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The Effects of Watching Text-Relevant Video Segments on Reading Comprehension of Culturally Unfamiliar Texts with Adult English Language Learners Supported by the Schematic Information-Processing (SIP) Model of Reading Comprehension

Amirreza Karami
University of Arkansas, Fayetteville

The Effects of Watching Text-Relevant Video Segments on Reading Comprehension of
Culturally Unfamiliar Texts with Adult English Language Learners Supported by the Schematic
Information-Processing (SIP) Model of Reading Comprehension

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by

Amirreza Karami
Shahid Rajaee Teacher Training University
Bachelor of Arts in English Language Teaching, 2012
Islamic Azad University
Master of Arts in English Language Teaching, 2014

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University of Arkansas

This dissertation is approved for recommendation to the Graduate Council.

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Freddie A. Bowles, Ph.D.
Dissertation Director

_____

Linda Carol Jones, Ph.D.
Committee Member

_____

Xinya Liang, Ph.D.
Committee Member

Abstract

The purpose of this mixed-methods sequential explanatory study was to investigate the effects of watching text-relevant video segments on reading comprehension of a culturally unfamiliar text when technical words are present or absent. Therefore, 44 adult English Language Learners (ELLs) with higher-intermediate to advanced English language proficiency levels from the Universidad Autónoma de Santo Domingo (UASD) School of Languages located in the Dominican Republic were chosen and randomly assigned to two different groups: control vs. experimental.

First, the researcher compared two different types of reading instruction—traditional text-based vs. video-based reading instruction supported by the Schematic Information-Processing (SIP) model of reading comprehension—and investigated their effects on reading comprehension of a culturally unfamiliar text when technical words were present or absent in the immediate post-test. The results of the independent samples t-tests indicated a statistically significant difference between the two types of reading instruction.

To compare the effects of the reading instructions on reading comprehension of different parts of the culturally unfamiliar text in the delayed post-test, the scores of the delayed post-tests from 30 participants were analyzed. The results of the independent samples t-tests showed no significant difference between the two groups in the delayed post-test when technical words were absent while a statistically significant difference between the two groups when technical words were present.

A two-way mixed ANOVA was also performed to find the possible interactions between the reading instructions and time. The results showed a statistically significant interaction

between the type of reading instruction and time, statistically significant differences in reading comprehension between two types of reading instruction in both immediate and delayed post-tests, a statistically significant effect of time on reading comprehension in both groups, and a statistically significant reduction in reading comprehension scores from immediate to delayed post-test.

Concerning the qualitative phase of the study, six participants were interviewed using a semi-structured interview format. Thematic analysis was used to interpret the findings of the qualitative phase of the study. The findings highlighted the importance of video segments in enhancing readers' interest and familiarizing readers with the target culture and unfamiliar vocabulary. In addition to this, the findings supported the role of video segments in readers' schema activation and deeper levels of information processing.

The integration of the quantitative analysis with the findings of the qualitative phase indicated the applicability of the video-based reading instruction followed by the guidelines of the SIP model in language classrooms. This type of reading instruction could improve readers' comprehension of the content of the culturally unfamiliar text, enhance their familiarity with the text, facilitate their ability to recall similar information faster from previously constructed schemas, and help readers retain the content longer. Limitations of the study, suggestions for future research, and implications of the study for teachers and teacher education were discussed in detail.

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Dedication

This work is dedicated to my beloved mother, sisters, and late father (Farhad Karami). I love you all.

In Loving Memory of My Late Father

Farhad Karami

With Eternal Love and Appreciation

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Chapter I

Introduction

Reading comprehension is one of the most important areas of educational research (Habók & Magyar, 2019). Reading comprehension is an important skill for those who want to read in their first language. It is also vital for second/foreign language learners. Researchers believe that the process of reading comprehension becomes even more complicated and challenging when it comes to the second or foreign language (Ölmez, 2016).

As a language teacher, I have always had challenges teaching passages with culturally unfamiliar information to my students. Therefore, I decided to develop a new reading comprehension model to emphasize the importance of integrating video segments into reading instruction and provide teachers with step-by-step guidelines on how to select video segments and utilize them in their reading instruction. After two years of research, I came up with the Schematic Information-Processing (SIP) model of reading comprehension (Karami, 2021). The SIP model focuses on reading instruction, and the way teachers can apply video segments to different stages of their reading instruction: pre-reading, while-reading, and post-reading. The SIP model also raised my concerns regarding foreign language learners' perspectives concerning each type of reading instruction, traditional text-based vs. video-based. Therefore, I also decided to investigate this aspect further by interviewing some participants from each group.

Reading comprehension has been defined in terms of various aspects involved in it. For example, Nassaji (2011, p. 173) defines reading as "a complex cognitive skill." Kissau and Hiller (2013, p. 437) consider it as "an inter-disciplinary skill" that requires the presence of different resources and language skills. Ölmez (2016, p. 720) steps beyond this and defines reading comprehension based on its complexity and "the processes involved in the concurrent operation

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of various subskills." To sum up, reading comprehension is a complex and multilayered concept that is an interaction between not only the "cognitive skills and processes" (Cain et al., 2004, p. 31) but also some other aspects such as metacognitive, social, cultural, and linguistic.

Statement of the Problem

Reading comprehension is the most important purpose of reading instruction in language classrooms (Bölükbaş, 2013). Reading comprehension is also the most important reason for the research community to remain interested in investigating and promoting various strategies of reading instruction. Some researchers believe that successful reading comprehension requires "sustained emphasis on reading comprehension instruction and scaffold strategy practices" (Brevik, 2019b, p. 1). Scaffolding, which is defined as supports that are "tailored to students' needs" (van de Pol et al., 2015), can play an important role in reading comprehension (Lantolf & Thorne, 2006; E. Rodgers & A. Rodgers, 2004) and move learners within their zone of proximal development (ZPD) by taking them from their actual level to their potential level of development (Vygotsky, 1978).

Researchers (e.g., Aljaafreh & Lantolf, 1994; Lantolf & Thorne, 2006) believe scaffolding is of vital importance for cognitive development because it helps learners to move within their ZPD and "benefit from supports and extra bits of help" (Karami, 2019, p. 63). There are different types of scaffoldings. For example, planned and interactional scaffoldings are two types highlighted by several researchers (e.g., Athanases & de Oliveira, 2014; Hammond & Gibbons, 2005; Reynolds & Daniel, 2018). The planned scaffolding refers to the activities related to the teacher's preparation for a lesson like preparing teaching tools or writing lesson plans while interactional scaffolding refers to the interaction of the teacher with students and providing the necessary support for them in the classroom. Some other examples of planned and

interactional scaffoldings are "people, adults and children, with various degrees of expertise", and "artifacts such as books, videos, wall displays, scientific equipment and a computer environment intended to support intentional learning" (Brown et al., 1993, p. 191). Another type of scaffolding is physical and curriculum scaffolding (Otrel-Cass et al., 2012). According to Otrel-Cass et al. (2012, p. 373), "the term 'scaffolding' may encompass structures such as software programs, but also curriculum structures or conversational features such as questioning, as well as physical structures that promote classroom learning." Warm-up activities are also a type of curriculum scaffolding that can be implemented by teachers to help learners move within their ZPD (Karami, 2021).

The involvement of various factors can lead to a successful process of reading comprehension. For example, the individual's cultural knowledge is an important aspect that requires a lot of attention (e.g., Carrell & Eisterhold, 1983; Fletcher, 1994; Hirsch, 2003; Pardo, 2004). Some researchers (e.g., Carrell & Eisterhold, 1983, p. 80) believe that one reason for the failure of a particular content schema "is that the schema is culturally specific and is not part of a particular reader's cultural background." Therefore, the cultural familiarity of the reader with the content of the text will connect previously constructed knowledge to new information and make the content more meaningful (Ebe, 2010; Goodman, 1996; Perez, 2004; Smith, 2006). Some researchers have already investigated the role of culture in successful reading comprehension (Goodman, 1982; Herrero, 2006; Jiménez, 1997; Keis, 2006).

The utilization of audio-visual materials is a strategy that can enhance comprehension of culturally unfamiliar texts in language classrooms (Karami et al., 2021). Videos are effective in reading comprehension of culturally unfamiliar texts because they can remove cultural barriers since they are "lauded for contextualizing language (i.e., linking language form to meaning) and

depicting the foreign culture more effectively than other instructional materials" (Herron et al., 1995, p. 775).

Some contributing factors to unsuccessful reading comprehension include but are not limited to the lack of an individual's prior experience, cultural, linguistic, and background knowledge. Therefore, some researchers (Herron et al., 1995, p. 775) mention that using videos in foreign language classrooms can link different forms of a language to their meanings through the portrayal of "the foreign culture." This seems to be more effective than the "other instructional materials" (Herron et al., 1995, p. 775). Some researchers also argue that videos can "reduce ambiguities present in native speaker voices" and lead to higher motivation as well (e.g., Herron et al., 1995, p. 775). Carrell and Eisterhold (1983) also clarify the importance of the familiarity of readers with texts and state that the topic of the text, as well as the content, needs to be familiar to readers in terms of their culture and background knowledge.

Since reading comprehension is "the use of multiple sources of knowledge, including background knowledge" (Nassaji, 2002, p. 468), the implementation of video segments in reading instruction can activate readers' background knowledge and their previously constructed schemas. This is an integration of various strategies in the process of second language teaching that has been emphasized by some researchers (Elleman & Oslund, 2019).

The implication of text-relevant video segments in reading instruction can display authentic contexts for reading passages. Herron et al (1995) report positive effects of watching videos on reading comprehension and argue that "videotapes permit students to hear native speakers interacting in everyday conversational situations and to practice important linguistic structures" (p. 775). In another study, Lin (2016) focuses on the effects of video-based materials

on two levels of reading comprehension, macrostructure and microstructure, and reports that video-based materials can significantly improve the macrostructure comprehension of readers.

The utilization of audio-visual materials in language classrooms is based on theories of mind such as the cognitive load theory of multimedia (Moreno & Mayer, 1999) and the dual-code theory (Clark & Paivio, 1991). Both verbal and non-verbal channels are emphasized in these theories. Both channels have equal weight in such a way that the involvement of both can improve language learning. Verbal representations are "visual, auditory, articulatory, and other modality-specific verbal codes" while non-verbal representations are "modality-specific images for shapes, environmental sounds, actions, skeletal or visceral sensations related to emotion and other non-linguistic objects and events" (Clark & Paivio, 1991, p. 151).

According to the cognitive theory of multimedia (Moreno & Mayer, 1999), information needs to be processed in a non-traditional environment with images and on-screen narration. In other words, the involvement of two channels of visual/pictorial and auditory/verbal processing in working memory (Mayer, 2001; Mayer & Moreno, 2003) not only can enhance the processing of information but also can minimize the cognitive load in the viewer's mind. Some researchers (van Merriënboer et al., 2006) believe that cognitive load can be best managed if irrelevant cognitive processing is minimized in the reader's mind.

Purpose of the Study

The first purpose of this study is to compare two different types of reading instruction (traditional text-based vs. video-based reading instruction supported by the SIP model) to see which strategy leads to more successful comprehension of a culturally unfamiliar text when technical words are present or absent. Adult English language learners with higher-intermediate

or above English language proficiency levels are the target population in this study. Adults have already constructed their cultural schemas and possess the necessary cultural and background knowledge because of their experiences and interactions with people in society. Based on the findings of previous studies (e.g., Al-Issa, 2006; Carrell & Eisterhold, 1983; Dole et al., 1991; Liang, 2013; Markham, 2001) participants' rich background knowledge and cultural experiences will be helpful for them to understand culturally unfamiliar texts better because they can connect new information to their previously constructed knowledge.

The second purpose is to compare traditional text-based reading instruction with video-based reading instruction supported by the SIP model to determine which strategy helps readers retain the content of the culturally unfamiliar text longer over time from pre-test to the delayed post-test.

The third purpose is to investigate the topic qualitatively from the perspective of English Language Learners (ELLs) to find out how efficient each type of reading instruction is and how each strategy helps readers understand the culturally unfamiliar text better.

Conceptual Framework

The review of the literature shows that there is still room to develop and investigate new reading comprehension models that focus on cultural aspects of texts and integrate videos into reading instruction (Karami et al., 2021). This study investigates this further and focuses on the practical aspects of the SIP model developed by Karami (2021).

The SIP model is a new reading comprehension model that provides theoretical support for the utilization of text-relevant video segments in three stages of reading instruction—pre-reading, while-reading, and post-reading—to teach culturally unfamiliar texts in second/foreign

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language classrooms. The SIP model is an integration of reading comprehension theories and models such as schema theory (Bartlett, 1932), information-processing theory, socio-cultural theory of Vygotsky (1978), dual-coding theory (Clark & Paivio, 1991), cognitive theory of multimedia (Moreno & Mayer, 1999), and other models of reading comprehension such as the construction-integration model of reading (Kintsch, 1988, 1998; Kintsch & van Dijk, 1978; van Dijk & Kintsch, 1983).

Significance of the Study

Although some studies have already researched the effects of implementing audio-visual materials such as videos on reading comprehension, no study has investigated the effects of video-based reading instruction supported by the SIP model on reading comprehension of a culturally unfamiliar text when technical words are present or absent. Previous studies were based on the dual-coding theory (Clark & Paivio, 1991), the cognitive theory of multimedia (Moreno & Mayer, 1999), or other models of reading comprehension such as the construction-integration model of reading (Kintsch, 1988, 1998; Kintsch & van Dijk, 1978; van Dijk & Kintsch, 1983). This study steps further by investigating the practical aspects of the SIP model.

A pilot study was conducted with a group of graduate students from the University of Arkansas in 2019. The results showed that the SIP model is an effective strategy for teaching culturally unfamiliar texts to English language learners (Karami & Bowles, 2021). In this study, I decided to compare two different types of reading instructions, traditional text-based vs. video-based supported by the SIP model, on a larger scale to see which one leads to more successful comprehension and longer retention of the content of the culturally unfamiliar text. Since it was not feasible to recruit enough homogeneous English Language Learners (ELLs)—in terms of cultural familiarity with American football—at the University of Arkansas, homogeneous ELLs

from the Universidad Autónoma de Santo Domingo (UASD) School of Languages based in the Dominican Republic were recruited.

Research Questions

A mixed-methods sequential explanatory research design was applied to address the following quantitative and qualitative research questions:

1) Does the presence or absence of video-based reading instruction significantly impact students' immediate comprehension of a culturally unfamiliar text when technical words are present or absent?

2) Does the presence or absence of video-based reading instruction significantly impact students' delayed comprehension of a culturally unfamiliar text when technical words are present or absent?

3) Does the presence or absence of video-based reading instruction significantly impact students' reading comprehension over time?

4) How does video-based reading instruction differ from traditional text-based reading instruction in terms of readers' perspectives? Which instruction helps readers more in terms of activating their previously constructed knowledge and providing them with the necessary support to comprehend the culturally unfamiliar text better?

Research hypotheses are as follows:

H_A1. The presence of video-based reading instruction significantly impacts students' immediate comprehension of a culturally unfamiliar text when technical words are present or absent.

H$_A$2. The presence of video-based reading instruction significantly impacts students' delayed comprehension of a culturally unfamiliar text when technical words are present or absent.

H$_A$3. The presence of video-based reading instruction significantly impacts students' reading comprehension over time.

Operational Definitions

Operational definitions allow the replicability of the study and improve the credibility of the methodology. Therefore, text-relevant video segments, reading comprehension, retention, and culturally unfamiliar texts are defined as follows:

- Text-relevant video segments are authentic short video clips (shorter than six minutes) related to the topic and the content of the reading passage.

- Reading comprehension is the ability of English Language Learners (ELLs) to read a passage, understand, summarize, and answer reading comprehension questions without referring to the text immediately after the treatment. Immediate post-tests were designed to measure reading comprehension in this study.

- Retention refers to the remembering of the content after a while (two weeks after the treatment). Delayed post-tests were designed to measure the retention of the content in this study.

- Culturally unfamiliar texts are authentic texts that are unfamiliar to readers in terms of their prior experiences, cultural and background knowledge.

Overview of the Research Method

This study compared two different types of reading instruction (traditional text-based vs. video-based supported by the SIP model) used for adult English language learners with higher-intermediate or above English language proficiency levels. The steps of the SIP model (Karami, 2021) were followed to teach a culturally unfamiliar text when technical words were present or absent. Therefore, the text was selected carefully to be culturally unfamiliar to the participants. Video segments were also selected carefully to be short, authentic, and uncaptioned.

Forty-four English Language Learners (ELLs) with higher-intermediate to advanced English language proficiency levels from the Universidad Autónoma de Santo Domingo (UASD) School of Languages were randomly assigned to two groups: control vs. experimental. To ensure the homogeneity of the participants in terms of their language proficiency levels, three sample reading tests of TOEFL iBT Reading Practice Sets (For Test Takers) with the same level of difficulty were chosen from the Educational Testing Services (ETS) website. A pre-test was also administered to find the homogeneity of the participants in terms of their prior knowledge of the culturally unfamiliar text.

The experimental group received reading instruction through implementing text-relevant video segments supported by the SIP model (reading a text by watching text-relevant video segments in three stages: pre-reading, while-reading, and post-reading) while the control group received traditional text-based reading instruction (just reading the text without watching the video segments). The participants read a culturally unfamiliar text about American football. The text was divided into two parts (a part with technical words vs. a part without technical words). The participants took three equivalent forms of multiple-choice reading comprehension questions in three different time-points: pre-test (T1), immediate post-test (T2), and delayed post-test (T3).

There was also one open-ended question asking participants to write a summary of the passage. The open-ended question was graded holistically by three experts in the field of English as a Foreign Language (EFL) to see which group outperformed the other group.

To find out the differences between these two different types of reading instruction in terms of reading comprehension and to answer the research questions one and two, three equal forms of tests were administered as the pretest, the immediate post-test, and the delayed post-test. The scores of these tests were compared to see which strategy was more successful in terms of reading comprehension. The delayed post-tests were administered two weeks after the treatment to find out which strategy could help readers retain the content of the culturally unfamiliar text longer over time from the pre-test (T1) to the delayed post-test (T3).

The fourth research question was addressed qualitatively by using the semi-structured interview format. Six participants from each group volunteered. The focus of interview questions was on different aspects such as the text, reading instructions, video segments, and culture. For example, one of the questions was looking for the readers' perspectives on reading instructions. The other one was looking to see to what extent each strategy could activate readers' previously constructed knowledge and provide them with the necessary support to comprehend the culturally unfamiliar text better. Thematic analysis was applied to address this research question and interpret the findings in detail.

Assumptions of the Study

The researcher followed the following assumptions:

1) A considerable number of participants participated in this study (at least 30 people).

2) The participants were eager to participate in this study.

3) The participants were honest when responding to the interview questions.

4) The participants were committed to participating in this study from beginning to end and taking all tests in three timelines: pre-test, immediate post-test, and delayed post-test.

5) The participants were committed to the research ethics such as confidentiality and integrity.

6) The experts were committed to ethical norms in research.

Limitations of the Study

The following were limitations of the study:

1) Some participants could be visual learners while others could be auditory learners.

2) Each participant could have different cultural knowledge and experiences.

3) The number of treatment sessions was limited to five hours and thirty minutes.

4) English was the participants' second language because they had learned English in an English as a Foreign Language (EFL) setting.

5) Only adults (18 years old and above) participated in this study.

6) The participants had higher-intermediate or above English language proficiency levels.

7) The participants might have different writing proficiency levels. Therefore, this could influence their answers to the open-ended question positively or negatively.

Chapter II

Review of the Literature

Chapter Two includes two integrated major review sections. The first part provides a review of reading comprehension, its definitions, and its relationship with culture by addressing the following research questions:

1) Does the presence or absence of video-based reading instruction significantly impact students' immediate comprehension of a culturally unfamiliar text when technical words are present or absent?

2) Does the presence or absence of video-based reading instruction significantly impact students' delayed comprehension of a culturally unfamiliar text when technical words are present or absent?

3) Does the presence or absence of video-based reading instruction significantly impact students' reading comprehension over time?

4) How does video-based reading instruction differ from traditional text-based reading instruction in terms of readers' perspectives? Which instruction helps readers more in terms of activating their previously constructed knowledge and providing them with the necessary support to comprehend the culturally unfamiliar text better?

The second part focuses on the review of the history of educational practices related to reading comprehension, the utilization of videos in reading comprehension, and the theoretical underpinnings behind this type of instruction including the review of reading comprehension models and theories. Figure 2. 1 is a literature map that depicts the concepts and ideas discussed in this chapter.
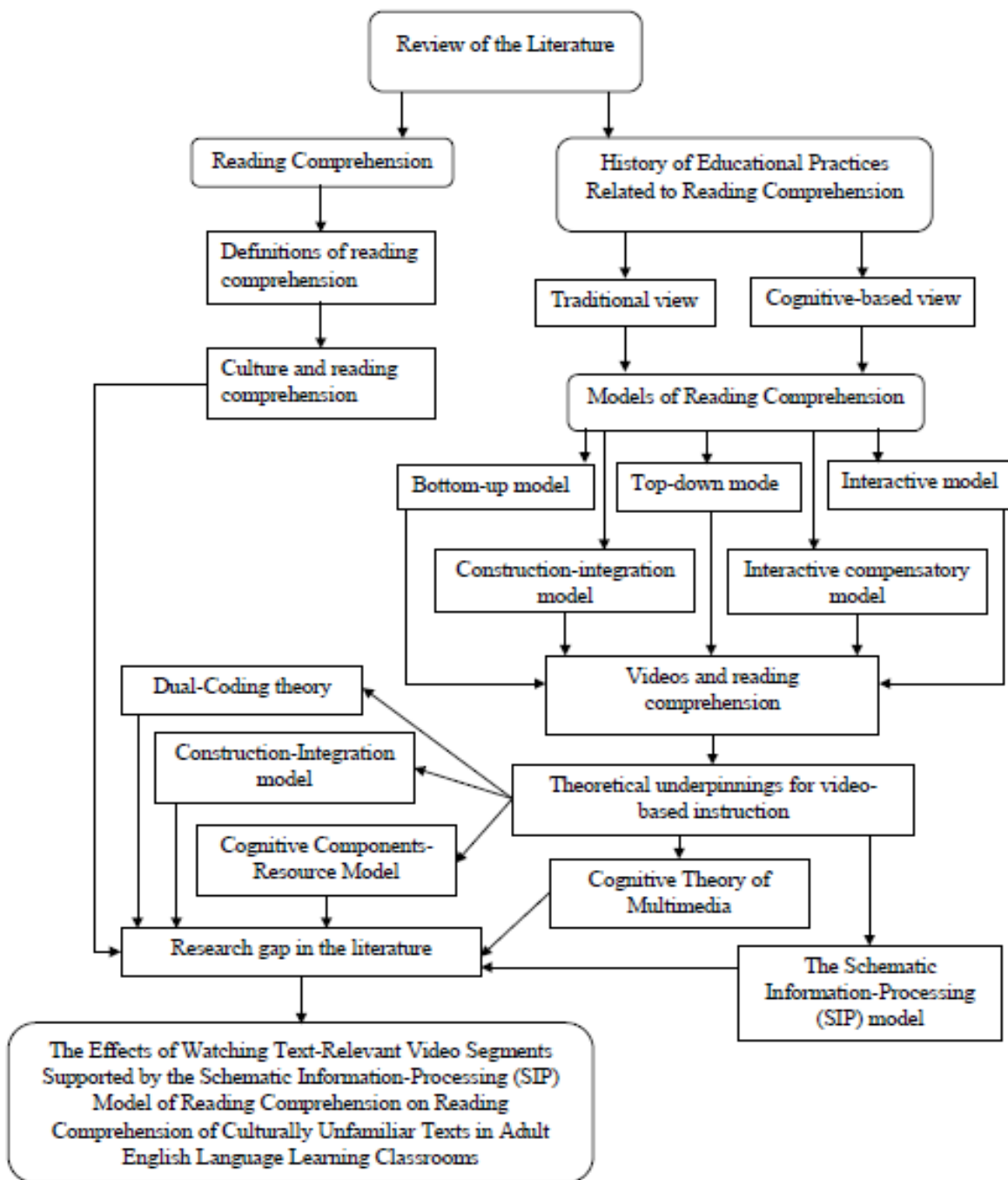
Figure 2. 1
Literature Map

Part One: (Review of Reading Comprehension, Its Definitions, and Relationship with Culture)

Reading is an important skill and area of research in the field of second/foreign language development. Scholars have mentioned some effects of unsuccessful reading on people's lives. For example, Mancilla-Martinez (2020) highlights the connection with negative life outcomes; Kickbusch (2001) reports the connection with an increase in unemployment rates; others argue the relationship between unsuccessful reading and school dropouts (Christenson & Thurlow, 2004; Hernandez, 2011), unsuccessful educational results (Baker & Dalton, 2011; Proctor et al., 2007; Shanahan & Beck, 2006), and students' struggles in schools (Melby-Lervag & Lervag, 2014).

