The Effectiveness of Using Group Story-Mapping Strategy to Improve Reading Comprehension of Students with Learning Disabilities

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Abstract

The purpose of this study was to examine the effectiveness of using group story-mapping on ESL students with a learning disability in reading comprehension. The researcher focused on a specific graphic organizer in this study, called Group Story-Mapping. This strategy required students with learning disabilities involving reading comprehension to identify the five main areas for recording a narrative story: setting, characters, problem, solution, and opinion. This strategy can also help students to visualize the connection between the ideas, and the teachers can have the advantages from the Group Story-Mapping Strategy to determine the strengths and weaknesses of their students' reading comprehension. Four participants from sixth grade class were selected to participate in this study. This research used a post-test-only design implementing a control group and an experimental group. Three data collection devises were used to determine the effectiveness of using group story-mapping to improve reading comprehension of students with learning disabilities. The result of this study showed that using the Group Story-Mapping Strategy helped students with learning disabilities to comprehend the text more easily.

Introduction

In schools across the United States, many learners receive special education services because of reading deficits such as reading comprehension. In an intermediate school in a Midwest state, the researcher participated in a practicum in sixth grade classroom that had four students that English is a Second Language (ESL) and they also had reading comprehension issues. These ESL students appeared to have difficulties in comprehending what they read in the text or story. They had difficulties in perceiving the main idea of the text, understanding the meanings of words in the text, and recognizing the main idea of the paragraph and how it was progressing in the body of the passage. They also did not have the ability to keep following the coherent flow during reading and connect the ideas while they read the paragraph in pieces, which led them to have an incomplete understanding.

Each person needs to understand what he or she reads because reading is an essential skill contributing to one's success in life. Improving comprehension skills can allow ESL students with learning disabilities in reading comprehension to read very well, recognize the main events and elements in the passage, and demonstrate the ability to do the homework and tests. Educators can develop their teaching technique by providing an appropriate tool such as graphic organizers. Stenson (2006) defined graphic organizer as a visual aid to demonstrate and concentrate on the important information that allows the student to maintain more knowledge so he or she can improve his or her reading comprehension. The student with a learning disability can improve his or her reading comprehension skills and enjoy the reading task if the educator uses effective strategies during the instruction time.

Many reliable researchers have discussed the effectiveness of using graphic organizers such as Group Story-Mapping Strategy improve reading comprehension skills (Boulineau, Fore, Hagan-Burke, & Burke,2004; Jiang, & Grabe,2007; Stetter, & Hughes,2011). Group Story-Mapping Strategy is a tool or strategy that utilizes a graphic organizer to support learners to recognize the story components such as the main character, setting/time, and solution (Boulineau et al., 2004). It utilizes visual representations to support students and give them a chance to understand what they read easily (Jiang & William, 2007). The students can sort the important information proficiently from the paragraph through following Group story-mapping. When they have this proficiency, they can split the passage into many parts. Some of these parts could be setting, theme, problem, solution, etc. Group Story-Mapping Strategy allows the learners to raise and improve their reading comprehension from a position of struggle into an area of reasonable sorting of information, with confidence included. It also gives the learner the ability to comprehend the text more precisely. The result of Ciascai's study (2009) when she tests the effect of using graphic organizers on educational instruction claims that the use of Group Story-Mapping Strategy empowers students to understand what the text is about by sorting and modeling many ideas in the passage. Group Story-Mapping Strategy shows how organizing the text can help the students to be able to comprehend the text easily.

The purpose of this research study is to examine the effectiveness of using Group Story-Mapping Strategy on ESL students with learning disability in reading comprehension. The study's question is this: What impact does Group Story-Mapping Strategy have on learning disability students' reading comprehension skills? The hypothesis of this study is that using the Group Story-Mapping Strategy will help students to comprehend the text easily.

Literature Review

Many theories have proposed to discuss what improves reading comprehension. Although the literature covered a wide verity of such methods and issues, this study focused on three significant themes which, frequently appear in the literature reviewed. These themes are learning disabilities, reading strategies, and group story-mapping.

