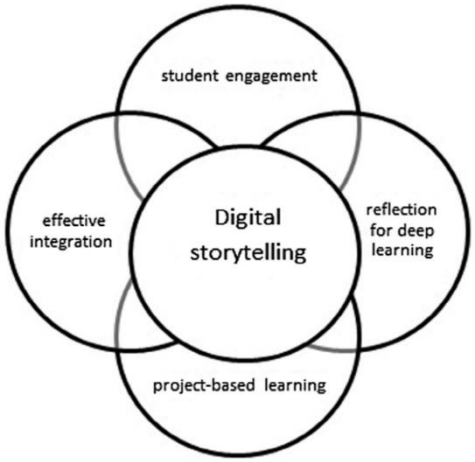
As with traditional storytelling, most digital stories focus on a specific topic and contain a particular point of view. The topics that are used in Digital Storytelling range from personal tales to the recounting of historical events, from exploring life in one's own community to the search for life in other corners of the universe, and literally, everything in between (Hartley, Rennie, Ruso & Watkins, 2005; Heo, 2009). Robin (2008) categorized digital storytelling into three groups namely: personal narratives that include some important events in one's life, stories that examine historical events, and stories that are primarily used to inform or instruct people on a specific subject.

Joe Lambert and the Center for Digital Storytelling have provided training and assistance to people interested in creating and sharing their personal narratives (Robin, 2011). The Center for Digital Storytelling (CDS), is also known for developing and disseminating the Seven Elements of Digital Storytelling, (see appendix table 1) which is often cited as a useful starting point to begin working with digital stories (Robin, 2011**).** These elements are defined for creating effective and interesting multimedia stories. Making a story is not a simple process that follows a recipe or prescribed formula. These elements require consideration for every story and determining the balance each element occupies in the story can take a lot of thinking and re-thinking.

Ohler (2013) mentioned that nowadays teachers of many subjects use digital storytelling in their classes to make difficult learning issues more concrete and understandable. In this regard, digital storytelling has been reported to increase the convergence of four student-centered learning strategies (Barrett, 2006):

student engagement, reflection for deep learning, project-based learning, and the effective integration of technology into instruction (Figure 2).

Figure 2: Convergence of four student-centered learning strategies in digital storytelling (Barrett, 2006)



Effects of offline vs. online digital storytelling on the development of EFL learners' literacy skills, adapted from Rahimi and Yadollahi, (2017: 4)

Digital storytelling has become prominent as an instructional tool to teach different school subjects to raise students' attention and interest (Robin, 2008) and teaching languages is included. Research shows that digital storytelling provides a lot of opportunities for language learners. It helps learners to improve their communicative competence in a learner-centered environment using language authentically and meaningfully in a personal manner (Rance-Roney, 2008). The important role of digital storytelling in listening comprehension (Abdolmanafi-Rokni & Qarajeh, 2014), reading and vocabulary learning (Chuang, Chiang, Su, & Chang, 2013), oracy skills and motivation (Tahriri, Danaye Tous, & MovahedFar, 2015); learning achievement, writing skill and verbal skills, and critical thinking ability (Yuksel, Robin, & McNeil, 2011) is also evident. According to the results of their study, the strategy of applying digital storytelling not only improves the speaking ability of learners but also has a considerable effect on students' motivation toward language learning in general and speaking skills in particular. Digital storytelling and story making give opportunities for sharing thoughts and ideas as a class, group or individually. It is a motivational tool which encourages learning, good communication skills and engagement in writing. It can also direct students to reach a deep comprehension in a short period of time. Simplicity of storytelling helps teachers not only totally present materials but also it helps students to understand more comprehensively (Abdolmanafi-Rokni & Qarajeh, 2014).

2.3 Theories that support educational use of digital storytelling

From the study of Wang and Zhan (2010), Constructionism (Papert, 1993) and narrative paradigm (Fisher 1985, 1989) are the two fundamental theories supporting various and innovative uses of digital storytelling in education. 'Constructionism' is explained as the "personal reconstruction of constructivism" that emphasizes the role of construction of knowledge in the "world" rather than purely in the "mind" (Papert, 1993). Constructionism is "learning by making," which is different from constructivist "learning by doing." The

idea of "learning by making" emphasizes learning that takes place when learners are engaged in building external and sharable objects, such as creating and sharing their stories enhanced by still images, voices, and background music.

According to Fisher (1984), narrative narration as a theory of "symbolic actions – words and / or deeds – that have sequence and meaning for those who live, create, or interpret them". He explained that narrative paradigm assumes that all forms of human communication can be seen fundamentally as stories, as interpretations of aspects of the world occurring in time and shaped by history, culture, and character.

Narrative stories according to Neuhauser (1993) are effective educational tools since they are believable, rememberable, and entertaining. Digital storytelling becomes an even more effective means of communication because narration is enhanced by visual aids, still images, music, and the authors' voice which expresses emotions (Wang and Zhan, 2010). Because various educational applications of digital storytelling are in compliance with how human beings learn, researchers have found that digital storytelling has played an effective role in many aspects of education.

3. Methodology

As mentioned above, this literature review aims to investigate the potential of digital storytelling on primary EFL learners. Several procedures were followed to ensure a high quality review of literature on the potential of digital storytelling. First, a comprehensive search of peer-reviewed journals was completed based on a wide range of key terms including picture books, storybooks, storytelling, potential, impact, digital storybooks, digital storytelling, literacy, student motivation, and various combination of these terms. The sources for selecting relevant literature were the database ERIC, EBSCO, Google Scholar, Science Direct, and Onesearch. Second, more articles were found by the snowballing of references. The snowballing process happens when an article leads to finding other articles that were either cited in an article or who cited the article. Third, key educational and technology journals around from around the world were searched independently and included the following publications: International Journal of Language and Linguistics, International Journal of Humanities and Social Science, Technology and Teacher Education Annual, Procedia - Social and Behavioral Science, Art Education, Issues in Educational Research, Children and Libraries, Communication Monographs, International Journal of Applied Linguistics & English Literature, Contemporary Issues in Technology and Teacher Education, Journal of Applied Developmental Psychology, and Communication Monographs. The search process uncovered 38 articles published from 1985 to 2018.

4. Results and Discussion

4.1 Benefits of Digital Storytelling

There are several benefits of absorbing digital storytelling as one of the elements in classroom learning process and it has been suggested and acknowledged by few prominent people who have been using digital storytelling for education purpose.

As stated by Robin (2005), many studies have found that digital storytelling in many different ways positively affects and supports students' learning. The advantages of digital storytelling are discussed in the following aspects.

4.2 Visual Memory and Writing Skills

Sarıca and Usluel (2016) studied the effect of digital storytelling on visual memory and writing skills of primary students. The participants were 59 primary school students enrolled in the "Journey of Myself" education program of the "Educational Volunteers Foundation of Turkey (TEGV)" during the fall semester of 2013-2014. The experimental group consisted of 29 students and the control group included 30 students. The research was conducted over a period of 13 weeks. From the fourth week on, the students in the control group were asked to prepare posters on "My World" and "Here is My Life" themes using printed materials, and no activities related to the digital storytelling were conducted. They wrote texts related to their topics and there were no story patterns considered in the stage of writing. In the final weeks, the pictures were drawn, the printed materials were affixed to the posters, designs were made and the posters were finalized. On the other hand, the students in the experimental group were asked to prepare digital stories about themselves on the same themes. They created their own individual digital story with the help of the researcher and the education volunteer. Some mobile applications (e.g. Animoto Video Maker, Com-Phone Story Maker, iMovie, Magisto, Storkit, Toontastic, Viddy, Voice Thread, etc.), web-based tools (e.g. Animoto, Powtoon, Myna, Storyjumper, etc.) and desktop software (e.g. Microsoft Photo Story 3, Adobe Premiere Elements 11, Windows Movie Maker, Scratch, Storytelling Alice, Moglue Builder, etc.) including text, sound, images or videos were used in this study. In the creation of digital stories, Ohler (2013) five-stage digital story creation process was used: planning, pre-production, production, post-production, and delivery. At the end of the implementation process, it was found that students enjoyed themselves in digital story creation process, they found it enjoyable to use tablets and that it was more preferred to use tablets instead of paper-pencil in obtaining visuals as a result of the observations made during the process and informal interviews with the students. The "Benton Visual Retention Test" and "Composition (Written Narrative) Evaluation Scale" were applied as pretest and posttest. In order to test whether there was an improvement within groups and to see if there were differences between groups, the hypotheses were tested using the t-test and obtaining gain scores. The findings showed a significant improvement in terms of the visual memory capacity and writing skills of students in both experimental and control groups, and the average gain scores were higher in the experimental group. Findings further reflected that digital storytelling created a significant difference in the writing skills of students. However, no statistically significant difference was observed between groups although the gain score averages of the experimental group students were higher in terms of visual memory capacity.

Yamac and Ulusoy (2016) investigated the effect of digital storytelling in improving the third graders'

writing skills. The study adopted the action research design as one of the qualitative research techniques to reveal how digital storytelling work as a multimedia tool in writing instruction. Stories were created by groups, pairs and individuals respectively. In the digital story making process, students worked through the following steps: preparation, drafting, revision, editing, storyboarding and gathering multimedia resources, producing, and sharing. Writing quality, story components and writing lengths were considered to assess the students' narrative writings. To assess overall quality of the texts, "6+1 Writing Traits Rubric", developed originally by researchers in Northwest Regional Educational Laboratory (Grundy, 1986) and adapted into Turkish by Ozkara (2007) was used. The scale is comprised of seven sub factors: ideas, organization, voice, word choice, sentence fluency, conventions and presentation. The writing performances of the students were measured before and after the teaching procedures of digital storytelling. Then, the process of narrative writing with digital storytelling was profoundly and carefully explored through observation and field notes, interviews, audio and video records, student diaries and documents, and student products. Their investigation demonstrated that digital storytelling enhanced students' ideas, organization, word choice, sentence fluency, and conventions in terms of writing quality. Similarly, the digital storytelling improved story elements and word counts in stories. In terms of the quality of students' digital stories, the results reflected a steady progress in the elements of digital stories, and the technology literacy and competency of students throughout the process. In addition, the digital storytelling refined the process of narrative writing, and emerged as a beneficial tool to overcome the digital divide by developing students' new literacy perception, competency, and skills. The digital storytelling also created learning community by improving interactions among students in the classroom, and increased their motivation to write.

4.3 Motivation and Engagement

Through a literature review, Foelske (2014) found that digital storytelling increases student motivation and engagement in student-centered projects. It had a positive effect on the improvement of literacy skills, other content knowledge and the 21st century skills both for the normal students and the students who normally struggle with writing a story. Students were more engaged when they were in control of reflecting, visualizing, and creating more meaningful digital stories to share with a large audience (Foelske, 2014).

A comprehensive study was made by Smeda, Dakich and Sharda (2014) to investigate the effectiveness of digital storytelling in the classrooms. An evaluation rubric was used to collect quantitative data, while interviews and observation were used to collect qualitative data. Data collection was guided by a mixed methods research design in order to evaluate if and how digital storytelling enhances teaching and learning outcomes. The researchers found that digital storytelling is a powerful tool to integrate instructional messages with learning activities to create more engaging and exciting learning environments. It is a meaningful approach for creating a constructivist learning environment based

on novel principles of teaching and learning. Thus, they concluded that the approach has the potential to enhance student engagement and provide better educational outcomes for learners.

Another study that showed the positive effect of using digital stories on young learners' motivation and engagement is the one made by Ritcher and Courage's (2017) which is entitled, *Comparing electronic and paper storybooks for preschoolers: Attention, engagement, and recall.* In their study, they assessed preschool learners's attention, engagement, and communication during readings from electronic and paper storybooks, and their recall of story content. Seventy-nine preschoolers listened to one story on a tablet and another in paper format. The e-book contained multimedia and interactive features that activated story-related information. Dependent measures were attention to the book, the adult, and off- task; engagement and communication; recall of story content. Language and executive functioning were assessed. The researchers investigation resulted to having children more attentive to, and engaged in the e-book than the paper book. Children communicated more about the device during the e-book but more about the story during the paper book. According to them executive functioning was a stronger predictor of attention.

4.4 Listening Comprehension

Verdugo and Belmonte (2007) examined the effects that digital stories may have on the understanding of spoken English by a group of 6-year-old Spanish learners. To accomplish their aim, they did a quasi-experimental research study in six state schools in Madrid. A pre-post test design was used to investigate whether internet-based technology could improve listening comprehension in English as a Foreign Language. Findings indicated that the experimental group outperformed the control group in the final test administered. It was noted that students in the experimental group were able to comprehend basic linguistic structures and vocabulary and provided correct answers. They pointed out that the use of various multimedia, including graphics, audio, video, effects and pictures in digital stories and the pedagogical practice of digital stories enhanced the students' attention and concentration on the oral input received.

Similarly, Collen (2006) studied the effects of digital stories on listening skills and found that the students in the experimental groups gave more correct answers to questions after they listened to and watched digital stories. In another experimental study, Abidin, et al. (2011) researched the effects of digital stories on the listening comprehension skills of pre-school students in foreign language teaching and found that the experimental group who watched digital stories were more successful.

Ciğerci and Gultekin (2017) also determined the effect of digital stories on the Turkish listening skills of fourth grade students by doing an experimental research. Quantitative data from the listening comprehension test was analyzed using t-tests, and the qualitative data was subjected to descriptive analysis. There was a significant difference between the post-test listening comprehension scores for the experimental and control groups. The qualitative data

from student and teacher interviews, and from classroom observations, showed that digital stories, listening activities based on the stories, and the creation of a more engaging and motivating classroom environment had positive effects on listening comprehension skills in the experimental group.

4.5 Digital Storytelling on Learners' Literacy

Robin (2011) in his study of the educational uses of digital storytelling, stated that digital storytelling by students provides a strong foundation in many different types of literacy, such as information literacy, visual literacy, technology literacy, and media literacy. Summarizing the work of several researchers in this field, Brown, Bryan and Brown (2005) have labeled these multiple skills that are aligned with technology as "Twenty-first Century Literacy," which they describe as the combination of:

• **Digital Literacy** – the ability to communicate with an ever-expanding community to discuss issues, gather information, and seek help;

• **Global Literacy** - the capacity to read, interpret, respond, and contextualize messages from a global perspective:

• **Technology Literacy** - the ability to use computers and other technology to improve learning, productivity, and performance;

• **Visual Literacy** - the ability to understand, produce and communicate through visual images;

• **Information Literacy** - the ability to find, evaluate and synthesize information.

In the area of technology literacy, students who create digital stories improve their skills by using software that combines a variety of multimedia tools including working with text, still images, audio, video and oftentimes, Web publishing. In the area of technological literacy, Digital Storytelling can provide a meaningful reason for students to learn to digitize media content by using scanners, digital still cameras, and video cameras. In addition, as students create the narration and soundtrack for a story, they gain skills in using microphones, digitizing audio and working with music and sound effects. Robin (2011) stated that when students are able to take part in the multiple steps of designing, creating and presenting their own digital stories, they improve a full complement of literacy skills, including:

• **Research Skills**: Documenting the story, finding and analyzing pertinent information;

• **Writing Skills**: Formulating a point of view and developing a script;

• **Organization Skills**: Managing the scope of the project, the materials used and the time it takes to complete the task;

• **Technology Skills**: learning to use a variety of tools, such as digital cameras, scanners, microphones and multimedia authoring software;

• **Presentation Skills**: Deciding how to best present the story to an audience;

• **Interview Skills**: Finding sources to interview and determining questions to ask;

• **Interpersonal Skills**: Working within a group and determining individual roles for group members;

• **Problem-Solving Skills**: Learning to make decisions and overcome obstacles at all stages of the project, from inception to completion;

• **Assessment Skills**: Gaining expertise critiquing their own and others' work.

Rahimi and Yadollahi (2017) investigated the effects of offline vs. online digital storytelling on the development of EFL learners' literacy skills, reading and writing to forty-two lower intermediate language learners who were grouped into two: experimental and control. The participants in the study received process-oriented writing instruction with two different types of multimedia making software.. The results of Analysis of Covariance primarily revealed that the literacy skills of those who produced their stories with the online platform improved significantly in comparison to the control group, who had worked with the offline software. The researchers concludes that the result may be attributed to the fact that digital storytelling is a powerful tool for facilitating the development of collaborative writing in language classes. The collaboration of students in writing process motivates them to take more active role in writing practice and help each other overcome the difficulties of the writing cycle. Similarly, this collaboration gives students the chance of reading, reviewing, and giving comments on others' works and thus their literacy repertoire develops more extremely in comparison to when they write individually.

5. Conclusion

With the purpose of exploring the potential of digital storytelling to young EFL learners through a review of related literature, the author of the present study found out profound and significant results that can resolve the questions raised.

To answer the first research question, 'What are the benefits of using digital storytelling to young EFL learners?', the following outcomes reflect the benefits of digital storytelling use in the classroom: First, digital storytelling enhances visual memory and writing skills. It develops students' ideas, organization, word choice, sentence fluency, and conventions in terms of writing quality. Second, it motivates students to be engaged in the activities. With the technology features and the powerful tool to incorporate instructional messages with learning activities, thus help create more engaging and exciting learning environments. Digital storytelling offers students the opportunity to collaborate, interpret, problem solve, use critical thinking skills, show self- expression, investigate, analyze and evaluate while being engaged in classroom activities (Butler, et al, 2013). Third, listening comprehension is developed. Due to the graphics, audio, video, effects and pictures in digital stories and the pedagogical practice of digital stories enhanced the students' attention and concentration on the oral input received.

To answer the second research question, 'How can digital storytelling enhance young EFL learners' literacy skills?', the study of Robin (2011) on the educational use of digital storytelling, he stated that when students are able to participate in the multiple steps of designing, creating and presenting their own digital stories, they increase a full complement of

literacy skills such as research, writing organization, technology, presentation, interview, interpersonal, problem-solving, and assessment. In language learning, literacy skills such as reading and writing are enhanced through working collaboratively and more accessibility of digital tools results in much more English achievement and that the availability of computer at home relates to students' performance in reading and achieving higher performance scores.

This present study proved that digital storytelling is very beneficial, so teachers have to integrate this instructional tool for their students better learning outcomes.

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APPENDIX

Table 1: The Seven Elements of Digital Storytelling

The Seven Elements of Digital Storytelling	
1. Point of View	What is the perspective of the author? Stories are told to make a point and should not be presented as a recitation of mere facts. Define the premise of the story so that all parts can serve to make the point. Consider the audience and direct the point to them.
2. The Dramatic Question	A question that will be answered by the end of the story. Capture the audience's attention at the beginning of the piece and hold their interest throughout. Pose the dramatic question in the opening lines and resolve it in the closing lines.
3. Emotional Content	Serious issues that speak to us in a personal and powerful way. The images, effects, music and tone of voice all lend to contributing emotion to the piece. Try to keep the elements consistent with the emotion of the moment
4.Gift of Voice	A way to personalize the story to help the audience understand the context. Take time to learn and practice the script so you can speak in a conversational voice. Record several takes and select the best one. Trust that the audience will think it is perfect.
5. Power of Soundtrack	Music or other sounds that support the storyline. It is a big plus to a digital story. The right music can set the story in time and can convey emotion. Play music behind an image and a specific emotion is generated. Change the music behind the same image and an entirely different emotion is experienced.
6. Economy	Simply put, using just enough content to tell the story without

	overloading the viewer with too much information.
7. Pacing	Related to Economy, but specifically deals with how slowly or quickly the story progresses. The rhythm of the piece is what keeps the audience's interest in the story. Changing pace within the story can facilitate moving the audience from one emotion to another.

Appendix A: Digital Story Creation

Samples of visuals drawn by the experimental group by hand and using tablets within the context of the stories in the research of Sarıca and Usluel (2016) on the effect of digital storytelling on visual memory and writing skills.

Appendix B: The Groups' Development in terms of Writing Skills

The groups's development in terms of writing skills in the research of Sarıca and Usluel (2016) on the effect of digital storytelling on visual memory and writing skills.

The experimental group outperformed the control group in terms of writing skills.