The vital role of reading comprehension in people's lives is related to the multifaceted nature of reading comprehension, its complexity, and connections to different areas of learning (Alvermann, 2001a; Diakidoy et al., 2011). The involvement of numerous variables makes reading comprehension more difficult for readers and more complex for researchers to explore (Elleman & Oslund, 2019). Moreover, two variables make the comprehension of a text more difficult: "one, the nature of the passage itself, and the other the lack of context" (Nassaji, 2002, p. 449).

The review of the literature also shows the presence of other variables. For example, teacher-related and learner-related variables are two broad sets of variables that are important in determining the reasons for the second language readers' reading comprehension (Karami, 2020). Teaching methods, strategies, and techniques are some of the teacher-dependent variables while an individual's vocabulary size and knowledge are some of the learner-dependent variables. Other learner-dependent variables include the information-processing skills of an

individual, the individual's language skills, metacognitive awareness, and background knowledge (Burgoyne et al., 2013). Leeser (2007) mentions text-related variables and cognitive aspects of the reader as other important variables involved in reading comprehension. The length and the structure of the passage are examples of the text-related variables while the capacity of the reader's working memory is an example of the cognitive aspects.

The complexity and multifaceted nature of reading comprehension, especially in second/foreign language development, can be a good reason for researchers to focus on addressing teachers' challenges in their classrooms regarding students' reading comprehension. Therefore, researchers look for strategies and new models to facilitate the process of reading comprehension in language classrooms (Karami, 2021). The models can "range from broad theoretical models depicting the relationships and interactions among comprehension subcomponents to models of specific comprehension processes" (Elleman & Oslund, 2019, p. 4).

To address the issues of reading comprehension, Yang et al. (2018) critically investigated technology-integrated instructional practices. They suggest that researchers need to focus more on the application of technology areas to be able to support fundamental reading skills. The authors also recommend enhancing the diversity of theoretical frameworks to promote reading development since it is a complex and multidimensional process. Meanwhile, some researchers (e.g., Elleman & Oslund, 2019; Snow & Matthews, 2016; Yang et al., 2018) highlight the importance of multiple strategies and argue that the implementation of different strategies in reading instruction can cover as many aspects as possible and help teachers address the complexity and multifaceted nature of reading comprehension better.

Definitions of Reading Comprehension

Several researchers have provided various definitions for reading comprehension. For example, according to Nassaji (2011, p. 173), reading comprehension is "a complex cognitive skill that encompasses subskills, processes, and knowledge sources." According to some other researchers (e.g., Carrell, 1988a; Grabe & Stoller, 2001, p. 9), reading is "… the ability to draw meaning from the printed page and interpret this information appropriately." Harris and Hodges (1995) consider reading as "the construction of meaning of a written or spoken communication through a reciprocal, holistic interchange of ideas between the interpreter and the message in a particular communicative context" (p. 39). Bölükbaş (2013) steps further and argues that "reading does not mean anything unless there is comprehension" (p. 2147).

According to Goodman (1973b, p. 164), reading comprehension is "a process in which the reader picks and chooses from the available information only enough to select and predict a language structure which is decodable." Gürses and Bouvet (2016) expand this definition and argue that the "reading process encompasses many activities" starting from the "comprehension of printed features by the reader's eye to the production of textual comprehension" (p. 20). McNamara and Magliano (2009) also emphasize the complexity of reading comprehension and state that reading comprehension encompasses deeper levels of information processing in the human mind.

Reading is an active process due to the degree of involvement of both the reader and the reading for meaning construction (Anderson, 1999). Reading is also an interactive process because of the simultaneous interactions in the reader's mind (Erten & Razi, 2009). Some other researchers (e.g., Afflerbach et al., 2017; Brevik, 2019b; Kamil et al., 2011) also mention that

reading comprehension is a complex and multidimensional interaction between not only the reader and the text but also the reader, reading activity, and the context.

Moore et al. (2016, p. 21) sum up the definitions of reading comprehension and state that even though there are various definitions for reading comprehension, they all share a common theme: reading comprehension is an active engagement of students, "processing what they read, forming a mental image, summarizing, and drawing conclusions." Therefore, reading comprehension has a complex and multifaceted nature composed of both cognitive and meta-cognitive skills and requires not only the active involvement of different resources but also the interaction between different sources of knowledge to construct meaning in the reader's mind.

Culture and Reading Comprehension

World knowledge in general, and cultural knowledge in particular, is an important area for successful reading comprehension (e.g., Carrell & Eisterhold, 1983; Fletcher, 1994; Hirsch, 2003; Pardo, 2004). According to Carrell and Eisterhold (1983, p. 80), "one of the most obvious reasons why a particular content schema may fail to exist for a reader is that the schema is culturally specific and is not part of a particular reader's cultural background."

Familiarity of the readers with the content of the text, in terms of culture, can help them connect the new input to their background knowledge and experiences and make the content more meaningful (Ebe, 2010; Goodman, 1996; Perez, 2004; Smith, 2006). The importance of cultural familiarity on successful reading comprehension have already been explored by several researchers (e.g., Goodman, 1982; Herrero, 2006; Jiménez, 1997; Keis, 2006).

Some researchers have also investigated the effects of different reading strategies on reading comprehension of culturally unfamiliar texts. For example, Faruk and Mahmud (2014) investigated the effects of cultural unfamiliarity on reading comprehension and how pre-reading activities could help readers overcome this barrier. They concluded that cultural unfamiliarity has negative effects on reading comprehension, and "pre-reading activities were useful to turn the negative effect into positive ones" (Faruk & Mahmud, 2014, p. 1). They also reported that "the pre-reading activities were not equally useful for all the students; the positive impact of the activities was obvious only in the motivated students' performance" (p. 1). Although there were only 19 participants in this study which means that the sample size is too small and the results cannot be generalized, the findings are in line with the results of the previous studies. The findings of previous studies (e.g., Abu-Rabia, 2003; Carrell, 1991; Yuet & Chan, 2003) also show that culturally familiar texts are better understood by readers in comparison to those with unfamiliar cultural content.

Concerning the importance of culture and cultural knowledge, which is related to the individual's world knowledge and is essential for successful reading comprehension (e.g., Droop & Verhoeven, 1998; Sabatin, 2013), the findings of previous studies show that culture and language are intertwined, and language is "either the matrix or the reflection of culture" in such a way that "teaching language means teaching culture" (Dai, 2011, p. 1031). Some researchers step further by stating that "without the study of culture, teaching L2 is inaccurate and incomplete" (Genc & Bada, 2005, p. 73). Some others argue that "learning a language means also the study of a different culture" (Kovács, 2017, p. 73).

The relationship between language and culture even goes deeper into teaching language skills such as reading comprehension. For example, some scholars report that the more familiar

the text to the reader in terms of culture, the better the reading efficiency (Droop & Verhoeven, 1998). In addition to this, some researchers (e.g., Chastain, 1971; Cooke, 1970; Gardner & Lambert, 1959, 1965, 1972; Kitao, 1991; Kramsch, 2001; Stainer, 1971) mention the internal and external benefits of integrating the target culture into language teaching. For example, the integration of the culture into language teaching "can motivate learners, make them interested in the target language, make language learning more meaningful, improve social relationships between language learners and native speakers, and enhance language learners' general knowledge about the target culture" (Karami, 2021, p. 6). Kovács (2017) believes that authentic materials are the primary teaching tools for introducing the target culture in language classrooms. "Authentic materials can help language learners experience the target language in the same way that a native speaker does" (Karami, 2021, p. 6) and retrieve or construct the necessary background knowledge for understanding the text better.

Part Two: (Review of the History of Educational Practices Related to Reading Comprehension, the Utilization of Videos in Reading Comprehension, and the Theoretical Underpinnings behind This Type of Instruction Including the Review of Reading Comprehension Models and Theories)

The History of Educational Practices Related to Reading Comprehension

The history of a close relationship between instructional practices and psychology (Clifford, 1978; Dole et al., 1991; Glasser, 1982) can be found in the early notions of educational psychologists (Resnick, 1985). They viewed reading comprehension as a set of sub-skills (Smith, 1965) that requires novice readers to "acquire a set of hierarchically ordered subskills that sequentially build toward comprehension ability" (Dole et al., 1991, p. 241). According to this traditional view of reading comprehension, readers have a passive role and "once the skills have

been mastered, readers are viewed as experts who comprehend what they read" (Dole et al., 1991, p. 241).

The inability of the proponents of the traditional view of reading comprehension to describe the reading process thoroughly shifted researchers' attention towards the cognitive-based view of reading comprehension. According to this view, reading is not the acquisition of a set of sub-skills. Instead, reading is a complex process (e.g., Anderson et al., 1984; Dole et al., 1991) that has an interactive (e.g., Dole et al., 1991; Rumelhart & Ortony, 1977) and a constructive nature (e.g., Anderson et al., 1977; Dole et al., 1991; E. E. Rumelhart, 1980; Spiro, 1980). Reading comprehension is an interactive process because of the interaction between reading strategies and the individual's background knowledge. It is also constructive because of the use of the individual's "existing knowledge and a range of cues from the text and the situational context in which the reading occurs to build, or construct, a model of meaning from the text" (Dole et al., 1991, p. 241). Table 2. 1 is a summary of the difference between two views of reading comprehension outlined by Karami (2021) and adapted from Dole et al. (1991).

Table 2. 1
The Difference between Traditional View and Cognitive-Based View

Reading Comprehension	Reading	Reader	Comprehension Ability	Meaning Construction	Emphasis	Nature
Traditional View	Complex	Passive	The acquisition of a set of subskills	Mastery of subskills and applying them to text	Automatic	Discrete
Cognitive-Based View	Convoluted	Active	Interactive	Integration of background knowledge and reading strategies	Intentional and conscious	Holistic

Note. From "The Schematic Information-Processing (SIP) Model of Reading Comprehension. Theoretical Support for the Utilization of Text-Relevant Video Segments to Teach Culturally Unfamiliar Texts in Second/Foreign Language Classrooms," by A. Karami, 2021, *Cogent Education, 8*(1), p. 4 (https://doi.org/10.1080/2331186X.2021.1891613). Copyright 2021 by the author.

According to the processing model of text comprehension (Kintsch & van Dijk, 1978), "the semantic structure of texts can be described both at the local microlevel and at a more global macrolevel" (p. 363). The authors also divide reading comprehension into different components and structures such as semantic structures. Based on the processing model of text comprehension, which is for skilled and less-skilled readers, reading comprehension occurs when there are three sets of mental operations (Kintsch & van Dijk, 1978). The first one is the ability of the reader to organize discrete elements of meaning into a coherent whole. The second one is the ability to summarize meaning, and the third one is the ability to generate "new texts from the memorial consequences of the comprehension processes" (Kintsch & van Dijk, 1978, p. 363).

There is an agreement among researchers on the complexity and multilayered nature of reading comprehension (e.g., Kintsch, 1988, 1998; Kintsch & van Dijk, 1978; van Dijk & Kintsch, 1983). This implies the importance of reading instruction and the reason that the instruction should cover as many aspects as possible. Table 2. 2 is a select summary of different reading comprehension models focusing on cognitive aspects of reading comprehension categorized by Karami (2021) and outlined by Angosto et al. (2013); Reichle (2015); and Shahnazari and Dabaghi (2014) to name a few.

Table 2. 2

Some of Reading Comprehension Models that Focus on Cognitive Aspects of Reading Comprehension

Models of Reading Comprehension	The Role of the Reader	Required Skills	The Processing of Information	The Role of Background Knowledge and prior experience
Bottom-Up Model	Active decoder of the text	Lower-order reading skills	Mechanical movement from parts (letters) to the whole (meaning making) in a way that is independent from each other	No Role
Top-Down Mode	Active engagement with the text	Higher-order reading skills	Moving from the whole (meaning) to the parts (letters) through making a connection between various sources of knowledge (e.g., the title, syntactic, semantic, etc)	Important role
Interactive Model of Reading (Rumelhart, 1977)	Active connector	Lower-order and higher-order reading skills	Making interaction between the text and the reader	Important role
Interactive Compensatory Model (Stanovich, 1980)	Active compensatory role	Lower-order and higher-order reading skills	Providing alternative compensation for deficiencies	Important role
Construction-Integration Model of Reading (Kintsch, 1988, 1998; Kintsch & van Dijk, 1978; van Dijk & Kintsch, 1983)	Active developer, evaluator, and creator of a network by the help of working memory	Lower-order and higher-order reading skills	The construction, integration, and activation of the information in short-term and long-term memory	Important role

Note. From "The Schematic Information-Processing (SIP) Model of Reading Comprehension. Theoretical Support for the Utilization of Text-Relevant Video Segments to Teach Culturally Unfamiliar Texts in Second/Foreign Language Classrooms," by A. Karami, 2021, *Cogent Education, 8*(1), p. 5 (https://doi.org/10.1080/2331186X.2021.1891613). Copyright 2021 by the author.

Videos and Reading Comprehension

The implementation of videos in teaching subject matters in general, and reading comprehension in particular, is a popular strategy in classrooms. Videos, as a "content-delivery tool" (Brame, 2016, p. 1), are preferred over other supplementary materials because they are easy to find and use in classrooms (e.g., Allen & Smith, 2012; Hsin & Cigas, 2013; Lloyd & Robertson, 2012; Rackaway, 2012; Stockwell et al., 2015). Despite this popularity and effectiveness, some researchers (H. Y. Lee & List, 2019) argue that "more work is needed to further establish the consistency of strategic processing across text and video" (p. 269). The authors mention two observable gaps in the literature concerning the use of video and reading comprehension and believe that strategies "have been examined in a binary fashion, as being used, or not, during reading, rather than as unfolding dynamically during the course of processing" (p. 268).

Karami et al. (2021) reviewed the literature in the past 20 years by focusing on the findings of previous studies concerning text-relevant videos and reading comprehension. The findings show that despite the development of various reading comprehension models to reach a good-enough approximation (Kendeou & O'Brien, 2018), some areas "remain unexplored in the literature indicating that there is still room for the development of new theoretical frameworks" (Karami, 2021, p. 7).

Previous studies have investigated the effects of text-related video segments on reading comprehension from different perspectives. For example, Caspi et al. (2005) focused on learners' preferences and the way this type of instruction could help them. Akbulut (2007) investigated vocabulary learning and reading comprehension. Lin (2016) focused on video-based materials and reading comprehension in terms of micro and macrostructure. Lin (2014) examined students'

cognitive comprehension problems while watching videos. Chambers et al. (2006, p. 232) explored "a year-long randomized clinical trial" to find embedded multimedia effects on reading, and Putorti et al. (2020) researched "the importance of optimized video communication in science classrooms in terms of students' comprehension, interest, and perceived pleasantness" (Karami et al., 2021, p. 54).

Karami et al. (2021) summarize their findings regarding the use of text-relevant videos in reading instruction and report that

> … 1041 people from first graders up to adults participated in these studies, a quantitative research method is the most dominant research methodology, and the focus is on the effects of videos on different aspects of reading comprehension. The findings also indicate that the utilization of text-related videos can have positive effects on reading comprehension and its related aspects. For example, some studies (Akbulut, 2007; Putorti et al., 2020; Tse et al., 2019) highlighted positive effects of watching videos on students' perception, attitude, and motivation towards language learning. (pp. 54-56)

Table 2. 3

A Summary of Research Studies Focusing on Watching Text-Related Videos and Reading Comprehension from 2000 – June 2019

Authors	Purpose	Number of Participants	Age Range of the Participants	Type of Video	Data Collection	Applicable Theory	Results
Caspi et al. (2005)	Students' preferences and how they learned from this type of instruction	7	25-57	Video recorded lectures	Semi-structured interview	Naturalistic approach	It is difficult to transfer learning strategies from books to videos. Learners' habits and their learning preferences are important factors "for determining the successful utilization of video" (p. 44). Some participants found this strategy both useful and helpful while others found it an extra cognitive task that made learning more difficult.
Akbulut (2007)	This study explores "the effects of multimedia annotations, particularly pictures and videos, on vocabulary learning reading comprehension of advanced learners of English as a foreign language" (p. 500).	69 freshman students (22 males and 47 females)	No age. Participants were selected based on their IELTS, and TOEFL scores	No specific video was mentioned (Hypermedia Reading Software was used to link images and videos).	True experimental design (Reading comprehension test, background questionnaire and semi-structured interviews.)	Generative Theory of Multimedia Learning (Mayer, 1997)	"No differences were observed on the reading comprehension test" (p. 499). The results also showed that this type of instruction (hypermedia reading) can have positive impacts on second/foreign language learners' attitudes toward second/foreign language reading.
Lin (2016)	This study was conducted to find out the effects of video-based materials on "second language learners' text comprehension at the levels of macrostructure and microstructure.	98 Chinese students	Undergraduate university students. 20 to 22 years old.	One of the treatment groups watched five videos. Videos were taken from "an online learning program developed by Live ABC Interactive Corporation." "The videos were television news programs of the Cable News Network (CNN)" (p. 6).	Pre- and post-test research design	Dual coding theory (Clark & Paivio, 1991)	The results of the study showed that video-based materials can significantly improve "macrostructure comprehension" of second language learners. (Macrostructure means the gist of the reading).
Tse et al. (2019)	This study aimed at investigating "the impact of two aspects of subject reading motivation."	100 secondary school students (53 males, and 47 females).	Secondary school students	"In the flipped class, students watched assigned pre-class videos and completed 5-10 multiple choice questions at home" (p. 388).	Video-based flipped class instruction, 2 by 2 factorial design (questionnaire, intervention)	N/A	"Video-based flipped class instruction was not only related to increased academic subject satisfaction and teaching effectiveness but also associated with lower motivation for subject reading" (p. 385).

Table 2. 3 (Cont.)

Authors	Purpose	Number of Participants	Age Range of the Participants	Type of Video	Data Collection	Applicable Theory	Results
Lin (2014)	This study investigated problems that university students faced "while viewing an online video-based English program" (p. 23).	The results conducted through self-reports and one to one interview from 213 university students.	University students	Online video-based English program	Content analysis approach	N/A	The author found 18 problems and categorized them "into three cognitive processing stages" including "perception, parsing, and utilization" (p. 23).
Chambers et al. (2006)	Authors evaluated "embedded multimedia in a year-long randomized clinical trial" (p. 232).	394 students in ten schools were randomly assigned "to the embedded multimedia or control treatments" (p. 234).	First graders	"This material consisted of 30-second to 3-min skits and other demonstrations integrated with teachers' lessons" (p. 234).	cluster randomized trial (CRT) design	Paivio's dual coding theory (Clark & Paivio, 1991)	The result of the study showed "significant positive effects on the Woodcock Word Attack scale, controlling for pretests, in HLM analyses with school as the unit of analysis. The results provide partial support for the utility of embedded multimedia as a component of beginning reading instruction" (p. 232).
Putorti et al. (2020)	The purpose of this study was to find out the effectiveness of implementing optimized video communication over press release science communication and a non-optimized video science communication.	160 adults participated in two experiments with 80 participants in each.	Adults	Optimized video communication which is a video of a combination of all "specific features of a successful science communication" (p. 1075).	2*2 between-subjects experiment	Cognitive theory of multimedia (Mayer, 2001)	The results showed that the optimized group outperformed the other groups in terms of comprehension, interest, and perceived pleasantness.

The review of the literature shows that the use of video segments can improve readers' overall comprehension of the text (Bransford et al., 2000; Karami et al., 2021; Rubin, 1995; Wagener, 2006). Karami et al. (2021) also argue that text-related videos not only can improve reading comprehension, but they can also improve some of its related aspects such as the reader's vocabulary knowledge, "motivation, interest, and pleasantness" (p. 57). Furthermore, videos can "reduce ambiguities present in native-speaker voices" (Herron et al., 1995, p. 775). Researchers focusing on the combination of various aspects and different areas of reading comprehension rather than "focusing on just one specific area" (Karami, 2019, p. 10).

The use of text-relevant video segments, as instructional scaffolds, in reading instruction can facilitate the process of comprehension. Teachers can apply different strategies. For example, watching visuals or providing opportunities for pair/group work in language classrooms are two types of planned scaffolding while helping the interpretation and clarification of the text by making the content more meaningful to the reader are two types of interactional scaffolding (Reynolds, 2017; Walqui, 2006).

Johnson (2019) investigated the effectiveness of different instructional scaffolds such as interactional scaffolds and planned scaffolds. According to Johnson (2019), instructional scaffolds can support language learning and academic development. Text-relevant video segments can provide readers with both types of scaffolds: interactional and planned. These two types of scaffolding differ in terms of the preparation and the time of the implementation. Planned scaffolding refers to the teacher's lesson plan preparation and the preparation of the teaching materials while interactional scaffolding refers to the teacher's in-person and face to face support in classrooms (Athanases & de Oliveira, 2014; Hammond & Gibbons, 2005; Reynolds & Daniel, 2018).

Theoretical Underpinnings for Video-Based Instruction

Video-based instruction is based on several theories and models including the cognitive theory of multimedia (Moreno & Mayer, 1999), the dual-coding theory (Clark & Paivio, 1991), the construction-integration model (Kintsch, 1988), and the cognitive components-resource model (Atkinson & Shiffrin, 1971). According to these theories and models, both verbal and non-verbal processes have equal weight in language processing in which the presence of both processes can foster language learning. Clark and Paivio (1991) distinguish between verbal and non-verbal representations and argue that both types must be present simultaneously to create positive impacts on language learning. Based on Clark and Paivio (1991, p. 151), verbal representations include "visual, auditory, articulatory, and other modality-specific verbal codes" while non-verbal representations include "modality-specific images for shapes, environmental sounds, actions, skeletal or visceral sensations related to emotion and other non-linguistic objects and events."

According to the cognitive theory of multimedia (Moreno & Mayer, 1999), information can be processed easily in an environment that is non-traditional and has images and on-screen narration. The presence of both channels (visual/pictorial and auditory/verbal) in working memory can facilitate the processing of information and minimize the cognitive load in the individual's mind (Mayer, 2001; Mayer & Moreno, 2003). van Merriënboer et al. (2006) investigate the role of cognitive load and report that cognitive load can be managed better if irrelevant cognitive processing is minimized. Therefore, the use of text-relevant video segments in reading instruction can minimize the cognitive load in working memory by using both verbal and non-verbal channels via offering verbal and non-verbal representations. This strategy can also enhance readers' working memory (Pezdek et al., 1984) in addition to providing a more

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meaningful context for reading passages. Brame (2016) believes that the consideration of cognitive load management, student engagement, and the promotion of active learning can enhance the effectiveness of implementing videos as a teaching tool in language classrooms.

The Schematic Information-Processing (SIP) Model of Reading Comprehension

The Schematic-Information Processing (SIP) model of reading comprehension (Karami, 2021) is a new reading comprehension model that can be applied to teaching culturally unfamiliar texts in adult English language learning classrooms. The SIP model, which is a combination of different reading comprehension models and theories, provides second/foreign language teachers with instructions and guidelines on how to teach culturally unfamiliar texts to second/foreign language learners by implementing text-relevant video segments in three stages of reading instruction: pre-reading, while-reading, and post-reading. According to this model, the utilization of text-relevant video segments in three stages of reading instruction can improve reading comprehension and enhance the retention of the content of culturally unfamiliar texts.