Learning Disability

"A learning disability, according to the Individuals with Disabilities Education Act (IDEA), is a disorder in one or more of the basic cognitive abilities involved in understanding or using spoken or written language," (Adebisi et al., 2015, p. 15). An individual with a learning disability may not have the appropriate skills that allow him or her to do well in speaking, reading, writing, or doing well in math (Acosta & Ferri, 2010). It means the individual who has perceptual handicaps, brain injury, minimal brain dysfunction, developmental aphasia, or reading difficulty considers as students with learning disability.

Reading is the gate to have the knowledge and new information and the core to have the best lifestyle. Berkeley (2007) mentioned in her study that almost 11% of learners in the USA public schools attend special education classes because of having specific learning disabilities such as having reading difficulty. Reading difficulty is a huge issue for students with learning disabilities who may experience the challenge to decode the words or utilize phonic skills. The difficulty in reading may also lead the learners to loose track of their thoughts and understand the text or read it fluently (Mahapatra, 2016). Also, the absence of the essential skills such as realizing the meaning of the word, utilizing strategies, and relating the previous knowledge to the

new acquaintance produce the phenome of reading difficulties (Akyol, Çakiroglu & Kuruyer, 2014). The difficulties to read the text lead the students to be less interested in understanding what they read from different resources which, disable them to success in the other classes. The inability to read affects the students' performance in all of their academic classes such as writing and math classes (Acosta & Ferri, 2010; Isikdogan & Kargin, 2010).

Alnahdi (2015) provided the relationship between the intelligence quotient level (IQ) and the ability to read, and how the low intelligence quotient level (IQ) plays a significant role to experience a hardness or difficulty during the reading time or reduce the child's ability to read. Therefore, reading performance of the students with reading difficulties is not similar to the reading performance of their chronologically same-aged peers, but the students who have reading problems can read at the same level of the readers from the lower grade level (Zascavage et al., 2012).

The Common Core State Standards (CCSS) demand educators to encourage their students through creating and providing strategies that work to improve reading skills of students with learning disabilities (Pittman & Honchell, 2014). It is essential for each student to have the capacity to understand what he or she reads to success in his or her education and life as well. Therefore, numeral studies mentioned that the special education educators have to implement explicit reading instruction to eliminate learning issues (İlter, 2016; Acosta & Ferri, 2010; Berkeley, 2007; & Zascavage et al., 2012). The special education educators most create strategies to encourage each student with learning disabilities to use the tool that helps him or her to read efficiently.

Reading Strategies

"The National Reading Panel (2000) specifies that the use of explicit and systematic classroom reading instruction must include comprehension strategies to be considered best practice," (Zascavage et al., 2012). Some researchers emphasized the importance of using the strategies that based on evidence-based practices (EBPs) in the schools to reach the excellence of educational services (Hornery et al., 2014 & Özmen, 2011). The evidence-based practices reflect the fact that the intervention needs to be supported by a substantial research to end the intervention with a positive result (Littek, 2013). It is also the specific instructional strategy, teaching the program, or the intervention which, helps the learners with disabilities to improve the desired skills (Hornery et al., 2014).

Some researchers coincided with that the main reason for implementing reading strategies is to improve learners' reading comprehension (Norato & Cañón, 2008; Isikdogan & Kargin, 2010). Reading comprehension refers to the cognitive and linguistic procedures that based to understand the meaning of the word, sentence construction, and phrases (Omar & Bidin, 2015). Acosta & Ferri (2010) found in their study that using the reading strategies to stimulate prior information, activate predictions, complete graphic organizer, and respond to the questions with sufficient materials can enhance the students' desire to read and understand what they read. Omar & Bidin (2015) also discussed the importance of activating visual support strategies into the instruction and how it worked on helping students with learning disabilities to be able to understand and complete the assignment.