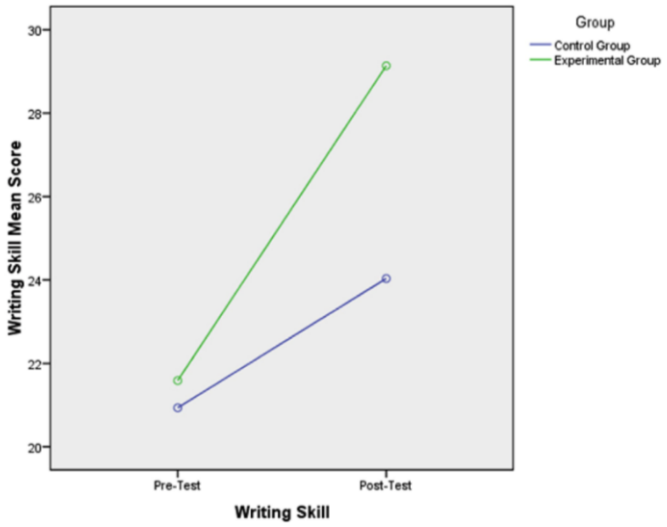

Fig. 5. The groups' development in terms of writing skills.

Appendix C: The Wilcoxon Signed-rank Test Results

This was the results regarding the students' writing quality scores on their performances before and after the procedures of the research study of Yamac and Ulusoy (2016) on the effect of Digital Storytelling in improving the third graders' writing skills. Students delivered better products in terms of ideas, organization word choice, sentence fluency and conventions at the end of the digital storytelling instruction.

Table 1. *The Wilcoxon signed-rank test results regarding the students' writing quality scores on their performances before and after the procedures*

Scores	Pretest-posttest	*n*	Mean Rank	Sum of Ranks	*z*	*p*
Ideas	Negative Ranks	0	.00	0	3.63	.00*
	Positive Ranks	14	7.50	105		
	Ties	12				
Organization	Negative Ranks	0	.00	0	4.18	.00*
	Positive Ranks	19	10	190		
	Ties	7				
Voice	Negative Ranks	0	.00	.00	1.73	.08
	Positive Ranks	3	2	6		
	Ties	23				
Word choice	Negative Ranks	0	.00	.00	2.44	.01*
	Positive Ranks	6	3.5	21		
	Ties	20				
Sentence fluency	Negative Ranks	0	.00	.00	3.35	.00*
	Positive Ranks	13	7	91		
	Ties	13				
Conventions	Negative Ranks	0	.00	.00	3.35	.00*
	Positive Ranks	13	7.00	91		
	Ties	13				
Total	Negative Ranks	0	.00	.00	4.12	.00*
	Positive Ranks	22	11.50	253		
	Ties	4				

p>.05

Appendix D: Phases of the Writing Process

This writing process was used by Rahimi and Yadollahi (2017) for their research study on the effects of offline vs. online digital storytelling on the development of EFL learners' literacy skills. The experimental group of their study had undergone this writing process.

Table 1. Phases of the writing process

Phase	Definition	Examples of teaching and learning activities
Pre-writing	Structured activities to provide motivation, content, fluency, language practice	Structured language practice, readings, films, discussions, brainstorming, webbing, outlining
Writing	First draft	Focus on content, getting ideas on paper
Response	Reaction of a reader or listener	Peer review, partners or small groups, teacher conferences, written feedback
Revising	Reseeing or rethinking content; second draft	Recognizing, adding details, adding support for arguments
Editing	Refinement and attention to writing conventions, including grammar and vocabulary; third draft	Checklists, grammar logs, exercises, proofreading practice
Post-writing	What students and teachers do with finished pieces	Display, share online, compile class writing into a booklet
Evaluating	How teachers and/or students assess student writing	Rubrics, conferences, self-evaluation, portfolios

Source: Adapted from California State University, Stanislaus, n.d., as cited in Weigle (2014, p. 227).

What do eye movements tell us:

Examining eye movements in observing cognitive and neurological aspects related to learning

Yeana Kim

Human Learning and Cognition

1. Introduction

How much do we know about what we see and where we look? Many people believe that our vision is similar to camera registration, just like how photographers would take snaps of photos (Schnelle, 2010). However, our vision involves much more than simply taking pictures and saving them into our brain just as we would to photographs sealed and kept into our photo albums. Instead, Schnelle-Schneyder (2003) claims that the principles of our vision are based on "concentration, selection, and abstraction." This means that in viewing a scenery, our vision does not equally capture the foreground or the background, nor does it register different objects within the foreground with the same amount of attention. Schnelle-Schneyder (2003) further adds that the principles – concentration, selection, and abstraction – are organized through our brain's mechanism of perception.

With our recognition on perception of the world being predominantly visual (Kolb & Whishaw, 2000), it is hard to believe that vision was greatly existent for the sole and main purpose of motor control – and not to provide perception of the world per se (Milner & Goodale, 2002, as cited in Kolb & Whishaw, 2000). However, much of our behavior is arbitrary and evident that it is mediated by an internal model of the world. The representational systems have evolved to allow the brain to model the world by identifying objects and events, attaching meaning and significance to them, and establishing causal relations (Kolb & Whishaw, 2000). In human beings and most primates, vision serves the purpose in providing some of the inputs to these representational systems. Some may not have direct links to the motor system, but have shown to be to cognitive systems, memory, semantics, planning, communication, and most of all to perception – which will be the main focus of this paper.

The purpose of this paper is to investigate the eye movements and what they can tell us about cognitive and neurological aspects related to learning. The paper plans to dissect eye movements by starting out with an introduction on the anatomical view and the nature of eye movements. Though eye movements may seem as simple as moving the eyes up and down

or left and right, eye movements are surprisingly complicated. Zapata, Puig, and Super (2011) discuss bottom-up and top-down processes in the way we perceive the world. The former claims that eye movements are guided by the physical attributes of visual stimuli. Meanwhile, the latter holds view that the perceptual or cognitive signals are led to perception – simply put, the already existent meaning in our minds reflect what we perceive.

The distinction between the two main processes are important because it influences the interpretations made in the literature of eye movements. With interest growing on eye movements, methodologies in tracking eye movements have been emerging. Laboratories have measured eye movements in various ways. From simply observing reading speed, much have been measuring for evidences of cognitive engagement (Yarbus, 1967; Rayner, Chase, Slattery, & Ashby, 2006; Miller, 2015).

In the field of language studies, eye movements have provided valuable information regarding the way we read. Initially, eye movement studies were conducted syntactically on word-level and sentence-level, later on developing into larger sums of texts such as paragraphs. While limited amount of studies looked at pleasure reading, much literature (Miller, 2015; Staub, 2015; Kaakinen, Ballenghein, Tissier, & Baccino, 2018) (as cited in Godfroid, 2019) have been conducting research using science texts, under the assumption that scientific texts are more difficult to comprehend. Indications of eye movement on reading are thus quite mixed: For instance, whether our eyes remain fixated or not fixated – and whether it does so on harder or easier materials.

Recognizing conflicting results on a plethora of literature on eye movements, this paper mainly focuses on authentic reading materials, one which would be most meaningful to the students in the classroom. Thus, this paper aims to discuss implications on authentic materials such as e-mails and classroom texts that deal with images.

2. Eye Movements

2.1Voluntary and involuntary eye movements

Banich (1997) proposes frontal eye fields and superior colliculus as being responsible for the voluntary and involuntary eye movements made by human beings. The latter is controlled by the frontal eye fields located in the region of the frontal lobes. These voluntary movements are programmed by each individual being to make deliberate decisions in making such movements. Voluntary movements are distinct from involuntary movements in that the latter tends to be reflexive. Yarbus (1967) discusses the importance of making voluntary eye movements by adding that the inability to make voluntary eye movements will lead to problems in perception; difficulties involve determination of proportions, comparison of areas, counting large numbers of small elements, and so forth.

Involuntary eye movements are controlled by the superior colliculus, which aids in shifting attention to new locations or objects. Likewise, attention shifts are made by controlling the eye movements to quickly

shift peripheral stimuli into foveal vision. Such process is accomplished through "saccades," eye movements jumping from one position to another without processing intervening visual information.

Banich (1997) identifies two main varieties of saccadic movements as 'express saccades' and 'regular saccades'. One pertaining to the involuntary movement is the 'express saccades' that takes about 120 milliseconds (ms); fast, reflexive movement triggered by novel visual stimulus in the periphery. 'Regular saccades' are voluntary movements that lasts longer between 200 to 300 ms. The frontal eye fields and superior colliculus work independently yet occur through a final common output pathway. It is believed that conflicts in movements can be avoided due to a greater influence of the frontal eye fields on the superior colliculus.

2.2 Cortex: Vision beyond the occipital lobe

In the early 1900s, it was commonly believed that the occipital lobes in the cortex were ones mainly in charge of vision. It is only in the past four decades that understandings emerged on visual processing taking place beyond the occipital lobes (Kolb & Whishaw, 2000). In stating their view regarding this, Graziano, Wheeler, and Gross (2000) would also agree to say that processing occurs in a complicated manner: Information is passed on from lateral geniculate nucleus to primary visual cortex, which is further processed in the extrastriate visual areas eventually reaching the posterior parietal cortex.

In fact, Kolb and Whishaw (2000) adds that greater parts of the cortex are involved in the processing of vision – 55% of the whole cortical surface taking up vision-related regions. Visual processing in humans are not limited to secondary visual areas but rather continues into the multiple visual regions of the parietal, temporal, and frontal lobes. While it is still unclear to speculate the specific functions of the cortex, Kolb and Whishaw (2000) divide the visual phenomenon into five main categories as: 'vision for action,' 'action for vision,' 'visual recognition,' 'visual space,' and 'visual attention.'

2.3 Five categories of visual functions

First, the claim 'vision for action' emphasizes that visual processing is required in directing specific movements. Evidence that movement is guided by vision rests in the fact that particular finger and hand patterns are made in grasping different objects. In addition, visual areas guide all kinds of specific movements made by each meticulous part of the body. Moving fingers to pick up a bean with chopsticks versus ducking away from a snowball requires different motor control but both are visually guided. It is also important to note that our vision also registers specific information about the movement of the target object, such as the location, trajectory, speed, and shape.

Second, 'action for vision' illustrates that our eye movements are not randomly made. Usually, the eyes tend to focus on what is deemed important or ones that act as distinct features of the stimulus. When normal and agnostic participants were compared to look at a sphere and a bust, the former tended to trace the outline of the shapes with their eyes. Meanwhile, the latter had their eyes moving at random (Luria, 1973, as cited in Kolb & Whishaw, 2000, p. 324). In

fact, eye movements are made in a distinctly similar fashion among humans. For example, people will regularly tend to scan the left visual field of a person's face (Kolb & Whishaw, 2000). Thus, 'action for vision' acts more as a top-down process where we actively search and scan and selectively attend to particular stimulus.

Third, 'visual recognition' emphasize the ability we have in recognizing objects and responding to visual information. When we recognize letters or symbols, we are prone to assign meaning to each of them. This highlights the capacity of the cortex in recognizing, assigning meaning, and labeling. Kolb and Whishaw (2000) claim that the temporal cortex carries high specificity in recognizing faces or hands. Thus, it is possible that the visual areas in the temporal lobe are specialized for visual recognition.

Fourth, 'visual space' emphasizes the importance of spatial location in our visual perception. Two main characteristics of space involved are egocentric space and allocentric space. The former recognizes objects in relation to an individual while the latter deals with space relative to one another. According to Kolb and Whishaw (2000), spatial differentiation is important due to the way information is processed. Since egocentric space deals in controlling actions toward objects, the visual space is coded into the neural system relating it to 'vision for action.' Meanwhile, allocentric properties of objects require constructing memory of spatial location. While it depends on the identity of the particular features, allocentric spatial coding is likely to be associated with the regions of 'visual recognition.' Essentially, different aspects of spatial processing will require both the parietal and temporal visual regions of the brain.

Fifth, 'visual attention' proposes that it is nearly impossible to process all the visual information available. When given shape, color, texture, location and more are provided as information, only the really important characteristics will be salient (Kolb & Whishaw, 2000). We select a specific aspect of the visual input and selectively give attention. Neurons in the cortex display their various attentional mechanisms by responding selectively to stimuli depending on location, time, or purpose. Such guidance of movements would most likely take place in the parietal lobe and object recognition in the temporal lobe.

3. Perception

3.1 Bottom-up and top-down

Current research shows that saccade and perceptual signals are closely related (Zapata et al., 2011). Visual signal guides saccades and gives rise to perception. Moreover, vision enables us to interact with our surrounding environment by identifying objects and guiding body movements. We continually scan the visual world using eye movements in order to perceive, and through the saccadic movements, relevant visual information is provided.

During the fixation of a saccade, visual signals entering the fovea are processed up to a perceptual level by the visual brain, ultimately leading to a conscious experience. Moreover, access to the more

peripheral regions allows for the direction of the next saccadic eye movement. Two types of signals that are important in directing eye movements are called bottom-up and top-down information.

Bottom-up control on saccadic behavior propose that eye movements are guided by the physical attributes of visual stimuli. General conclusion made through the investigations revealed that salient properties of stimuli attracted the eyes irrespective of object identification (Lindauer & Lindauer, 1970; Brigner & Deni, 1990) (as cited in Zapata, 2011). Moreover, stimulus contrast through luminance, motion, size, orientation, etc. attract our attention and define our saccadic targets, including our perception of the stimulus (Theeuwes et al., 1999; Theeuwes, 1992, 1994; Itti & Koch, 2000; Nothdurft, 2002; Parkhurst & Niebur, 2003) (as cited in Zapata 2011).

Moreover, the top-down processes influence the control of oculomotor behavior. These signals are either perceptual or cognitive signals which derive from higher visual areas that are again led back to lower areas and motor regions. Yarbus (1967) initially proposed the importance of memory or task demands in the production of eye movements, or scan paths, in viewing an image. More recent studies have shown that eye movements are task dependent and fixations are made on behavioral relevant objects (Hayhoe et al., 2003; Hayhoe & Ballard, 2005) (as cited in Yarbus, 1967).

3.2 Schnelle: F-sequences

Schnelle (2010) describes the process of saccadic eye movements as occurring from the center to the peripherals. Initially, an object's brief global impression activates the mind's attentional focus, arousing a desire for us to clearly identify the impression. The fovea, area in the retina where vision is most acute, eventually detects the object – fixating on the core of the impression. However, the information gathered from the core is not enough in understanding the "complete phenomenon" occurring within the object. More information regarding the "neighboring" or surrounding positions would require "f-sequence", which is the sequence of focus points that are caused by saccadic eye movements, to move from one position to another.

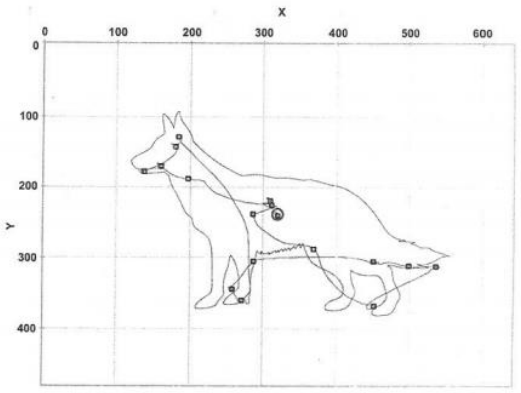

Figure 1 Saccadic eye movements: Scanning a design of a fox (Schnelle, 2010, p. 69).

Figure 1 above illustrates the fixation points and movement direction of the f-sequence. The initial f-sequence movement starts from the center of the body, accompanied by short, indecisive move to a nearby position. Afterwards, clear sequences are made to the fox's neck, mouth, eyes, and ears; then to the bottom of the object – it's four legs and the tail. Eventually, final sequence is made by returning to the original central position.

As the eye movements are being made, Schnelle (2010) claims that names of the body parts will be triggered, allowing the observer to label each part of the fox. As for animals, such as a cat, Schnelle (2010) further posits that different visual category cognits would be activated since language is not an option for the animals. In addition, "saccadic integration" occurs as scanning shifts are made within the object. Schnelle (2010) describes saccadic integration as common categorization that happens when neighboring sub-sequences are registered. For example, each leg is not recognized as completely different objects but rather as "fixation bundle of legs" that belongs to the fox, which is then stored into separate combination categories.

3.3 Yarbus: Eye movements in perceiving co mplex objects

Alfred Yarbus, one of the founders of modern eye movement, immensely influenced the recent approaches to the study of eye movements and vision (Tatler, Wade, Kwan, Findlay, & Velichkovsky, 2010). One of the contributions made by Yarbus (1967) involved examining eye fixations on paintings. In the span of a three-minute recording session, fixations were particularly directed towards faces of the individuals in the painting scene early on in the first viewing period of 35 seconds. It was further verified that general trends for fixation when viewing scenes geared towards persons within the scene. Recent studies have shown that such trend is much evident on the very first fixation (Fletcher-Watson, Findlay, Leekam, & Benson, 2008) (as cited in Tatler et al., 2010).

Figure 2 '*The Unexpected Visitor'* Oil on canvas painting by Ilya Repin, 1884–88. (Source: Courtesy of www.ilyarepin.org.)

Further findings involved patterns that different people carry when viewing the same painting. In recording observers who viewed the paining "The Unexpected Visitor" by Ilya Repin (*Figure 2*), Yarbus (1967) found that patterns of eye movements made by the observers were similar but not identical. In addition, the similarities that existed within a single observer was greater than between observers – indicating that individual differences in perception existed. In viewing complex scene for an extended period of time, he suggested that the eyes fixated in order to examine the most important elements of the picture. This is evident in providing different instructions or conditions to the observers before viewing the painting. *Table 1* (See appendix) lists the seven conditions that each observer was provided with.

Yarbus (1967) found that altering instructions given to the observer had a profound effect on the behavior

of the observers. Further observations made by Yarbus (1967) involved variations in fixation points depending on the task – or character of the information – the observer is engaged in, since different item information is localized in different parts of the object. This validates discussions made by Schnelle-Schneyder (2003): Concentration, selection, and abstraction are key principles of vision that are organized by our brain's mechanism of perception.

For example, *Table 2* (See appendix) below provides saccadic eye movements made while the observers were provided with particular conditions. For the first condition in which free examination of the portrait was required, movements toward face recognitions were greater compared to others. Second condition requested information on the estimate of the material circumstances. Observers' eye movements mainly focused on the furniture in the house, such as the table and chair, or the unknown furniture behind the children. Third and fifth condition has similar eye movements that tended to move towards the peoples' forms as information on age and clothes were required. It seems that the former focus was greater on the faces because age is possibly most reflective from the faces. Fourth condition asked for information that required what the family was doing before the intrusion. Much eye movements are concentrated towards the hands of the children on the table and the body movements of the ladies. Eye movements on the sixth condition seem to be most dispersed as the observers are trying to get as much information about the portrait. Lastly, much to-and-fro movements are made between faces, possibly to figure out facial expressions – from which observers can gauge the types of emotions involved.

Once attention is given to an object or when our vision is attracted by an object, "the essential aspects [of the object] are registered and the inessential features are neglected." (Schnelle-Schnider, 2003). Simply put, once our human eyes perceive stimulus that are meaningful, there is a greater chance that it would be registered into our brains as procedural memory. This reflects discussions made by Zapata et al. (2011) regarding the top-down processing involved. Not to mention the design of the study in which meaning (conditions to look for) was already given, observers were already primed to perceive and look for specific information. In doing so, relatively similar eye movements were made, indicating that we believe certain traits or characteristics would provide us with the information we are looking for.

4. Eye tracking

4.1 Eye tracking methods

Kliegl and Laubrock (2018) list alternate methods for tracking a reader's eye. Some well-known methods are electrodes, infrared corneal reflections, search coils attached to the surface of the eyes, infrared dual-Purkinje image tracking, and video-based pupil monitoring (Kliegl & Laubrock, 2018, p. 70). Some have faced disadvantages due to intrusiveness and usability; while video-based systems through corneal reflection have considerably improved. Nevertheless, video-based eye trackers have been used quite often for its easy accessibility, relative accuracy and

affordability. Below, *Figure 3*, illustrates a diagram of a typical eye tracker set up.