The Schematic Information-Processing (SIP) model of reading comprehension

> … is an eclectic model that derives ideas from a diverse range of theories and models related to reading comprehension and video-based instruction. The reason for this eclecticism is that some researchers (e.g., Kendeou & O'Brien, 2018; Perfetti & Stafura, 2014) mentioned the complexity of reading comprehension and highlighted the inability of reading comprehension theories and models solely to describe this convoluted process in depth. Therefore, it seems that "the development of multiple theories, each focusing on a separate component of reading" or "the development of a 'good-enough' approximation of a theory of reading comprehension" can provide a better explanation and a detailed analysis of successful reading comprehension (Kendeou & O'Brien, 2018, p. 8). (Karami, 2021, p. 7)

Thus far,

> … different theories have been developed by researchers to explain reading comprehension, the importance of audio-visual materials, and the effectiveness of

using videos in reading instruction, but no study has provided a theoretical framework for the integration of text-relevant video segments to teach culturally unfamiliar texts in second/foreign language classrooms. The findings of previous studies have supported the use of videos in language classrooms (e.g., Chun & Plass, 1996, 1996b; Jones & Plass, 2002; Lin, 2016) through reporting positive effects of video-based instruction on learning different areas of second/foreign language such as reading comprehension. The SIP model offers a bridge to support reading comprehension by integrated text-relevant information in the target language that provides instructors with a schema to guide them through the stages of reading comprehension. (Karami, 2021, p. 7)

Figure 2. 2 shows a graphical representation and describes in detail how viewing text-relevant video segments by following the guidelines of the SIP model can improve reading comprehension of culturally unfamiliar texts.
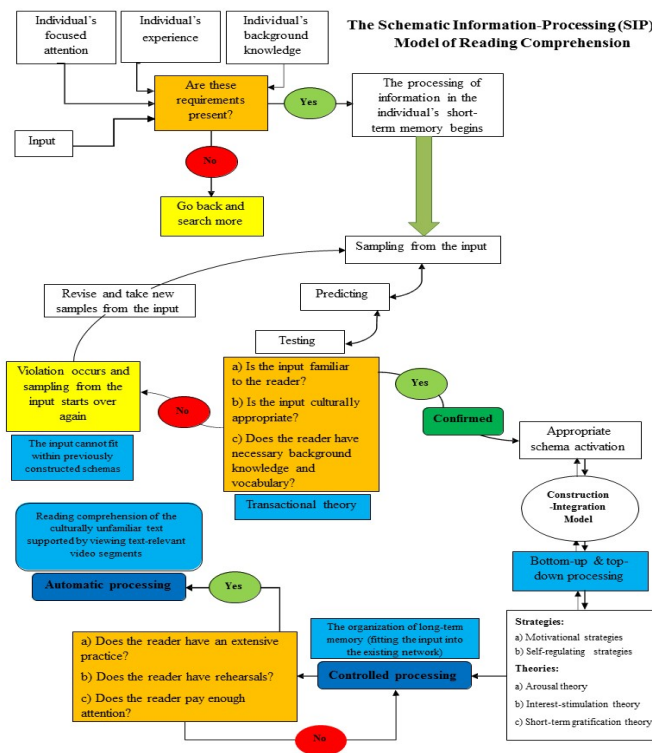
Figure 2. 2
The Schematic Information-Processing (SIP) Model of Reading Comprehension

Note. From "The Schematic Information-Processing (SIP) Model of Reading Comprehension. Theoretical Support for the Utilization of Text-Relevant Video Segments to Teach Culturally Unfamiliar Texts in Second/Foreign Language Classrooms," by A. Karami, 2021, *Cogent Education, 8*(1), p. 15 (https://doi.org/10.1080/2331186X.2021.1891613). Copyright 2021 by the author.

Unlike other models of reading comprehension, the SIP model steps further and provides guidelines for teachers on how to apply this model in their reading instruction. In addition to this, the SIP model specifies the features of text-relevant video segments that should be used in reading instruction. The SIP model provides teachers with instructions to choose the most appropriate type of text-relevant video segments. Based on this model, teachers should pay close attention to "the authenticity of videos, the position of the video in the lesson plan, the duration of the video, the repetition of viewing, and videos with or without subtitles or captions" (Karami, 2021, p. 16). In addition to this, teachers need to consider some other factors such as "the subject matter and its difficulty level, classroom settings, and their students in terms of their cultural and linguistic values" to be able to choose the most appropriate text-relevant video segments for their reading instruction (Karami, 2021, p. 16).

According to the SIP model,

> … teachers need to utilize text-relevant video segments appropriately while they are teaching culturally unfamiliar passages. For example, teachers should play text-relevant video segments in the pre-reading stage to give an overall picture of the passage and to provide students with a summary of the content of the culturally unfamiliar text with the help of video segments. This activity familiarizes the students with the topic and activates their previously constructed schemas. Then teachers can ask warm-up questions and refer to the video(s), if necessary, to help students retrieve their background knowledge and prior experience. In fact, the pre-reading stage prepares students to move to the next stage which is the while-reading stage.
>
> Text-related video segments should be cut and prepared for the second stage which is the while-reading stage. After reading each paragraph or after reading some sentences from each paragraph, depending on the difficulty level of the content or students' language proficiency level, teachers should play and pause relevant video segment(s) several times to let students make connections between the content of the text and video segments. Watching text-relevant video segments should be a supplementary activity and teachers should do other reading comprehension activities as well if necessary.
>
> The third stage is the post-reading stage and teachers are expected to wrap up the content and to help students maximize their comprehension. Replaying text-

relevant video segments in this stage can provide extra practice and help students see a summary and the visual form of the content once more. Some activities like summarizing the text, classroom discussion, group work, and pair work are also required in order to improve readers' comprehension and let the input move further in the individual's mind from controlled to automatic processing (See Karami, 2021 for detailed discussion). (Karami, 2021, pp. 18–19)

The researcher suggests some guidelines for choosing and preparing text-related video segments. In addition to this, the researcher also recommends that text-relevant video segments need to be uncaptioned and unsubtitled, authentic, and long enough to improve reading comprehension of culturally unfamiliar texts.

Uncaptioned and Unsubtitled

Although some studies support the use of captioned videos on the improvement of reading comprehension (e.g., BavaHarji et al., 2014; Koolstra et al., 1997; Kruger & Steyn, 2013; Markham, 2001), some others (P. Hwang & Huang, 2011; Metruk, 2018) report insignificant differences. The inconsistency is due to the difference in the research setting, the purpose of the study, and other "varying degrees of linguistic, cultural, and background knowledge of the participants" (Karami, 2021, p. 16). Uncaptioned or unsubtitled text-relevant video segments allow readers of the culturally unfamiliar text to view the same content on the screen and dedicate their attention to the video segments rather than reading captions or subtitles on the screen (Karami, 2021). In other words, "presenting printed text and graphics can cause split attention in the visual channel" (H. Lee & Mayer, 2018, p. 649). For example, Delgado et al. (2018) compared two types of reading instruction, paper-based vs. digital reading, to find out the most successful reading instruction through conducting a meta-analysis. The findings of the study show that "providing students with printed texts despite the appeal of computerized study

environments might be an effective direction for improving comprehension outcomes" (Delgado et al., 2018, pp. 33–34).

The cognitive theory of multimedia learning (Mayer, 2009; Mayer & Pilegard, 2014) highlights the idea of overloading "the visual channel with printed forms of the words (captions/ subtitles)" and clarifies how this might delay deeper processing of information and lead to an unsuccessful comprehension process. The review of previous studies shows that captioned or subtitled video segments might prevent viewers from focusing on the content, distract, and "divert them from achieving the purpose of watching text-relevant video segments supported by the SIP model" (Karami, 2021, p. 16). Therefore, the researcher suggests reading a paper-based text and watching relevant video segments without captions or subtitles. The SIP model suggests that the utilization of text-relevant video segments in three stages of reading instruction can activate readers' background knowledge and prior experience and help readers retrieve information easier and faster from their previously constructed schemas. According to the principles of this model, viewers "benefit more by converging both channels toward the text-relevant video segment rather than focusing on the subtitles or captions" (Karami, 2021, p. 16).

Authenticity

"For the real-world language to emerge, there is a need to create authentic learning situations" (Nikitina, 2011, p. 34). It is suggested to provide students with authentic learning situations to help them use words and sentences of the target language correctly. Taylor (1994) describes authentic teaching materials as the ones that are not produced for teaching the target language. Some examples of authentic materials are "television shows, news broadcasts, films, the use of different websites or printed materials such as travel brochures, photographs,

newspapers, magazines, restaurant menus." (Kovács, 2017, p. 82). Some examples of authentic resources are TVs, DVDs/CDs, and computers (e.g., Bahrani et al., 2014; Mackenzie, 1997). Jewitt (2012) argues that it is better to use existing videos as they are such as homemade or YouTube videos.

According to Bal-Gezegin (2014), authenticity is very important because of providing a real-life setting for learners. In addition to this, authenticity can help learners be more integrated into "the target culture and learn more about the people using the target language" (Bal-Gezegin, 2014, p. 455). The SIP model also suggests that authentic videos are one of the best "resources for teachers to provide language learners with an example of the authentic use of the target language" (Karami, 2021, p. 17). In other words, the use of authentic videos in language classrooms can help learners "realize the passion and the rationale behind the words and sentences" (Karami, 2019, p. 64) and help teachers teach "the target culture and its related aspects such as pragmatics" easier (Karami, 2019, p. 65). Nikitina (2011, p. 33) also discusses this further and believes that authentic videos can create "an authentic learning situation where the real world becomes a part of the educational experience and necessitates the use of an authentic language by the learners."

Concerning reading comprehension, Nassaji (2002) highlights the importance of sociocultural background knowledge and states that the ability of the individual to use this knowledge correctly and appropriately can improve their reading comprehension as well. Therefore, the researcher suggests that reading instruction embedded in a meaningful context benefits the individual more.

Length

Teachers need to consider the length of text-relevant video segments as well. The findings of previous studies (e.g., Mayer, 2001) show that long videos create extraneous cognitive load in the individual's working memory. This is also highlighted in the SIP model by stating that a careful selection of text-relevant video segments can "avoid imposing a high cognitive load on readers" (Karami, 2021, p. 17), minimize the volume of cognitive load by providing viewers with small pieces of information related to the culturally unfamiliar text, manage their intrinsic cognitive load, and increase their germane cognitive load (Brame, 2016).

Segmentation is a way to control the extraneous cognitive load (Ibrahim et al., 2012). For example, teachers can divide their teaching materials into different units of information to help their students process the units one by one (Ibrahim et al., 2012). This will reduce extraneous cognitive load which is "the load that is caused by the instructional material used to present the content" (de Jong, 2010, p. 106). Hasler et al. (2007) investigated this further by comparing different types of instructional animations (learner-paced vs. system-paced). According to them, learner-paced (shorter pieces of animation) were more effective than system-paced (longer pieces). This is in line with the findings of Ayres and Paas (2007, p. 812) who argued that "continuous animations create extraneous cognitive load, due to their transitory nature, and inhibit learning as a consequence."

Weeding, which is "the elimination of interesting but extraneous information that does not contribute to the learning goal" (Brame, 2016, p. 2), is another way to keep working memory away from being overloaded. This can be done by removing the unnecessary parts from the video. This allows teachers to keep their students engaged and help them process "only the essential content" (Ibrahim et al., 2012, p. 222). Previous studies highlight the positive effects of

short videos on student engagement. For example, Guo et al. (2014) reported that student engagement will increase up to 100% by 6-minute videos, decrease to 50% by 9-12 minutes and to 20% by 12-40 minutes.

Brame (2016) argues that some groups of learners benefit more from extraneous information. This is in line with the findings of previous studies. For example, Spanjers et al. (2010) report that there is a significant interaction between video segmentation and the individual's prior knowledge. The authors argue that non-segmented videos are more beneficial to individuals with higher levels of prior knowledge while individuals with lower levels of prior knowledge benefit more from segmented videos. According to the SIP model, text-relevant video segments should be short video segments, shorter than six minutes, to be more effective because they provide readers "with an overview of culturally unfamiliar texts from different perspectives" (Karami, 2021, p. 18).

Research Gap in the Literature

The review of the literature shows that the utilization of videos in language classrooms needs further investigation in terms of theory and practice (Karami et al., 2021). For example, Hodges et al. (2016, p. 10) focused on the diversity of reading and writing theories. The authors argue that there is not much "diversity among types of theories existed, which could be a result of recent legislative changes, societal changes, or pedagogical changes." The models and theories of reading comprehension that highlight the use of videos do not provide guidelines and criteria regarding the reading instruction and the features and characteristics of video segments (Karami et al., 2021). It is important to choose videos appropriately based on defined guidelines and play them in the most appropriate time and position of teaching because of the influences

that they can have on readers' motivation and their efficiency of learning (Karami et al., 2021; Ljubojevic et al., 2014).

According to the review of the literature discussed in this chapter, the SIP model is a new theoretical underpinning for the utilization of text-relevant video segments in reading instruction. No study has investigated the effects of watching text-relevant video segments supported by the SIP model on reading comprehension of culturally unfamiliar texts before. This is a gap in the literature and the purpose of this study is to fill this gap.

Conclusion

This chapter provided a detailed description of the literature regarding the reading comprehension of culturally unfamiliar texts through viewing text-relevant video segments and their theoretical underpinnings. The review of the literature shows that despite the development of various reading comprehension models and theories, teachers still face challenges in their classrooms regarding the teaching of culturally unfamiliar texts. The review also shows that there is a need for further development and exploration of reading comprehension models and theories. Therefore, this study attempts to fill this gap in the literature by investigating the effects of watching text-relevant video segments on reading comprehension of culturally unfamiliar texts in adult English language learning classrooms.

Chapter III

Methodology

Introduction

The purpose of this chapter is to provide full details regarding the methodology including the research design, research questions and hypotheses, the nature of the study, participants, treatment, study materials, research instruments and assessment tools, reliability and validity of the research instruments and assessment tools, and data collection procedures.

Mixed-Methods Sequential Explanatory Design

A mixed-methods sequential explanatory design was used to compare two different types of reading instruction, traditional text-based vs. video-based supported by the Schematic Information-Processing (SIP) model of reading comprehension (Karami, 2021), to find out (a) which strategy is more successful for teaching a culturally unfamiliar text when technical words are present or absent in both immediate and delayed post-tests, and (b) which strategy helps readers retain the content longer.

An explanatory sequential mixed-methods design, which consists of two data collection phases: the quantitative phase followed by the qualitative phase (Creswell et al., 2003), was applied to address four research questions. However, the quantitative phase was more dominant than the qualitative phase in this study. Therefore, the quantitative data were collected and analyzed primarily. Then, the findings of the qualitative data were integrated with the results of the quantitative phase to support, explain, and elaborate them by exploring participants' views in a more detailed description through thematic analysis. Using a mixed-methods approach provided a more complete and synergistic utilization of data" in comparison to "separate

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quantitative and qualitative data collection and analysis" (Wisdom & Creswell, 2013, p. 1). This

approach also allows researchers to look at the findings from a different perspective and achieve

authentic data from a reflection of individuals' real-life experiences (Regnault et al., 2018).

Figure 3. 1 represents a summary of the research methodology.
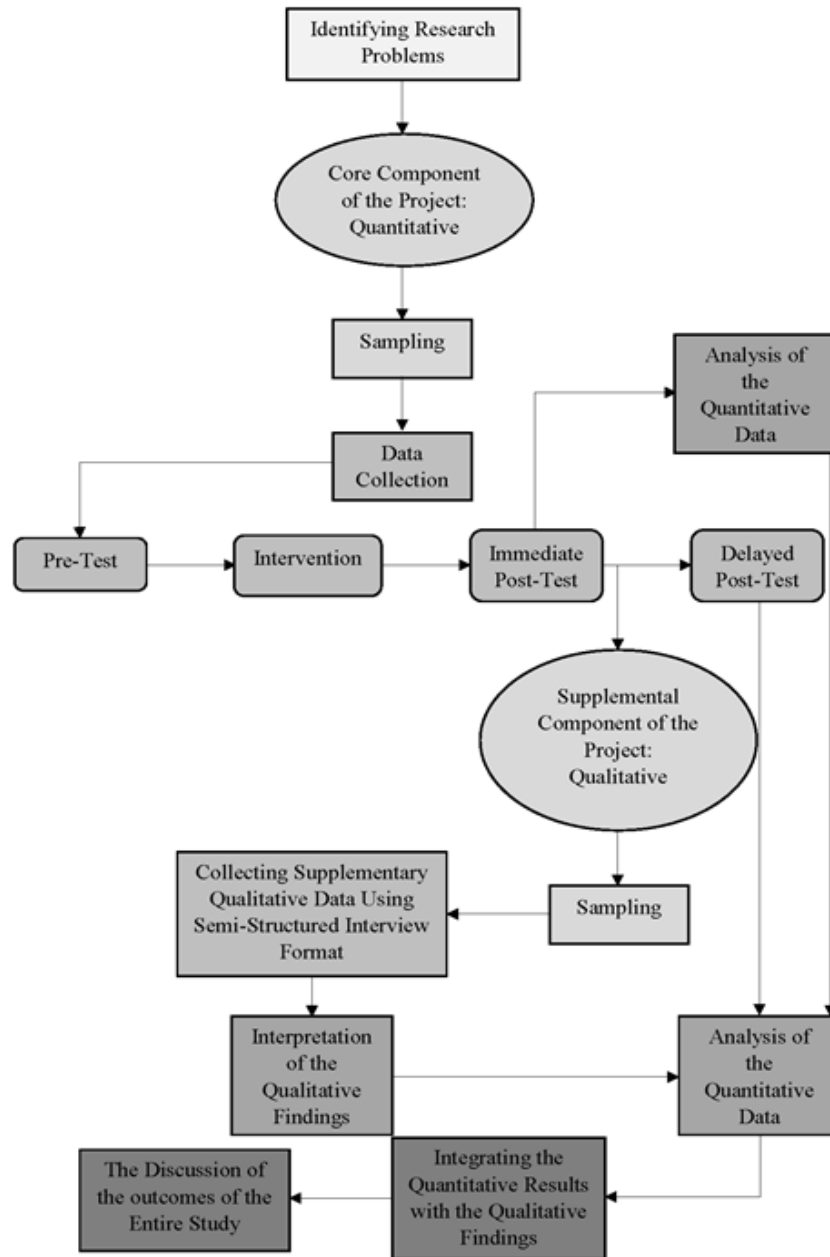
Figure 3. 1
Research Methodology

Research Questions and Hypotheses

The following research questions are addressed in this study:

1) Does the presence or absence of video-based reading instruction significantly impact students' immediate comprehension of a culturally unfamiliar text when technical words are present or absent?

2) Does the presence or absence of video-based reading instruction significantly impact students' delayed comprehension of a culturally unfamiliar text when technical words are present or absent?

3) Does the presence or absence of video-based reading instruction significantly impact students' reading comprehension over time?

4) How does video-based reading instruction differ from traditional text-based reading instruction in terms of readers' perspectives? Which type of instruction helps readers more in terms of activating their previously constructed knowledge and providing them with the necessary support to comprehend the culturally unfamiliar text better?

Research hypotheses are as follows:

H_A1. The presence of video-based reading instruction significantly impacts students' immediate comprehension of a culturally unfamiliar text when technical words are present or absent.

H_A2. The presence of video-based reading instruction significantly impacts students' delayed comprehension of a culturally unfamiliar text when technical words are present or absent.

H_A3. The presence of video-based reading instruction significantly impacts students' reading comprehension over time.

Nature of the Study

One dependent variable and two independent variables are key variables in this study. Teaching strategy and time are two independent variables while reading comprehension is the only dependent variable. Teaching strategy, as the between-subjects factor, has two levels: text-based vs. video-based reading instruction. Time, as the within-subjects factor, has three different time points: pre-test (T1), immediate post-test (T2), and delayed post-test (T3). By including time as a within-subjects factor, participants' retention was measured in a three time-line mode from pre-test (T1) to the delayed post-test (T3). Reading comprehension of the culturally unfamiliar text was measured by a set of reliable and valid tests including both open-ended and multiple-choice questions.

Sample Size

Two different types of quantitative analyses were performed in this study: independent-samples *t*-test and two-way mixed ANOVA. Independent-samples *t*-tests were performed to answer the questions regarding immediate and delayed comprehension (Q1 & Q2). The analysis of the first research question was performed by using data taken from 44 people because 44 people took the pre-test and immediate post-tests. However, the analysis of the second, as well as the third research question, was based on the data taken from 30 people because 30 people out of 44 took delayed post-tests. The qualitative phase of the study was also addressed by interviewing 12 people out of 44.

Previous studies were reviewed, and the power analysis was performed using G*Power3 (Faul et al., 2007) to find the most appropriate sample size. For example, some second language (L2) researchers believe that 20 is the average minimum sample size to perform a two-way mixed ANOVA in L2 research (Plonsky, 2014) while Norouzian (2020) raises this number to "somewhere between 44 and 49 participants depending on the size of Cohen's d" in between-groups comparisons (p. 855).

Effect size is used to determine the most appropriate sample size for a study by providing "a quantitative measure of the magnitude of the difference between groups or association between variables" (Bakker et al., 2019, p. 2). To find the most appropriate effect size, different related studies were reviewed. The review of the literature shows that scholars have reported different effect sizes. For example, Guo et al. (2020, p. 1) conducted a meta-analysis and found "moderate overall positive effects (Hedges's $g = 0.39$)" of graphics on students' reading comprehension, or Pearson et al. (2005, p. 1) reported "the results of a meta-analysis of 20 research articles containing 89 effect sizes related to the use of digital tools and learning environments to enhance literacy acquisition" by reporting the "weighted effect size of 0.489." On the other hand, Bakker et al. (2019, p. 3) argued that the benchmark values developed by Cohen (1969) "are widely used today: 0.2 small, 0.5 medium, and 0.8 large." According to them, they "seem to have had merit in educational research too." The authors also noticed that "effect sizes have decreased over time" (Bakker et al., 2019, p. 3).

Power analysis was also performed using G*Power3 (Faul et al., 2007) to determine the most appropriate sample size for conducting a two-way mixed ANOVA. The results showed that the desired sample size to achieve an acceptable power of 0.80 with a medium effect size (Cohen's $d = 0.5$, Cohen's $f = 0.25$) and an alpha of 0.05 should be 28 to perform a two-way

mixed ANOVA including the within-between interaction. The minimum sample size in this study ($n = 30$) exceeds the required number. Therefore, this study has an acceptable statistical power.

The suggested minimum sample size for studies based on the interview data collection procedure ranges from six to 12 participants (e.g., Baumgartner et al., 2002; Bernard, 1995). Therefore, 12 people, six from each group, were interviewed to address the qualitative phase of the study.

Participants of the Study

Immediate Post-Tests

Second/foreign language learners are the population for second/foreign language researchers and a group of these learners would be the best representative of the population. Since English Language Learners (ELLs) were the population of this study, 44 ELLs were chosen from the Universidad Autónoma de Santo Domingo (UASD) School of Languages located in the Dominican Republic. The participants were chosen based on their responses to a survey and their willingness to participate in this study. The participants were randomly assigned to two groups: control vs. experimental. Spanish and English were the participants' first and second language, respectively, and they had learned English in an English as a Foreign Language (EFL) setting. Table 3. 1 shows information regarding the participants' gender, age, and reading placement test scores.

Table 3. 1
Participants' Information

	N	Minimum	Maximum	M	SD
Gender	44	M	F	1.59	0.49
Age	44	19	35	26.31	5.31
Reading Placement Test	44	18	27	22.50	2.70

The researcher assigned a code to each participant to keep them anonymous. Then, a third person drew codes out of a bowl and randomly assigned the participants to either the control or the experimental group. The number of the participants in the control group ($n = 22$, $M = 26.22$, $SD = 5.48$) were equal to the number of the participants in the experimental group ($n = 22$, $M = 26.40$, $SD = 5.26$). Although the number of females ($n = 26$) were more than the number of males ($n = 18$) in this study, each group had an equal number of males ($n = 9$) and females ($n = 13$).

Table 3. 2
Comparison between the Participants of the Control and the
Experimental Group

Backgrounds	Number of Students	
	Control Group	Experimental Group
Females	13	13
Males	9	9
Total	22	22

Delayed Post-Tests

One purpose of this study was to compare two different reading instructions to investigate which strategy helped readers of the culturally unfamiliar text retain the content longer. Therefore, all participants were supposed to take equivalent reading comprehension tests two weeks after the treatment sessions. Unfortunately, some participants refused to take the delayed post-tests and only 30 people out of 44 (15 people from each group) took the tests. Table 3. 3 shows a summary of the participants' information.

Table 3. 3
Participants' Demographics

	N	Minimum	Maximum	M	SD
Gender	30	M	F	1.66	0.47
Age	30	19	35	25.73	4.78

The number of the control group participants who took the delayed post-tests ($n = 15$, $M = 26.00$, $SD = 5.07$) was equal to the number of the experimental group participants ($n = 15$, $M = 25.46$, $SD = 4.64$). However, the number of females ($n = 20$) was more than the number of males ($n = 10$). Nine females and six males from the control group and 11 females and four males from the experimental group took the delayed post-tests. Table 3. 4 provides a summary of the number of participants in each group.

Table 3. 4
Comparison between the Number of Participants Who Took the Delayed Post-Tests in the Control and the Experimental Group

Backgrounds	Number of Students	
	Control Group	Experimental Group
Females	9	11
Males	6	4
Total	15	15

Homogeneity of Participants

Although the control group ($M = 23.04$, $SD = 2.98$) had a higher mean score than the experimental group ($M = 21.95$, $SD = 2.33$) in the TOEFL iBT Reading Practice Sets (For Test Takers) developed by Educational Testing Services (ETS), the participants of both groups were categorized as high-intermediate to advanced level readers of English according to the Performance Descriptors for the TOEFL iBT Test developed by Educational Testing Services (ETS).

To recruit homogeneous participants, a pre-test was administered to measure the differences in terms of the participants' background knowledge and cultural familiarity with American football. The results of the pre-test showed that the mean score of the pre-test, control group ($M = 7.88$, $SD = 1.95$) vs. the experimental group ($M = 8.47$, $SD = 1.90$), was almost the same for both groups with almost the same magnitude of standard deviations.

Treatment

Homogeneous participants in terms of language proficiency level and prior knowledge of the content of the culturally unfamiliar text were randomly assigned to two different groups: one control group vs. one experimental group. The researcher selected an article about American football written by Osorio (2011). The article had two sections: the first part was about the basic rules and regulations of American football without technical words and phrases. The second section was about specific strategies and rules of this sport with technical terms and phrases. Each part of the text was covered in one session and each session lasted for 165 minutes including pre-test, intervention, and post-test. Each group had two sessions of instruction that lasted for about 330 minutes in total.

The experimental group received video-based reading instruction supported by the SIP model (Karami, 2021)—reading a text by watching some carefully selected text-relevant video segments in three stages of the reading instruction—while the control group received no intervention beyond just reading the text. Text-related video segments were selected based on the guidelines of the SIP model outlined by Karami (2021). Some video segments were short enough to provide readers with a summary of the text and activate their prior cultural knowledge and

experiences while some other video segments were longer to display different parts of the text in detail.

Each group took the pre-test before the main instruction, an immediate post-test immediately after each session, and a delayed post-test for each part of the text two weeks later. Participants received two equivalent forms of questions in terms of the difficulty level (see Appendix B, C, D, E, F). The pre-test helped the researcher investigate the homogeneity of the participants and their familiarity with the content of the culturally unfamiliar text. The results of the immediate post-tests demonstrated the readers' immediate comprehension of the text, and the results of the delayed post-tests could help the researcher determine the type of reading instruction (traditional text-based vs. video-based) that led to the retention of the content longer.

Study Materials

Culturally unfamiliar texts are reading passages that introduce a new cultural event or a tradition of a country to those who lack the necessary background knowledge or prior experiences to understand the text. Some examples of culturally unfamiliar reading passages are wedding ceremonies, traditional festivals, special cultural events, carnivals, and sports. American football was chosen as the topic of the culturally unfamiliar text for this study (see Appendix A).

An article about American football (Osorio, 2011) was chosen. The article had two sections. The first part (Passage I) had 834 words discussing more about general rules and regulations of American football. This section had more general words and phrases in comparison to the second part of the text. The second section (Passage II) had 1218 words discussing more about specific rules and strategies of American football. This part of the text had more technical terms and phrases in comparison to the first section. Two experts read and

evaluated both sections to ensure that they are in the participants' language proficiency levels in general, and their reading proficiency levels in particular.

Some authentic text-relevant video segments were also chosen from YouTube and the NFL Football Operations website (see Appendix H). These video segments were chosen based on the guidelines of the SIP model. They were used to teach the culturally unfamiliar text to the experimental group. A total number of 10 authentic text-relevant video segments, ranging from eight seconds to three minutes, were used to teach Passage I. In addition to this, 21 authentic text-relevant video segments ranging from nine seconds to three minutes were used for Passage II. Table 3. 5 shows a summary of the number of the video segments, as well as their length range, played for each section.

Table 3. 5.
The Length and the Number of Video Segments Viewed by the Experimental Group for Both Passages

	N	Length Range
Passage I	10	8 sec to 3 min
Passage II	21	9 sec to 3 min

Research Instruments and Assessment Tools

To answer the first and the second research question, three equal forms of reading comprehension and vocabulary tests were designed and evaluated by three experts in the field to ensure their validity. The evaluation of the questions by three experts helped the researcher establish the face validity, as well as the content validity of the tests.

The third research question, which was concerned with the retention of the content over time, was addressed by the results of the delayed post-tests (two weeks after the treatment sessions). A total number of 30 participants took the delayed post-tests. All questions were in the

multiple-choice format except for the last question that was open-ended asking participants to write a summary or whatever they remember from the culturally unfamiliar text. The open-ended questions were graded holistically by three experts according to the adapted version of the holistic rubric developed by Kelley and Clausen-Grace (2007) and described by Anderson (2014) in chapter 12 of the *Teaching English as a Second or Foreign Language* (Celce-Murcia et al., 2014, p. 184). The average of the scores was calculated and considered as the participant's final score for the open-ended question. The first and the second graders were Ph.D. candidates specializing in Teaching English to Speakers of Other Languages (TESOL) with nine and eight years of teaching experience, respectively. The third one was a master's student in TESOL with 15 years of teaching experience.

Research question four, which was about the qualitative phase of the study, was addressed by interpreting the responses to the interview questions (see Appendix G). Data were collected using a semi-structured type of interview to be able to get as much information as possible from interviewees by not deviating from the topic. Interview questions were also reviewed by two experts. Semi-structured interview responses were reviewed, categorized, and coded primarily and secondarily by three experts to identify themes and sub-themes.

Reliability and Validity of Research Instruments and Assessment Tools

Reliability

Three sets of tests—pre-test, immediate post-test, and delayed post-tests—with the same level of difficulty were designed and administered in three different time points: before treatment (T1), immediately after treatment (T2), and two weeks later (T3). The reliability of the tests had been established in the pilot study using test-retest reliability ($r = .785$, $p < .05$). In addition to

this, the value for Cronbach's alpha was calculated to determine the internal consistency of the items. The result showed an acceptable value ($\alpha = .773$) based on the literature (Fraenkel & Wallen, 1996). Face validity and the construct validity of the tests had also been established in the pilot study.

The adapted versions of the same tests were used in this study because of their pre-established validity and reliability. However, both reliability and validity were checked and established once more for this study. Since three sets of equivalent questions were used, parallel forms reliability was also performed to measure the correlation between equivalent forms. The results showed a high correlation between different forms of the test ($r = .842$, $p < .001$).

Validity

Following the guidelines of Ary et al. (2019), different types of evidence were gathered and addressed to support the validity of the tests.

Test Content

According to Ary et al. (2019), test content focuses on the content of the test and its relationship with the intended construct. An outline was provided by following the steps mentioned by Ary et al. (2019). The outline included the objectives, topics, and conceptual frameworks of the study. Multiple-choice questions were designed based on the questions of the pilot study and in proportion concerning the importance and emphasis on each aspect.

The focus of this study was on teaching some specific rules and strategies of American football to English Language Learners (ELLs) in addition to the basic rules and regulations. Thus, the text was divided into two sections: introduction and key factors. An equal number of

reading comprehension questions, as well as an equal number of vocabulary questions, were designed for each section. Figure 3. 2 shows the proportion of questions designed to measure vocabulary and reading comprehension in this study.
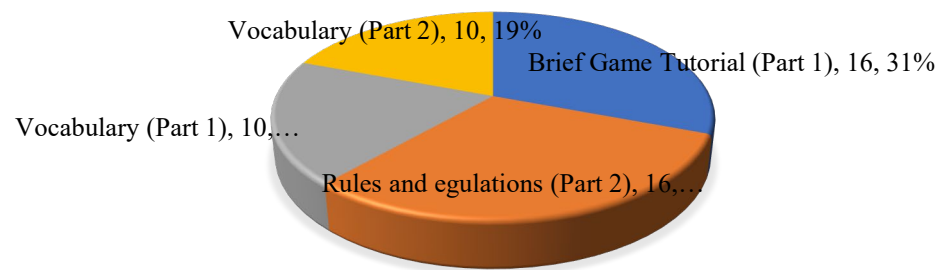
Figure 3. 2
The Proportion of Questions to Measure Vocabulary and Reading Comprehension of the Culturally Unfamiliar Text in This Study

Face Validity

To determine the face validity of the tests, three experts evaluated them. The results showed that the tests were valid in terms of face validity. Although the interview questions had been checked and validated in the pilot study, two experts evaluated the semi-structured interview questions once more.

Construct-Related Validity

Construct-related validity is the "logical and empirical evidence which supports the claim that a test measures the psychological construct it is designed to measure and not something else" (Ary et al., 2019, p. 97). Reading comprehension questions focused on three levels to establish the construct-related validity: the surface, the textbase, and the situation model (van Dijk & Kintsch, 1983). "At the textbase, the local and global characteristics of the text are involved" meaning that "the semantic content of the text is represented" (Caillies & Denhière,

2001, p. 17). Caillies and Denhière (2001, p. 17) state that "at the situation model level, not only is the text itself represented, but also the situation described by the text." In this study, reading comprehension questions focused on the retrieval of the explicit information from the text, the inferences of the information, as well as the self-interpretation and integration of the ideas together.

Data Analysis

A mixed-methods sequential explanatory research design was applied to find the effects of watching text-relevant video segments supported by the SIP model on reading comprehension of a culturally unfamiliar text in adult English language learning classrooms with high-intermediate to advanced English language proficiency levels. One dependent variable and two independent variables were identified and analyzed by performing independent-samples t-tests and a two-way mixed ANOVA. An independent-samples t-test was performed to compare the "means between two independent groups" (Kim, 2015, p. 540) while the two-way mixed ANOVA was run to find the "differences in the mean values of the outcome variable between the factor levels of the within-subject factor, between the factor levels of the between-subject factor, as well as the interaction" of the two (Schober & Vetter, 2018, p. 571). The Statistics Package for Social Sciences (SPSS) 26 was used to perform the analyses. The qualitative phase was also addressed using the thematic analysis through interpreting the interview responses.

Chapter IV

Results and Analysis

This chapter deals with data analysis and interpretations through reporting the findings and interactions corresponding to different phases of the current study. The purpose of this study was to investigate the effects of watching text-relevant video segments supported by the Schematic Information-Processing (SIP) model of reading comprehension (Karami, 2021) on reading comprehension of a culturally unfamiliar text when technical words were present or absent.

The focus of the first three questions was on the quantitative phase while the last question addressed the qualitative aspect of this study. The fourth research question was addressed qualitatively through interviewing six participants from each group, control vs. experimental. Interviewees of both groups received the same interview questions. However, the participants of the experimental group had extra questions regarding watching text-relevant video segments and their potential effects on schema activation, background knowledge, and cultural familiarity. The final report includes an integration of the results of the inferential statistics as well as the interpretation of the findings of the qualitative portion. The combination of both can provide generalizability through the quantitative phase as well as the context to the findings through the qualitative phase.

Quantitative Results

This section addresses the findings of the quantitative phase regarding the comparison between two types of reading instructions and their effects on reading comprehension, as well as the retention of the culturally unfamiliar text when technical words were present or absent.

Each group read two parts of the culturally unfamiliar text (a part without technical words and phrases vs. a part with technical words and phrases) about American football for five hours and thirty minutes. The first part (passage I) was about the most basic rules of American football composed of simple words and phrases. The second part (passage II) was about the techniques and strategies used by football players on the field. This section was composed of more technical words and phrases. Figure 4. 1 represents an overall comparison of the mean scores of both groups for each part of the text in the immediate post-test.

Groups	Immediate Post-Test (Passage 1)	Immediate Post-Test (Passage 2)
■ Control Group	21.2	16.39
■ Experimental Group	27.73	25.26
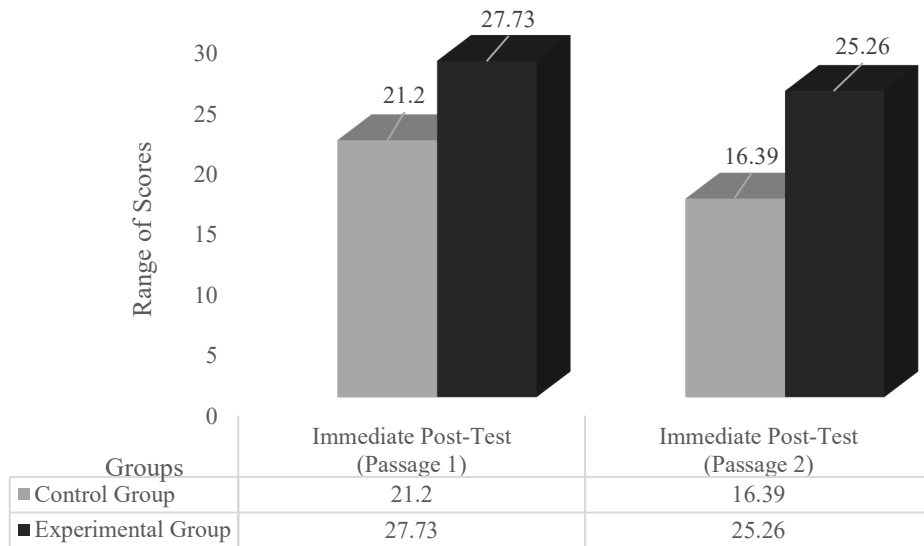
Figure 4. 1
An Overall Comparison of Reading Comprehension Mean Scores for Both Groups and Both Reading Passages in the Immediate Post-Test (T2)

The overall comparison of the mean scores shows that the mean scores of the experimental group are higher than the mean scores of the control group for both types of texts in the immediate post-test. However, the mean scores are higher for the passage I (the text without technical words and phrases) in comparison to passage II (the reading passage with technical

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words and phrases). Table 4. 1 shows the mean and the standard deviation of reading comprehension scores of the control and the experimental group in immediate post-tests.

Table 4. 1
Mean and Standard Deviation of Reading Comprehension Scores for Each Group in Immediate Post-Tests

Tests	Control Group		Experimental Group	
	M	*SD*	*M*	*SD*
Immediate Post-Test (Passage I)	21.20	3.46	27.73	1.94
Immediate Post-Test (Passage II)	16.39	2.84	25.26	1.82

The comparison of the mean scores for both types of texts, Table 4. 1, shows that the mean score of the experimental group ($M = 27.73$, $SD = 1.94$) is higher than the mean score of the control group ($M = 21.20$, $SD = 3.46$) in the passage I. The experimental group ($M = 25.26$, $SD = 1.82$) has also outperformed the control group ($M = 16.39$, $SD = 2.84$) in passage II. Two independent-samples *t*-tests were run using SPSS 26, and the results showed a significant difference in reading comprehension of the two parts of the culturally unfamiliar text between the control and the experimental group in terms of their immediate post-tests scores.

Passage I (A Part of the Text without Technical Words and Phrases)

An independent-samples *t*-test was conducted to see whether reading comprehension scores differed significantly between two types of reading instructions immediately after reading a culturally unfamiliar text when technical words were absent. Since the assumption of the equality of variances ($p = .004$) was violated as assessed by Levene's Test, a Welch t-test was performed. Other assumptions were also tested. For example, the inspection of box plots showed no outliers in the data. Although the data of the control group was normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$), the data of the experimental group was not normally distributed ($p < .05$).

Research (e.g., Ghasemi & Zahediasl, 2012) has clarified that results are robust to violations of the normality assumption in parametric tests in studies with more than 30 or 40 participants. Thus, a Welch t-test was performed to compare two group means. The results showed a statistically significant difference in reading comprehension mean scores of passage I between the control and the experimental group, with the control group scoring lower than the experimental group, $M = -6.52$, 95% CI [-8.24 to -4.80], $t(32.97) = -7.704$, $p < .001$.

Passage II (A Part of the Text with Technical Words and Phrases)

An independent-samples *t*-test was also performed to determine whether reading comprehension scores differed significantly between the control and the experimental group after reading a part of the culturally unfamiliar text when technical words were present. Since all the assumptions were met (there were no outliers in the data, data were normally distributed according to the Shapiro-Wilk's test ($p > .05$), and there was equality of variances ($p = .067$)), an independent-samples *t*-test was run and the results showed a statistically significant difference between two groups in terms of their reading comprehension, $M = -8.87$, 95% CI [-10.32 to -7.42], $t(42) = -12.328$, $p < .001$, $d = 3.72$ with the control group ($M = 16.39$, $SD = 2.84$) scoring much lower than the experimental group ($M = 25.26$, $SD = 1.82$).

The effect size is very large meaning that the mean difference between groups is larger than three standard deviations. This is also indicating that video-based reading instruction was an effective strategy for teaching the part of the culturally unfamiliar text with technical words and phrases. Table 4. 2 Provides a summary of the results of the independent samples *t*-tests for both passages in immediate post-tests.

Table 4. 2

The Results of the Independent Samples t-Tests for Both Passages in Immediate Post-Tests

Passage	*n*	*MD*	*D*	*T*	95% CI	
					Lower	Upper
Passage I	22	-6.52	32.97	-7.704	-8.24	-4.80
Passage II	22	-8.87	42	-12.328	-10.32	-7.42

Note. p < .001.

The participants of the study knew from the consent form that they would take equivalent forms of the immediate post-tests two weeks later. Unfortunately, seven participants from each group missed the delayed post-tests. Therefore, only 30 people out of 44 took the delayed post-tests two weeks later. Figure 4. 2 displays an overall comparison of the mean scores of both groups for each part of the text in the delayed post-test (T3).

Groups	Delayed Post-Test (Passage 1)	Delayed Post-Test (Passage 2)
Control Group	22.41	13.19
Experimental Group	22.38	21.89

■Control Group   ■Experimental Group

Figure 4. 2
An Overall Comparison of Reading Comprehension Mean Scores for Both Groups and Both Reading Passages in the Delayed Post-Test (T3)

The overall comparison of the mean scores of the delayed post-tests showed that the mean score was higher for the passage I (the reading passage without technical words) in

comparison to passage II (the reading passage with technical words). The comparison of the

mean scores also showed that the mean score of the control group was slightly higher than the

mean score of the experimental group for passage I in the delayed post-test. However, the mean

score of the experimental group was much higher than the mean score of the control group for

passage II. Table 4. 3 represents the mean and the standard deviation of reading comprehension

scores for each group in the delayed post-tests.

Table 4. 3
Mean and Standard Deviation of Reading Comprehension Scores for Each Group in the Delayed
Post-Tests

Tests	Control Group		Experimental Group	
	M	*SD*	*M*	*SD*
Delayed Post-Test (Passage I)	22.41	2.29	22.38	2.31
Delayed Post-Test (Passage II)	13.19	1.88	21.89	1.58

The comparison of the mean scores for both parts of the text in the delayed post-test,

Table 4. 3, indicated that the mean score of the control group ($M = 22.41$, $SD = 2.29$) was

slightly higher than the mean score of the experimental group ($M = 22.38$, $SD = 2.31$) for the

passage I. However, the mean difference between both groups was noticeable for passage II in

the delayed post-test. The experimental group ($M = 21.89$, $SD = 1.58$) outperformed the control

group ($M = 13.19$, $SD = 1.88$) in terms of reading comprehension of the part of the text with

technical words and phrases. Two independent-samples *t*-tests were also performed using SPSS

26 to determine whether reading comprehension scores were statistically significantly different

between the control and the experimental group in the delayed post-test.

Passage I

An independent-samples *t*-test was performed to determine whether reading

comprehension scores were statistically significantly different between the participants of the

control and the experimental group two weeks after reading the part of the culturally unfamiliar text when technical words were absent. Since all the assumptions were met (there were no outliers in the data, data were normally distributed in both groups according to the Shapiro-Wilk's test ($p > .05$), and there was equality of variances ($p = .930$)), an independent-samples t-test was run and the results showed no statistically significant difference between two groups in the delayed post-test for the passage I, $M = .03$, 95% CI [-1.68 to 1.75], $t(28) = .04$, $p = .969$.

Passage II

An independent-samples t-test was also performed to determine whether the scores of the experimental and the control group differed after reading the part of the culturally unfamiliar text when technical words were present in the delayed post-test. Since all the assumptions were met (there were no outliers in the data, data were normally distributed according to the Shapiro-Wilk's test ($p > .05$), and there was equality of variances ($p = .540$)), an independent-samples t-test was run and the results showed a statistically significant difference between groups, $M = -8.70$, 95% CI [-9.99 to -7.40], $t(28) = -13.71$, $p < .001$, $d = 5.01$ with the control group ($M = 13.19$, $SD = 1.88$) scoring much lower than the experimental group ($M = 21.89$, $SD = 1.58$). There was also a very large effect size for the delayed post-test meaning that the difference between the two mean scores was larger than 5 standard deviations. This indicates that the video-based reading instruction supported by the SIP model was a very effective strategy for teaching culturally unfamiliar texts with more technical words and phrases because it helped readers retrieve the content longer. Table 4. 4 provides a summary of the results of the independent samples t-tests for both passages in the delayed post-tests.

Table 4. 4
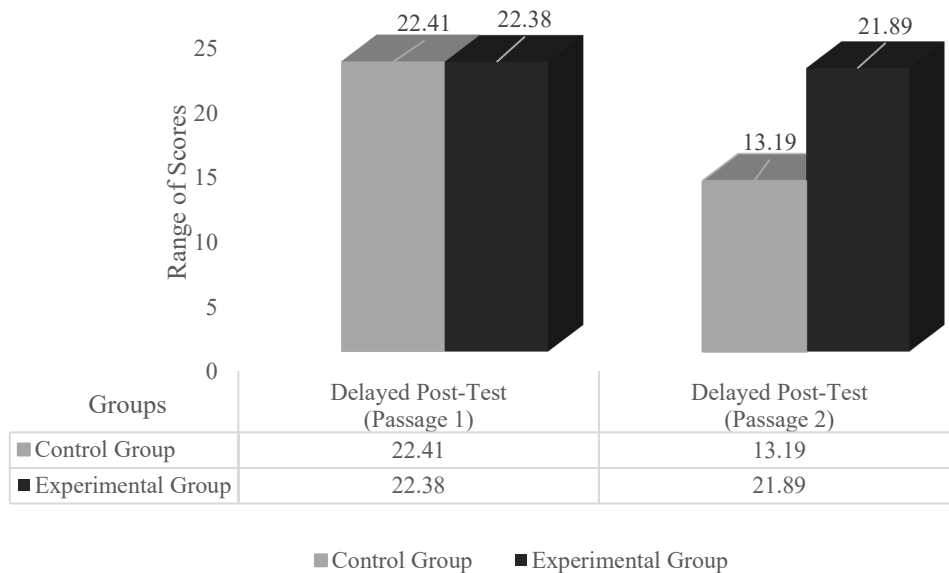
The Results of the Independent Samples t-Tests for Both Passages in the Delayed Post-Tests

Passage	*n*	*MD*	*d*	*T*	95% CI	
					Lower	Upper
Passage I	15	.03	28	.04**	-1.68	1.75
Passage II	15	-8.70	28	-13.71*	-9.99	-7.40

Note. *p < .001. **p > .05.

A post-hoc power analysis was conducted by considering the total sample size ($n = 44$) to determine the estimated effect size for a two-tailed independent-samples *t*-test with an equal number of participants in each group, power of .80, and an alpha of 0.05. The results showed that with this sample size, an effect size of at least .87 (Cohen's $d = 0.87$) can be detected. In my case, the effect size was 2.32, and the power of detecting it was over 80% of the time.