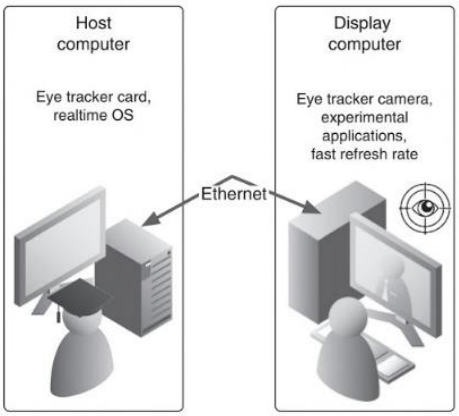

Figure 3 Typical eye tracker set up. Source: Kliegl & Laubrock (2018)

Godfroid (2019) claims that eye movements can provide information regarding the cognitive processing and knowledge for participants to use in accomplishing a task or goal. Current neurophysiological research has shown close links between eye movements and covert attention shifts. Eye movement data are indicative of where the participants look (fixation location), for how long (fixation duration), and where their eyes move or saccade to next. Information regarding location and duration prove to be useful as it tells researchers whether and for how long participants engage with specific information in the input (Godfroid, 2019). Eye movement research has been growing in the following topics, but not limited to: "sentence processing, the bilingual lexicon, vocabulary, prediction in language comprehension, language production, language assessment, implicit and explicit knowledge, and subtitle processing (Conklin & Pellicer-Sanchez, 2016; Conklin, Pellicer-Sanchez, & Carrol, 2018; Dussias, 2010; Godfroid & Winke, 2015; Keating, 2013; Roberts & Siyanova-Chanturia, 2013; Winke, Godfroid, & Gass, 2013) (as cited in Godfroid, 2019).

5. Implications on reading

5.1 The three dissociations

Contrary to what many people believe through their limited experience, our eyes do not necessarily make "smooth" movements. Kliegl and Laubrock (2018) outline three main types of dissociations, which are saccades, fixations, and "fixational movements." Saccades refers to the alterations made through quick, jerky movements. The movement is said to last between 10 and 30 milliseconds. Meanwhile, fixations are relatively stable phases; and one fixation is believed to last between 30 and 500 milliseconds – and in fact, even more than 500 milliseconds. Fixational movements, also described as micro saccades, occur when we are consciously trying to fixate on (an object or) a word. Nevertheless, the eyes would still tremor or drift without us intending to do so or having the desires to move.

Observations made through the three dissociations indicate that what is perceived during reading is not the movement of the eyes, but in actuality the movement of attention. In fact, eye tracking has become the means of method in psycholinguistic research due to the link of fixation durations and fixation location to attention. The notion "Attention is one key theoretic construct… [in] information processing" allowed Kliegl and Laubrock (2018) to

reach a hypothesis that "if processing is difficult, fixation durations increase and the distances between their locations decrease" (Kliegl & Laubrock, 2018, p. 69). Similar findings were found on incidental vocabulary acquisition research studies such as Elgort, Brysbaert, Stevens, and Van Assche, (2018), Godfroid et al. (2013), Mohamed (2018), and Pellicer-Sanchez (2016) that have shown learners spent longer times reading novel words embedded in natural texts (as cited in Godfroid, 2019). This illustrates that learners are able to give attention to unfamiliar words and attempt to process the novel items.

5.2 Eye movements in reading

There have been mixed results regarding the theories supported by reading. Zapata et al. (2011) claim that bottom-up processing aspect of reading lead to word fixation affected by the basic lexical properties, such as the frequency and length. For instance, higher frequency words will be given less fixation than lower frequency words; longer words will gain longer re-fixations (Rayner et al., 1996, as cited in Zapata et al., 2011). In addition, Rayner et al. (2006) observed that changes in the durations and frequencies of fixations and saccades were made depending on either the reader's skill level or the difficulty of reading material. Researchers claim that these behaviors are indicative of the ease or difficulty of the reading text. Fixation durations are assumed to reflect time spent on executing these processes. Longer fixations on text indicates longer processing times as it requires greater demand. Studies indicating that readers make longer fixations on difficult words as opposed to familiar, short, and unimportant words support the idea that eye movements are reflective of skills or problems with reading and processing. In addition, increased reading difficulty has been associated with shorter saccades, increased regressions, and longer fixations. Furthermore, researchers have associated increased reading difficulty – a function of individual differences and manipulated textual variables such as word length, frequency, and predictability – with shorter saccades and increased regressions, as well as lengthier fixations (Rayner et al., 2006).

Zapata et al. (2011) also propose support for top-down processing strategies. It has also been found that eye movement behavior is not only affected by the characteristics of the words being fixated, but also the relationship between the fixated word and the meaning of the preceding text (Morris, 1994). For example, when comparing fixations on words at the beginning and end of a clause, the latter word in the clause tended to have longer saccades. This serves as evidence in explaining that the process of wrapping up a linguistic constituent is influential in determining the meaning.

5.3 Reading authentic materials

As several researches have been conducted on reading in general, it is quite necessary to observe whether similar results will be obtained in reading authentic materials. Looking into studies on authentic materials are essential as great hope exists for its usefulness to the students in their future English usage. Clark, Ruthven, Holt, Song, and Watt (2014) observed eye movements made when reading diverse types of e-mails. The eight main types of genre involved call for papers, cinema, spam, newsletter,

orders, information technology services notice, seminar, and library. In reporting findings on whether differences in lengths of scan paths existed between e-mail genres, Clark et al. (2014) claimed that the first four genres mentioned above had the greatest level of fixation and longest scan paths overall. The researchers use the top-down processing method to deduce that the genres with greatest familiarity led to triggering of previous experience and thus better recognition. Within the same study, bottom-up processing is also evident when participants go through higher level of fixation and longest scan paths in e-mails that are only represented by the form but with no content. Since form features exhibit the nature of genres, the participants undergo difficulty in deciphering faulty or empty information.

In another study, Mason, Tornatora, and Pluchino (2013) observed the integration of text and picture learning in a science text from the classroom. Such context provides authenticity in that students are frequently presented with science textbooks and websites that require comprehension of verbal and graphical information (Mason et al., 2013). Thus, the study focused on online cognitive processing during text reading and inspection of graphical material. Results showed that participants with greater preexisting knowledge of the topic conducted more integrative transitions between one representation to another. During the re-reading process, longer fixation time was evident on the pictures. Speculations can be made that the more prior knowledge, the more attentional resources may be used to integrate the verbal and graphical aspects of the materials (Mason et al., 2013). Meanwhile, not all types of texts would produce the same result as this study: In a more informal text or pleasure reading material, greater pre-existing knowledge can actually lead one to give less attention and end up skipping some contents.

6. Conclusion

Human beings make conscious and unconscious eye movements more than we can ever imagine. Moreover, eye movements are made without realizing that it provides crucial information about what we perceive and vice versa how much our prior knowledge or perception shapes the way we visualize things. In attempting to investigate the influence of eye movements on cognition, Kolb and Whishaw (2000) make such distinction through ‘vision for action’ and ‘action for vision.’ Likewise, Zapata et al. (2011) neatly categorizes it as bottom-up and top-down processes of eye movements. Essentially, vision influences how we perceive the world; yet at the same time our pre-knowledge and prior background awareness also shapes our vision.

Such findings are crucial in the study of eye movements as it provides diversity in the interpretation of results. Reading is a highly contextual aspect where the learners’ proficiency level or the difficulty of the reading text greatly influence how much could be perceived. For instance, longer fixations can be made on both meaningful and “unmeaningful” materials depending on the type of text and the goal of the learner in reading the text. Vice versa, shorter fixation can be maintained if the

learner deems the material to be easy and self-explanatory – or despite contents being easily digestable, still fixate due to the meaning it carries for the learner.

One thing is for certain: as vision provide a window into perception, eye movements become a great indication of how procedural memory affect cognitive operations. Eye movements are physical manifestations of our cognitive learning – microcosm of learning in the brain. While limitations of eye tracking methods exist, technology will continue to advance until the processes of tracking eye movements become accessible. Until then, we as teachers can advise students to be cognitively aware of where we look at, what we look at, and how long we look at because it all carries meaning.

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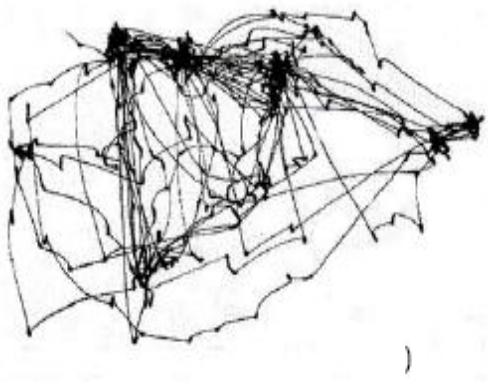
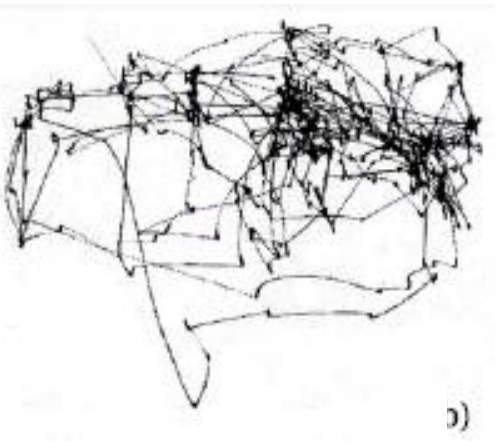
APPENDIX

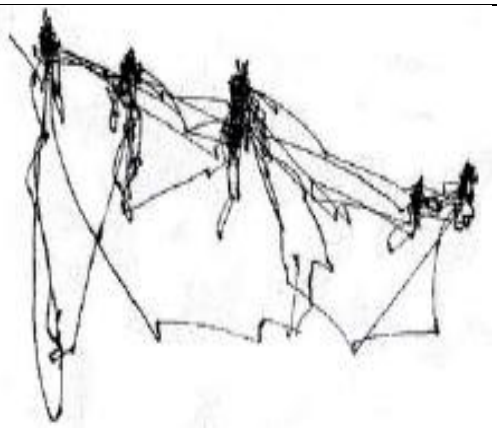
Table 1 The seven conditions of instructions given during the experiment

Condition	Instructions: When the picture appears,
a.	Simply look at the picture whatever way you want (Free examination).
b.	Estimate the material circumstances of the family in the picture.
c.	Give the ages of the people.
d.	Surmise what the family had been doing before the arrival of the 'unexpected visitor'.
e.	Remember the clothes worn by the people.
f.	Remember the position of the people and objects in the room.
g.	Estimate how long the unexpected visitor had been away from the family.

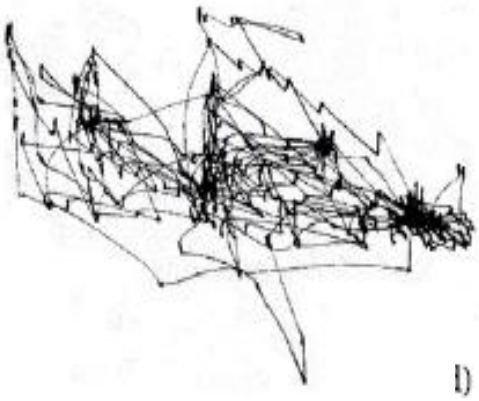
Table 2 Eye movements made in each condition (Adapted from Tatler et al., 2010)

Condition	Movements on the picture	Movement patterns
a.		
b.		

c.

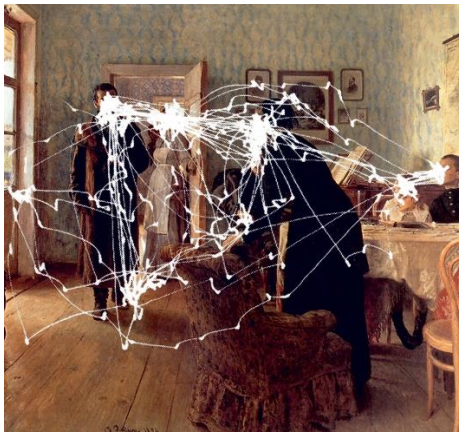


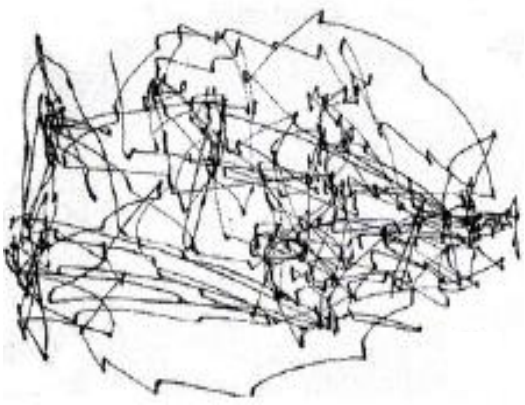
d.

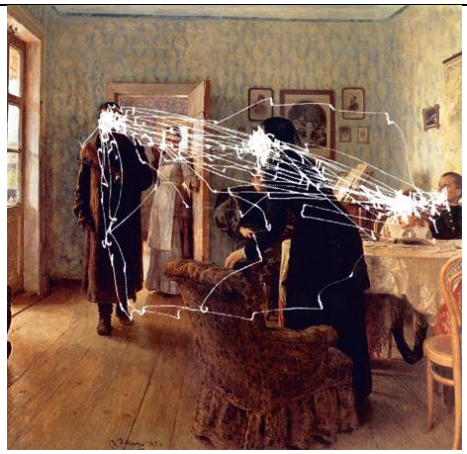
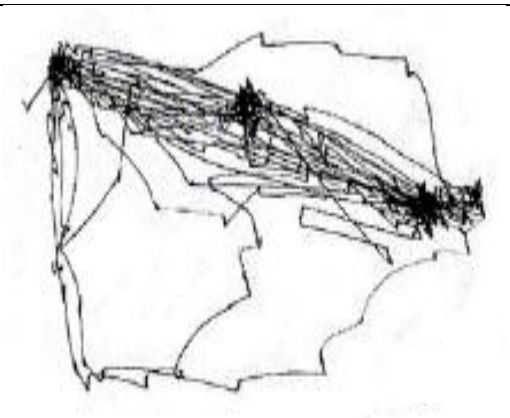


e.

f.





g.		

The Effects of Questioning the Author on Reading Comprehension of Adult Learners

Minjung Park

Teaching Reading

1. Introduction

Questioning the Author (QtA) is designed for readers to have a dialogue with a text's author. It is grounded that since the author of text can be fallible, readers are encouraged to question unclear or incomplete ideas. Usually, students used to be demotivated in that they could not understand the text due to lack of their ability. However, by raising doubts over what the author has written, readers take a role of reviser and while questioning author's vulnerability, they can deepen their understanding. Rather than obtaining information from text, students focus on building up meaning and putting together the idea derived from dialogue or discussion in QtA (Beck & McKeown, 2001).

In most language teaching environments, an excessive amount of explicit grammatical explanations and bilingual lists for vocabulary deprives students of being engaged with a text. This widespread pedagogical practice has been criticized in terms of pushing students to retrieve written information and to stay at a surface level. Given the purpose of teaching, teachers should lead students to apply pedagogic skills and strategies in practice. Nevertheless, in grammar-based approach, owing to teachers' explaining text from top to bottom, students are not given any chance to grapple with the content nor to produce output based on teachers' modeling.

To overcome the problem, QtA can be an alternative in that it enables students to deeply think about the author's underlying intentions by receiving open-ended queries (Beck & McKeown, 2001). In the process of having dialogue with author and reaching an agreement with peers in discussion, students broaden their understanding, converting what they have read into their own language (McKeown, Beck & Worthy, 1993). Therefore, the primary goal of this study is to investigate effectiveness of QtA for all levels of language proficiency. The second goal is to figure out how students perceive QtA.

This paper is mainly organized in four sections: intervention, method, results, and discussion. In intervention, two studies are analyzed in the light of pedagogies or strategies used in their research. In method, procedures and teaching methods of my research are described. Also, the process of collecting and analyzing data is explained in this section. Then, the result of my research is shown with figures and students' perception on QtA extracted from personal interview survey is provided. Finally, the future of QtA is discussed in terms of how it can be adapted in my class.

2. Intervention

Reichenberg (2014) focuses on how the teachers in QtA develop strategies to allow students to be more engaged in texts and to grapple with the content,

which is the main goal of QtA. The context of her study is Swedish students from grade 4 in rural schools whose average age was 10.3 years when it was conducted.

Reichenberg (2014) presents six strategies. One of them is turning back. Turning back occurs when students misread the text or get distracted from something unrelated to the main issue. Depending on students' comprehension level, they can produce answers which are not connected to what they have read. Whenever students go to the wrong direction or hesitate to make one step further, teachers need to encourage students to reread the text, which provides opportunity to arrange their cognitive process. On the other hand, for good comprehenders turning back can be a change to take a time to consider more deeply. For example, open-ended questions such as 'you don't think so?', 'how do you mean?' stimulate students to rethink the author's intention.

Another strategy is segmenting texts. Segmenting is making a pause on the spot where teachers expect to be questioned by students. Teachers need to pay attention to some sentences that may raise students' curiosity due to ambiguity of lexicon or content. In each segment, students are required to find out the author's main idea behind his or her words by making inference or filling up the gap caused by the author's fallibility.

Third, revoicing means that students can answer about the text in their own language after establishing information gained from the text in their cognitive process. Since the goal of QtA is make the author's written text much clearer, students try to produce clear statements.

Next, recapping is summarizing what they have read. In this strategy, it is possible for teachers to know whether students have understood the important part of the text with summaries that they make. In this research, teachers asked students to summarize whenever they finished reading each segment so that teachers could decide to move on to next paragraph.

Marking happens when teachers note that students have made significant utterance to inspire classroom discussion. In QtA, teachers are not allowed to mention directly whether the answers from the students are right or wrong. Instead, through marking, teachers repeat or accentuate what students have said and this can motivate students giving an impression that they are on the right track.

Last, teachers annotate whenever students encounter unfamiliar vocabularies or abbreviations in reading. Rather simply explaining what they mean, teachers ask students back to enable them to guess their meaning by providing similar context where those words are used.

Baleghizadeh (2011) concentrates on the relationship between QtA and reading comprehension. The context of her study is 98 Iranian adult EFL students who are studying English at a private language institute in the capital. They are university students whose average age is 27 years. Their English proficiency is low-intermediate.

In her study, Baleghizadeh (2011) advocates student-initiated interaction. According to Whitaker (1983), leaners should be who asks questions trying to figure out answers, which leads to constructive discussion to increase comprehension. Questions generated by teachers concentrate more on the quality of being right. Since they have answers, they do not give

students any opportunity to delve into the content. That is why Baleghizadeh (2011) wants participants in some groups to produce their own four open-ended questions or to be trained in QtA to see if their comprehension increases by asking about the texts. However, questions generated by the participants from a group who was not familiar with QtA technique were superficial. For example, these participants ended in making questions about the words they did not know. On the other hand, students from the group trained in QtA produced more effective questions to realize the author's intention and to inspire discussion.

She also suggests negotiated interaction. Whenever students encounter unfamiliar vocabulary, participants were encouraged to find out the meaning through negotiation with their partners. For example, during the lesson they did not know what the word "Marinnation" meant. One student fixed on "nation" and the other got the hint from submarine and guessed that it would have to do with sea or water. On the basis of their conjecture, they succeeded in figuring out its meaning by putting it together with the context.

3. Method

3.1 Participants

The participants for this study were 4 Korean adult learners (2 females and 2 males) whose average age is 60. I placed two people in a group depending on their language proficiency and each group had one female and one male. Group 1 had low-intermediate level and Group 2 had intermediate-high level. Considering frequency of exposure to English, Group 2 is higher than Group 1. Group 1 is never exposed to the language in daily life, but Group 2 usually listens to English news programs every morning.

3.2 Procedure

The study required participants in both groups to read two articles from authentic materials and to answer text-related comprehension questions. One article from CNN was about durians and the other from Bloomberg dealt with Ramadan. The articles were chosen due to familiarity of themes to the participants. The texts were not modified nor simplified. Each group performed two times. We read articles in English and comprehension questions were also in English, but the communication language in each session was Korean. On the first trial, they read based on grammar-based approach and in second trial they read with QtA.

In grammar-based approach, the instructor focused more on teaching grammatical structures and vocabulary and students jotted down every single element to translate the text into Korean. On the contrary, in QtA the instructor did not mention grammar rules but limitedly explained some words which were key to understanding the text. Participants from both groups had an opportunity to discuss through queries that the instructor asked. The questions that students received were to facilitate constructing meaning of text and they were broad, open-ended such as:

- "What is the author trying to say?"

- "What do you think the author means by that?"

- "What is happening here?"

The instructor tried not to say if the ideas that participants shared in QtA discussion were right or wrong. They were guided whenever they strayed

from author's main point by turning back to the important part of text or repeating essential utterances made by participants. In order for participants to focus more on discussion, they were encouraged to stick to vocabulary that they already knew, ignoring technical terms or difficult words.