Overall Reading Comprehension of the Culturally Unfamiliar Text

The third research question was about the retention of the content of the culturally unfamiliar text by considering three time-points: pre-reading, while-reading, and post-reading. Since both parts of the text were related to American football, the results of the immediate post-tests were added together and titled, "Total Immediate Post-Test Scores." The results of the delayed post-tests were also added together and titled, "Total Delayed Post-Test Scores." This could determine which reading instruction was more effective over time—before treatment, immediately after treatment, and two weeks later—and which one could help readers retain the content longer. Therefore, a two-way mixed ANOVA was performed to address this aspect of the study.

The assumptions of the two-way mixed ANOVA (Laerd Statistics, 2015) were assessed carefully to ensure the most appropriate selection of the statistical test. For example, Levene's test of homogeneity of variances and Box's M test indicated the homogeneity of variances (*p* >

.05) and the homogeneity of covariances ($p > .001$), respectively. Mauchly's test of sphericity was also examined to check the assumptions of sphericity for two-way interaction $\chi^2(2) = 1.76$, $p = .413$. Since all other assumptions were also met, the two-way mixed ANOVA was performed using SPSS 26.

The results showed a statistically significant interaction between the type of reading instruction and time on reading comprehension, $F(2, 56) = 38.123$, $p < .001$, partial $\eta^2 = .577$. The results also showed a statistically significant differences in reading comprehension between two types of reading instruction (traditional text-based vs. video-based reading instruction) in the immediate and delayed post-tests, $F(1, 28) = 212.44$, $p < .001$, partial $\eta^2 = .884$ and $F(1, 28) = 67.52$, $p < .001$, partial $\eta^2 = .707$, respectively. Reading comprehension scores were statistically significantly greater in the experimental group ($M = 7.69$, 95% CI [6.61 to 8.77], $p < .001$) in comparison to the control group in the immediate post-test. This was also true for the delayed post-test because reading comprehension scores were statistically significantly greater in the experimental group ($M = 4.33$, 95% CI [3.25 to 5.41], $p < .001$) in comparison to the control group.

Further analysis was also performed to find simple main effects of the time. The results showed a statistically significant effect of time on reading comprehension scores for both the control group—$F(2, 28) = 145.46$, $p < .001$, partial $\eta^2 = .912$—and the experimental group, $F(2, 28) = 802.68$, $p < .001$, partial $\eta^2 = .983$. Table 4. 5 provides a summary of the results for the two-way mixed ANOVA comparing the main effects of the time on reading comprehension scores.

Table 4. 5
Results for the Two-Way Mixed ANOVA Comparing Main Effects of the Time on Reading Comprehension Scores

Source	Control Group			Experimental Group		
	F	P	η^2	F	p	η^2
Time	145.46	.001	.912	802.68	.001	.983

To proceed further and find where the differences lie, tables of Pairwise Comparisons were examined. The results of the analysis showed that reading comprehension scores were statistically significantly improved, in the control group, from the pre-test to both immediate (M = 10.72, 95% CI [8.44 to 13.00], $p < .001$) and the delayed post-test (M = 9.89, 95% CI [8.38 to 11.39], $p < .001$); However, reading comprehension scores were not statistically significantly reduced from immediate to delayed post-test (M = -.83, 95% CI [-2.67 to 1.01], $p = .724$).

For the experimental group, reading comprehension scores were statistically significantly improved from pre-test to both immediate (M = 18.08, 95% CI [16.94 to 19.22], $p < .001$) and the delayed post-test (M = 13.89, 95% CI [12.50 to 15.29], $p < .001$). In addition to this, reading comprehension scores statistically significantly reduced from immediate to the delayed post-test (M = -4.18, 95% CI [-5.48 to -2.88], $p < .001$).

Despite this significant decrease from the total immediate to the total delayed post-test scores, the experimental group had significantly higher mean scores—in both immediate and delayed post-test—in comparison to the control group. For example, the overall comparison of the mean scores of the immediate post-test showed that the total mean score of the experimental group (M = 26.32, SD = .95) was greater than the total mean score of the control group (M = 18.63, SD = 1.80). This was also true for the delayed post-test in which the total mean score of

the experimental group (*M* = 22.13, *SD* = 1.53) was greater than the total mean score of the control group (*M* = 17.80, *SD* = 1.34).

According to the results of the descriptive and inferential statistics, the group with the video-based reading instruction supported by the SIP model outperformed the control group with the traditional text-based reading instruction in terms of reading comprehension and retention of the content of the culturally unfamiliar text.

Qualitative Findings

The following section provides information regarding how video-based reading instruction differs from traditional text-based reading instruction in terms of readers' perspectives. In addition to this, this section is looking for the answer to see which instruction could help readers more in terms of activating their previously constructed knowledge and providing them with the necessary support to comprehend the culturally unfamiliar text better.

A semi-structured interview format was used to collect the qualitative data and address this aspect of the study. This type of interview was applied because this format allowed the interviewer to ask follow-ups or new questions as needed. In total, 12 participants (six people from each group) volunteered to be interviewed.

The number of interview questions for the control group was seven and this number for the experimental group was 13 (see Appendix G). The focus of the first seven questions was on the participants' feelings, motivation, perception, background knowledge, and prior experiences. The experimental group received six additional questions about the effects of watching video segments on activating their prior knowledge and cultural experiences. Interview questions had

been designed for the pilot study (Karami & Bowles, 2021) and reviewed by three experts in the field. This evaluation could help the researcher with the validity of the qualitative study (Zohrabi, 2013). Interviews were conducted based on the qualitative research interview tips indicated by McGrath et al. (2019).

Two experts reviewed the interview questions once more to ensure their validity. Reliability was also another important factor to consider. Reliability refers to the consistency of the findings (e.g., Leung, 2015; Sekaran & Bougie, 2003). Therefore, the comparison between the findings of the pilot study with the results of the current study showed the consistency of the findings across the studies. The interview of the control group lasted for about 46 minutes while the interview of the experimental group lasted for about 73 minutes due to the additional questions that each interviewee received.

Thematic analysis was used to identify themes, organize, describe, and report data. Thematic analysis was applied as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006). The researcher also considered some other criteria such as credibility, transferability, dependability, and confirmability to conduct a trustworthy thematic analysis (Nowell et al., 2017). Credibility refers to the extent to which both respondents' views and the interpretation of them by the researcher match (Tobin & Begley, 2004). This was addressed through recruiting two other experts and peer debriefing of the data. Transferability refers to the generalizability of inquiry (Nowell et al., 2017, p. 3). This was also fulfilled by providing a rich description of the context. Dependability was achieved through clear and logical documentation of the research process (Tobin & Begley, 2004). Confirmability refers to the degree to which the findings and the interpretation of the data are derived from the data

(Tobin & Begley, 2004). This was established when all other three criteria were met (Guba & Lincoln, 1989).

Three experts reviewed the interview responses. Thematic analysis (Braun & Clarke, 2006) was used to interpret the findings. Three overarching themes, with some sub-themes for each one, were identified through an inductive (bottom-up) approach. An inductive approach is a data-driven approach (Braun & Clarke, 2006) that provides a strong connection between the identified themes and the data (Patton, 1990).

Nowell et al. (2017) suggested six phases to establishing trustworthiness in a thematic analysis. Following the steps mentioned by Nowell et al. (2017) and the step-by-step guide to thematic analysis outlined by Braun and Clarke (2006), interview responses were recorded, transcribed, and followed by initial coding to highlight words or phrases repeated or appeared to stand out. Saldaña (2009) states that initial coding "is not necessarily a specific formulaic method" (p.81). These words and phrases were then reviewed for the second time. Creswell (2013) argued that re-coding of data after the initial cycle of coding also helps the researcher improve reliability. Finally, the themes were identified and reviewed by two experts and the final report was produced.

Three overarching themes were identified: unfamiliarity, attraction, and deeper levels of information processing. Some sub-themes also emerged for some themes: for unfamiliarity, the sub-themes were '*culture*' and '*vocabulary*'; for attraction, the sub-theme was '*teaching strategy*'; for deeper levels of information processing the sub-themes were '*video and schema activation*' and '*supportive role of video segments*.' Pseudonyms were used to keep interviewees anonymous.

Unfamiliarity

The unfamiliarity of the participants with the topic and the content of the different parts of the text was clear in the interviewees' responses. The interviewees from both groups acknowledged that they were not familiar with the topic and the content. For example, Pedro mentioned this unfamiliarity with American football and said, "Once a cousin of mine invited me to one of his football games at school, American football game at school, and I said, 'No' because I didn't know anything about it." Sandra was thinking of American football as a "rude sport" before participating in this study, but she understands it better now and believes that "it is for strong people."

Unfamiliarity was manifested by interviewees in two different concepts: (a) culture and (b) vocabulary.

Culture

According to the interview responses, American football is not a popular sport and is not played by most of the people in the Dominican Republic. Jose highlighted this unpopularity and said, "I did not know anything about American football before, and it is basically because in my country we do not play this sport, and no one used to watch it on the TV." Ramon also mentioned the same thing by stating that American football "is not played in my country, and I didn't have any experience with it." Therefore, the interviewees acknowledged that it was their first time reading about American football and some of them even mentioned that they did not know anything about American football before participating in this study.

They also acknowledged that both parts of the culturally unfamiliar text were useful, informative, and easy to read. For example, Maria stated that the text was informative although it

was not necessarily her type of thing because she is not a sports fan, especially American football. However, she believes that the text was "definitely informative", and she could learn "a thing or two" about the sport that she was not familiar with.

Baseball is the most common sport played in the Dominican Republic which means that the participants are familiar with the rules and regulations. This is because baseball is played, televised, and discussed in society. This makes baseball a culturally familiar and popular sport among the people of the country. American football is not a popular sport in the Dominican Republic. This means that the participants were not familiar with the rules and regulations of this sport, and the text was unfamiliar to them in terms of culture, background knowledge, and prior experiences.

Vocabulary

The review of the interview responses also revealed that in addition to the unfamiliarity of the participants with the topic and the content of the text in terms of culture, they were not familiar with technical terms as well. For example, Ana said, "There were some keywords that they were unknown." Maria also highlighted this unfamiliarity with the technical terms and phrases by stating that "well, I didn't understand the technical terms" because those were specific terms. Rosario responded similarly. At first, she thought that she had enough vocabulary knowledge to understand the text. In the meantime, she acknowledged that her knowledge of words was "not related to American football. For example, punt. I didn't know what that was."

The unfamiliarity with words and phrases also highlights the importance of background knowledge in understanding a culturally unfamiliar text. When a topic is unfamiliar, the individual lacks the necessary background knowledge and prior experience to understand the

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technical words and phrases. This might hinder the comprehension process as well. For example, the interviewees were familiar with baseball and its rules and regulations. This is because of the popularity of this sport in the Dominican Republic. The familiarity of the readers with the topic, technical words, and phrases could facilitate the comprehension process and improve reading comprehension of the culturally unfamiliar text.

Attraction

The other important overarching theme was the importance of the topic in attracting readers and how reading instructions could keep readers interested and engaged. Some interviewees mentioned that the topic was not interesting enough for them at the beginning. For example, Ana and Jose said, respectively, "I was not interested in American football before the reading" and it was not interesting at first, but "it started my interests." Ana added that:

> At the beginning, the information itself, Uhm, didn't. I mean, was not relevant but once you explained to us the way it moved, the way it went. We, I got more and more interested in the reading now that could be headway for me to understand. Then maybe watch the next time there is a football game on TV.

One of the most important aspects of successful reading comprehension is to keep readers engaged and interested in reading culturally unfamiliar texts. According to the interview responses, the teaching strategy was an important factor and played a key role in the successful comprehension of the culturally unfamiliar text.

Teaching Strategy

The interviewees highlighted the importance of the teaching strategy in the clarification of the content of the different parts of the culturally unfamiliar text. Since reading the text and the teacher's explanation were the main types of reading instruction for the participants of the

control group, some interviewees highlighted the importance of the teacher's explanation in vocabulary development. For example, Jose stated that "I was lost at the beginning" with "some of the terms" but with the teacher's "explanation, as I said, it went through like I did have enough vocabulary." He also continued, "The explanation of the vocabulary like it was easy and the keywords that are used in the game like the terms. They were explained properly so that helped me understand better." Ana also found the teacher's explanation efficient by stating that after "the information was explained to us, now, I think it's an interesting sport."

The explanation of the teacher seems to be as important as readers' prior knowledge and background experiences. The participants of the control group stated that the teacher's explanation could help them improve their knowledge and understand different parts of the text better. For example, Rosa, an interviewee from the control group, mentioned that the teacher's explanation was very effective in such a way that it could improve her knowledge "because of the explanation of the specific rules." The interviewer also asked her about the effective factors that could assist her in understanding the text better. She responded:

> Of course, the prior knowledge and also, you know, the definition you gave us and specific to the game of football cause my knowledge about this game were limited. Now that the explanation you gave us, the PowerPoint presentation, Uhm, the, you know, the summary you presented from the key concepts of this game, the rules of the game you know, I didn't know, you know, any rule about this game but with your explanation, the presentation with the PowerPoint. It taught me a lot to learn the information about this game.

Ana also acknowledged the importance of the teacher's explanation and described the teaching process in detail.

> First was your careful explanation. Uhm, the definition of each rule. You presented, there was a … I enjoyed the most, you presented first a set of rules, and you explained to us each of them step by step. For me, that was a key point. I mean, if any class, if any text is explained to students the way you did, believe me, everyone is going to understand the topic is about what goes along with it.

Meanwhile, the interviewees from the experimental group emphasized the effectiveness of both strategies (reading the text and watching text-relevant video segments). For example, Sandra highlighted the importance of the combination between watching related video segments and reading different parts of the text. Rosa said that the videos explained the content very well. She continued that after the video, the teacher's teaching and explanation were "very understandable." She also highlighted that "videos were better than just reading the text. Of course, videos." Then, she added, "At the beginning, I read the rules and then, I couldn't understand very well. Then, I saw the videos in action and then, I could understand it better the videos rather than just reading it." Daniel also mentioned the effectiveness of both types of strategies and mentioned that the videos could make the text "easier to understand." Juan also mentioned the importance of adding visuals to the reading instruction and continued,

> Something maybe that would help would be some images. I like connecting the text with the image. So, maybe students were not so proficient in the sport or in English per se will get to understand like quicker by relating the text to the image or pictures in your brain.

The interviewer asked Juan to see which one, video segments or images, would be more helpful and effective. He told the interviewer that "a short video, for sure" by adding that "the inclusion of videos, like those short clips, might be wonderful." Therefore, most of the interviewees of the experimental group preferred short text-relevant videos over images. According to them, video segments can be more effective than pictures.

The interview responses of the experimental group also showed that both the teacher's explanation and watching video segments could enhance readers' interests in American football. For example, the interviewer asked Rosario, "Are you interested in American football now?" She responded:

> Yes. Absolutely. I mean, it's not that I love it now, but it was pretty interesting. You know, I always watch movies and sometimes is about American football.

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You know playing and stuff, and I did not know what they were doing. But now if
I watch one, I will be able to understand what's going on.

Daniel also mentioned that he felt motivated to learn more about American football after

the treatment. He stated that he was not motivated to follow sports on TV before participating in

this study because of his unfamiliarity with the rules and regulations of sports. According to his

responses, he feels more motivated because he knows "most of the rules" and "what happens" in

the game. Therefore, he likes "to watch it on TV" more than before. According to him,

At first, when you talked about that in this program or interview, we will be
talking about football. At first, was not interesting for me. From the first section
that we got together, I start feeling more interesting about and knowing
everything about football because I start to understand the game. Now, I feel so
motivated to watch it on TV, too.

Therefore, teaching strategy plays a decisive role in the successful comprehension of

culturally unfamiliar texts. The SIP model (Karami, 2021) encourages teachers to play authentic

text-relevant video segments in three stages of reading instruction to enhance their students'

motivation and interests by providing a meaningful context. The interviewees of both groups

highlighted the importance of visuals and acknowledged the vital role of videos in better

comprehension of the different parts of the text about American football.

Deeper Levels of Information Processing

The interviewees in both groups described in detail how they were trying to process the

information in their minds to understand the content of the different parts of the culturally

unfamiliar text. For example, some interviewees from the control group mentioned the idea of

connecting prior knowledge and experiences to new information. Ana stated that she was trying

to connect the rules of American football to the rules and regulations of other sports like

basketball and baseball. She explained in detail how she was trying to process the new input

deeper in her mind. She said,

> Penalties like in the case of baseball or basketball. You know, the rules I mean, I
> understood there was. I mean, there was a set of rules in that there was an offense
> team and a defense team. You know, a little bit different from basketball or
> baseball. Uhm, but still one team attacking the other team.

Other interviewees from the control group also acknowledged the connection between

previously constructed schemas and the new input. For example, Juan said,

> Sometimes, I knew some technical terms. Even though I didn't know their use in
> the sport because I could associate it with the sport like for example, punt. I knew
> what punt was but never related to football and then I got, I got to understand it
> better when I saw the definition.

He also highlighted the importance of background knowledge and how his background

knowledge about other sports could help him understand American football. He mentioned that

he could "take up terms quickly because of the many of the rules" he knew "from other sports".

Rosa could connect new information to her previously constructed knowledge as well. She

mentioned how this connection could help her handle the unfamiliarity with the text. She said,

> As I told you before, I didn't know anything about, you know, about American
> football. But it was, you know, the weird part for me but some terms as I said
> were familiar like defense, offense, others because they are related to basketball.

Jose expanded this connection to other resources such as social media and the Internet by

stating that he had watched some players perform special techniques on TV before, but he did

not know the name of them. He said,

> Sometimes when we are navigating the Internet or let's see any social media, I
> could see these fractions of the games like people chasing another and when they
> tackle. They are. That's the only thing I can relate to, but I did not understand
> what's really what really happened there until this moment.

Not only the interviewees of the control group but also the experimental group acknowledged that they were trying to make connections between their background knowledge and experiences with the new information in the text. For example, Rosa, Pedro, Rosario, and Antonio named some common rules and terms used in both baseball and American football. For example, Rosa described how she could make a connection between American football and baseball. She said, "I could make the connection in baseball when people try to hit the player in order that to avoid the player to get on the base." She also stated that the different parts of the text were not difficult to follow because of creating connections between new information and previously constructed knowledge. She told the interviewer that it "seems I'm following basketball and some concepts and terms were familiar to me." Pedro could also connect some statements from the text to some movies that he had already watched. Daniel highlighted this by stating that "the only thing that I used to know about football. For example, I used to see that they push each other" when they are "playing in the football game but didn't know why."

Video and Schema Activation

The interviewees of both groups highlighted that the previously watched movies and videos could help them connect the new information in the culturally unfamiliar text with their previously constructed knowledge. Jose, from the control group, stated that the "fractions of videos" that he had watched like "people chasing one player and taking the player down to the floor" could help him connect the ideas. He also added, "Yeah, those, they came to my mind while reading." Ana also mentioned the importance of already watched videos and continued, "I have never been in contact with that kind of information about American football. In fact, I have watched it on TV, and I was interested in the mid-time show." Juan added that not only it was

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easy for him to make a connection, but he also could understand everything quickly because he used to watch sports on TV. He added:

> You know, they talk about like as many sports as possible like mainstream sports be a tennis, basketball, football, and so. Every time I watch the program, they talk about all the sports. Right? And they normally talk about football. The point is I have never gotten the opportunity or given myself the opportunity to dig down into the rules and everything about the sports. But I was familiar with the sport and like in theory. Something not so profound I would say.

Rosa, an interviewee from the experimental group, stated that video segments helped her more than just reading the text in creating connections and activating schemas. She indicated that watching text-relevant video segments in two stages of reading, while-reading and post-reading, helped her a lot. She said, "Videos made me go back and read the text and understand better." Rosario, another interviewee from the experimental group, described how video segments could help her understand the content better:

> When you read, you imagine things, … For example, me, I'm not used to watching American football. So, I was making the image in my mind, but I don't really know. You know, it was my mind but once I saw the video, I watched the video. Uhm, you have already imagination of how it is actually. So, it's easier for you to learn, understand.

She also mentioned that without watching the video segments, it would have been difficult to understand the culturally unfamiliar texts. For example, she told the interviewer that she did not understand some techniques such as 'point after touchdown' until she saw the action in the video. Pedro and Daniel, interviewees from the experimental group, acknowledged that video segments could make the text easier for them. Pedro even stepped further and stated that he would watch YouTube videos to clarify his ideas if there were no video segments in the class. He believes that including video segments was like a reward for him. Daniel also highlighted the connection that text-related video segments could make and stated that video segments

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"represents the action" of "what they say in the text, so it helped me a lot to hear what I understood." He continued:

> What I used to know about football is that they use to push each other, to get the ball on their hands, to get to the End zone. And when I watched the video, I relate that if that information that I used to know.

Supportive Role of Video Segments

Although the control group had no interview questions regarding the video segments, they suggested that including video segments would be an effective strategy to facilitate the process of reading comprehension. For example, Maria said,

> I think my only suggestion would be that probably it would be much more fun if scenarios were included. Like scenarios of like specific play or something. And then how was kind of interpret what was happening. Like trying to identifying the term just by listening to the specific scenario or watching a video about specific scenario and being able to interpret it after having the notion of having the definition of something. Maybe, like looking at it from a more divert way.

The supportive role of pictures and video segments can also be noticed from what Jose suggested:

> We used the imagination, and that's good. Because it actually helped us to imagine the game, and what happens in each stage. But it would have helped better if we had these pictures or videos of what really happens during the game."

He also suggested that including both pictures and videos could be more effective. However, he believes that videos are more helpful than pictures. Juan also mentioned that watching text-related video segments, as a supplementary activity, could be extremely helpful for the reader with insufficient background knowledge or readers with low language proficiency levels. He said,

> Maybe you can have a text, and then you can have something like an example, and video sample rolling the play or run in the play if you're explaining

something like sack for example. You can have a short video maybe ten seconds demonstrating what is actually with an image, I mean, with the video. Yeah. Maybe that might be more enticing for some people or not maybe being proficient in English as I said before, or even being proficient, who are not very knowledgeable about the sport. That might help them make an instant connection with the text or which were just explaining."

Juan believes that readers would enjoy adding short video segments with the duration of "ten seconds or longer" to the reading instruction. Then, he added,

You can add at least a short video per slide, and then you might get reactions like wow, I like it. Even more because, you know, we are living in a crazy era. You know. And everything is related to technology and content like attractive content, and what they see videos like moving images they get excited, and they get to understand it better."

Ana also mentioned a similar thing and noted that video segments should be short "like some trailers." She also stated that the integration of video segments into reading instruction could make "learning faster."

The experimental group received video-based reading instruction as their main instruction. They emphasized that text-related video segments clarified the complex rules of American football and helped them understand the texts better. For example, Rosa indicated that text-relevant videos could help her understand the rules. In addition to this, they helped her see the content in the action. She added, "When I was reading the text, I saw the words. And then I watch the video, and then I could understand the definition." She also believes that playing text-relevant video segments in different stages of reading instruction enhanced reading comprehension and led to longer retention of the content. She said,

It just kind of connect me with the first, vocabulary or rules. So, maybe I have forgotten because of the during the class, the session. There were several things to keep in mind. So, while reviewing after the session was done and reviewing it kind of made me go back and connect the definition, to remember also the new vocabulary."

Pedro described the importance of playing text-relevant video segments in different stages of reading instruction similarly. Pedro said:

> Because if I had doubt at the beginning when we see the video the second time. I clarify the doubt I have. And then, at the end, everything was clear because I said, "Ok." This is what I think, and it is right.

He also added:

> They were so helpful because when we read something, and then you play the video immediately. It was like, oh. This was we were reading about. Like, immediately it makes a big impact in understanding because we see immediately what we are talking about."

Daniel had similar opinions as to the following:

> Because it's like you read something. You have some doubts about it how it happens. like for example, when we read the information about Interception that is like when someone takes the ball when the quarterback throws it. When I see that, in the video, I understand better what I read."

Rosario believes that text-relevant video segments could summarize the slides since they were saying the same thing. She also believes that the repetition, which was provided by playing text-relevant video segments, could help the reader's brain "find things easier." She added the importance of repetition to students by stating that "every time you review things once or three times it's really helpful." Sandra considered repetition as a mind refresher that could help the reader remember what he has already read. Pedro had a similar statement highlighting that the combination of reading and watching text-relevant video segments could help the reader remember what they have read before. In fact, "the first thing that comes to mind is the picture of it." Daniel highlighted this and described how repetition was effective for him. He said,

> They were really interesting because it was like understanding a paragraph, what they say, and then show it as it was real. Like happening at the moment. So, it was really interesting. Some of them because I was not familiar with football, I

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was like, I don't understand what they are showing. But there was a connection through the text and the video."