3.3 Data collection

After each session, participants were required to answer comprehension questions. There were 10 questions and each had 3 choices. Participants were allowed to ask the meaning of some vocabulary to avoid their choosing wrong answers owing to difficult or confusing words in spite of high comprehensibility. After this assessment, the score was calculated to compare the effectiveness of grammar-based approach and QtA.

In-person interview surveys were performed right after each class to figure out how students perceived QtA. The questions in this survey were mainly asked as below:

-How did you feel in each session?

-What was advantage and disadvantage of each methodology for you?

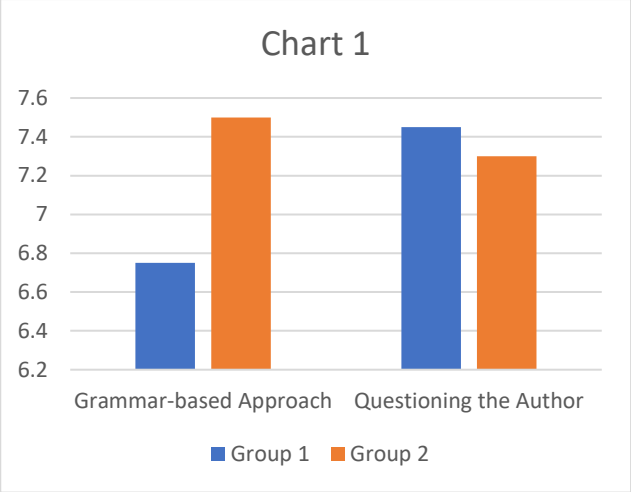
-Which one do you think is better to increase reading comprehension?

-Did you enjoy QtA?

-If there was any disadvantage in QtA, how can it be revised?

4. Results

Chart 1 shows the means of the score when each group answered comprehension questions after grammar-based approach class and this can be compared with the score of QtA.



It is indicated that the score of Group 1 increased after QtA, but that of Group 2 has slightly decreased. One possible reason can be found in how each group performed QtA.

In the session of QtA, it seemed that Group 1 had more active and profound discussion comparing to Group 2. Since Group 1 had lower language proficiency, they stuck to the little vocabulary that they knew and it was observed that they actively negotiated meaning to catch the main idea of the text with limited number of words. On the other hand, Group 2 concentrated more on translating the text into Korean, rather than finding out what the author was trying to say. It was predicted that their performance on QtA would be better because of their higher language proficiency and larger amount of background knowledge on the target language. However, that advantage made Group 2 remain at a surface level, hindering them from deepening their understanding of the text. This led to a result that comprehensibility of Group 2 on QtA has decreased.

To return to the first research question, the answer is yes. The effectiveness of QtA can be shown differently depending on language proficiency. However, it does not depend on how much linguistic

knowledge readers have but relies on how readers read based on queries of QtA. Despite better proficiency, students who concentrated more on the process of negotiation for meaning through discussion outperformed the others who simply tried to translate the text.

As to the second research question of how students perceive in QtA, they all agreed that it was possible to be engaged with the text. According to their interview, in the first session where we read the text with a grammar-based approach, all the things that were explained to participants during the class disappeared after the class so that they could not remember anything. Also, because of the instructor's excessive explanation, they could not have any curiosity or motivation to read more and figure out the meaning of the text.

However, in QtA, even though they felt little bit uncomfortable now that the teacher did not provide them explanation about the text, they said that they could further their understanding, striving to answer QtA open-ended queries. Moreover, in QtA session where students could maintain their pace while reading, they had enough time to think about the text and their comprehensibility increased by saying about what they have understood in their words.

5. Discussion

The purpose of this study was to overcome the problem that grammar-based approach hinders students from being engaged with texts and leads them to remain at a surface level. Actually, in many studies, it is shown that QtA does help students to improve reading comprehension, but it was curious whether it would be effective for all levels of proficiency. Thus, the first research question was, "Does QtA help students from various levels of proficiency to improve reading comprehension?" The second research question was, "How do students feel about QtA?"

The results revealed that QtA did contribute to increased reading comprehension for lower-proficiency students, which was not expected. Rather, higher-proficiency students struggled in thinking profoundly about the text, distracted by translation into Korean that they used to do in their English reading class. To answer the second research question, they could grapple with the text, which led them to deepen the meaning of the text.

The interesting finding of the study is that QtA also works for those who have smaller vocabulary. It was believed that reading in a second language should be based on large quantity of lexicons, but QtA has demonstrated that discussion with peers and thinking further with the context can fill up the gap that might have occurred due to shortage of vocabulary.

Meanwhile, it seemed that teachers need to be trained to advance the discussion to carry out effective QtA. Since I have never been taught English reading with QtA, it was not easy to lead students to continue the discussion after the queries such as "What's going on here?" or "What does the author want to say?" Especially, it was complicate and unclear how to help students without an explicit explanation when they got lost while reading the text.

Given the future how QtA can be applied for my teaching, a classroom environment will be where students being the center lead the class and teachers with their mouth shut most of the time intervene only when it is necessary. Throughout this mini-research project, it was shown that students are capable of

performing task without teachers' excessive help. Rather, they become motivated and have fun with finding out some clues in the text and negotiating the meaning with their peers. When students reach the point where they can handle the text having a dialogue without teachers' guide, this will be optimal.

6. Conclusion

The purpose of this study was to explore the effectiveness of QtA for adult learners with various levels of proficiency, and it was found that QtA can improve reading comprehension for those who tried to focus on the open-ended queries, regardless of language proficiency. Based on participants' perception on QtA, it has pedagogical advantages in that readers are easily involved in the text, which encourages them to keep thinking and sharing ideas with peers. Furthermore, learners are more motivated in QtA. They said that they wanted to practice what we have performed in sessions while reading by themselves. Therefore, QtA can be applied to all levels of students and it increases their reading comprehension.

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The Lesson Plans for Teaching Writing Based on Task-based Learning

Kahwa Kim

Teaching Writing

1. Introduction

1.1 Regarding the lesson plans

Writing is often perceived as the most challenging part of the language by many Korean students even though it is an important skill for them for various reasons such as exams, essays, job searching, etc. Writing is a hard task even for a native speaker because it requires lots of complex mental processes and strategies not to mention knowledge about the language structure. Unlike speaking, which is uttered without planning, writing takes time and strategy. Considering that many Korean students go through all the burdens of the writing process—choosing the topic, making plans and outlines, writing and revising, often without sufficient guide—it is crucial that writing class should care for their difficulties and relieve their burden. The present lessons aim to motivate students by providing lots of meaningful and effective activities to amplify both their rhetorical knowledge and writing content, and to develop their writing strategies so that students are to be prepared to compose a better piece of writing at the end of the lesson. Willis (1996) notes that 'it is well known that writing is in itself a learning process. It often helps people to clarify ideas and to create new ones.' In this regard, this writing class will be beneficial for not only to improve their writing skills but also to increase their learning motivation and general language proficiency.

The overall goal of the three lessons is to enable students to write a paragraph including a topic sentence and relevant supporting ideas with unity and consistency. Under the given topics such as family, tour in Seoul, or problem-solving, the lessons try to involve the students in a meaningful context which enables students to communicate for a real purpose and learn by doing things. Even though it's a writing class, the class is not solely focused on having the students exercise the writing skills; rather it incorporates a lot of speaking activities and collaborative work which engages students' background knowledge and experience activated for second language acquisition. The basic method of the lessons follows Task-Based learning (TBL) approach which focuses on learning to communicate through interaction, the use of tasks as the core unit of analysis, planning and instruction (Richards & Rodgers, 2001).

The lessons aim to explore the method of TBLT in writing class for university students. The target students for the lessons are freshmen and sophomores who are enrolled in an English writing course of an undergraduate school in Korea. A class consists of 20 students and their language proficiency is mostly in intermediate level based on the result of the placement test which they took at the beginning of

this course. They are from all different majors and background with diverse experience and interests. However, they need to achieve a high proficiency level on the graduation test which includes a writing section. Therefore, the students' needs for this course are very significant and they have high motivation to improve their English. The class meets 2 days a week, 2 hours for each session, and the following lesson plans are designed for 3 class sessions of the course.

1.2 Theoretical Background

The primary method of this lesson plan is borrowed from Task-Based Learning (TBL). To begin, there have been continuous attempts to define the term 'task'. The prominent scholar Nunan (1989:6) asserts that a task 'should have a sense of completeness, being able to stand alone as a communicative act in its own right'. Klapper (2003) defines tasks as 'meaning-based activities closely related to learners' actual communicative needs and with some real-world relationship, in which learners have to achieve a genuine outcome.' Ellis defines a task as 'activities that call for primarily meaning focused language use' (2003).

TBL is a version of communicative language teaching that encourages students to learn by doing things in the target language. The classification of tasks is suggested in several different ways by the TBL scholars. Prabhu (1987) classified tasks into three major ones: 'information-gap, reasoning-gap and opinion gap.' A more recent classification by Richard (2001) categorized tasks into 5 types as jigsaw, information-gap, problem-solving, decision-making and opinion exchange; which are also included in these lesson plans. According to the framework suggested by Willis (1996), it consists of three phases: pre-task, task cycle, and language focus. According to Willi's framework of TBL, the pre-task introduces the class to the topic and the task, activating topic-related words and phrases. Secondly, the task cycle offers learners the chance to use the language in order to complete the task. Last, language focus phase allows a closer study of some of the specific features which occurred during the task cycle. She also suggests a presentation. The present lesson plans are designed basically based on Willis framework.

The advantage of TBL is that it offers the opportunity for 'natural' learning inside the classroom. It emphasizes meaning over form but can also cater to learning form. It is compatible with a learner. Willis (1996) notes, 'If learners know that in class they will be expected to make real use of the target language themselves, this leads them to pay more attention to what they hear and read, and to process the input more analytically, noticing useful features of language. Thus output can encourage intake'. In another words, by providing authentic communicative tasks which involve students producing the language for a real purpose, students are more actively engaged in learning, thus will be led to achieve a better result in their language learning.

Another important feature of TBL is that it highly emphasizes communicative interaction which provides students with opportunities for lots of collaborative learning in class. In this lesson, students actively participate to work in pairs and groups instead of being led by teacher's domination. It is more student-centered learning environment which makes students feel more free, confident, and more responsible for their own learning. Willis (1996) states that 'tasks remove the teacher domination, and learners get chances to open and close conversations,

to interact naturally, to interrupt and challenge, to ask people to do things.'

As for a writing class, tasks can prove to be a worthy method of teaching writing because writing itself is a 'goal-oriented activity' (Manhedran, 2012). Tasks can help writing instruction because a task is an activity which involves students to communicate in an authentic context and create some outcome. Writing is simply one kind of task itself in a sense that it has a definite goal and requires students to make plans to create a production. In a task-based approach, writing constitutes a natural part of the cycle. In this regard, Willis (1996) explains that 'Several kinds of writing are involved…sometimes for drafting and creating often in collaboration with others; sometimes for public consumption at a report stage'.

Therefore, the present lesson plans paired with TBL approach will attempt to provide students with meaningful and effective tasks that can lead them to improve their English language proficiency, especially their writing skills.

2. Lesson plan

- **Lesson plan #1**

Age : 1st~2nd year in university

Number of students : 20 students

Class time : 2 hours

Subject : English Writing

Topic : Describing my family member

Objective : By the end of the lesson students will be able to:

i) activate their background knowledge and experience related to the topic, describing a person and expand it by communicating with the classmates.

ii) write a paragraph to describe one of their family members using a topic sentence and relevant supporting details.

Time	Activity	Description	Materials
15 min	**Activity 1** Interviewing a classmate	**[pair work]** i) Students are put in pairs. ii) Teacher gives out a form to ask about the person. ii) They interview each other to fill out the form.	Appendix 1

10 min	**Activity 2** Descriptive words	**[Pair work]** i) Teacher provides a list of descriptive adjectives and the pictures of people. ii) Students choose the words from the list to describe the person and label them on the picture. iii) Using the words, describe the person in a pair.	Appendix 2
20 min	**Activity 3** My favorite celebrity	**[Group work]** i) Teacher explains the task showing the example. (Appendix 3). Then students are put in groups of 4 people. ii) Each group member is assigned a role for the group work; host, writer, proofreader, presenter. iii) Each of the group chooses one celebrity to describe. They have to write 3~4 sentences about the celebrity. iv) The host assigns the role for the group members and cooperates with them in each step. v) The writer writes down what each person says about his/her favorite celebrity. vi) The proofreader gives suggestions to improve the writing. vii) The presenter reads the written description of the celebrity to the class and initiates a 'Who is it?' quiz. viii) People in the other groups listen and take a guess to find out the answer.	Appendix 3
15 min	**Activity 4** Model writing	**[Pair work]** i) Teacher displays a sample descriptive paragraph and leads a whole class discussion to identify the topic sentence and supporting details and talk about their features. ii) Teacher presents a paragraph on PPT which has no topic sentence. iii) Students read the paragraph and discuss in pairs to create a topic sentence for the paragraph.	Appendix 4

		iv) Teacher goes over student's topic sentences.	
15 min	**Activity 5** Planning	**[Individual work]** i) Students write about one of their family members. ii) They write an outline before they start their actual writing.	Appendix 5
25 min	**Activity 6.** Writing a first draft of descriptive paragraph	**[Individual work]** i) Students write descriptive paragraph to describe one of their family members.	
15 min	**Activity 7** Peer evaluation	**[Pair work]** i) Teacher hands out a form for peer evaluation. ii) Students in pairs switch their writing and read it to write their feedback.	Appendix 6
5 min	**Wrap up**	i) Teacher explains the homework and wrap up the class.	
	Assignment Revising & Publishing on the class blog	i) Students revise their draft as homework. ii) They upload their writing on the class blog before the next class. iii) Students are encouraged to write some comments to their classmates' writings.	

• Lesson plan #2

Age : 1st~2nd year in university

Number of students : 20 students

Class time : 2 hours

Subject : English Writing

Topic : One-day trip in Seoul

Objective : By the end of the lesson students will be able to:

i) activate their background knowledge and experience related to the topic and expand it by communicating with the classmates.

ii) write a narrative paragraph to talk about a one-day trip in Seoul using a transitional words to express time order.

Time	Activity	Description	Materials
10 min	**Activity 1** Introducing the topic	**[Whole class]** i) Students watch Youtube clip about 25 things to do in Seoul. **https://www.youtube.com/watch?v=N-zrjBpKGiI** ii) Students can freely participate by sharing their opinions about the places.	
20 min	**Activity 2** Class survey	**[Group work]** i) The class is divided into 2 groups. ii) Teacher hands out a survey form and students communicate to ask: 'Among the 10 most popular tourist sites, what are your 2 most favorite places? Tell the reasons for your choice.' iii) Students walk around the class to meet the group members and have a survey. iv) Each group reports their survey.	Appendix 7
20min	**Activity 3** Day trip organizer	**[Pair work]** i) Students are put in pairs and choose 4 places in Seoul to have a one-day trip. ii) Students write about them in the organizer. iii) Teacher picks one or two pairs to have an oral report to the class.	Appendix 8
10 min	**Activity 4** Modeling for transitional words	**[pair work]** i) Teacher shows a sample of a narrative paragraph. ii) Students read the paragraph and point out the transitional words. iii) Teacher shows a list of transitional words.	Appendix 9

15 min	**Activity 5** Planning	**[Individual work]** i) Students brainstorm about a one-day trip in Seoul and write in a mind map to organize their ideas. ii) After the brainstorming, students decide which ones to develop and which ones to get rid of.	Appendix 10
25 min	**Activity 6** Writing a narrative paragraph	**[Individual work]** i) Students write a narrative paragraph about a one-day trip in Seoul.	
15 min	**Activity 7** Peer evaluation	**[Pair work]** i) Teacher hands out a form for peer evaluation. ii) Students in pairs switch their writing and read it to fill out the form.	Appendix 11
5 min	**Wrap up**	Teacher explains the homework and wraps up the class.	
	Assignment Posting on the class bulletin board	i) Students are assigned to bring in a hard copy of their paragraph. ii) Teacher announces that their writing will be posted on the bulletin board next week. iii) In the following lesson next week, students post their writing on the class bulletin board. Then they read other people's compositions and write their feedbacks on the post-it and stick it to the paper.	

• Lesson plan #3

Age : 1st~2nd year in university

Number of students : 20 students

Class time : 2 hours

Subject : English Writing

Topic : Writing an opinion about the problem

Objective : By the end of the lesson students will be able to:

i) activate their background knowledge and experience related to the topic and expand it by communicating with the classmates.

ii) write an opinion paragraph about the problem.

Time	Activity	Description	Materials
25 min	**Activity 1** Problem-solving	**[Pair work]** i) Teacher introduces the topic and shows a problem cards in PPT. ii) Students can freely participate by sharing their solutions for the problems. iii) Students are put in pairs and read the problems on the PPT. iv) Students discuss to choose the problem they want to talk about. v) Students in pairs think about the solutions for the problem and write it down.	Appendix 12 & Appendix 13
20 min	**Activity 2** Pros and cons	**[Group work]** i) Teacher gives a statement with an opinion statement: 'Children should not play video games.' ii) Students are divided into two groups to go for either pros or cons. iii) In each team, they have a discussion to write the reasons to support their opinion. iv) Students take turns arguing about the topic. v) After everyone speaks at least more than once, students in each team freely participate in a rebuttal stage. Then the teacher decides the winning team.	
15 min	**Activity 3** Modeling for transitional words	**[pair class]** i) Teacher shows a sample of an opinion paragraph.	Appendix 14

		ii) Students highlight the transitional words while reading the paragraph.	
15 min	**Activity 4** Brainstorming	**[Individual work]** i) Teacher hands out the form for brainstorming. ii) Students have time to brainstorm for their writing using the provided form.	Appendix 15
25 min	**Activity 5** Writing an outline and a first draft	**[Individual work]** i) Teacher introduces the features of body of an essay to the class and explains them about the task to write 3 paragraphs for the body part of an essay. ii) Teacher hands out a form to write an outline to write 3 opinion paragraphs. ii) Students write an outline in the given form. iii) Based on the outline, students write the first draft of the paragraphs to describe their opinions.	Appendix 16
15min	**Activity 6** Peer evaluation	**[pair work]** i) Students exchange their writing and give feed back to each other.	Appendix 17
5 min	**Wrap up**	Teacher explains the homework and wraps up the class.	
	Assignment e-mail exchange	i) They are assigned to finish and revise the 3 paragraphs which had been done in class. ii) Students will exchange their writing with their group members through email. iii) Students should send at least 1 reply to one of the group members to show their opinion about the argument.	

3. Defense of the lesson

3.1 TBL for writing class

The lessons are designed to adhere to the procedures suggested by Willis (1996). In her framework for TBL, she suggests three phases: pre-task, task cycle and language focus. In the first phase, pre-task, the class is introduced to the task activating topic-related words and phrases. The second phase which is the task cycle offers learners the chance to use the

language focused on meaning followed by planning for the oral report. As a last stage, language focus allows a closer study of some of the syntactic features.

The topic of the first lesson is to describe a family member, which is supposedly an easy and familiar topic for students. The topic of the second lesson is to design a one-day trip in Seoul, which is an authentic and real purpose. The topic of the third lesson is to write 3 opinion paragraphs as a body part of an essay to suggest a solution for a problem, and this is supposed to be cognitively more challenging and requires them to be involved in more intense plans for their argument. Students are more motivated when they talk about topics that are fun and familiar to them (Cutrone & Beh , 2018) or they could have a sense of realistic purpose in the language use.

Adhering the steps of a task-based lesson laid out by Willis (1996), each lesson consists of 7 activities which include pre-task, main task, and post task. The first 3 activities are provided as pre-tasks to introduce the topic, expose useful words and phrases, and motivate the students to get involved in the topic. 'The general purpose of the pre-task activities is to increase the chance that some restructuring will occur in the underlying language system, and that either new elements will be incorporated, or that some re-arrangement of existing elements will take place' (Foster and Skehan 1996). The pre-task activities include pair work or group work to communicate to achieve the task related to the topic. That is followed by the modeling of the sample writing in order for students to have some exposure to proficient language use. In Samuda's (2008) study, she mentions that after a 'pre-focus' group-work phase, there follows a 'language-focus' stage in which a teacher introduces (first implicitly and then explicitly) new ways of expressing modality to an entire group of learners.