Sandra mentioned that the way text-relevant video segments were played by the teacher could help her understand the different parts of the text better. She told the interviewer that the playing and pausing of the video segments could clarify things and help her a lot.

In addition to the supportive role that video segments played for the participants of the experimental group; text-relevant video segments also helped them psychologically by enhancing their interest level towards the topic. For example, Rosa stated that after participating in the study she got very interested in American football. Daniel also stated that the integration of text-related video segments in reading instruction was an effective strategy for the experimental group because it motivated them to learn more about American football.

The interview responses highlighted the effectiveness of the SIP model in teaching different parts of the culturally unfamiliar text about American football. Playing text-relevant video segments in three stages of reading instruction could act as a kind of scaffolding for readers by providing them with the necessary support to understand the text and creating connections between their background knowledge and prior experiences.

Chapter V

Conclusion, Discussion, and Recommendations

Introduction

Reading comprehension is one of the most important skills in human life because poor reading performance is linked with negative life outcomes (Mancilla-Martinez, 2020) such as an increase in unemployment rates (Kickbusch, 2001), negative educational outcomes such as school dropout (Christenson & Thurlow, 2004; Hernandez, 2011), and unsuccessful educational results (Baker & Dalton, 2011; Proctor et al., 2007; Shanahan & Beck, 2006). Poor reading skills have also been identified as a leading factor in students' struggles in schools (Melby-Lervag & Lervag, 2014).

The multifaceted nature of reading comprehension creates a challenge for second/foreign language researchers, teachers, and learners. Therefore, researchers continue to address the challenges of reading instruction to improve or innovate new reading comprehension strategies and models (Karami, 2021). For example, Elleman and Oslund (2019) highlight the importance of "comprehension strategy instruction" and how the implementation of multiple strategies can be beneficial in reading instruction. This study took this idea and investigated the effects of watching text-relevant video segments to teach a culturally unfamiliar text when technical words were present or absent to adult English language learners with higher-intermediate to advanced English language proficiency levels.

This chapter presents an overview of the study including a summary of the data collection procedures, major findings of the study, discussion, limitations, suggestions, implications of the study for teachers, and conclusion.

Overview of the Data Collection Procedures

Forty-four English Language Learners (ELLs) from the Universidad Autónoma de Santo Domingo (UASD) School of Languages located in the Dominican Republic were randomly assigned to two groups: control vs. experimental. The homogeneity of the participants in terms of English language proficiency was determined using the TOEFL iBT Reading Practice Sets (For Test Takers) developed by Educational Testing Services (ETS). The participants were homogeneous in terms of their first language because Spanish was their native language. They were also homogeneous in terms of their familiarity with the topic of the culturally unfamiliar text based on the results of the pre-test.

The participants read two different parts of a text about American football. The first part (passage I) was about the general rules and regulations of American football. Technical words were absent in this section. The second part (passage II) was about specific strategies and techniques of this game, and technical words were present in this section. The control group received traditional text-based reading instruction while the experimental group received video-based reading instruction supported by the SIP model. The participants of the study received three equal forms of reading comprehension tests in three different time points: pre-test (T1), immediate post-test (T2), and delayed post-test (T3).

Major Findings of the Study

The results of the quantitative analyses following the interpretations of the qualitative findings were used to address four research questions. The results showed that the SIP model was an effective strategy to teach culturally unfamiliar texts to adult English language learners when technical words were present or absent. The overall findings of the study also represented

that video-based reading instruction was more helpful than traditional text-based reading instruction in teaching texts when technical words were present. In addition to this, the findings highlighted that playing text-relevant video segments in three stages of reading instruction could activate readers' background knowledge and prior experiences, facilitate the process of reading comprehension, and help readers retain the content longer. A summary of findings for each research question was provided below.

The results of the SPSS analysis showed a statistically significant difference in terms of reading comprehension of two different parts of the culturally unfamiliar text (when technical words were present or absent) between traditional text-based and video-based reading instruction in the immediate post-test. The comparison of the mean scores of the two groups indicated that the video-based reading instruction supported by the SIP model was an effective reading instruction for teaching both parts of the text and the most effective one for teaching the section with technical words. The difference between the mean scores of the groups for the passage I ($M_E - M_C = 6.53$) was smaller than the difference between the means scores of the groups for passage II ($M_E - M_C = 8.87$) in the immediate post-test.

The findings of the SPSS analysis indicated no significant difference between the two groups in the delayed post-test for the part of the text without technical words and phrases (passage I). The reason is that both groups had almost the same mean score for the passage I in the delayed post-test. The mean score of the control group ($M = 22.41$) in the passage I was slightly higher than the mean score of the experimental group ($M = 22.38$).

The comparison of the mean scores of the immediate and delayed post-tests for each group showed a slight increase in the mean score of the control group for the passage I from the immediate ($M = 21.2$) to the delayed post-test ($M = 22.41$). This seems to be unusual because the

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delayed post-test was administered two weeks later and the scores of the delayed post-test were expected to decrease in general unless there were some training or other types of practices like self-study. Although the participants of the study had been informed to not taking notes or using other resources while participating in this study, it seems that the participants of the control group ignored these requests. On the other hand, the mean score of the experimental group for the passage I decreased from the immediate ($M = 27.73$) to the delayed post-test ($M = 22.38$). The participants of both groups were notified once more by highlighting that they were not expected to read, take notes, or watch any other sources related to American football during their participation in this study.

Concerning the results of the delayed post-test related to the part of the passage with technical words and phrases (passage II), SPSS analysis showed a statistically significant difference between the two groups. The comparison between means of the groups in the immediate and the delayed post-test also indicated almost the same decrease from the immediate to the delayed post-test in both the control group ($M_1 - M_2 = 3.20$) and the experimental group ($M_1 - M_2 = 3.37$). In addition to this, the difference between the mean scores of the groups for the passage I ($M_C - M_E = 0.03$) was much smaller than the difference between the means scores of the groups for passage II ($M_E - M_C = 8.70$) in the delayed post-test.

Two-way mixed ANOVA was performed to address the third research question. The results of the two-way mixed ANOVA showed a statistically significant interaction between the type of reading instruction and time on reading comprehension (Figure 5. 1), statistically significant differences in reading comprehension between two types of reading instruction (traditional text-based vs. video-based reading instruction supported by the SIP model) in the immediate and the delayed post-tests, a statistically significant effect of time on reading

comprehension for both groups, and a statistically significant reduction in reading comprehension scores from immediate to the delayed post-test.

The lines in Figure 5. 1 are not parallel indicating that the relationship between reading comprehension and the retention of the content of the culturally unfamiliar text over time depends on the type of reading instruction. For example, readers who received video-based reading instruction outperformed the other group who received traditional text-based reading instruction in terms of reading comprehension and the retention of the content over time from pre-test (T1) to the delayed post-test (T3).
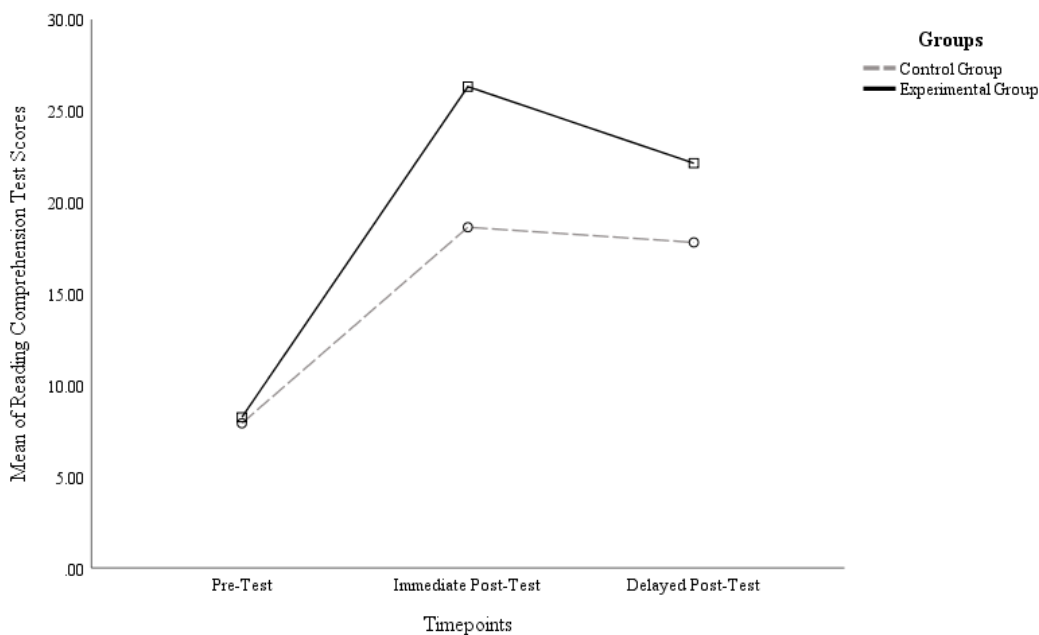
Figure 5. 1
Interaction between the type of reading instruction and time on reading comprehension

To address the qualitative phase of the study, interview responses were recorded, transcribed, and coded primarily and secondarily by three experts. Finally, three overarching themes and some sub-themes were identified. The findings of the thematic analysis highlighted the unfamiliarity of the participants with the content of the text in terms of culture and

vocabulary. The interviewees emphasized the importance and the role of the teaching strategy in reading comprehension, as well as the ways that teaching strategy could motivate, encourage, and help readers comprehend culturally unfamiliar texts better.

According to the findings of the qualitative phase, both types of strategies were helpful and supportive. They could motivate readers, enhance their interests, and help them learn more about American football and follow this sport later.

The third theme was about deeper levels of information processing in the reader's mind. Interviewees of both groups acknowledged their efforts to make connections between new information from the text and their previously constructed knowledge and prior experiences. The interviewees of the control group also mentioned how they were trying to imagine the actions by referring to previously watched movies. On the other hand, the interviewees of the experimental group indicated the important role that video segments played during the instruction in their schema activation and comprehension. In addition to this, the interviewees of both groups emphasized the facilitating role of short text-relevant video segments and their supportive role in better comprehension of different parts of the culturally unfamiliar text.

Discussion

Four research questions were addressed in this study. The questions were about the applicability of video-based reading instruction supported by the SIP model. Since both quantitative and qualitative findings supported the applicability of this model, the benefits of the utilization of text-relevant video segments in three stages of reading instruction were discussed in detail (See Karami, 2021 for an expanded discussion). The SIP model:

… moves from the basic requirements of reading comprehension to comprehension-level processing. This model emphasizes the idea of the complexity of reading comprehension and argues that for successful comprehension of culturally unfamiliar texts, various intentional and unintentional processes must occur inside and outside of the individual's mind simultaneously. (p. 14)

According to the SIP model, the pre-reading stage is vital for the initiation of reading instruction. Teachers can plan some warm-up activities (ice-breakers) to involve and engage students more in classroom activities. Warm-up activities prepare students to focus more on the main activity and provide them with an opportunity to pay greater attention to the subject matter by concentrating more on the topic (Allwright, 1984; Velandia, 2008). In other words, warm-up activities help readers focus on "the main idea rather than jumping from topic to topic and lower students' affective filters by helping them feel more comfortable through talking about their prior knowledge and cultural experiences" (Karami, 2021, p. 8).

Teachers should view students' funds of knowledge (Moll et al., 1992) as an opportunity to indicate their respect, admiration, and support in their classrooms. Students' funds of knowledge can also play a very important role in the teacher's lesson planning and act as a kind of scaffolding in reading instruction. According to the findings of the previous studies based on the Situation Model (Castles et al., 2018; Kintsch, 1998; Zwaan & Radvansky, 1998), the activation of the individual's background knowledge is a helpful strategy to create a connection between the text and the individual at the surface level. This connection will "extend and refine the propositional message to integrate it into a situational representation of the text" (Shin et al., 2019, p. 322). Some researchers (e.g, Castles et al., 2018, p. 28) refer to this as the meaning construction stage and define it as the "mental representation of the situation being described by the text." According to the SIP model,

… viewing text-relevant video segments, as a warm-up activity before reading the text, can also allow viewers to retain new information longer in their working memory. Working memory is a temporary storage for the input and the processing of information which prioritizes attention, restrains irrelevant information from interfering, and works closely with long-term memory to retrieve already constructed information (Baddeley, 2000; Just & Carpenter, 1992). Not only can warm-up activities foster motivation (Velandia, 2008), but they can also prioritize attention in working memory and initiate the processing of information at the surface level. This requires the reader to draw attention in order to fill the capacity of working memory with relevant information (Cowan, 2010). (Karami, 2021, pp. 7–8)

According to the SIP model, "playing text-relevant video segments, as a part of the warm-up activity, can help readers focus more on the content of the culturally unfamiliar text and avoid distractions and irrelevant information" (Karami, 2021, p. 8). In addition to this, viewing text-relevant video segments moves readers from sentence-level to discourse level through connecting the form to the meaning and helps them follow the text easier through connecting cognitive resources to previously constructed schemas (Alptekin & Ercetin, 2011). This is in line with the findings of Shin et al. (2019, p. 337). They argue that "the positive effect of prior knowledge on cognitive performance can be enhanced by high working memory capacity."

The SIP model also describes how the information is processed in the pre-reading stage after doing warm-up activities and playing text-relevant video segments. Based on this model,

… new information must move from working memory to long-term memory where relevant schemas have already been constructed. A good fit of the input into the existing and predefined schemas takes the input one level higher to the information-processing stage. If the input does not fit the existing schema, a violation occurs and sampling from the input starts over again. According to Goodman's psycholinguistic model of reading (Goodman, 1967, 1971, 1973a), input processing is 'an ongoing, cyclical process of sampling from the input text, predicting, testing and confirming or revising those predictions, and sampling further' (Carrell & Eisterhold, 1983, p. 554) (Karami, 2021, pp. 8–9)

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To process the information further, the individual should apply some strategies to be able to accommodate the input and connect it to the previously constructed schemas (Kucer, 2001). "Monitoring, summarizing, clarifying, questioning, visualizing, predicting, and organizing" are some of the strategies that readers can apply to create a connection between their background knowledge and new information (Pardo, 2004, p. 277). Reading comprehension is an "information laden" process in which the speed of the processing is important (Hannon, 2012). The slower the processing of information, the more probable the loss of the information in the individual's mind (Hannon, 2012). According to the SIP model, "the lack of common features between the reader's background knowledge and the content of the text means extra work on the part of the reader" (Karami, 2021, p. 9). The SIP model suggests that the utilization of text-relevant video segments can provide readers with more resources and help them process the information faster.

In addition to readers, teachers need to apply strategies to their reading instruction to facilitate the process of reading comprehension in the pre-reading stage. The pre-reading stage is called cueing by de Koning et al. (2009) or signaling by Brame (2016). In the SIP model, cueing or signaling takes different forms and is used to highlight the most important information. The teacher's intentional verbal signaling is a preferred form in the SIP model. This can be done by playing and pausing text-related video segments in the pre-reading stage (Karami, 2021). According to the SIP model,

> … short text-relevant video segments can provide a brief overview of the most important information about the content of the culturally unfamiliar text. Highlighting the key information by playing short text-relevant video segments before reading the text can direct readers' attention and ignite processing of the key information. Highlighting the key information or cueing not only brightens the key aspects or darkens the unnecessary aspects but also 'reduces the effects of extraneous cognitive load induced through unnecessary searches' (Ayres & Paas, 2007, p. 813). This activity can also reduce the 'extraneous load by helping

novice learners with the task of determining which elements within a complex tool are important, and it can also increase germane load by emphasizing the organization of and connections within the information' (Brame, 2016, p. 2). Germane load (GL) conceptualized by Sweller et al. (1998) refers to 'the mental resources devoted to acquiring and automating' schemas in long-term memory (Debue & van de Leemput, 2014, p. 2). (Karami, 2021, p. 10)

Finally, the SIP model highlights the importance of the pre-reading stage and its

vital role in deeper levels of information processing by

> … highlighting the key information in video segments in the pre-reading stage, signaling them, and targeting particular elements of the video for processing in the individual's working memory will direct the viewers' attention to the main purpose of the text. This will help readers not only think deeper about the text in advance, but it will also help them guess upcoming words, sentences, or even the content of the text. By the removal of input ambiguities in the confirmation stage and by providing readers with sufficient information via playing text-relevant video segments, teachers can help readers fit the input into their previously constructed schemas. The reader will then be able to move forward to deeper levels of information processing which is the interpretation stage. (Karami, 2021, p. 10)

The successful connection of new information to background knowledge through playing

video segments can transmit information more vividly because "dynamic pictures can effectively

enable viewers to encode and reintegrate their schemas in higher speed" (Liang, 2013, p. 599).

This can be achieved through the integration of multiple strategies into reading instruction.

Trabasso and Bouchard (2002, p. 184) argued that multiple strategies can enhance the good

performance of students in reading comprehension "tasks that involve memory, summarizing,

and identification of main ideas."

The second stage in the SIP model is called the while-reading stage. This stage focuses

on deeper levels of information processing and how different factors can influence this process.

The second stage, which is called the interpretation stage or the stage of meaning construction,

requires the simultaneous occurrence of bottom-up and top-down processing (Karami, 2021;

McNeil, 2011). Bottom-up processing fills out or instantiates schemas (Carrell & Eisterhold,

1983) and helps the processing of the novel concepts through making predictions and taking the smallest units. On the other hand, "top-down processing starts with general to confirm these predictions" (An, 2013, p. 130) and facilitate "their assimilation if they are anticipated by or consistent with the listener/reader's conceptual expectations" (Carrell & Eisterhold, 1983, p. 557). The SIP model suggests that the simultaneous occurrence of both modes, bottom-up and top-down, can move the input further to the next level of information processing in the individual's mind.

In addition to the simultaneous processing of information in the while-reading stage, some other factors seem to influence reading comprehension. For example, readers' interest and motivation are two factors that require the teacher's attention. The researcher highlights the importance of these two factors and divides them into internal and external factors. The "internal factors include the reader's interest level and intrinsic motivation" while the "external factors include extrinsic motivation which can vary from the teaching strategy to getting a good grade in the exam" (Karami, 2021, p. 11). Previous studies (e.g., Ng & Ng, 2015, p. 98) report that "individuals with the most remarkable abilities cannot accomplish long-term goals."

Some researchers (e.g., Butcher & Kintsch, 2003; Schallert & Martin, 2003) also mention the importance of readers' motivation in their engagement in the reading process. They highlight the possibility that readers' interests, emotions, and the purpose of reading can be affected by different factors. Being motivated and interested in the reading can pave the way for the input to fit into the existing schema in the reader's long-term memory. Some strategies can keep readers motivated and interested. According to Guilloteaux and Dörnyei (2008, p. 57), motivational strategies are composed of two facets. The first facet is called 'instructional interventions' which refers to the teacher's activities and programs to enhance students' motivation and keep them

engaged. The second facet is called 'self-regulating strategies' and refers to the strategies implemented by the individual readers to manage their level of motivation and interest and keep themselves motivated.

The SIP model also focuses on the motivational aspects of reading comprehension. The author highlights the importance of motivational theories in the SIP model. According to Marshall (2002), the theories of motivation and interest explain how learners are engaged, how their emotions are activated, and how their interest in a topic is initiated. Based on these theories, an appropriate video can "engage the learner, activate emotional states, initiate interest in a topic, and allow for absorption and processing of information" (Marshall, 2002, p. 7). The SIP model integrates both types of motivational strategies into reading instruction through playing text-relevant video segments. Readers are kept involved during the reading process by viewing the related video segments and relating them to their background knowledge and previously constructed schemas.

The SIP model clarifies the reasons for playing text-relevant video segments in the while-reading stage. In the SIP model,

> … it is important to play text-relevant video segments during the second stage of reading instruction for two reasons. The first reason is that the reading of a culturally unfamiliar text might be a cumbersome task for readers that could demotivate or even prevent them from following the text. Teachers need to keep readers motivated, engaged, and encouraged. The second reason is that text-relevant video segments can help deeper processing of information, facilitate the process of comprehending, and improve reading comprehension of culturally unfamiliar texts. Text-relevant video segments help readers transform information from their working to long-term memory even though the input is still controlled and needs further processing of information to be automated. (p.12)

The third reading stage in the SIP model is called the post-reading stage or comprehension-level processing. This is a very important stage since the comprehension of the

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content takes place. The transformation of the input from short-term memory (pre-reading stage) to long-term memory (while-reading stage) shapes the stepping stones for automatic processing. According to McLaughlin et al. (1983, p. 152), some skills (such as second language acquisition) involve "the gradual integration of lower-level skills and their accumulation as automatic processes in long-term storage."

Controlled processing is a "tightly capacity-limited" process that is "a temporary activation of nodes in a sequence" (McLaughlin et al., 1983, p. 139). On the other hand, automatic processing requires "the activation of certain nodes in memory every time the appropriate inputs are present" (McLaughlin et al., 1983, p. 139). In the SIP model, the movement of the input from controlled to automatic status is required for a response to be automated. This is the time when the comprehension of the text occurs. According to Young et al. (2015, p. 68), "when readers automatically recognize words, cognition is allocated for higher-level processes, such as reading comprehension."

Based on the SIP model, the implementation of text-relevant video segments in this stage can facilitate the comprehension process. In fact,

> … while the input is still in the controlled status, it has not been internalized yet and requires more time and attention in order to be automated. Extra repetition, sufficient attention, and more practice in real-life situations are required to move the input further in order to be internalized and transferred to the next status which is automatic status. According to the SIP model, video segments should be replayed at this stage since the processing of syntax imposes high cognitive demands on the reader's mind, so the reader may not be able to process other types of text-related information related to the culture of the target language (Herron et al., 2000) (Kararmi, 2021, p. 13).

The lack of relevant cultural schemas hinders the successful transformation of the information from the individual's short-term memory to long-term memory. This unsuccessful transformation results in the misinterpretation of the input. In a study, Steffensen et al. (1979, p.

11) reported that second language learners with foreign cultural schemas comprehend the text "quite differently from a native" speaker of that language "and probably will make what a native would classify as mistakes." Therefore, watching text-relevant video segments in the post-reading stage can provide viewers with the actual use of target words and sentences. "This will improve learners' knowledge of the target language and will also help them be more flexible not only in their word choices and grammar but also in other aspects such as pragmatics" (Karami, 2021, p. 13).

According to Prater (2009), readers' skills to decode a text, vocabulary knowledge and grammar, short-term memory, and inferential knowledge are some of the most important components of successful reading comprehension. The inclusion of text-relevant video segments in reading instruction can "bring relevant background knowledge to the reading process" through the allocation of "more attentional space for textual analysis and interpretation" of texts (Erten & Razi, 2009, p. 61). In other words, playing text-relevant video segments in three stages of reading instruction can help readers understand not only the content but also the structure of the text better (Karami, 2021) because of connecting "important ideas and integrating these ideas with prior knowledge and forming a strategically associated memory structure about the content" (Wijekumar et al., 2018, p. 6).

Limitations, Suggestions, and Implications of the Study for Teachers

Limitations and Suggestions

This study had some limitations. For example, a small number of participants participated in this study. It was difficult to recruit participants because the participation was voluntary and virtual via Zoom. In addition to this, there was a time or a scheduling conflict that was making it

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more difficult for participants to join the treatment sessions. Some participants were employed or college students. Therefore, they had to work full-time or study for their exams. Some of them even had to take some college classes at the same time.

The sampling method in this study was a non-probability sampling method due to the limited access to English language learners. The researcher sent out a survey to a group of English language learners in the Universidad Autónoma de Santo Domingo (UASD) School of Languages located in the Dominican Republic. Interested people completed a survey by choosing whether they like to participate in this study or not. Interested volunteers completed the consent form, and then the research process began. Although the non-probability sampling method was used in this study, the researcher tried to consider any evidence of bias against the study. For example, the participants were assigned randomly into two groups. Placement tests and pre-tests were used to homogenize the participants. Future studies could replicate this study by recruiting the participants with the probability sampling methods.