While the previous tasks did not necessarily include writing, the main tasks of each lesson require some writing element such as writing outlines or constructing a paragraph including a topic sentence and supporting details. This is also done in pairs or groups so that students can collaborate on their planning, outlining, writing, and revising.

Their writing is assumed to be published in certain ways so that the students will have a sense of audience. Whether the writing be for an exam or for one's expression of oneself, the act of writing is the act of creating or composing meaning, or rather, a meaningful text that is highly contextualized by the creator's language ability, background, purpose for writing and, perhaps most importantly, audience (Hudelson, 1994). Therefore, being aware of audience will make students do their best and can increase the quality of their writing production. 'So the more public, or more permanent, the circumstances of communication are the more likely we are to aim at a clear, accurate and well organized presentation' (Willis, 1996). In addition, it will force students to shift their attention from meaning to form and make them more conscious about language accuracy. Finally, a written homework assignment would also be assigned.

Raimes (1986) suggests that we can prepare students for writing tasks by giving them opportunities to speak, listen to, read, and write the new language in the process of making and communicating their meaning. He promotes some pre-writing activities such as making lists and group discussion to assist students to generate and organize the idea and revise those ideas. Willis (1996) explains that pre-task

activities can involve students exploring topic language and give them relevant exposure and create interest in doing a task on the topic and activate topic-related words and phrases. The pre-tasks are designed to be in an accumulating manner from simple to more complexity so that students can start from the easy point and make use of what they have learned in the preceding activity for a more challenging and complicated tasks. Such activities as group discussion, interviewing, listing, surveying, problem-solving, debating were adopted and working in pairs and groups played crucial roles to accomplish the given tasks. According to Willis (1996), 'doing a task in pairs or groups has a number of advantages and it gives learners confidence to try out whatever language they know, or think in the relative privacy of a pair or small group'.

The main task in this lesson involves the actual writing activity, which includes writing a mind map or list for brainstorming, making outlines or first draft. After accomplishing the pre-tasks, which have gotten students fully ready to generate their own idea, students actually grab their pens and start by jotting their rough ideas by filling a mind-map, or making a list to organize the ideas and words. Then, they can write their rough draft in a form identifying a topic sentence and the supporting details accordingly. There's also a session for peer evaluation to help them understand how to formulate a paragraph, and to stimulate students to learn from peers and focus on the language form. According to Kroll (1990), peer evaluation can be an effective method in writing class because if students are alerted to what to look for and how to look for it, they can be very helpful to each other.

Students are not required to submit the final draft within the class time because time is also an important factor influencing the quality of students' writing. We might have to include enough time for students to explore the topic thoroughly and try again. Time should not be a constraint, and revision should not be considered as a punishment (Raimes, 1986). In addition, many students and teachers feel that writing under pressure is a very unnatural situation and perhaps it would be hard for students to demonstrate their best capability (Kroll, 1990). Therefore, students are allowed to take time to try several revisions on their own and go through drafts to create a piece of writing at their best within the due for the assignment.

The final composition is expected to be shared in a certain way such as presenting on a class blog or posted on the classroom bulletin board or shared through emails. As described in Li's research, audience interaction is an important factor in task-based writing. If you are speaking to a larger audience, or writing for someone other than a close friend or family member, it is natural to plan what you are going to say or write. 'So the more public, or more permanent, the circumstances of communication are the more likely we are to aim at a clear, accurate and well organized presentation' (Willis, 1996). Therefore, establishing a platform, such as e-mail, class blog, class newspaper, bulletin board where students can actively participate in interactive writing, can enhance the students' writing competence.

Therefore, by providing communicative and interactive activities and creating a student-centered learning atmosphere based on TBL, students are expected to improve their language proficiency

during the class and led to increase their writing skills by taking the present lessons.

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Appendix 1

- Ask your partners questions and get to know each other.

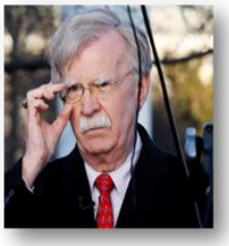
Question topic	Your partner's answer
Your partner's name	
Age	
Hometown	
Occupation	
Hobbies	
Interests	
Weekend activities	
_____	

Appendix 2

- Choose the words that you think best describe the person in the picture.

caring	sophisticated	intelligent	generous	patient	easy going
short tempered	friendly	fun-loving	serious	soft-spoken	interesting
quiet	talented	shy	hard-working	outgoing	talkative
smart	reliable	creative	stubborn	enthusiastic	selfish






Appendix 3

He is friendly and talkative.
He looks like a grasshopper.
He runs a lot in the variety show.
Who is he?
A: He is Jaesok You.

He is a very important man in the U.S.A.
He is stubborn and opinionated.
He used to be a very successful business man.
Who is he?
A: He is Donald Trump.

Appendix 4

• Read the paragraph and write a topic sentence with your partner.

My Grandfather

_____. Every day, he swims a mile and works in his garden. He and my grandmother have four children and ten grandchildren. My Grandfather loves parties and invites our entire family to his house for a big dinner on his birthdays. All 20 of us eat and tell stories half the night. My grandfather never gets tired and is always the last to go to bed. On his last birthday, my brothers and I gave him a present. We put our money together and bought him a video game system. Now he invited us to his house every weekend to play video games with him. My grandfather never seems old to me.

Appendix 5

- **Write an outline to describe one of your family members in a paragraph.**

Topic sentence:

Supporting detail 1:

Supporting detail 2:

Supporting detail 3:

Concluding sentence:

Appendix 6

Peer Evaluation

Writer: _____ **Reader: _____**

Questions	Yes	No
1. Does the paragraph have a good topic sentence?		
2. Does the topic sentence express the main idea of the paragraph?		
3. Does the paragraph enough supporting details?		
4. Are the supporting details all related to the topic sentence?		
5. What do you like the best about the paragraph?		
6. Do you have any suggestions for the paragraph? If your answer is yes, what are they?		

Appendix 7

<Group survey>

Name of the tourist site	How many people like the place?	Why?
1. Kyoungbokgung Palace		
2. Bukchon Hanok Village		
3. Children's Grand Park Seoul		
4. N Seoul Tower		
5. Myeondong		
6. War Memorial Of Korea		
7. Hongdae Free Market		
8. Seoul Forest		
9. Lotte World		
10. Cheonggyecheon		

Appendix 8

Organize a one day trip in Seoul!

Kahwa Kim

Retrieved from 'https://pasarelapr.com/map/seoul-tourism-map.html'

Place	What to do
1.	
2.	
3.	
4.	

Appendix 9

Example of a Narrative Paragraph

The one day I spent in Morocco, Africa was an experience of a lifetime. When I finally reached Morocco and got off the bus, there were four little girls standing shoeless in the hot sun. After I swallowed my tears, I could not even try to picture this in America as it is not something you often see in the U.S. Meanwhile my tourist guide instructed me not to give them money as it encouraged the children to beg; however, I was wearing four silver bracelets. As I walked over to the girls, their eyes watched my every move. Then I kneeled down to their level while I gave each girl a bracelet. They stood there gleaming at me, for they were pleased. I felt completely in disbelief that this tiny gesture could mean so much. Though this experience was upsetting, and a huge culture shock, it will stay with me forever.

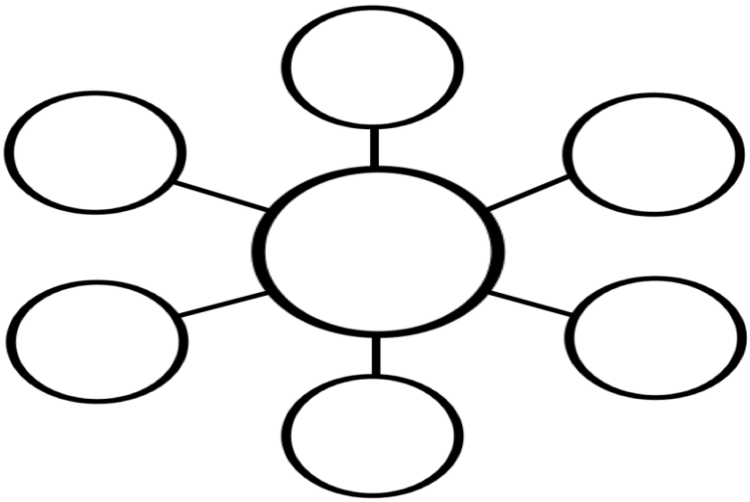
Retrieved from http://gabrielbull.club/narrative-paragraph/narrative-paragraph-writing-narrative-paragraphs-using-transition-words-narrative-paragraph-sample-pdf/

<Transitional words>

To Show Time Order	
First,….	After that,……..
First of all,……	Then,……..
Second,……	Finally,…….
Next,……..	Last,…….

Appendix 10

Brainstorm your ideas to organize a one day trip in Seoul.
Feel free to jot down any ideas that pops up in your mind.



Appendix 11

Peer Evaluation

Writer: _____ **Reader: _____**

Questions	Yes	No
1. Does the topic sentence represent the main idea of the paragraph?		
2. Is the paragraph written in time order?		
3. Are there any sentences that stick out from the topic?		
4. Are there effective transitional words?		
5. What do you like the best about the paragraph?		
6. Do you have any suggestions for the paragraph? If your answer is yes, what are they?		

Appendix 12

		
I am gaining weight.	I want to get a part time job.	I want to improve my English.
I don't get along with my classmates.	I drink too much alcohol.	My room is always so messy.

Appendix 13

•Discuss with your partner to choose the problem and make solutions.

Problem:

_____

_____

_____

Solutions:

_____

1.

_____

_____

2.

_____

_____

3.

_____

_____

Appendix 14

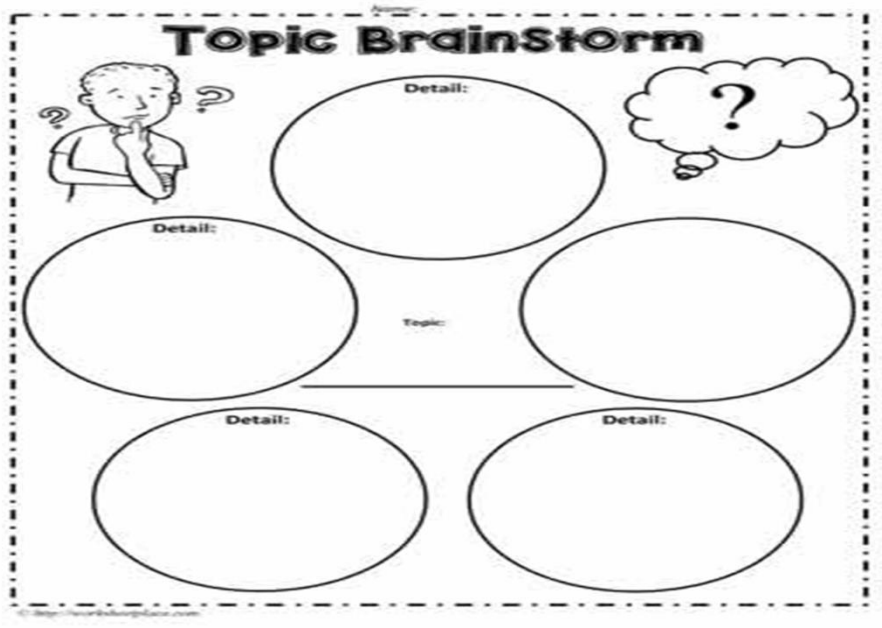
Sample opinion paragraph

Video Games and Violence

In my opinion, violent games are harmful to young people. First of all, studies show that playing these games can cause changes in the behavior of young people. According to researchers, immediately after playing these games, young people have more aggressive thoughts and angry feelings. In addition, frequent players get into more fights at school and have more arguments with their teachers. A second reason that violent video games are harmful to young people is that, in my opinion, they make young people less sensitive to violence in the real world. I believe that these games make it entertaining to school and kill, and the line between imaginary violence and real violence becomes very thin or disappears entirely for children. I feel that violent video games are harmful to young people and should be controlled- or evee better, banned.

Retrieved from 'Longman Academic Writing Series 2', 2014, Pearson

Appendix 15



Appendix 17

Peer Evaluation

Writer: _____ **Reader: _____**

Questions	Yes	No
1. Does the topic sentence represent the main idea of the paragraph?		
2. Does each reason have a relevant reasons and examples?		
3. Are there any sentences that stick out from the topic?		
4. Are there effective transitional words?		
5. What do you like the best about the paragraph?		
6. Do you have any suggestions for the paragraph? If your answer is yes, what are they?		

Multiliteracies and Bridging Activities Approach: Guiding L2 learners toward authentic and autonomous L2 learning and use

Jessica Steyn

Theoretical Foundations of CALL

1.Introduction

The world as we know it is constantly changing, every day we become more and more connected with global communities through the ubiquitous technologies at our fingertips. Social media (SM) has become an important feature of our social world, and has changed the way we produce and consume content, connect with others, perform our identities and imagine our future selves. With these changes in mind, socio-cultural frameworks of language and education have re-conceptualized language and learning, bringing into focus the social, situated, and multi-nature (meaning multiple and diverse modes, languages, cultures, practices) of interaction, literacy and identity. SM is defined as "any application or technology through which users participate in, create, and share media resources and practices with other users by means of digital networking" (Reinhardt, 2019, p. 4). One can conceptualize the four purposes of SM as; "to connect with others and build relationships, to collaborate with others, to present and broadcast an identity, or to express creativity" (Zhu and Chen (2015), as cited by Reinhardt, 2019, p. 4). In this paper, SM is positioned in contrast to formal education spaces and traditional literacy practices, in the sense that SM use is vernacular, everyday, multimodal, and transcultural (Reinhart, 2019). Implicated in SM, participation is the broader audience, identity performance, and increasing semiotic and socio-pragmatic awareness.

With these changes, language is understood as a situated practice, and thus always loaded with multiple meta-messages that emerge in use. Consequently, language learning is also a social and situated practice, and functions as a process of socialization into certain language and other meaning-making practices. The social meaning of language emerges out of engaging with others, through these interactions localized meanings emerge, are maintained, and negotiated. Language learning also emerges out of participation in a practice and interactions with others. In light of the global and digital nature of the modern world, these situated practices are highly multimodal, multiliterate, specialized and "integral to building and maintaining relationships in many domains" (Vandergriff, 2016, p. 13).

From the perspective of a second/foreign language learner (L2 learner), these changes and practices in these spaces can be result in language learning impediments if they are not equipped with the necessary tools and semiotic resources. Traditional

literacy education does not fully take into consideration the need to expand literacy from learning distinct reading and writing skills, the need to reimagine the fixed text as an object that can be fluid, repurposed and redesigned, and to reimagine literacy practices outside of the classroom, away from textbooks. The global and digital nature of the modern world requires that L2 learners develop some important strategies that will help them negotiate their position within these new spaces and their practices. Socio-cultural and socio-constructivist frameworks understand the need for a multiliteracies model in L2 education and the need for L2 learners to develop a cultural competence and sociopragmatic awareness in order to effectively participate in these new spaces using their L2. Sociopragmatics of language is defined as "social perceptions underlying participants' interpretation and performance of communicative action" (Kasper and Rose (2002), as cited by Reinhardt and Rhu, 2013, p. 21). A multiliteracies and socio-constructivist approach to L2 education aims to promote the ability to critically analyze, socially evaluate, and co-create meaningful semiotic content in all available modes, spaces and forms. A bridging-activities model conceives as SM tools and practices as an L2 learning support. In this view, these spaces and their tools are generally familiar to people all over the world, and using their affordances in conjunction with in-class instruction (as a scaffolding technique) to promote sociopragmatic awareness, multiliteracies development, and cultural and semiotic competence, could provide L2 learners with the means and support for developing and negotiating their L2 voice. Vandergriff (2016) states that "for language learning to be successful, learners must develop the competence to convey both the message and the meta message so that the emerging L2 self is in harmony with the learners exiting identities" (p. 105).

The goals of L2 education have changed and may include sociopragmatic awareness, cultural competence and autonomous L2 voice development. Instruction may need to focus on appropriate scaffolding that promotes sociopragmatic, contextual and genre awareness, production, consumption and co-creation of content, considering a broader audience, regarding learners' identity and imagined future self. This paper, is designed with a specific L2 teaching and learning context in mind. Specifically, a Korean elementary school English classroom. I teach grade 6 English to 7 classes twice a week, the classroom content and activities are designed around a textbook. Each chapter in the textbook is has 6 lessons designed to focus on developing a specific language skill; lesson 1 and 2) listening and speaking skills, introducing the theme for the chapter and target language forms, lesson 3 and 4) reading and writing skills, introducing narratives and texts that use the target language forms, and lesson 5 and 6) producing the language forms creatively in the form of a poster/ group project and review of what learners have learned in that chapter. My general impression is that while most of the language forms and their functions introduced in the textbook are useful, they are not situated in authentic contexts, and they allow for little to no repurposing and redesigning for the learner's purposes. The main evidence for this last issue is how my learners almost always flout the textbook uses and forms to make creative and often humorous

constructions, that often don't 'fit in' the textbook structure, or in the spaces that the textbook allows for learner production. In this way learners are pushing back on the parameters set up by the textbook and illustrating their desire to develop their own L2 voice. Of the new goals and focuses that emerge out of the pervious discussions, at the very least I want the learners in my class to be able to experience authentic contexts of the language forms, functions and themes presented in the textbook, develop an awareness of how different contexts and audiences act on emergent sociopragmatic forms and meanings. And further develop a semiotic and socio-cultural awareness that they can use to help support their own L2 voice development and negotiation. Bridging SM with in-class instruction may be an effective way to support these learners' L2 learning with these goals in mind.

The goal of this paper is driven by a need as a L2 teacher to be critically designing and redesigning activities and tasks for a purpose. This purpose needs to be driven by the relevant needs of learners. Drawing on the previous discussions the needs of L2 learners can be supported by taking advantage of SM affordances. With the help of in-class scaffolding and situated language and sociopragmatic awareness, learners can develop and negotiate their L2 voice in familiar SM spaces, with a new critical awareness, as well as an understanding of relevant and available semiotic resources. This paper acts as a guide for teachers who wish to situate the classroom content within the broader global context using SM. Focusing on sociopragmatic awareness and L2 voice development, the teaching activities explained and designed in this paper, envision SM spaces as platforms to be explored and used for learners' specific purposes, learners become the explorers and teachers guide the them in their exploration, always drawing their attention to the relationship between available semiotic choices, identity, and context.

The following section will explore current studies that are guided by social pedagogical and multiliteracies frameworks in L2 learning alongside the affordances of SM, namely, Pallet and Myers (2017), Blattner and Fiori (2011), Blattner, Dalola, and Lomicka (2015), and Reinhardt and Ryu (2013). All three studies consider the importance of scaffolding and sociopragmatic awareness in their goals and activity designs. The concepts of teacher scaffolding as well as peer scaffolding seem especially important for preparing learners to enter into activities in online spaces. In section 2.1 Pallet and Myers (2017) provide an in-depth look into what it means to adopt a social and L2 literacies pedagogical framework, as well as evidence for the affordances of blogging and social reading for L2 learners. L2 literacy is conceptualized as "socially-, historically-, and culturally situated practices" (Pallet and Myers, 2017, p. 112). The goal of developing learners L2 literacy, and reconceptualization of L2 literacy as a multiliteracies project is especially useful for this paper.

The importance of the social and situated nature of L2 literacy, as well as the aim to develop learners as consumers and co-producers is specifically in line with the goals discussed previously. In section 2.2 Blattner and Fiori (2011) use a Spanish language course textbook to guide peripheral SM participation in Facebook (FB) Groups, aiming to raise

sociopragmatic awareness and develop multiliteracy skills of L2 learners. The authors use of textbook themes as a guide for SM exploration, and scaffolded linguistic analysis provides a good framework from which to draw on for the designing of activities in this paper. In section 2.3 Blattner *et al* (2015) makes use of the SM space Twitter, and specifically designs activities for beginner/ low intermediate language learners. This study is useful for this paper in the way that it problematizes traditional teaching approaches that attempt to 'de-culturalized' language learning for beginner learners, and argues for the need for socioprogmatic awareness and cross-cultural competence at the early stages of language learning. Finally, in section 2.4 Reinhardt and Ryu (2013) adopt and adapt a bridging-activities approach to raise sociopragmatic and language awareness for beginner language learners. The framework and activity design are easily to adapt for the purposes of this paper. The content and activities are heavily scaffolded to support beginner learners, and the simulated space (FBGroup) and peer developed characters and production provide interesting ways for learners to develop an awareness of the relationship between language choice, identity, and context.

Section 3 will present and describe the teaching context, activities and evaluation procedures of a SM program that can be incorporated into an L2 classroom. The SM program is designed to play out throughout the school year, spread over 4 units, each unit will be implemented after 4 lessons of the textbook have been completes and will draw from themes and language forms and functions introduced. Each unit consists of 7 activities that draws from frameworks and models presented in the literature review.

2. Literature Review

2.1 L2 literacy and social pedagogy: authentic contexts for L2 voices

Pallet and Myers (2017) explore the effectiveness of an L2 intermediate-level French program, Tout le monde (TLM). TLM is framed and guided by design and implementation of L2 multiliteracy, sociocultural and social pedagogical frameworks. The goal of the TLM program is to address the challenge of L2 literacy development in the modern world, including promoting cultural awareness and discourse competence. This program focuses on the concepts of community, understands the importance of voice, audience and the co-construction of knowledge as defining features of SM. The goal is to present authentic and engaging texts, contexts and tasks for learners to interact with and use for their own purposes, and in this way promote learner agency. Pallet and Myers (2017) state two main course objectives: 1) encourage in depth engagement with the text through reading, and 2) encourage learner empowerment/ agency by focusing on situated and salient content, contexts, and tasks. The goals of L2 literacy are to aid "interpretation, collaboration (writing for an audience), cultural conventions, cultural knowledge..., problem solving, (self) reflection, and language use" (Kern (2000) as cited by Pallet and Myers, 2017, p. 112). L2 literacy goals are expanded to all communicative skills, such as reading and writing texts, spoken language, images, videos, computed mediated discourse (such as links, tags,

comments, emoticons etc.), all varying across different mediums and genres.

The sociocultural constructivist and learner-centered pedagogy is important for L2 literacy development as it emphasizes interaction, it takes seriously the sociocultural context of the learner and learner activity, learner agency and co-authorship in meaning construction, and understands the importance of the generic tools, mediums and forms available (Pallet and Myers (2017). Further, the native speaker identity and language use is not viewed as the ideal, the L2 learner's cultural and social context are taken in to account and instruction is centered around that. Pallet and Myers (2017) state that taking this situated and social approach allows for the awareness of what learners are truly motivated by, namely a participatory culture were learners are motivated by acceptance into a desired community and ability to share their own knowledge within that community.

In this study, the use of Web 2.0 as a language learning tool is motivated by its ubiquitous nature in the modern world, its role in propagating multilingual content and awareness and its role as a global sociocultural resource. Further, Pallet and Myers (2017) state its pedagogical affordances as "allowing for knowledge co-construction...including metacognition, peer-to-peer writing and editing, intercultural communication..., and intercultural exploration" (p. 114). Pallet and Myers (2017) adopt 3 processes of technology for consideration in the design of the TML program; 1. design (taking existing resources and creating new ones for specific purposes), 2. transformation (repurposing existing resources for individual identity related and ideational work), and 3. meditation (reflection on the role of medium, sociocultural contexts, power relations, and task, and how these impact communication). Specifically, Pallet and Myers (2017) state that the design of the program was "conceived as process orientated, one where the media adopted would foster transformative 'reframings and recontextualizations', empowering students not only as readers but also collectively as knowledge producers" (p. 114). The positioning of learners' as knowledge producers is something that will be drawn on for the design of activities in section 3.

The activities of the TMC course described by Pallet and Myers (2017) consisted of 4 parts, 1) reading a short story, 2) blog posts (written and audio), 3) social reading, and 4) extramural fan and critic expression. Each activities goal and rational was shared with the learners as a means to emphasize co-construction of knowledge and knowledge sharing. Below is a discussion of activities 2 and 3 as they pertain to the needs of this paper.

In the written blog post activity learners made weekly blog posts and were required to comment on other blogs. Learners were given a choice between two topic options, the posts were directly tied to the themes and narratives in the short story, taking on personal perspectives and in this way promoting learners to take authentic ownership of the content. The affordances of using the digital tools in blog posts for L2 education is well documented, Pallet and Myers (2017) cite many authors that find blogs afford L2 learners authentic context for L2 writing, reading

and oral skills development, self-reflection, L2 culture learning, and their ability to reach a wide and diverse authentic audience. Pallet and Myers (2017) state that the affordances of blogs in L2 literacy learning (motivation, authenticity, collaboration and literacy) should be used in conjunction with teacher guidance, in this way learners can be prepared technically and socioculturally for the experiences they may have online as L2 users. In this blogging activity the learners' goal was simply to share their experience with their classmates. The blog activity was designed to encourage community building, peer-support (share difficulties and successes), authentic audiences (classmates and teachers), and turning readers into writers (promoting learner agency). Pallet and Myers (2017) argue that the most prominent feature of blogs in L2 education is the 'viewability' and extension of the audience away from the teacher.

The activity of social reading was employed by the use of annotations. Learners were instructed to use annotations to comment on a broad range of topics, to signal lack of understanding, ask and answer questions, "share personal reactions to the storyline, and to identify key words, themes, and cultural elements" (Pallet and Myers, 2017, p. 120). The motivation behind this activity is in addressing and challenging the idea that reading is a relatively silent, individual and invisible process. Moreover, the social reading task was conceived as a tool to scaffold the reading process. The social reading activity is a means to start a dialogue about the reading process, and "lets students notice, question, and decipher a text together" (Pallet and Myers, 2017, p. 119). Further, "digital social reading enables readers to become empowered...in that readers leave a digital footprint, creating a two-way relationship with the author" (Pallet and Myers, 2017, p. 119).

Pallet and Myers (2017) report a high degree of effectiveness of the TLM program and the tools it used as a means to promote L2 literacy and develop a social pedagogy. In terms of the written blog posts, Pallet and Myers (2017) state that they facilitated interaction. In the examples of blog posts provided, learners displayed positive attitudes and self-reflection on the learning process. The posts and attitudes reflected by the learners was validated by classmates and classmates were able to offer encouragement and support, fostering a sense of community and support. Learners were able to express themselves in a personal manner and able to relate to the text in ways that were most salient to their own identities. Responses to posts also displayed a high degree of meta-awareness in acknowledging the language use in the posts that they commented on. The social reading activities showed how learners were interpreting the text in real time.

Pallet and Myers (2017) state that an anonymous survey was used in order to assess "the social pedagogy aspects of the course" (p. 127). The results of this survey showed that learners found the blog supported them in communication, vocabulary building, and grammar. Most importantly, learners found that the blog activity was highly motivational in their L2 learning endeavor. Learners answered questions in English and French about what they did and didn't like about the blogs as well as how they

perceived their connections with their classmates. The results showed that the activity supported them in "community building and solidarity as well as a certain level of meta-awareness" (Pallet and Myers, 2017, p. 127).

The activity and affordances of blog posting described by Pallet and Myers (2017) are attractive but require a high level of L2 repertoire, which learners in my classes may not have. Micro-blogging may be the solution to this problem, and is further explored in section 2.3. The concept of social reading is very attractive and can be conceptualized in multiple and varying ways, not only as annotations, but perhaps through other SM tools like retweeting, likes, and sharing. Further, the way that the learners in this program were presented with options for what content/ them/ topic they wanted to address as well as for what language they wanted to use in some activities and assessment was in line with authentic uses of SM and concepts of learner agency that has been addressed in earlier sections. The way that teachers in this study shared the goals and objectives of the course and activities with learners is also an important element in terms of fostering learner autonomy. This kind of transparency is important for learners, and it is something that can easily be included in any course design. While this course used a short story as a spring board from which to enter into SM practices, the following study uses a course textbook. This is useful for this paper because it is not always viable to disregard formal teaching practices that both teachers and learners have grown to expect and accept, and secondly, the textbook and SM space provide a useful and practical vehicle for genre comparison as a means to develop multiliteracy skills.

2.2 Textbook and SM: sociopragmatic awareness and multiliteracy development

Blattner and Fiori (2011) look specifically at bridging L2 textbooks with peripheral SM participation, as a means to develop sociopragmatic awareness and multiliteracy skills in an undergraduate intermediate Spanish course. Blattner and Fiori (2011) argue that developing sociopragmatic awareness and multiliteracy skills is crucial for L2 learning, even at earlier stages of L2 learning. Blattner and Fiori (2011) problematize traditional classrooms and textbooks for artificial and decontextualized language practice, focusing on L2 skills (listening, speaking, reading, writing, and grammar), while not addressing sociopragmatic elements of situated language use. Blattner and Fiori (2011) define the sociopragmatic elements as the "social perceptions underlying speakers' interpretation and performance of communicative acts" (p. 26). Often these choices are made in accordance with the identity that the speaker is trying to convey to other participants, Blattner and Fiori (2011) argue that because of the social nature of language, having command of the metamessages that language carries with it are just as important as lexical and grammatical skills. The fact is that L2 use outside of the classroom will have social consequences for L2 learners, teachers can prepare learners for this by bringing authentic social spaces into the class and helping them learn transferable skills and raise awareness to navigate these social spaces. Blattner and Fiori (2011) state that sociopragmatic resources

should come from authentic sources and thus SM is a useful resource for this goal.

Blattner and Fiori (2011) state the need for multiliteracy development in L2 learning emerges from the modern digital tools available to us that have changed the ways we interact and socialize. Blattner and Fiori (2011) argue that L2 learners "must be prepared not to only recognize and use multiple discourses and media but also understand, analyze and interpret their content" (p. 27). An important factor in developing multiliteracies and exposing learners to new discourse communities is teacher guidance and scaffolding, Blattner and Fiori (2011) state that in order for learners to be successful they need "explicit and prior preparation with the medium, the activity, and the community" (p. 27). If L2 learners develop digital multiliteracies, they may be encouraged to actively interact in these spaces, and other global learning communities in the L2 outside of classroom contexts, in new ways that are relevant for the development of their L2 voice.

The use of SM, specifically FB Groups, in this course is motivated by all the possible affordances that spaces like these have opened up for L2 learning. Blattner and Fiori (2011) discuss how advances in communication technology have become so common place (already apart of Learners daily lives) and have given rise to new and accessible communities, "new language practices, uses, rules, and conventions, all of which could either become an overwhelming or enriching experience for both L2 learners and language instructors" (p. 24). Using SM in the language learning class provides learners with a platform to observe authentic versions of these new communication features and experiences that exist within certain online communities, as well as develop an awareness of how the cultural and social contexts, genre and available modes act on language choice, use and interpretation. Blattner and Fiori (2011) state that SM is a potential resource for language classes "as a way to provide both constructive linguistic outcomes and easy, immediate, and individualized interactions with peers, instructors, and native speakers" (p. 25). SM spaces make opportune environments for social engagement, it is easy for people to connect, interact and create with others. The ultimate aim of using SM as an L2 learning resource is to help learners "learn to understand and thus better access these communities, become familiarized with new voices and new genres, and finally enter into these language practices" (Blattner and Fiori, 2011, p. 25).

Blattner and Fiori (2011) state that the tasks in this course aimed to integrate SM into the classroom by promoting situated learning through scaffolded awareness discourse analysis tasks on the social practices in FB Groups. According to Blattner and Fiori (2011), the goal is to use SM as a means to promote sociopragmatic development (raised awareness of language use in authentic social contexts), collective interpretation and collaboration, and develop multiliteracy skills (raised awareness of language use in relation to the digital context, mode and genre features). Further, the SM component of the course was worth 10% of the grade as "it is essential to incorporate pragmatically orientated tasks as a learning objective and as a regular important

course component" (p. 28). In preparation for the course described by Blattner and Fiori (2011), the instructor prepared a FB Group for the class, that learners joined, this space was designed and used as a space for sharing resources and links to other FB Groups. The learners were given a training session on how to use FB and complete tasks. The course textbook had three units, learners were tasked with finding and posting (on the class FB Group) links and descriptions of FB Groups relating to these themes. Blattner and Fiori (2011) state that this task "ensured that individuals investigated the purpose of the group, the profile of the typical members, and the language of the group for the links they posted" (p. 29). Next, the class chose which groups would be analyzed. Blattner and Fiori (2011) state that the analysis task "required students to identify, examine, reflect upon, and analyze the language posted in the FB Groups chosen for a specific unit in terms of greetings/ leave-taking and vocabulary use" (p. 30). Learners had to show evidence for their analysis with samples and these analyses were assessed for accuracy. Class time was dedicated to discussions of learner's experiences and reflection on their analysis and findings, this was meant to scaffold and facilitate the raising of sociopragmatic awareness and multiliteracies development.

Blattner and Fiori (2011) collected qualitative data based on the learners' analysis tasks and verbal reports for all three units, this was used to assess their sociopragmatic awareness and multiliteracy skills development. The linguistic functions of greetings and leave-taking were specific language focal points for the learners. Blattner and Fiori (2011) show what the learners picked out from the FB Groups, I.e. basic greetings, inclusive / non-inclusive greetings, typical / notable goodbyes, cultural differences, greetings vs. Leave-takings. Blattner and Fiori (2011) show in their data that all learners recognized typical greetings and leave-taking forms, not all recognized nuanced and notable instances. Further, all learners reported and showed evidence for learning new vocabulary from their exploration of the various FB Groups. Learners reported that they used contextual cues as well as dictionary and translation practices to understand things like apocopes, syllabograms, spelling variations, emotives and abbreviations. Blattner and Fiori (2011) state that this lexical variation is an important feature of language because authentic language use "generally offer many other linguistic variations that can dramatically impact the outcome of an interaction" (p. 34). Blattner and Fiori (2011) state that as a result of the course, the learners'; learned from real-life language use and examined it beyond the social and cultural confines of their L1. [The use of SM] provided attractive cultural information that stimulated language learners to autonomously explore a target culture and thereby actively engage in the use of authentic source materials. (p. 35)

Further, with regard to sociopragmatic awareness, the tasks and use of SM provided learners with opportunities to "access functional and cultural appropriateness of a variety of acts in an authentic context" (Blattner and Fiori, 2011, p. 36). And with regards to multiliteracies skill development, the learners demonstrated that modes of communication in SM spaces "were empowering and offered a variety

of transferable skills for interpreting, evaluating, and negotiating electronic foreign language discourse" (Blattner and Fiori, 2011, p. 36). Blattner and Fiori (2011) warn that in order to be able to guide L2 learners in SM practices and use, the teacher needs to have a raised awareness of these practices and an idea of what their learners may experience in this space. This is why the next study is of use to this paper, it explores the use of Twitter as a L2 learning resource and is appealing because it is a SM space that I have explored personally for my own L2 learning and I may have some idea of the interactions and experiences that L2 learners can expect. Something that both this study and the following study have in common is the importance of peripheral participation, for L2 users of SM, this form of participation in a community / space is a legitimate and useful learning technique.

2.3 Twitter: Sociopragmatic awareness for beginner L2 learners

By looking at Twitter's demographic statistics one can see how pervasive SM has become in the modern digital era. According to statistics on the website Omnicore, in 2018 there were over 326 million active users on Twitter, and over 500 million tweets were set each day. Currently, Twitter supports over 40 different languages. In this globalized and digital world, having competence in an L2 requires control over multimodal and multiliterate resources as a means to navigate the digital spaces of desired target language communities, as well as performing multiple identities using these multiple semiotic resources. Common and authentic use and practice in Twitter involves following celebrities, and popular culture figures. The needs of L2 learners and features of Twitter is drawn on by Blattner, Dalola, and Lomicka (2015). In their study, teaching activities were designed to incorporate genuine sociopragmatic use of Twitter as a means of developing beginner L2 learner's cultural competence and sociopragmatic awareness. This is in line with Reinhardt's (2019) findings that SM can be used as a tool for "observation of, and participation in, sociopragmatically genuine discourse practices in the L2" (p. 33).

The main goal of the integrated language and culture pedagogy and teaching activities in the study by Blattner *et al.* (2015) is to study how language learners (specifically beginner French language learners) can use Twitter as a tool to develop cross-cultural awareness and better understand sociopragmatic features of tweets written by French native speakers. Blattner *et al.* (2015) aim to address gaps in previous research that pay specific attention to participation and production. According to the authors, L2 learning that incorporates SM need not only focus on participation and production, also important for cultural competence and sociopragmatic awareness is being able to analyze language choices and use, in authentic contexts. Their goal is to develop and practice the awareness in contextualized and authentic language environments, this can lead to awareness of the target language and culture as well as a critical awareness of the learner's own language and culture.

The use of a microblogging tool such a Twitter, is motivated by the global and technological nature of the modern world, as discussed before, the changing world has changed the goals of language teaching. Blattner *et al*. (2015) state that language learning must now include the development of cross-cultural competence, as communication today (especially using SM) often brings together people of different languages, identities, stances, and cultures. Language is viewed as "the processes and products of intercultural exchanges" (Blattner *et al*., 2015, p. 214) and learning a language means being able to "to interact competently in situations with people of diverse linguistic and cultural communication styles" (Blattner *et al*., 2015, p. 214). Blattner *et al*. (2015) argues that this sociopragmatic awareness be a part of the L2 learners learning goals even at a beginner level, this is motivated by the fact that developing cross-cultural competence and sociopragmatic awareness is a tool that beginners need to master, lacking these skills will seriously limit the semiotic resources available for the learner. According to Blattner *et al*. (2015) there is a "critical need to include cultural exposure in the lower division of the foreign language curriculum and to not wait to convey such essential elements to [L2] learners at some later stage of acquisition" (p. 218). This study is also motivated by the issue that traditional textbooks do not have these affordances for cross-cultural competence and sociopragmatic awareness in authentic contexts, whereas Twitter offers opportunities for situated and authentic language practices and learning of these practices. Blattner *et al*. (2015) State that "learners must be given access to and the opportunity to use new technologies in order to understand their current and potential uses for learning, online communication, and information dissemination and retrieval" (p. 225). The use of Twitter specifically is motivated by affordances of this space found by other research cited by Blattner *et al*. (2015); according to these studies Twitter extends language learning out of the physical classroom, it encourages participation and community building with participants outside of the classroom, it is a good tool to develop cross-cultural competence, and develop a community of practice. According to Blattner *et al*. (2015) Twitter also severs as a good tool to analyze authentic language use.

The main teaching activity in this study involves beginner French learners, following well-known French speakers on Twitter. The program had three parts: 1) completion of a metalinguistic survey, 2) weekly linguistic analysis of tweets (5 weeks), and 3) completion of a post-task questionnaire. The goal of the metalinguistic survey was to gage the learner's level of French education, exposure to French and experience with social media as well as experience with using French on social media. For the analysis of tweets, learners were given a list of well-known French twitter users and selected 3 to follow based on different categories. Each week they chose 1/2 tweets to screenshot and analyze from each person they followed; analysis was scaffolded with a linguistics questionnaire that drew attention to pragmatic variables in the tweet. Analysis focused on two specific cross-cultural pragmatic features; 1) abbreviations used in French tweets, and 2) English borrowings.

The goal of tweet analysis was to analyze how native speakers use French on twitter, so that learners can "become familiar with the discursive conventions of the electronic media and how cultural aspects of the L2 are used which facilitates the making of meaningful connections with NSs on the same platform" (Blattner *et al*., 2015, p. 216). The goal of the post task survey was to analyze how learners viewed their learning experience and their perception of using Twitter to learn French. Of special interest to this paper is the linguistic questionnaire that scaffolded the learners' analysis of the tweets. The learners were told not to use the translation function of the tweet, and it was designed to draw the learners' attention to specific linguistic and semiotic features and functions of the tweet. (see appendix 5 for how this linguistic questionnaire (Blattner *et* al. (2015), Appendix C, P. 234-5) has been adapted for this paper).

Blattner *et al*. (2015) analyzed the tweets and the learner's analysis of the tweets, specifically the correctness of the identification of borrowings and abbreviations, and correctness in their analysis of the sociopragmatic features of the tweets, I.e. the meaning/ understanding of the tweets selected for analysis. In this way, Blattner *et al*. (2015) evaluated the teaching and learning goals of the study, specifically, if the learners developed a cross-cultural competence, and sociopragmatic awareness. In the evaluation of the learning goals, Blattner *et al*. (2015) found that the participants had difficulty in accurately interpreting and understanding English borrowings and abbreviations in the French tweets, due to their limited repertoire, and limited exposure to nonce usages. Blattner *et al*. (2015) Argues that these results show that beginner language learners have difficulty understanding language use that (while popular in authentic online contexts) they have not encountered before (in textbooks). This leads to Blattner *et al*. (2015) stating that Twitter could be a tool for learners to encounter new vocabulary and CMC practices of French speakers. Because tweets are generally multimodal (emoticons, pictures, links, hashtags etc.) learners have more semiotic evidence from which to extrapolate meaning. Results show that "interaction, even at the passive level of following tweets, can aid in the comprehension of cross-cultural pragmatics and the development of digital literacy skills in early L2 acquisition" (Blattner *et al*., 2015, p. 218).