The duration of the study was also another issue. Volunteers knew from the consent form that their participation would last up to 10 hours including treatment sessions and taking some surveys, questionnaires, pre-test, immediate, and delayed post-tests. This load of work was demotivating them from being involved in this study.

Although the power analyses indicated that the sample size was large enough in this study, it seems that the involvement of a greater number of participants would add to the generalizability of the results. Therefore, future studies could replicate this study with a greater number of participants. In addition to this, it was impossible to control some confounding variables in this study. For example, the study was not conducted in an intact classroom. This means that the researcher had no control over students' activities during the treatment sessions.

Future studies could consider this and control as many confounding variables as possible. This study also did not consider covariates. For example, this study did not differentiate participants in terms of their gender, age, and education level. Future studies need to address them.

This study demonstrated the efficacy of blending more than one strategy to assist English Language Learners (ELLs) in better reading comprehension and longer retention. Therefore, it is suggested to apply blended strategies in language classrooms since the combination seems to be more productive. Luke et al. (2011, p. 159) suggested teachers add "cognitive and psycholinguistic approaches to comprehension" that "can be brought together with substantial engagement with (a) student cultural and linguistic resources and (b) rich, culturally relevant, and intellectually demanding themes, topics, and field knowledge" (Luke et al., 2011, p. 159).

This study investigated the effects of watching text-relevant video segments supported by the SIP model on reading comprehension of two different parts of a culturally unfamiliar text (a part without technical words and phrases vs. a part with technical words and phrases). Adult English language learners with higher-intermediate to advanced English language proficiency levels were the participants. Future studies need to focus on language younger learners with different language proficiency levels.

American football was the topic of this study. Future studies could focus on different culturally unfamiliar topics such as different traditional and cultural events in various countries or even topics from other subjects such as literature, history, civic education, and geography.

This study was conducted online via Zoom. Future studies can focus on in-person classes to control external variables as much as possible. This would also allow researchers to include video-based reading instruction supported by the SIP model in their lesson plans to investigate

the long-term effects of this strategy on readers' reading comprehension. Future studies need to be conducted in different intact classes and settings to compare this strategy with other strategies of reading instruction in terms of students' perceptions, feelings, and reactions.

Although 44 people participated in the immediate post-tests and 30 of them in the delayed post-tests, the results can be generalized to a specific population of English Language Learners (ELLs) who live in the Dominican Republic and share almost the same background knowledge about American football. Future studies need to replicate this study in other settings with participants from different cultural backgrounds.

The mixed-methods sequential explanatory design was applied to conduct and integrate the quantitative results with the qualitative findings in this study. Future studies need to apply only quantitative or just qualitative research methodology. Researchers also need to conduct a longitudinal case study to investigate this strategy further and even in detail by providing a rich description of the phenomena. Future studies also need to investigate the participants' interests and motivation by using previously developed questionnaires.

Implications of the Study for Teachers

For optimal reading instruction, Williams (1987) proposed three stages of pre-reading, while-reading, and post-reading. The most important stage is the pre-reading stage since the reader's background knowledge is activated and their prior experiences are recovered. In the pre-reading stage, new information can be accommodated and activated by using pictures and audio-visual materials (Al-Issa, 2006). In fact, the use of "pictures, slides, movies, games and other such devices" in the pre-reading stage can "activate and build upon the students' schema" (Al-Issa, 2006, p. 44).

Playing text-relevant video segments at the pre-reading stage can help readers take a sample from the input and test it against their previously constructed knowledge to see whether they can move forward in the processing of information. Craik and Lockhart (1972) explain how information is processed in the human mind. Based on their view, the depth of processing is linked to long-term retention of the information. The implementation of text-relevant video segments in the while-reading stage can deepen the processing of information in the reader's mind and result in "superior long-term retention" (McLaughlin et al., 1983, p. 138).

Playing text-relevant video segments in the post-reading stage can stabilize the content in the viewer's mind. Text-relevant video segments can allow the meaning of a word to become "generalized across encounters so that it loses connection to specific contexts, allowing it to be applied flexibly to new contexts" (McKeown et al., 2018, p. 576). This aligns with the argument of McLaughlin et al. (1983) who mentioned the importance of the holistic input and stated that "by dealing with related units of information rather than isolated bits, more efficient processing becomes possible" (p. 138). For example, if a passage is about family and the goal is for language learners to know more about family and different names assigned to family members, short video segments about family will provide a whole picture of the passage by including intended terms. This activity can activate the most appropriate and relevant schemas in viewers' minds so that they can speak about their family members by following the model. Viewing text-relevant video segments activates both verbal and visual channels (Mayer, 2001) because it is a multiple-layered strategy. The activation of both channels leads "to better learning outcomes if integration between narrative and educational contents are complementary" (Caspi et al., 2005, p. 34) and improves deeper levels of information processing.

Including text-relevant video segments can also assist the improvement of language skills and subskills such as listening, vocabulary, and grammar in addition to motivating readers and keeping them engaged. For example, text-relevant video segments can improve the vocabulary knowledge of the readers of culturally unfamiliar texts because videos can provide a rich and native-like context by reducing the contextual burden (Karami, 2019). Text-relevant video segments can provide viewers with an opportunity to see how native speakers of the target language deal with specific situations, and how they use the target language to express their meanings in terms of pragmatics.

Conclusion

Teaching culturally unfamiliar texts to adult English Language Learners (ELLs) was explored by comparing two different reading instructions (traditional text-based vs. video-based reading instruction supported by the SIP model). The results of the quantitative analysis, as well as the findings of the qualitative phase, indicated that video-based reading instruction could improve readers' comprehension of the content of the culturally unfamiliar text when technical words were absent or present, enhance their familiarity with the text, facilitate their ability to recall similar information faster from their previously constructed schemas, and help readers retain the content longer.

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Culturally Unfamiliar Text

Passage I

BRIEF GAME TUTORIAL

The sport of American football is unique in many respects when compared with most national and international team sports. It is the only sport in which overall team performance, outside of the scoring, is literally measured by inches. In its most basic form, American football consists of two teams with eleven players each. One team is awarded possession of the ball (offense) and is given an opportunity to score by driving through the other team in a series of set plays. The opposing team (defense) is tasked with trying to prevent the offense from advancing or scoring. Play begins with the offense awarded possession of the ball until it either scores, loses the ball to the other team during play, or has to relinquish possession to the other team. When the opposing team takes possession of the ball, it then becomes the offense and is given an opportunity to score, as the two teams reverse roles. The game continues in this fashion for one hour of playing clock time, which is divided into four quarters, with the teams changing direction of play on the field after each quarter.

Offensively, the team with possession of the ball can score by taking the ball, under control (caught or carried by an offensive player), across the plane of the end of the field (goal line – the beginning of the End Zone), resulting in a touchdown (6 points). Other scoring opportunities are provided when the ball is kicked between the goalposts in a field goal attempt (3 points), or during a Point After Touchdown (PAT) attempt (1 or 2 points, depending on PAT method, kick or run, respectively).

In order to score or get into scoring position, a team that is on the offensive must march down the field through a series of plays, called downs, until, if successful, they reach the End Zone by scoring a touchdown or a field goal. The team with possession of the ball is given four downs to cross at least ten yards of the field, after which, if successful, they are given a new set of four downs to cross another ten yards, and so on. If a team fails to cross ten yards of the field in four downs, it relinquishes the ball to the other team. If a team on offense senses, after the third down, that it will not reach the tenth yard, it may use its fourth down to "punt" the ball to the other team by kicking it as far into the opposing team's side of the field as possible so as to give the opposing team more yards to work with when they take possession. In a fourth down situation the offensive team may also elect to try a fourth down conversion to reach the tenth yard and thus assure a new set of downs, keeping the offensive drive alive.

Defensively, the team that is not awarded possession of the ball will try to thwart the offensive team's attempt to advance at every down. The objective for the defense is to stop the offense as soon as possible, through a turnover or through denial of the tenth yard. This is done by rushing at the offensive team at the snap of the ball and trying to either steal the ball away from the offense or grounding the ball through means of a "tackle." Tackling usually involves bringing the

offensive team's ball-carrier to the ground so that the ball, or specific parts of the ball carrier's body, touch the ground while the ball is still under control of the ball carrier. Once the ball touches the ground, the referee will blow a whistle, ruling the play "dead" and a new down is created for the offensive team, assuming the offense is still within their fourdown allotment. When a defensive team has been successful in stopping the offense and preventing a score, the offense is forced to turn possession of the ball over to the defensive team by means of a punt or, in a failed fourth down situation, by relinquishing possession of the ball at the last spotting of the ball. A defensive team may only score if it legally steals the ball from the offensive team and can bring the ball to the End Zone of the offensive team in one play, or, when an offensive player is tackled behind his own End Zone (a "safety" worth 2 points for the team on defense). Otherwise, within any offensive play, a defensive team is not given a legal opportunity to accrue yards or score. There are many other details concerning the rules of the game that should be studied in order to better understand what factors are critical to winning in the sport of American football. Of particular interest are the rules governing overtime play, when the game ends in a tie after regulation time expires. Usually, overtime play involves one regulation period (15 min) of sudden-death play. This means the first team to score wins.

Passage II

KEY FACTORS AND VARIABLES

The following list represents the most important factors and variables that affect the ability of a team in the NFL to win games.

General Factors
Total Yards (positive)
In the NFL, the team with the greatest number of total yards at the end of a game, will usually also win the game.

Time of Possession (positive)
Time of possession is normally associated with the team that is on offense. A team that possesses the ball longer also displays an ability to control the defense. Within a 60-minute NFL game, winning teams typically average times-of-possession in excess of 30 minutes, while losing teams average times of possession less than 30 minutes.

Home Field Advantage (positive for home team)
Often overlooked by those who seek performance-based factors that determine outcomes in NFL games, the home field advantage is considered to be a very powerful factor in winning NFL games.

Overtime First Possession (positive)
A highly decisive factor in winning when the game ends in a tie during regular play time, the first team to get possession of the ball during the overtime play will usually win the game.

Offensive Factors
Third-Down Conversions (positive)

A very important factor in winning games is the ability to gain the ten yards within four downs. Therefore, a critical factor in teams winning games is third-down conversions. That is, the ability to gain the tenth yard by the third play of each series.

Fourth-Down Conversions (positive)

The ability of a team to convert the tenth yard on fourth down. Typically, 4th down conversion attempts are made only when short of the tenth yard by inches or when winning seems out of reach and a desperate attempt is made to continue the march down field.

Yards per Play (positive)

Teams that are able to march or gain ten yards within one or two plays will tend to "move the chains" (a term indicating that a new set of downs is beginning and the ten yard markers on the sidelines are being moved to a new spot) regularly and have no trouble marching down for a score. Typically, teams that average more than five yards per play tend to be more successful in winning games.

Red Zone Conversions (positive)

The areas on the playing field extending from the 20 yard line to the goal line are referred to as the Red Zone. In this area, an offensive unit is normally within field goal distance and can elect to score 3 points by kicking the ball, or may attempt to score a touchdown (6 points) by driving further towards the goal line. Winning teams tend to score every time they reach the Red Zone.

Penalties and Penalty Yards (negative)

Penalties result in lost yardage. Because penalties are exacted by taking away yards gained, *number of penalties*, *yards per penalty*, and *total penalty yards* will greatly influence the outcome of a game.

Turnovers and Turnover Differential (negative)

A turnover is any play that unintentionally returns possession of the ball to the defensive team, thus making the defensive team into the offense. Recovered "fumbles" are the typical type of turnover. A *fumble* occurs when a player, who is deemed to have possession of the ball, loses control of the ball and allows the ball to touch the ground. Fumbles can be *forced* (by the defense) and *unforced* (lack of offensive ball control). When a fumble is recovered by the defensive team, it becomes a turnover and the defensive team takes possession of the ball and becomes the offense, getting the opportunity to score. Oftentimes, fumbles can result in direct scoring by the recovering defensive team.

Another type of turnover is the *interception*. An interception occurs when an offensive player (usually the quarterback) throws a pass and a defensive player catches the ball before the ball can land on the intended receiver or hits the ground.

Defensive Factors

Sacks (positive)

When the ball is snapped to initiate a play, the defense rushes towards the quarterback, or anyone who gets the ball, to tackle them or to turn the ball over. During this rushing by the defense, if they are able to tackle the quarterback behind the line of scrimmage before the quarterback is able to hand the ball to another offensive player, the defensive unit is credited with a "sack."

Tackling Efficiency: Tackles (positive) and Missed Tackles (negative)

The most important weapon for the defensive unit is the "tackle." A *tackle* is performed when a defensive player brings down an offensive player who possesses the ball and causes the ball, or certain parts of the player who is in possession of the ball, to touch the ground. A *missed tackle* occurs when a defensive player manages to wrap his arms around a player in possession of

the ball, but does not bring that player down, allowing the offensive player to gain additional yards.

Red Zone Stops (positive)

Red Zone stops occur when a defensive unit successfully prevents the offense from scoring after that offense reaches the Red Zone.

Red Zone Forced Field Goals (positive)

Once an offensive team has reached the Red Zone, the ability of an NFL kicker to kick the ball through the uprights is practically assured. As such, an offense that has reached the Red Zone is assumed to be able to score at least 3 points. A defense that can limit the damage caused by an offense that has reached the Red Zone to 3 points is effective in diminishing the offensive team's ability to score.

Forced Turnovers: Forced Fumbles,
Recovered Fumbles and Interceptions (positive)

Defensive units that create turnovers in possession by forcing the offense to fumble the ball, or by intercepting passes, create changes in the momentum of the game that favors the defensive unit's team and increases the team's ability to win. This includes *forced fumbles*, *recovered fumbles* and *interceptions*.

Forced Safety (positive)

When a defensive unit drives the offense backwards, past the offense's own goal line, that defensive unit will score two (2) points as a "safety." This is the only legal way for a defensive team to score points as a defensive team and occurs very infrequently during an entire season of play.

Special Teams Factors

Punt and Kick-Return Yards (positive)

During a kick-off, when a team first kicks off to the offense, or when the offense kicks a punt to the defense to relinquish possession of the ball, the "new" offense will catch the ball and try "returning" it as far as they can on the field by having a player run back with the ball. The number of yards that the kick return team is able to return the ball during these Special Teams plays are included in the *total yards* calculations.

Field Goal Attempts and Conversions (positive)

The decision to attempt a field goal (3 points) is a tactical decision made by a team's coaching staff. Usually, the decision to attempt to score a field goal depends greatly on the distance remaining to the goal posts and the ability of a team's kicker.

Point After Touchdown (PAT) Attempts and Conversions (positive)

A PAT is an attempt to kick the ball through the uprights from the 3 yard line, immediately following a touchdown. A successful PAT is worth one point and, normally, is converted almost 100% of the times attempted.

The passage was taken from the following website:
https://www.sportsci.org/2011/go.htm

Pre-Test

Multiple-Choice Reading Comprehension Test

1) How is the overall team performance measured in American football?   1 point

   ○   a) Miles

   ○   b) Meters

   ○   c) Inches

   ○   d) Centimeters

2) How many ways are there for a team with possession of the ball to score points   1 point
   in American football?

   ○   a) Two

   ○   b) Three

   ○   c) Four

   ○   d) One

3) In the National Football League (NFL), the team with the greatest number of   1 point
   ……………. will usually win the game.

   ○   a) Total yards

   ○   b) Tackles

   ○   c) Punts

○   d) Penalties

4) In American football, after the first successful movement of the offense, a new
set of ……………… to cross another ……………….. is given to the team with
possession of the ball.   **2 points**

○   a) 10 downs – 4 yards

○   b) 4 downs – 4 yards

○   c) 4 downs – 10 yards

○   d) 10 downs – 10 yards

5) What is the main goal of the opposing team in American football?   **1 point**

○   a) Trying to thwart the offensive team's attempt to advance at every down.

○   b) Trying to pass the ball to the offense team and help them advance at every down.

○   c) Trying to help the offensive team's attempt to advance at every down.

6) In a typical NFL game, a team will field ……………… separate and distinct set
of players for playing offense and defense.   **1 point**

○   a) Three

○   b) Two

○   c) One

○   d) Four

7) …………….. with ……………….. in each are involved in its most basic form
of American football.   **2 points**

○   a) One team – Ten players

○   b) Two teams – Eleven players

○   c) Two teams – Ten players

○   d) One team – Eleven players

8) In American football, the offense will score at least ……………….. points   1 point
when they reach the Red Zone.

○   a) 3

○   b) 2

○   c) 1

○   d) 6

9) In general, turnovers and turnover differentials are ………………. in the   1 point
performance of teams in American football.

○   a) Neutral

○   b) Positive

○   c) Negative

10) The main purpose of the offense, in American football, is ……………….. .   1 point

○   a) To pass the ball to the other team and assist them to move forward at every down.

○   b) To prevent the offensive team's attempt to move forward at every down.

○   c)   To march down the field in order to score or to get into the scoring position.

11) In general, tackles are ………………… factors, but missed tackles are   2 points
………………….. factors in American football.

○   a)   Negative – Positive

○   b)   Positive – Negative

○   c)   Positive – Positive

○   d)   Negative – Negative

12) Sudden-death play is played in …………………… .   1 point

○   a)   2 periods of 15 minutes

○   b)   1 regulation period (15 minutes)

○   c)   2 periods of 10 minutes

○   d)   1 regulation period (10 minutes)

Multiple-Choice Vocabulary Test

1)   In American football, one team is called ………………. and the other team   1   point
is called ………………… .

○   a)   Defense – Offense

○   b)   Defense – Neutral

○   c)   Neutral – Offense

○   d) Neutral – Neutral

2) What is the following area called in American football?   1 point
     "The area that is extending from the 20-yard line to the goal line."

    ○   a) Red Zone

    ○   b) Goal Line

    ○   c) Side Lines

    ○   d) End Zone

3) In American football, the team that has the ball and is given the opportunity   1 point
     to score by driving through the other team is called…………………. .

    ○   a) Offense

    ○   b) Neutral

    ○   c) Defense

4) In American football, any unintentional return of the ball to the defensive   1 point
     team is called ……………. .

    ○   a) Turnover

    ○   b) Tackle

    ○   c) Sack

    ○   d) Penalty

5) Which football operation is described by the following explanation?
     "……………. happens when forcing the offensive team's ball-carrier down   1 point
     to the ground so that the ball or specific parts of the body of the ball carrier
     touches the ground while the ball is still under control of the ball carrier."

○   a) Possession

○   b) Marching

○   c) Tackling

○   d) Stealing

6) ………………… is another type of turnover.   1 point

○   a) Sack

○   b) Tackle

○   c) Penalty

○   d) Interception

7) In American football, ………….. occurs when a player loses control of the   1 point
ball in such a way that the ball touches the ground.

○   a) Fumble

○   b) PAT

○   c) Punt

○   d) Tackle

8) What is it called when "the ball does touch the ground and the referee blows   1 point
a whistle, then, a new down is created for the offensive team?"

○   a) Dead

○ b) Grounding

○ c) Turnover

○ d) Stealing

9) Which football operation is described by the following statement? "An offensive player throws a pass and a defensive player catches the ball before the ball can land on the intended receiver or hits the ground." 1 point

○ a) Interception

○ b) Punt

○ c) Sacks

○ d) Kick-return

10) The most important weapon for the defensive unit is the ……………… . 1 point

○ a) Forced safety

○ b) Conversions

○ c) Kick-off

○ d) Tackle

Open-Ended Question

1) Write down a summary of what you know about American football.

Appendix C

Immediate Post-Test (Passage I)

Multiple-Choice Reading Comprehension Test

1) The main point of this article is about ……………….. .   1 point

   ○   a) Popularity of American football in the world

   ○   b) Rules and regulations of American football

   ○   c) Introducing the American football field

   ○   d) Cooperation and collaboration of the players in the field

2) The overall team performance in American football is measured by ……. .   1 point

   ○   a) Meters

   ○   b) Inches

   ○   c) Centimeters

   ○   d) Miles

3) In its most basic form, American football consists of ……………… with   2 point
   …………….. in each team.

   ○   a) One team – Eleven players

   ○   b) Two teams – Ten players

   ○   c) Two teams – Eleven players

○   d) One team – Ten players

4) How long does American football last?   1 point

○   a) The game continues for two hours of playing clock time which is divided into four quarters.

○   b) The game continues for one hour of playing clock time which is divided into two halves.

○   c) The game continues for two hours of playing clock time which is divided into two halves.

○   d) The game continues for one hour of playing clock time which is divided into four quarters.

5) According to the article, how many ways are there for a team to score   1 point
   points in American football?

○   a) One

○   b) Two

○   c) Three

○   d) Four

6) Touchdown results in …………………… .   1 point

○   a) 6 points

○   b) 1 or 2 points

○   c) 3 points

7) Point After Touchdown attempt results in ……………… .   1 point

○   a) 6 points

○   b) 3 points

○   c) 1 or 2 points

8) The team with possession of the ball is given ……………… to cross at   2 points
    least …………….. of the field.
    ○   a) 10 downs – 4 yards

    ○   b) 10 downs – 10 yards

    ○   c) 4 downs – 10 yards

    ○   d) 4 downs – 4 yards

9) For a successful movement of the offense, they are given a new set of   2 points
    ……………. to cross another …………….. and so on.
    ○   a) 10 downs – 10 yards

    ○   b) 4 downs – 10 yards

    ○   c) 4 downs – 4 yards

    ○   d) 10 downs – 4 yards

10) What is the main goal of the opposing team in American football?   1 point

    ○   a) Trying to thwart the offensive team's attempt to advance at every down.

    ○   b) Trying to help the offensive team's attempt to advance at every down.

    ○   c) Trying to pass the ball to the offensive team and help them advance at every
         down.

11) A(n) ………….. team may only score if it legally steals the ball from the   1 point
    other team and can bring the ball to the End Zone of the other team in one

play, or, when a player of one of the teams is tackled behind his own End Zone (a "safety" worth 2).

○   a) Offense

○   b) Defense

12) Overtime play involves …………………. Of sudden-death play.   1   point

○   a) Two periods of 10 minutes

○   b) One regulation period (10 minutes)

○   c) Two periods of 15 minutes

○   d) One regulation period (15 minutes)

Multiple-Choice Vocabulary Test

1) In American football, the team that has the ball and is given an opportunity   1   point
   to score by driving through the other team is called **……………… .**
   ○   a) Defense

   ○   b) Neutral

   ○   c) Offense

2) In American football, the team that is preventing the other team from
   advancing or scoring is called ………………. .   1 point

   ○   a) Defense

○   b)   Neutral

○   c)   Offense

3) The line between the End Zone and the field is called ……………… .   1 point

    ○   a)   Side Lines

    ○   b)   Front Line

    ○   c)   Goal Line

    ○   d)   Yard Line

4) Choose the best option that describes the term "downs".   1 point

    ○   a)   It is an area of the football field.

    ○   b)   It is a positive special team factor.

    ○   c)   It is a series of plays of the offensive side.

    ○   d)   It is an attempt at the End Zone.

5) What is "punt" in American football?   1 point

    ○   a)   Kicking the ball as far into the opposing team's side of the field as possible so as to give the opposing team more yards to work with when they take possession.

    ○   b)   Giving a new set of four downs to cross another ten yards.

    ○   c)   Trying a fourth down conversion to reach the tenth yard and thus assure a new set of downs, keeping the offensive drive alive.

○   d) Reaching the End Zone by scoring a touchdown or a field goal.

6) PAT stands for …………………. .   1 point

○   a) Point After Touchdown

○   b) Practices And Trends

○   c) Point After Trends

○   d) Preferences and Trends

7) The following statement describes the ……………. .
"Offensively, the team with possession of the ball can score by taking the ball, under control, across the plane of the end of the field.   1 point

○   a) Tackle

○   b) Turnover

○   c) Touchdown

○   d) Stealing

8) Once the ball touches the ground, the referee will blow a whistle, ruling the play …………. and a new down is created for the offensive team, assuming the offense is still within their four-down allotment.   1   point

○   a) Stealing

○   b) Grounding

○   c) Turnover

○   d) Dead

9) Which term describes the following statement? "When the game ends in a tie after regulation time expires and the first team to score wins."   1 point

   ○   a) PAT

   ○   b) Kick-offs

   ○   c) Sudden-death play

10) Bringing the offensive team's ball-carrier to the ground so that the ball, or specific parts of the ball carrier's body, touches the ground while the ball is still under control of the ball carrier is called ………….. .   1 point

   ○   a) Possession

   ○   b) Tackling

   ○   c) Marching

   ○   d) Stealing

Open-Ended Question

1) Write down a summary of what you remember from section A.

Delayed Post-Test (Passage I)

Multiple-Choice Reading Comprehension Test

1) American football continues for ……………. Of playing clock time.   1 point

    ○   a) Three hours

    ○   b) Two hours

    ○   c) One hour

    ○   d) Four Hours

2) The time of playing American football is divided into ………………. .   1 point

    ○   a) 4 quarters

    ○   b) 2 halves

    ○   c) 4 halves

    ○   d) 2 quarters

3) How many teams are played in American football?   1 point

    ○   a) 5

    ○   b) 4

    ○   c) 2

○   d) 1

4) How many players do each team have on the field in American   1 point
football?

○   a) 13

○   b) 12

○   c) 11

○   d) 10

5) Which distance unit is used to measure the overall performance of teams in   1 point
American football?

○   a) Miles

○   b) Centimeters

○   c) Inches

○   d) Meters

6) The offense is given ……………… to cross at least ………………. of the   2 points
field.

○   a) 10 downs – 10 yards

○   b) 10 downs – 4 yards

○   c) 4 downs – 4 yards

○   d) 4 downs – 10 yards

7) There is/are (a) way(s) for a team to score points in American football.   1 point

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○   a) Three

○   b) One

○   c) Two

○   d) Four

8) If a team fails to cross ………………. of the field in …………………, it   2 points
relinquishes the ball to the other team.

○   a) 4 yards – 10 downs

○   b) 4 yards – 4 downs

○   c) 10 yards – 4 downs

○   d) 10 yards – 10 downs

                        1 point

9) PAT has ……………….. points.

○   a) Six points

○   b) Three points

○   c) One or two points

○   d) No points

10) Touchdown results in ………………… .   1 point

○   a) Six points

○   b) Three points

○   c) One point

○   d) Two points

11) Overtime play involves one regulation period of ……………… .   1 point

○   a) 10 minutes

○   b) 30 minutes

○   c) 20 minutes

○   d) 15 minutes

12) The opposing team is trying to ………………… .   1 point

○   a) Pass the ball to the other team and assist them to move forward at every down

○   b) Help the offense team's attempt to move forward at every down

○   c) Prevent the offensive team's attempt to move forward at every down.

13) Which team can score based on the following technique: "It legally steals the
    ball from the other team and can bring the ball to the End Zone of the other
    team in one play, or, when a player of one of the teams is tackled behind his   1 point
    own End Zone (a "safety" worth 2).

○   a) Offensive

○   b) Defensive

Multiple-Choice Vocabulary Test

1) In American football, the team that is preventing the other team from advancing or scoring is called ………………. .   1 point

    ○   a) Defense

    ○   b) Neutral

    ○   c) Offense

    ○   d) None of the above

2) The following statement describes the ....   1 point
In American football, this "team that has the ball and is given an opportunity to score by driving through the other team in a series of set plays."

    ○   a) Defense

    ○   b) Neutral

    ○   c) Offense

    ○   d) b & c

3) The word "downs" refers to …………………. .   1 point

    ○   a) A series of plays of the offensive side

    ○   b) An area of the football field

    ○   c) An attempt at the End Zone

    ○   d) A positive special team factor

4) The following definition refers to the ……………………. .   1 point
"The line between the field and the End Zone"

○   a) Front Line

○   b) Yard Line

○   c) Side Lines

○   d) Goal Line

5) …………… occurs when the team with possession of the ball moves offensively, and scores by taking the ball under control across the plane of the end of the field.   1 point

○   a) Turnover

○   b) Stealing

○   c) Touchdown

○   d) Tackle

1 point

6) PAT is the short form of the ………………… .

○   a) Point After Trends

○   b) Preferences And Trends

○   c) Practices And Trends

○   d) Point After Touchdown

1 point

7) An operation is called "punt" when …………………………. .

○   a) Moving a new set of 4 downs to cross another 10 yards in the field

   ○   b) Reaching the End Zone by scoring a touchdown or a field goal

   ○   c) A fourth down conversion occurs to reach the tenth yard in order to assure a new set of downs, keeping the offensive drive alive

   ○   d) The ball is kicked as far into the opposing team's side of the field as possible in order to give the opposing team more yards to work with when they take possession of the ball

8) What is the meaning of the "sudden-death play"?   1 point

   ○   a) The first team to score loses.

   ○   b) The first team to score wins.

   ○   c) a & b

   ○   d) None of the above

9) ……………… occurs when forcing the offensive team's ball-carrier down to the ground in such a way that the ball or specific parts of the body of the ball carrier touch the ground while the ball is still under control of the ball carrier.   1 point

   ○   a) Marching

   ○   b) Possession

   ○   c) Stealing

   ○   d) Tackling

10) The following definition explains …………………… .
"When the ball touches the ground and the referee blows a whistle, then, a new down is created for the offensive team, assuming the offense is still within their four down allotment.   1 point

○   a) Grounding

○   b) Dead

○   c) Stealing

○   d) Turnover

Open-Ended Question

1) Write down a summary of what you remember from section A.

Appendix E

Immediate Post-Test (Passage II)

Multiple-Choice Reading Comprehension Test

1) Which factors are considered to be positive factors for the offense in American football?   4 points

     ○   a) Third-down conversions

     ○   b) Fourth-down conversions

     ○   c) Yards per play

     ○   d) Red Zone conversions

     ○   e) Penalties and penalty yards

     ○   f) Turnover and turnover differential

     ○   g) Tackles

     ○   h) Missed tackles

2) Which factors are considered to be positive factors for the defense in American football?   3 points

     ○   a) Sacks

     ○   b) Forced safety

     ○   c) Interceptions

○   d) Missed tackles

○   e) Turnover and turnover differential

3) Under almost all conditions of play, in the NFL, the team with the greatest
number of ……………. at the end of a game, will usually also win the   1 point
game.

○   a) Tackles

○   b) Punts

○   c) Total yards

○   d) Sacks

4) Within a 60-minute NFL game, winning teams typically
average…………………. in excess of 30 minutes.   1 point

○   a) Total yards

○   b) Time of possession

○   c) Tackle

○   d) Both a & b

5) In a typical NFL game, a team will field ……… separate and distinct set of
players for playing offense and defense.   1 point

○   a) One

○   b) Four

○   c)   Three

○   d)   Two

6) According to the article, typically, teams that average more than five………… typically tend to be more successful in winning games.   1 point

○   a)   Offensives

○   b)   Defensives

○   c)   Total yards

○   d)   Yards per play

7) Within ……………. an offensive unit can score 3 points by kicking the ball or may attempt to score a touchdown (6 points) by driving further towards the goal line.   1 point

○   a)   Goal line distance

○   b)   Yards

○   c)   Red Zone distance

○   d)   Field goal distance

8) The offense is assumed to be able to score at least ……… points by reaching the Red Zone.   1 point

○   a)   6

○   b)   1

○   c)   2

○   d)   3

9) The number of ………… that the kick return team is able to return the ball during these Special Teams plays are included in the calculations of total yards.   1 point

○   a)   Inches

○   b)   Meters

○   c)   Yards

○   d)   Centimeters

10) A successful PAT is worth ……….. and, normally, is converted almost 100% of the times attempted.   1 point

○   a)   Three points

○   b)   Six points

○   c)   One point

○   d)   Two points

Multiple-Choice Vocabulary Test

1) The ability to gain the tenth yard by the third play of each series is called………. .   1 point

○   a)   First-down conversion

○   b)   Second-down conversion

○   c) Third-down conversion

○   d) Fourth-down conversion

2) In American Football, the areas on the playing field extending from the 20-yard line to the goal line are referred to as the ……………. .   1 point

○   a) Red Zone

○   b) Side Lines

○   c) End Zone

○   d) Goal Line

3) What is it called when a defensive player brings down an offensive player holding the ball and causes the ball or the player who is in possession of the ball, to touch the ground?   1 point

○   a) Missed tackle

○   b) Interception

○   c) Tackle

○   d) Fumble

4) Any play that unintentionally returns possession of the ball to the defensive team, thus making the defensive team into the offense is called……… .   1 point

○   a) Penalty

○   b) Kick

○   c)   Tackle

○   d)   Turnover

5) What is this performance called in American football?
"A .... occurs when a player, who is deemed to have possession of the   1 point
ball, loses control of the ball and allows the ball to touch the ground."

○   a)   Fumble

○   b)   Tackle

○   c)   Punt

○   d)   PAT

6) The following statement describes a(n) ....
"A(n) ……………. Occurs when an offensive player (usually the quarterback)   1 point
throws a pass and a defensive player catches the ball before the ball can land on
the intended receiver or hits the ground."

○   a)   Total yards

○   b)   Fourth-down conversions

○   c)   Penalty

○   d)   Interception

7) The type of fumble performed by the defense is called …………….. .   1 point

○   a)   Unforced

○   b)   Forced

○ c) Neutral

8) Fumbles are ……………… .   1 point

○ a) 1 type

○ b) 2 types

○ c) 3 types

○ d) 4 types

9) Which statement describes a "sack" in American football?   1 point

○ a) When the ball is snapped to initiate a play, the defense rushes towards the quarterback, or anyone who gets the ball, to tackle them or to turn the ball over.

○ b) When winning seems out of reach and a desperate attempt is made to continue the march down field.

○ c) When the game ends in a tie during regular play time, the first team to get possession of the ball during the overtime play will usually win the game.

○ d) When the opposing team takes possession of the ball, it then becomes the offense and is given an opportunity to score, as the two teams reverse roles.

10) "Move the chains" means …………….. .   1 point

○ a) A new set of downs is beginning and the ten-yard markers on the sidelines are being moved to a new spot.

○ b) Choosing to punt the ball away to the defense.

○ c) Trying to upset the quarterback's ability to throw the pass.

○ d) Forcing the offense to fumble the ball, or by intercepting passes, create changes in the momentum of the game that favors the defensive unit's team and increases the team's ability to win.

Open-Ended Question

1) Write down a summary of what you remember from section B.

Delayed Post-Test (Passage II)

Multiple-Choice Reading Comprehension Test

1) Please read each statement and choose the best option.   1 point
A) Sack is a…………… factor for the defense.

    ○   a) Negative

    ○   b) Neutral

    ○   c) Positive

B) Fourth-down conversion is a …………….. factor for the offense.   1 point

    ○   a) Negative

    ○   b) Neutral

    ○   c) Positive

C) Penalties and penalty yards for the defensive unit are
…………………..factors.   1 point

    ○   a) Negative

    ○   b) Neutral

    ○   c) Positive

D) Third-down conversion is a ……………… factor for the offense.   1 point

    ○   a) Negative

○   b) Neutral

○   c) Positive

E) Turnovers are ………………… factors.   1 point

○   a) Negative

○   b) Neutral

○   c) Positive

2) The team with the greatest number of ……………. at the end of a game, will win the game.   1 point

○   a) Players

○   b) Tackles

○   c) Penalties

○   d) Total yards

3) When the ball is snapped to initiate a play, the defense rushes towards the ...., or anyone who gets the ball, to tackle them or to turn the ball over.   1 point

○   a) Kicker

○   b) Defensive player

○   c) Quarterback

○   d) Coach

4) Within a 60-minute NFL game, winning teams typically average times-of-possession in excess of ………. minutes.   1 point

○   a) 20

○   b) 30

○   c) 40

5) ……… separate and distinct set of players will field for playing offense and defense in a typical NFL game.   1 point

○   a) Four

○   b) Three

○   c) Two

○   d) One

6) The following is happening in the ……………. .
"Within this area, an offensive unit is normally within field goal distance and can elect to score 3 points by kicking the ball or may attempt to score a touchdown (6 points) by driving further towards the goal line."   1 point

○   a) Red Zone

○   b) Goal Line

○   c) Yards

○   d) End Zone

7) Which defensive factor is considered to be positive for the defense?   1 point

   ○   a) Interceptions

   ○   b) Overtime play

   ○   c) PAT

8) Which defensive factor is considered to be negative for the defense?   1 point

   ○   a) Interceptions

   ○   b) Missed tackles

   ○   c) Penalties and penalty yards

9) A(n) .... that has reached the Red Zone is assumed to be able to   1 point
score at least 3 points.

   ○   a) Defense

   ○   b) Offense

10) Red Zone stops occur when a(n) .... unit successfully prevents the   1 point
other team from scoring after they reach the Red Zone.

   ○   a) Offensive

   ○   b) Defensive

11) Tackles are performed with players of the ....   1 point

○ a) Defensive

○ b) Offensive

○ c) Quarterback

Multiple-Choice Vocabulary Test

1) Third-down conversions were defined as "…………………………..".   1 point

○   a) The ability to gain the tenth yard by the third play of each series.

○   b) The ability to gain the eighth yard by the second play of each series.

○   c) The ability to gain the second yard by the eighth play of each series.

○   d) The ability to gain the Third yard by the tenth play of each series.

2) A .... occurs when a player, who is deemed to have possession of the
   ball, loses control of the ball and allows the ball to touch the ground.   1 point

○   a) PAT

○   b) Punt

○   c) Tackle

○   d) Fumble

3) A turnover is ……………………….. .   1 point

○   a) Any play that intentionally does not return possession of the ball to the offensive
       team, thus making the offensive team into the defense.

b) Any play that unintentionally returns possession of the ball to the defensive team, thus making the defensive team into the offense.

4) ………………. Was/were defined as the area on the playing field extending from the 20-yard line to the goal line.

1 point

   a) Side Lines

   b) Red Zone

   c) Goal Line

   d) End Zone

5) Which statement describes the tackle?

1 point

   a) A defensive player brings down an offensive player who possesses the ball and causes the ball, or certain parts of the player who is in possession of the ball, to touch the ground.

   b) Tackle is the same as the penalty.

   c) An offensive player brings down a defensive player who possesses the ball and causes the ball, or certain parts of the player who is not in possession of the ball, to touch the ground.

   d) Tackle is the same as the fumble.

1 point

6) Fumbles are …………… types.

   a) 1

   b) 3

   c) 2

○ d) 4

7) The type of fumbles performed by defense is called ....   1 point

○   a) Unforced

○   b) Forced

○   c) Neutral

8) What is the meaning of "move the chains" in the article?   1 point

○   a) Trying to upset the quarterback's ability to throw the pass.

○   b) A new set of downs is beginning and the ten-yard markers on the sidelines are being moved to a new spot.

○   c) Forcing the offense to fumble the ball, or by intercepting passes, create changes in the momentum of the game that favors the defensive unit's team and increases the team's ability to win.

○   d) Electing to punt the ball away to the defense.

9) The following statement describes the .... in American football.
"When the ball is snapped to initiate a play, the defense rushes towards the   1 point
quarterback, or anyone who gets the ball, to tackle them or to turn the ball over."

○   a) Punt

○   b) Sack

○   c) Fourth-down conversions

10) Which statement describes the interception?   1 point

a) A defensive player (usually the quarterback) throws a pass and an offensive player catches the ball before the ball can land on the intended receiver or hits the ground.

b) Two offensive players (usually the quarterback) throw a pass and two defensive players catch the ball before the ball can land on the intended receiver or hits the ground.

c) Two defensive players (usually the quarterback) throw a pass and two offensive players catch the ball before the ball can land on the intended receiver or hits the ground.

d) An offensive player (usually the quarterback) throws a pass and a defensive player catches the ball before the ball can land on the intended receiver or hits the ground.

Open-Ended Question

1) Write down a summary of what you remember from Section B.

Appendix G

Interview Questions

Interview Questions for the Control and the Experimental Group

1) How did you feel about the text?
2) Was the text culturally familiar to you? Why or why not?
3) Could you make a connection between the text and your background knowledge or prior experience? How? Can you please explain more?
4) In your opinion, what helped you to understand the text successfully?
5) Did you have enough vocabulary knowledge to understand the text?
6) Do you think that the topic was interesting enough for you to read the text? Why?
7) Do you have any suggestions for the researcher about how to improve the participant's comprehension of the text?

Interview Questions for the Experimental Group

1) Do you think that text-relevant video segment helped you in the comprehension of the text? Why or why not?
2) How do you feel about the video?
3) Did you connect the video to your background knowledge or prior experience? How?
4) Did it enhance your interest in reading the text carefully? How?
5) Did text-relevant video segments help you to guess the meaning of the unknown words in the text? How?
6) Which one was more helpful in comprehending the text? Text-relevant video segments, text, or a combination of both?

Appendix H

Links to the Video Segments

Passage I

Pre-Reading Video Segments:

1) Video segments played in the pre-reading stage:

https://www.youtube.com/watch?v=3t6hM5tRlfA

https://howtheyplay.com/team-sports/How-to-Understand-Football

While-Reading Video Segments:

1) After paragraph 1: One minute of the following video segment.
https://www.youtube.com/watch?v=Ddwp1HyEFRE

2) After paragraph 2:
https://operations.nfl.com/the-rules/nfl-video-rulebook/scoring-plays/

3) After paragraph 3: Parts related to the "punt" from seconds 1 – 1:33.
https://www.youtube.com/watch?v=FZMAK3nQlMo

After paragraph 3: The whole video segment.
https://www.sbnation.com/2018/12/11/18058128/nfl-punting-art-form-golden-age-evolution

4) For the first part of paragraph 4 related to the "tackle": Seconds 1 – 57
https://www.youtube.com/watch?v=TghA-qbwQA4

5) Paragraph 4 – Related to the "stealing the ball"
https://www.youtube.com/watch?v=WoGCbxK1VuQ

6) After paragraph 4: From minute 3 to 4.
https://www.youtube.com/watch?v=Ddwp1HyEFRE

Post-Reading Video Segments:

https://www.youtube.com/watch?v=3t6hM5tRlfA

https://www.youtube.com/watch?v=Ddwp1HyEFRE (seconds 1 – 55) (seconds 1:08 – 1: 50) (seconds 2:20 – 2:25) (seconds 3:01 – 4:16)

https://operations.nfl.com/the-rules/nfl-video-rulebook/scoring-plays/

Passage II

Pre-Reading Video Segments:

https://www.youtube.com/watch?v=3t6hM5tRlfA

https://howtheyplay.com/team-sports/How-to-Understand-Football

https://www.youtube.com/watch?v=Ddwp1HyEFRE

https://operations.nfl.com/the-rules/nfl-video-rulebook/scoring-plays/

https://www.youtube.com/watch?v=FZMAK3nQlMo

https://www.sbnation.com/2018/12/11/18058128/nfl-punting-art-form-golden-age-evolution

https://www.youtube.com/watch?v=TghA-qbwQA4

https://www.youtube.com/watch?v=WoGCbxK1VuQ

https://www.youtube.com/watch?v=Ddwp1HyEFRE

https://operations.nfl.com/the-rules/nfl-video-rulebook/scoring-plays/

While-Reading Video Segments:

1) After Third-Down Conversion:

https://www.youtube.com/watch?v=wq7HVoQ029U

2) After Fourth-Down Conversion:

https://www.youtube.com/watch?v=xYRhSu8DeRg (Seconds: 0 – 1:02)

https://www.youtube.com/watch?v=_JBBC8bk84I (Seconds: 0 – 1:00)

3) Penalties

https://www.youtube.com/watch?v=Ddwp1HyEFRE (Seconds 5:16 – 5:25)

https://www.youtube.com/watch?v=5ZgICeN3Oc8 Seconds 0 – 1:06

4) Turnovers and Turnover Differential: Interception & Fumble

https://www.youtube.com/watch?v=pD48miQmXz0

https://www.youtube.com/watch?v=zYz0O0-84BY (seconds 1 – 1:20)

5) Quarterback:

https://www.youtube.com/watch?v=Ddwp1HyEFRE (seconds: 1:53 – 2:03)

6) Sacks

https://www.youtube.com/watch?v=3Dfq2A7uiTE____

https://www.youtube.com/watch?v=Ddwp1HyEFRE (Seconds 4:51 – 5:03)

7) Tackles

https://www.youtube.com/watch?v=WF9IX7WJEkk (seconds 0 – 1:01)

8) Missed Tackles

https://www.youtube.com/watch?v=sSdczWAHz58 (Seconds 0 – 1:04)

9) Red Zone Stop

https://www.youtube.com/watch?v=lSXOJf6VSBI (Seconds 40 – 1:20)

10) Recovered Fumbles and interceptions

https://www.youtube.com/watch?v=mZooIzPiXbY (Seconds 0 – 1:10)

11) Fumble

https://www.youtube.com/watch?v=Ddwp1HyEFRE (Seconds 4:29 – 4:38)

12) Interception

https://www.youtube.com/watch?v=Ddwp1HyEFRE (Seconds 4:38 – 4: 51)

13) Safety

https://operations.nfl.com/the-rules/nfl-video-rulebook/safety/

14) Forced Safety

https://www.youtube.com/watch?v=yv1kh_ssiKU (Seconds 16 – 1:12)

15) Punt and Kick-Return Yards

https://www.youtube.com/watch?v=yWp3pCbRqg4 (Seconds 0 – 1:16)

https://www.youtube.com/watch?v=Y0BZW478tCQ_____

https://www.youtube.com/watch?v=X7BepDe6Zoc (Seconds 44 – 1:28)

16) Point after Touchdown

https://www.youtube.com/watch?v=QW1KvDpEacA

Post-Reading Video Segments:

Replay all video segments indicated above.

Universidad Autónoma de Santo Domingo
Primada de América
Fundada el 28 de octubre del 1538

Facultad de Humanidades
Escuela de Idiomas
"Año de la Integración y Renovación Académica"

November 16, 2020
Ciudad Universitaria
Santo Domingo, D. N.,
Dominican Republic

Honorable authorities of the University of Arkansas (UARK), United States,

After a respectful greeting, hoping that upon receiving this communication you are in good health, I have the pleasure to inform you that our Language School, of our Universidad Autónoma de Santo Domingo (UASD), the first in the Americas, has granted permission to the honorable professor Amirreza Karami, researcher of your prestigious university, to apply his doctoral thesis instruments to the students of the Modern Languages career who belong to our School, which is part of our Faculty of Humanities.

We are very grateful for your time and understanding,

Sincerely,

Prof. René Olivares Lajara
Director of the Language School
Faculty of Humanities, UASD
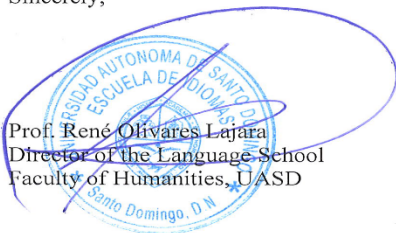
UNIVERSITY OF ARKANSAS.

To:	Amirreza Karami BELL 4188
From:	Douglas J Adams, Chair IRB Expedited Review
Date:	02/11/2021
Action:	**Expedited Approval**
Action Date:	02/05/2021
Protocol #:	2009284156A001
Study Title:	The Effect of Watching Text-Relevant Video Segments on Reading Comprehension of Culturally Unfamiliar Texts in Adult English as a Second/Foreign Language (ESL/EFL) classrooms
Expiration Date:	09/24/2021
Last Approval Date:	02/05/2021

The above-referenced protocol has been approved following expedited review by the IRB Committee that oversees research with human subjects.

If the research involves collaboration with another institution then the research cannot commence until the Committee receives written notification of approval from the collaborating institution's IRB.

It is the Principal Investigator's responsibility to obtain review and continued approval before the expiration date.

Protocols are approved for a maximum period of one year. You may not continue any research activity beyond the expiration date without Committee approval. Please submit continuation requests early enough to allow sufficient time for review. Failure to receive approval for continuation before the expiration date will result in the automatic suspension of the approval of this protocol. Information collected following suspension is unapproved research and cannot be reported or published as research data. If you do not wish continued approval, please notify the Committee of the study closure.

Adverse Events: Any serious or unexpected adverse event must be reported to the IRB Committee within 48 hours. All other adverse events should be reported within 10 working days.

Amendments: If you wish to change any aspect of this study, such as the procedures, the consent forms, study personnel, or number of participants, please submit an amendment to the IRB. All changes must be approved by the IRB Committee before they can be initiated.

You must maintain a research file for at least 3 years after completion of the study. This file should include all correspondence with the IRB Committee, original signed consent forms, and study data.

cc: Freddie A Bowles, Investigator