On a final note, the focus on native speaker French is quite limiting in this study. Based on the global nature of the modern world and the proliferation of multilingualism in online spaces, Twitter could be used to decentralize the native speaker ideal, and broaden the scope of analysis to other users of the L2 in the space. The use of Twitter as a tool for language, cultural and sociopragmatic analysis and its affordances serve the needs of this paper well. Further, the need for sociopragmatic awareness for beginner L2 learners is important for consideration of the teaching context in this paper and is expanded on in the review of the next study.

2.4 Bridging activities and language awareness

Reinhardt and Ryu (2013) use a bridging activities model to develop sociopragmatic awareness of Korean honorifics to beginner Korean learners. Their

bridging activities model is an adjusted form from what is described in Reinhardt and Thorne (2009). The goal of a bridging activities model is to merge learners' everyday digital practices with the L2 classroom. Activities that are designed within a bridging activities model, scaffold learners "experiential and analytic awareness of digitally-mediated student selected or created texts and literacy practices" (Reinhardt and Thorn, 2009, p. 14). The main goals of this model is that the learners will be guided toward a form of participation in authentic digital literacy practices (observing, exploring, creating, projecting identity and stances) in the L2, and develop an autonomy (without teacher scaffolding) in which they are able to use their new critical, analytical, and participatory skills for their own purposes (Reinhardt, 2009, p. 15). A second framework employed by this study is that of language awareness. A language awareness approach means understanding that language (as object of analysis) is situated, emergent in context, and directed towards a social function (Reinhardt and Rhu, 2013, p. 21).

Reinhardt and Ryu (2013) discuss how language use has a social function, and language use on SM "embody socio-literacy practices, in which identities and communities are performed and negotiated in socially recognized ways, by means of shared repertoires" (p. 18). In these highly situated contexts, unique sociopragmatic conventions emerge. The rationale behind employing a bridging activities model is that it can help develop learners digital L2 literacies as well as develop an awareness of everyday sociopragmatic conventions that are employed in these spaces (Reinhardt and Ryu, 2013). Using this model allows for the digital literacy practices to be the "means and object of awareness" (Reinhardt and Ryu, 2013, p. 19). In this model, L2 learners can develop an awareness of language choices and how these choices realize specific meanings within specific contexts. Reinhardt and Rhu (2013) argue that adopting a language analysis approach to analyze language use and choices within recognizable digital contexts and experiences, will "facilitate a learner's ability to connect that use to social purpose, and develops his or her awareness of...how language is used to create socio-cultural context" (p. 21).

The activities in this study are geared towards developing a sociopragmatic awareness of the use of Korean honorifics in SM spaces, specifically on FB Groups. This is an important aspect of the Korean language as it is salient in everyday use, and dynamically negotiated across contexts. Further, these activities are designed as a means to address the limited contexts of use presented in the Korean textbooks. The original bridging activities model has 3 major parts, 1) observation and collection (observe authentic participation and language use in a space, collecting and reflecting on relevant texts in the space), 2) guided exploration and analysis (identification and analysis of linguistic and semiotic choices in selected texts), and 3) creation and participation (apply new sociopragmatic awareness to produce text for peer review, and finally participate in the space). Because in this study, the participants were beginner Korean learners, the framework was adjusted in that the collection of analyzable texts was done by the teachers and participation was scaffolded and simulated with a FB group and peer developed

characters (Reinhardt and Rhu, 2013). The danger in this is that one of the main affordances of a bridging activity model is lost, namely, the selection of personally relevant materials, and the resulting motivational benefits. The authors summarize the course activities, goals and tasks in a table (Reinhardt and Rhu, 2013, p. 23), it is a useful framework from which to develop bridging activities for this papers program, further discussed in section 3.

Reinhardt and Rhu (2013) evaluated the learners sociopragmatic awareness demonstrated in their productions, by identifying learner "practice of pragmatic flouting, the understanding of contextual constraints on use, and the creative use of FB affordances" (p. 25). For the authors, the intentional flouting of honorific norms demonstrates a sociopragmatic awareness. Specifically, in SM contexts variations on the norms of honorific use result in new social meanings. In regards to contextual constraints, use of honorifics was analyzed as highly dependent on familiarity with participants, and other audience factors. Further, the use of SM allowed for creative and nuanced used of honorifics by the learners. The authors also made use of a post-instructional survey in order to collect reflective data on the development of learners' socioprogmatic awareness and their perception of the course as a whole. Results showed overall enjoyment, and learners perceived their own cultural and sociopragmatic awareness as more developed. An important suggestion for future studies proposed by Reinhardt and Rhu (2013), is that comparable examples of the sociopragmatic language uses should be analyzed from multiple SM spaces, and that this can aid in developing an understanding of the relationship between medium, context, social purpose and form. Further, a genre awareness and comparison will make explicit conventions of spaces they may already be familiar with.

The studies reviewed above have provided good examples of what is means to adopt a multiliteracies and social pedagogical framework in an L2 learning context. Drawing on the goals, rationales, activity designs and evaluation methods of these studies, the next section describes and explains an adaption of the above frameworks that attempts to make use of the affordances of SM in the hopes of situating the L2 classroom content within the broader global context, with a focus on sociopragmatic awareness and L2 voice development.

3. Teaching Methods

The teaching goals, methods, activities and evaluation of the program designed here draw heavily on multiliteracies and bridging activities models. The title of the paper '*Multiliteracies and Bridging activities approach: Guiding L2 learners toward authentic and autonomous L2 learning and use'* is a clue to what the goals of this program are and how teacher scaffolding is an important feature.

3.1 Teaching Context

The teaching context that this program is designed around is a Korean elementary school English classroom. The participants are grade 6 learners, around 12 years old. Of the 7 classes (+/- 25 learners per class), most students have been learning English in school since the third grade, and about 60-70 % of

these learners attend extra-curricular English classes in private academies. The English proficiency among the learners varies from beginner (struggles to read, write and speak) to native like (spent time abroad in an English-speaking country), but the majority of learners display an elementary to intermediate level of English proficiency. Learners have English class with me twice a week, the classroom content and activities are designed around a textbook (see table 1 below).

Table 1: YBM Elementary school English Grade 6

YBM Elementary English	**Theme**	**Language function**
1. What Grade Are You In?	Meeting new people	Introducing yourself
2. What Would You Like?	Going to a restaurant	Ordering and describing food
3. My Favorite Subject Is Science	School	Describing favorite things and giving reasons
4. How About Turning Off the Light?	Climate change	Giving suggestions
Review 1		
5. Go Straight and Turn Left	Going to new places	Asking for and giving directions
6. Your Car Is Faster Than Mine	Competing with friends	Making comparisons
7. What Will You Do This Summer?	Summer vacation	Discussing future plans
8. How Was Your Trip	Summer vacation	Discussing past events
Review 2		
9. I Exercise Four Times a Week	Fitness, good and bad habits	Frequency
10. What Season Do You Like?	Seasons	Likes and dislikes
11. What Do You Want to Be?	Careers and jobs	Describing jobs
Review 3		
12. I Have a Headache	Sickness and symptoms	Describing symptoms and remedies
13. When Is the School Festival?	Fun events	Asking for event information
14. Congratulations!	Graduation	Expressing praise
Review 4		

Each chapter in the textbook is designed to focus on a specific language form and theme and has 6 lessons focusing on developing a specific language skill; lesson 1 and 2) listening and speaking skills, introducing the theme for the chapter and target language forms, lesson 3 and 4) reading and writing skills, introducing narratives and texts that use the target language forms, and lesson 5 and 6) producing the language forms creatively in the form of a poster/ group project and review of what learners have learned in that chapter. In the textbook there are 4 review sections, these sections provide a unique time slot and opportunity to implement the SM bridging activities. The English classroom is equipped with a computer and projector. All students have access to a school computer lab (which has 30 computers), and to my knowledge all students have their own smart phone (which they are allowed to bring to school), but most likely some have parental controls activated to limit their use. The school has a 'smart room' available a few times a month, where learners can have access to individual tablets and other digital media resources.

The main focus of this year long program will be to incorporate 4 SM units that will function alongside use of the textbook. Through teacher scaffolding students will learn about the generic conventions of a specific SM space, in line with the textbook themes, learners will develop a simulated profile, and make connections with identity, semiotic choice and context. The textbook will be used as a guide for understanding and analyzing specific language forms and functions, as well as a means to compare different modes and conventions. In line with Rhienhardt and Rhu's (2013) suggestion, comparing textbook language use with SM language use will aid in developing an understanding of the relationship between medium, context, social purpose and form. Further, a genre awareness and comparison will make explicit conventions of spaces they may already be familiar with. Employing a bridging activities model, simulated and authentic SM practices and interactions will be explored and analyzed in conjunction with target language forms and functions. Learners will analyze content in SM spaces using a linguistic questionnaire, that will bring into focus important semiotic forms, functions and social meanings, moreover a critical analysis of the modes and tools that the SM space provides. The aim of these processes is to situate language use in authentic contexts and help learners develop sociopragmatic awareness of language use in these contexts. This scaffolded process aims to eventually lead to transformed practice in the SM space and allow learners to use what they have learned in a way that supports the development of their L2 voice. Because a specific textbook is used for three years, a further affordance that these activities may provide is that it allows for learners to become creators of learning content for future learners, allowing them to reconceptualize themselves as expert members of the learning community at school, and collectively as a group of authentic L2 content creators.

3.2 Teaching Activity

The SM aspect of the program is designed to play out over the school year, spread over 4 units, each unit will be implemented after 4 chapters of the textbook

have been completed and will draw from themes and language forms and functions introduced in those 4 chapters. Each unit consists of 7 activities, designed to incorporate a bridging activities model that promotes L2 learners sociopragmatic awareness of authentic language use and functions, in comparison with language use and functions presented in the textbook, as well as develop digital multiliteracy skills and promote their emerging L2 voices. Due to the English level and age of the students, teacher scaffolding and simulated practice are heavily implemented into these models. As discussed in previous sections, scaffolding should promote sociopragmatic, contextual and genre awareness, production, consumption and co-creation of content, considering a broader audience, regarding learners' identity and imagined future self.

The 7 activities in the SM unit described below are designed with the aim of being able to implement them with the use of any English textbook. They are a means to expand learner engagement with the textbook, broaden the learning environment to authentic contents, promote sociopragmatic awareness and development of L2 voice. Because a program of this kind has never been implemented in the teaching context described above, the first time it is used will require heavy scaffolding and pre-activity preparations and education (this is the function of activity 1). Teacher guidance will be critical at this stage, in this way learners can be prepared technically and socioculturally for the experiences they may have online as L2 users. The idea is that the SM space that is employed in this framework can change, so while the description below focuses on bridging Twitter with in-class instruction, another teacher/ researcher using this program design can use Facebook Groups, YouTube, or Wikipedia for instance, if they feel they have a better command over those SM spaces and practices and can better prepare their learners for activity in those spaces.

The following sections (3.2.1- 3.2.7) describe each activity of the SM unit, before this, a brief description of the activities and their goals is provided. Activity 1 will serve as a foundational part of the program as a whole. The aim of this activity is to explore what knowledge learners have about the SM space (its tools, practices, and users), prepare them with relevant technical skills, and how to complete activities, and adjust their expectations for the English program. Activity 2 will require that learners work in groups to design a simulated profile that they will work with, bringing into focus an authentic context and identity work. Activity 3 will allow for time to re-approach and re-view themes and language functions in the textbook chapters with the knowledge learned in activities 1 and 2 in mind. Activity 4, 5, and 6 will form the adapted bridging activities section of the unit that corresponds with the bridging activities described by Reinhardt and Rhu (2013). Activity 4 involves observation of teacher-collected SM artifacts, aims to situate learned forms and functions within authentic SM contexts and practices. Activity 5 implements guided exploration and analysis, aims to develop a critical awareness of the textual and sociopragmatic elements in authentic SM artefacts, scaffolded with a linguistic questionnaire (see appendix 5). Activity 6, creation and participation, learners will work in groups and with their simulated profiles, applying

their sociopragmatic understandings and knowledge of the situated SM context in order to produce a post, first as a group, then individually as a means to support development of their L2 voice. The final unit, social reading, aims to start a dialogue about the reading process, and lets learners notice, question, decipher, and react to each other's productions together. See appendix 1 for a tabulated summary of unit 1's activities, goals and focus.

3.2.1 Activity 1: Where are you? (Introduction into the SM space)

In this activity learners are introduced to the SM space that they will use, namely, Twitter. Learners will discuss what they know about the space, its tools, practices and its users. The teacher will also present these features of the space to the learners. Using the class computer and projector the teacher will guide the students through the space, how it may be used and what kind of functions might be performed. As discussed in the literature reviewed, an important factor in developing multiliteracies and exposing learners to new discourse communities is teacher guidance and scaffolding, Blattner and Fiori (2011) state that in order for learners to be successful, learners need "explicit and prior preparation with the medium, the activity, and the community" (p. 27). Because Twitter will be used throughout the year, with the SM unit being implemented into the 4 review sections of the textbook, Activity 1 will only need to feature once in the program. The teacher will lead a discussion about how Twitter is often described as a real-time microblogging (short messages) platform, and it's 140-character limit (in Korean and double that for English), and the advantages of these features for the L2 learner. For this the teacher must have set up their own simulated profile, with an @ handle, profile picture, bio-line and location. The teacher will demonstrate how to post a tweet, follow other users, like tweets, reply to tweets and retweet (this enables sharing other tweets and headlining it with one's own tweet/ comment).

While tweets and their replies are characterized by short texts, they are generally accompanied by a wide range of multimodal content, users can use emoticons, and attach images, videos, GIFs, reaction GIFs, and links from other sites. Another important feature of tweets are the hashtags that users add, they are usually typed into the end of a tweet and have a wide range of functions. Hashtags are a way to identify key words, ideas, or interests in a particular tweet, the hashtags make the tweet searchable under those specified links. The last function to mention is the search function, users can search for other users, hashtags, key words, topics or interests in the search function.

All these tools and features need to be pointed out, discussed and explored with the learners. Important here is that the teacher shares with the learners the L2 learning affordances of participation on Twitter. Twitter supports L2 learning in multiple ways, specifically, learners will be able to connect with and view interest-driven content produced by many users of the L2, the multimodal nature of twitter affords the L2 learners a wide range of semiotic resources from which to draw for understanding content and producing content, and provides opportunities for development of their own L2 voice.

3.2.2 Activity 2: Who are you? (Group formation and identity work)

The teacher will have set up a basic simulated profile for 4 users, each based around a specific theme, learners will organize in groups based on the theme of their choice and then work together to develop the profile (the @handle, profile picture, bio-line and location). The thematic handles are in line with the themes that the previous textbook chapters present. So, the themes for unit 1 will be; 1) meeting new people, 2) at a restaurant, 3) school life, 4) climate change. Each learner will choose to follow one other handle based on the theme and the profile they have designed with their peers. Learners will have to complete a table describing the choices they made and why (see appendix 2). In their groups, learners will present their profiles to the class, and everyone will follow each other's handles. The simulated profiles are useful for group work, age level and English level of the learners. They will be able to draw on each other's knowledge in their choices and develop a SM profile together, co-creating content. The completion of the table should bring into awareness the kinds of identity choices available to them and the reasons for the choices that they have made, and a feeling for the processes involved constructing an online identity around a certain interest.

3.2.3 Activity 3: Textbook Review

The teacher will follow the textbook procedures for the review activity, learners have been exposed to this textbook format and teaching procedure before so it will be familiar to both the teacher and learners. For instance Lesson 4, titled *How about turning off the light?,* introduces the sentence structure "How about V+ing?", the function of this sentence structure is generally to ask someone their opinion, or to give a polite suggestion, the latter being the textbook focus. The theme that this lesson introduces is climate change, and suggesting way to help with combating this issue. Learners will have practiced listening and speaking drills, reading and writing skills, introducing narratives and texts that use the target language forms, within the chapter themes. There is opportunity here for the teacher to engage learners in the different generic conventions that act on them while engaging with the textbook and relating that to what they have and will encounter in their SM practice. For instance, with consideration to their group theme and simulated profile and how they might make use of the linguistic function of suggestions, or how their group interest might be concerned with climate change, in the form of the textbook production and review activity (writing 3 sentences on a poster for the class), and in the form of tweets and the relevant tools and functions available. Attention can be drawn to the different audiences, and how production might differ and what kinds of tools they might use in the different spaces. Using the knowledge from activity 3 learners can complete a table (see appendix 3), this will become a collaboratively designed and shared resource from which they can refer to and build on throughout the unit. It will serve as a reminder and illustration textbook forms, and functions as well as a 'multimodal dictionary' that they can add to throughout the unit. The goal of this activity is to develop learner's genre awareness and begin

developing their understanding of the relationship between medium, context, social purpose and form.

3.2.4 Activity 4: Bridging activity 1 (observation and collection)

In this activity, the teacher will present each group with screenshots of tweets she has designed and posted on her simulated profile that make use of the different language functions, and themes presented in the textbook up to this point. The point here is that the teacher situates the in-class learning content, into the SM space. The collection part of this bridging activity is scaffolded by the teacher designing the tweets for the space, collection needs to be scaffolded because of the learners age and English level. Further, the teacher designs the tweets as a means for learners to see how the language forms and functions that they now know, may be used in the SM space. The space may still be foreign and overwhelming to the learners, but they will have command over the language in these simulated tweets and so may spend more energy looking at the different tools used and other important features. Learners will use these tweets and be prompted to find out what the function is, what tools and features were used. The aim is to present learners with familiar forms and functions that they need to identify which is situated in the SM space, in contrast to the usual presentation of these forms, functions and themes in the textbook. Learners can discuss and complete a table (see appendix 4) stating whether or not their group simulated profile would like, reply, or retweet this tweet and why. In this activity, learners can begin to develop an awareness of the language choices available in this space, and how these choices may realize specific meanings within specific contexts (say in comparison to the textbook production). The teacher can highlight how the tweets she produced may or usually may not have been interacted with, and how this 'lurking' activity is also an important feature of online participation.

3.2.5 Activity 5: Bridging activity 2 (guided exploration and analysis)

In this activity, the teacher will present each group with screenshots of and links to tweets posted by authentic users of the L2 that make use of the language functions, and themes presented in the textbook up to this point. Learners will use these tweets and be prompted to complete the linguistic questionnaire (see appendix 5) in order to develop more sociopragmatic awareness of lesser-known forms and functions, produced by authentic users of the L2, in authentic SM contexts. Analysis scaffolded with a linguistics questionnaire can draw attention to pragmatic variables present in tweets, that the textbook does not present. Reinhardt and Rhu (2013) argue that adopting a language analysis approach to analyze language use and choices within recognizable digital contexts and experiences, will "facilitate a learner's ability to connect that use to social purpose, and develops his or her awareness of...how language is used to create socio-cultural context" (p. 21). The main goal here is for learners to be guided in developing the ability to link the forms of the tweets with their social functions.

3.2.6 Activity 6: Bridging activity 3 (creation and participation)

In this activity, learners will apply their new knowledge of how language forms and functions are used in SM contexts by redesigning and repurposing them by using their simulated profile. The learners will produce two tweets, first with peer scaffolding and as a group guided by the language functions and theme introduced in the textbook, and then a second time individually, having the freedom to produce a more open-ended tweet using and language function and addressing any theme, but still adhering to the simulated profile). Learners will fill out a table (see appendix 6) that questions the motives behind the linguistic and other sociopragmatic choices they made and sociopragmatic meanings that emerge (both for the group tweet and the individual tweet). After posting tweets, learners will be encouraged to view other group profiles and like, reply, and retweet as they imagine their group profile might respond to those tweets, learners are to fill out the table (see appendix 5) regarding these actions. The aim of this activity is to scaffold learner's real language use in the SM space, and allow them autonomy in the development of an L2 voice. In this activity real and situated language use is tied to medium, and context of communication. The activities leading up to this point have highlighted the connections between form, function, and context, and guide the learner to be able to make informed choices in this activity. Simulated participation is important for lower level learners as they will be able to practice different choices with fewer social consequences that don't necessarily reflect on their own real identities. A simulated and teacher scaffolded bridging activities model will allow for a safe space for L2 learners to become aware of and practice new sociopragmatic forms, they can learn what to expect and develop a level of preparedness, before they go out into the digital wilds.

3.2.7 Activity 7: reflection zone (social reading)

In this activity, learners will reflect on the program as a whole, as suggested by Pallet and Myers (2017) the motivation behind this activity is in addressing and challenging the idea that reading is a relatively silent, individual and invisible process. Learners will work in their groups to view and discuss the activity that occurred on their tweets they produced for the group profile. They will use the function on Twitter that shows the user how other users have generally interacted with their tweets, I.e. how many users viewed the tweet, how many users clicked on the tweet, how many users clicked on their hashtags, how many users visited their profile from by clicking on the handle in their tweet, how many likes, replies, and retweets their tweet received. This process will bring to light how different forms of interaction exist in this SM space, it will also form part of a learning process whereby learners can compare the amount of traffic and participation each tweet generated, which forms of practices were legitimized or not. Learners conclude reflection using the post-task survey adapted from Reinhardt and Rhu (2013) (see appendix 7).

The activities, teaching materials and students produced products described above will need to be translated from English to Korean and vice versa with the help of co-workers who are fluent in both Korean and English. A program of this nature will be intensive and time consuming to prepare and carry out.

But as someone once told me, it's not about having the time, it's about making the time.

3.3 Evaluation

3.3.1 What is being evaluated and how?

The effectiveness of the teaching activities and teaching goals will be evaluated in this program. Specifically, did the learners raise their sociopragmatic awareness and develop multiliteracies skills, and was the development and negotiation of their L2 voice supported by the program. Learners' perception of the use of SM in the English class as well as ways that the activities might be improved for the next unit can also be measured. In order to evaluate sociopragmatic awareness, multiliteracy development, and L2 voice development, there will be collection and assessment of learner analysis, production, and reflections, in the form of tables and surveys in appendix 2, 3, 4, 5 and 6. The post –task survey in appendix 6 will be used to measure learners' perception of the use of SM in the English class. All the tables and surveys will be looked at and assessed throughout the unit, feedback can be given to students before the next unit starts so as to improve their experience, and teachers will be able to work on areas that need to be adapted in the program. These tables and surveys will provide reflective data about learners' language choices and hopefully point to analytical evidence of raised awareness's and skill development. Because there are 4 units throughout the program, learner sociopragmatic awareness and multiliteracy development can be compared from the first unit with that of the fourth unit. A comparison of what students produce (over time) may show evidence of raise sociopragmatic awareness and better command of multiliteracies.

3.3.2 Evaluating sociopragmatic awareness

In terms of sociopragmatic awareness, Blattner and Fiori (2011) define the sociopragmatic elements as the "social perceptions underlying speakers' interpretation and performance of communicative acts" (p. 26). Often these choices are made in accordance with the identity that the speaker is trying to convey to other participants, Blattner and Fiori (2011) argue that because of the social nature of language, having command of the metamessages that language carries with it are just as important as lexical and grammatical skills. Blattner et al. (2015) state that sociopragmatic awareness is being able to analyze language choices and use, in authentic contexts. The learners in this program will be assessed to measure their sociopragmatic awareness throughout the unit described in section 2, specifically the analysis of simulated and authentic tweets, as well as the choices and motives for their choices in production and participation. It is important to assess what the learners take into consideration in the interpretation and production of tweets, i.e. the user identity (their group simulated identity and projected identities of the authentic tweets, as well as the tweets produced by their peers), the SM tools and functions, and the audience (specifically in comparison with those available in the interpretation and production of the textbook) etc.

Blattner *et al*. (2015) analyzed tweets and learner's analysis of the tweets, specifically the correctness of the identification of borrowings and abbreviations,

and correctness in their analysis of the sociopragmatic features of the tweets, I.e. the meaning/ understanding of the tweets selected for analysis. In the activities described in section 2 of this paper, learners will be analyzing tweets designed by teacher and authentic tweets by other users, their language analysis completed (in appendix 2, 3, 4 and 5) can be assessed for correctness, and identification of sociopragmatic features, and differences between textbook and Twitter production forms and functions. For instance, recognizing form variations, translation abilities, recognizing functions, and audience. Reinhardt and Rhu (2013) evaluated sociopragmatic awareness demonstrated in learner productions, by identifying learners "practice of pragmatic flouting, the understanding of contextual constraints on use, and the creative use of FB affordances" (p. 25). Reinhardt and Rhu (2013) argue that in their simulated participation activity, learners displayed intentional flouting of linguistic forms and functions, awareness of how the context and identity constrains their semiotic choices, and using the SM space creatively is was evidence of raised sociopragmatic awareness. In this paper, learners will be producing two tweets, one with their group and one individually, learners will also interact with tweets produced by other groups. These productions and interactions can be assessed for flouting, form and meaning manipulations, and perceived constraints based on the Twitter handle they designed with their group, and the modes and tools available to them.

3.3.3 Evaluation multiliteracies development

In terms of multiliteracies, the goal is to promote learners ability to critically analyze, socially evaluate, and co-create meaningful semiotic content in all available modes, spaces and forms. According to Blattner and Fiori (2011) in developing multiliteracy skills (raised awareness of language use in relation to the digital context, mode and genre features) L2 learners "must be prepared not to only recognize and use multiple discourses and media but also understand, analyze and interpret their content" (p. 27). The activities in section 2 and the tables and surveys (appendix 2, 3, 4, 5 and 6) continually draw learners' attention to the different modes and tools that are available in the SM space Twitter. It will be easy to assess what tools they pick up on, how they interpret their uses and what motivates their own uses of specific tools and SM resources. Learners are also put in a position to compare the modes, tools and features available in the textbook with that of Twitter. The textbook and SM space provide a useful and practical vehicle for genre comparison as a means to develop multiliteracy skills. Activity 2 specifically draws students attention to genre differences in the textbook and Twitter, comparing text production in the textbook, and production on Twitter, the table learners fill out for this activity (appendix 4) (which is expanded on throughout the unit) can be conceived of as a representation of their raised genre awareness.

3.3.4 Evaluation the emergent L2 voice

In terms of learners' emergent L2 voice, the program described above aims to provide L2 learners with opportunities, tools and resources to develop their individual L2 voice, this will aid in the construction,

maintenance and negotiation of L2 identities and the self. Vandergriff (2016) states that "for language learning to be successful, learners must develop the competence to convey both the message and the meta message so that the emerging L2 self is in harmony with the learners exiting identities" (p. 105). Vandergriff also argues that L2 users in online spaces utilize the agency that these spaces afford them by making strategic choices in developing, maintaining and negotiating their L2 voices. Language and identity are linked because, as understood in sociocultural approaches, language as a social practice is never neutral, it carries with it a metamessage that indexes the user's identities. Participation in digital practices, in this program, is aimed at supporting L2 learner agency and in turn provides opportunities for L2 users to develop, maintain and negotiate an L2 voice and thus build a compatible L2 identity. This interdependent relationship between language, agency and identity calls for a focus on the choice's language learners make "to ensure that the emergent L2 voice is compatible with the learner's existing sense of self" (p. 87). By using the tables and linguistic survey in appendix 2, 3, 4, and 5, the learners can be assessed on whether they made production and interaction choices based on the simulated identity they developed with their group members. Important to note here, is that these Twitter profiles are simulated and so may not correspond with the existing or imagined identity of the learner, thus there may be resistance to some of these activities based on this.

4. Conclusion

SM and new technologies are an integral part of learners' lives. The purpose of this paper is to propose an L2 pedagogical framework informed by current literature that takes on the affordances that SM participation and interaction may provide for L2 learners. The pedagogical frameworks and models described by Pallet and Myers (2017), Blattner and Fiori (2011), Blattner, Dalola, and Lomicka (2015), and Reinhardt and Ryu (2013), bring into focus the social, situated, and multi-nature (multiple and diverse modes, languages, cultures, practices) of interaction, literacy and identity. Of specific interest to this paper is the importance of raising sociopragmatic awareness and multiliteracy skill development as a means to promote L2 voice development. Section 1 of this paper draws on multiple approaches for the design of teaching activities, specifically, adapting an altered bridging activities model with simulated participation and teacher scaffolding (Reinhardt and Ryu, 2013), a genre comparison approach to developing multiliteracies and sociopragmatic awareness, and a focus on the benefits of peripheral participation (Blattner and Fiori, 2011), and focusing of sociopragmatic awareness raising using Twitter (Pallet and Myers, 2017, and Blattner, et al., 2015). Section 2 describes a SM program that is designed to be incorporated into a language learning classroom, alongside traditional class materials, with heavy teacher and peer scaffolding. Traditional L2 classes tend to focus on lexical and grammatical awareness, with limited presentation of variability and limited experience with different and relevant contexts presented in the textbook. The social cost is low in the

isolated and de-contextualized language classroom, but in the real world, using the L2 carries with it a high social risk. With the help of in-class scaffolding, situated language and other semiotic tools, and sociopragmatic awareness, learners can hopefully develop and negotiate their L2 voice in familiar SM spaces, with a new critical awareness, as well as an understanding of relevant and available semiotic resources.

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Appendix 1: Summary of program activity design, goals, and tasks.

Activity:	Goal and focus:	Scaffolding and simulation features	tools, products	Activity:
1Where am I? **SM Space introduction**	Develop learner's technical competence with the SM space.	Teacher will guide the students through the space, how it may be used and what kind of functions might be performed.	Teach designed simulated profile.	Explore what knowledge learners have about the SM space and introduce its tools, practices, users, and L2 learning affordances.
2.Who am I? **Group identity work**	Work in groups, design a simulated profile for the unit, bringing into focus an authentic context and identity work.	Twitter profile set up by teacher for each group The areas of interest are; 1) meeting new people, 2) at a restaurant, 3) school life, 4) climate change	Twitter profiles of different groups discussed and designed, Table for activity 2	Learners will organize in groups based on the textbook theme and then work together to develop the profile (the @handle, profile picture, bio-line and location). Each learner will choose to follow one handle based on the theme of their group handle and the profile they have designed. Learners will have to complete a table describing the choices they made and why. In their groups, learners will present their profiles to the class, and everyone will follow each other's handles.

3.Textbook Re-view	Develop generic awareness between textbook and SM space in terms of conventions, modes, forms, audience etc.	Engage learners in discussions that consider their group theme and simulated profile and the use of linguistic functions, modes and audience in the textbook format and in the form of tweets and the relevant tools and functions available.	Textbook and table for activity 3	Learners complete textbook review activities and complete the table using the knowledge from unit 1,2, and 3, this will become a collaboratively designed shared resource from which they can refer to throughout the program.
4.SM observation and collection	Situate learned forms and functions within authentic SM contexts and practices.	Teachers collect and present teacher designed tweets. Guide learners through analysis.	Screenshots of simulated tweets	Learners will use the simulated tweets and are prompted to find out what the functions, tools, and features used. Aiming to present learners with familiar forms and functions that they need to identify, situated in the SM space. Learners discuss and complete a table stating whether or not their group simulated profile would like, reply, or retweet this tweet and why.
5. SM guided exploration and analysis	Develop a critical awareness of the textual and sociopragmatic elements in the SM artefacts.	Teachers collect and present authentic user generated tweets. Teachers guide learners through metalinguistic and sociopragmatic awareness.	Screenshots, links to tweets, and linguistic questionnaire	Learners' use the authentic tweets are prompted to complete the linguistic questionnaire in order to develop more sociopragmatic awareness of lesser-known forms and functions, produced by authentic users of the L2, in authentic SM contexts.
6.SM creation and participation	Apply new sociopragmatic understandings and knowledge of the situated SM context in order to produce a post (group and individual) as a means to support development of their L2 voice.	Peer scaffolding in the design of the group tweet.	Tweet production (group and individual) Tables for unit 7	Learners produce 2 tweets, 1 as a group guided by the language functions and theme, and 1 individually, having the freedom to produce a more open-ended tweet using any language function and addressing any theme, but still adhering to the simulated profile). Learners fill out a table that questions the motives behind the linguistic and other sociopragmatic choices they made (for both tweets). After posting tweets, learners are encouraged to view other group profiles and like, reply, and retweet as they imagine their group profile might respond to those tweets, learners are to fill out the table regarding these actions.

7.Social Reading	start a dialogue about the reading process, and let students notice, question, decipher and react to eachother's productions together. SS analyze their language choices.	Peer scaffolding and discussions about Tweet activity	Post-task Reflection survey Viewing Tweet activity together	Learners work in groups to view and discuss the activity that occurred on their tweets they produced for the group profile. They will use the Twitter function that shows the user how other users have generally interacted with their tweets. This process will bring to light how different forms of interaction exist in this SM space, it will also form part of a learning process whereby learners can compare the amount of traffic and participation each tweet generated, which forms of practices were legitimized or not. Learners conclude reflection using the post-task survey.

Appendix 2:

Unit 1: Activity 2: Who am I? Group Identity work

Simulated twitter handles based around interests:

1. meeting new people
2. at a restaurant
3. school life
4. climate change

Profile design:	**What?**	**Why?**
Group theme:	1 / 2 / 3 / 4	
@ handle:		
Profile picture:		
Bio-line:		
Location:		

1st follow:	@	

Appendix 3:

Activity 3: Textbook review

Group 4 Lesson 4	Language form: "How about V+ing?"	Language function: Opinions or suggestions	Theme: Climate change
a. Textbook: How do you express this in the textbook? (what do you wirte in the textbook?) Who is your audience? (think about who will see your work, who is it for?)			
b. twitter: How might you express this on Twitter? (think about the different tools, I.e. emoticons) Who is your audience? (think about who will see your tweet, who is it for? I.e. who might you @?)			
c. Throughout the unit: Write down instances on Twitter that you have seen for these (1-8) that reference the language form, function and theme): 1. Tweet text 2. Emoticons 3. Picture 4. Link 5. Gif 6. Video 7. Hashtag 8. Follow			

Appendix 4:

Activity 4: Bridging activity 1 (observation and collection)

Group 4 Lesson 4 Theme: Climate change Function: Suggestions	Tweet 1: [screenshot of simulated tweet]	Tweet 2: [screenshot of simulated tweet]	Language function: What is being suggested? Or What is the opinion?	Theme: How does this relate to the climate change theme?
Would your group profile …	Yes/ no	Yes/ no	Tweet 1: how and why	Tweet 2: how and why
Like this tweet				
Reply to this tweet				
Retweet this tweet				
Follow this @ handle				

Appendix 5:

Activity 5: Bridging activity2 (guided exploration and analysis)

Linguistic questionnaire: linguistic analysis (adapted from Blattner *et al.* (2015), p. 234-5).

1. Who wrote the tweet (the @ handle)?
2. Do you know the users gender, age, and nationality based on this tweet? How do you know?
3. Is the user a native English speaker? How do you know?
4. How well do you understand the tweet (1 (not at all) -10 (completely))?
5. Translate the Tweet into Korean:
6. Use the translate button, does your translation match? What is different?
7. Does what we have learned in this lesson help you understand this tweet?
8. What new words have you learned from this tweet? (e.g slang, abbreviations etc)
9. What is the function of the tweet? (e.g. greeting, suggestion, stance/ opinion)
10. Are there any hashtags?
11. What are they? What language are they in? (E.g. #environment – English)
12. Click on them / look them up using the search function, are they popular?
13. Describe one other tweet that uses one of the hashtags that this tweet has, are they similar/ different in any way? (e.g. language, topic, function etc.)
14. Does this tweet have other features? (punctuation, capitalization, emoticons, links, likes, retweets, replies, other users tagged etc.)

15. What are they? How do they help you understand the tweet and/ the function of the tweet? (e.g. thumbs up emoticon- agreeing/ happy/ positive)
16. Are there any replies to this tweet? Do they help you understand the tweet and / the function of the tweet better? Do the replies show agreement/ support/ disagreement?
17. Would your group profile like this tweet? Why? (Extra: Would you? Why?)
18. Would your group profile reply to this tweet? Why? How? (Extra: Would you? Why?)
19. Would your group profile retweet this tweet? Why? Would your group profile add a comment? If yes, what would it say?
20. Who are the other users tagged? Why do you think they were tagged?
21. Rewrite this tweet here: Change it to match your group profile, and try to use the phrases and/ functions we have practiced in class.

Appendix 6:

Activity 7: Bridging activity3 (Creation and participation)

Lesson 4:	**Group tweet:**	**Individual tweet:**
Screen shot of tweet:		
What is the function of the tweet? Why?		
What is the theme/ topic? Why?		
What other resources does the tweet include? And why? -text -emoticons -Picture -Link -Gif -Video -Hashtag		
What does this tweet show about the identity of the group profile? What would other users think of the group profiles? -age -gender -native language -English proficiency -interests		

Other group's Tweets: If you performed any of these interactions or participation functions, paste a screenshot here, state why , and/ include and new words you discovered (feel free to use the translate function)	Screenshot:	New words:
	Yes / No	Why?
Like the tweet		
Reply to a tweet		
Retweet a tweet		
Lurking		

Appendix 7:

Activity 7: Post task survey and unit reflection

1. Rate your experience in the program for this unit:
   a. 1 bad –10 very good
   b. Why?
2. Was the group profile and Twitter participation helpful and/ useful to learn and practice:
   a. The language form "How about V+ing?"
   b. The function of suggesting
   c. Discussing the theme of climate change
3. Did you learn new vocabulary? If yes state them here:
4. Rate the difficulty in making your own Tweet:
   a. 1 very difficult- 10 very easy
   b. Why?
5. Did you enjoy making the profile? Why?
6. Did you enjoy using Twitter? Why?
7. Why part of the program was not enjoyable / useful?
8. Will you use Twitter in the future?
9. What SM space would you like to learn about next?

Graduate Thesis Abstracts

ABSTRACT

Phonological Representations in the Bilingual Mental Lexicon: Variation in First language and Proficiency

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The main purpose of this mixed methods study is to understand how phonological information about lexical items is stored in lexical memory and how it is processed in order to shed light on the bilingual mental lexicon regarding sound. This study examined: (a) the difference in the level of L1 interference based on students' L2 proficiency levels; (b) the effect of word frequency on students' phonological representations; (c) the effect of word types on the level of L1 interference; and (d) the ways to compensate for low-quality phonological representations. Twenty seven participants who were enrolled in a class entitled English as an International Language at a university in South Korea were involved in the study. Through word association tests, a survey, questionnaire, and interviews, the role of phonological similarities between L1 and L2 and how bilinguals associate words based on phonological relations were examined. The results indicate that although there were some L1 effects in the processing of English words in bilinguals, the effects are not significant. The results also showed that variables such as participants' proficiency levels and word frequencies affect the connections between bilinguals' L1 and L2. In addition, loanshifts used with Korean participants were affected by the participants' L1, whereas L1 had no effects on cognates for French participants.

Key words: Phonological Representation, Phonological Processing, Bilingual, Mental Lexicon, Exemplar Theory, Cross-Linguistic Interference, Word Association Test

A B S T R A C T

Effects of Keeping a Lexis Notebook in Broadening Depth of Vocabulary Knowledge

M i n j i L e e

D e p a r t m e n t o f T E S O L

The Graduate School of TESOL and International Studies

S o o k m y u n g W o m e n ' s U n i v e r s i t y

As vocabulary learning is both an essential and complex activity for students and language teachers, it is quite a challenging thing to choose an effective way of teaching vocabulary beyond the simple acquisition of form and meaning of the word itself. Since the Korean learning context often values only the breadth of vocabulary knowledge, in the form of simple translation, students hardly experience development of vocabulary depth. As a result, the present study aims to examine the effects of keeping a lexis notebook on broadening the depth of vocabulary knowledge of sixteen 6th to 9th grade Korean students. The participants' depth of vocabulary knowledge was estimated using techniques called a WAT and a VKS three times, including a pre-test, mid-test and post-test. The results of this study show some positive effects of keeping alexis notebook in broadening students' depth of vocabulary knowledge despite some slight changes. Students also were found to have produced more cognate relations after keeping lexis notebooks. The tendencies of students to produce schematic and cognate words gradually and responding more to cognate associates of verbs than other word types were found as well.

Key words: Depth of vocabulary knowledge, Lexis notebook, Word association test