This study implemented a graphic organizer as a strategy to develop retention and thus reading comprehension of the students with learning disabilities. Graphic organizer strategies are a tool of education gives the student with learning disability assistance to complete an academic assignment until he or she masters the skills to work on the task by himself or herself (Stenson, 2006). According to Özmen (2011), "graphic organizers are defined as visual or graphic displays that show visual interrelationships of superordinate and subordinate ideas using spatial arrangements, geometric shapes, lines, and arrows to portray the content structure and demonstrate key relationships between concepts" (p. 786). Sadeghi, Afghari & Zarei (2016) presented a Vygotskyan view which stated that graphic organizer strategy should include into special education classrooms to encourage learners' comprehension. Furthermore, Stenson (2006) concluded in his study that providing graphic organizer strategy to students with learning disabilities can raise the ability to comprehend the text about 18%.

There are numerous studies concurred with the advantages of using a graphic organizer on reading comprehension (İlter, 2016; Özmen, 2011; Isikdogan & Kargin, 2010; Stenson, 2006; Omar & Bidin 2015). They believed that graphic organizers could help students with learning disabilities to organize and combine the information with their prior knowledge, improve thinking processes, increase the ability to focus on the essential element of the text, and recall the connection between the events in the novel. They also demonstrated graphic organizers as the most efficient instructional tool to improve reading comprehension and develop education through scaffolding student learning. However, Jiang & Grabe (2007) found in their study that using graphic organizers have positive effects to improve reading comprehension. They meant that the beneficial effects of using the graphic organizer depend on the way the educator

provided it. They emphasized the importance of teaching how to use graphic organizers explicitly and allow the student with learning disabilities to practice them on reading comprehension over and over by using different texts.

There are many types of graphic organizers. One of these types is group story-mapping, and this study will implement it during the intervention. Stenson (2006) stated that students with learning disabilities perform better academically when they utilize graphic organizers like Group Story-Mapping Strategy to improve reading comprehension.

Group Story-Mapping

There are several definitions of Group Story-Mapping Strategy in the literature. One of those definitions stated that Group Story-Mapping Strategy provides a visual-spatial show of vital information to enhance learner with reading difficulty to realize the story's elements and remember them (Boulineau et al., 2004). Group Story-Mapping Strategy displays a schema teaching technique that works on relating the story's parts with each other and clarify the essential elements of the story in the schema to the learner with reading difficulty (Isikdogan & Kargin, 2010).

Beneficial instructional strategy for students with a specific learning disability in reading must concentrate not only on a students' weakness, but also on their strengths and utilize multisensory instructional approach such as visual spatial to deliver information through various ways to the brain (Zascavage et al., 2012). Story maps could be utilized effectively before reading the text to extract previous knowledge and simplify the discussion. It could also be utilized during reading the text to guide the reader and remember pertinent information about the

topic or after reading the text to review the given information in the text (Boulineau et al., 2004). However, Özmen (2011) compared the effectiveness between filling the story map after and before reading the passage. The result of his study proved that filling the story map after reading the text is more effective than providing it before reading the text.

Furthermore, Teo and her colleges (2016) indicated that teachers must provide the text or story that has an apparent chronological order to assist learners with learning disabilities to understand the essential elements such as characters, problem, and solution from the story without feeling confused. Several researchers found that Group Story-Mapping technique provided a positive effective on improving reading comprehension of students with learning disabilities (Alnahdi, 2015; Isikdogan & Kargin, 2010). Besides, Boulineau and his colleagues (2004) empathized that the educators should use Group Story-Mapping Strategy to teach the story elements because it helps to improve and preserve students' comprehension skills even if the educator discontinued the instruction.

Methods

Research Design

The study question addressed in this research was: What impact does Group Story-Mapping Strategy have on learning disability students' comprehension skills? A post-test only design was implemented in this research study to discover the impact of using Group Story-Mapping Strategy on learning disability students' comprehension skills. The participants were randomly assigned to either the experimental group or the control group. A post-test was utilized to compare the result between post-test scores of the experimental group and the control group.

The experimental group received the intervention using the group story-mapping strategy. The control group did not receive the intervention using the group story-mapping strategy. At a later date, the control group would receive the same intervention through using another nonfiction story. The Group Story-Mapping Strategy in this study contained five main areas for recording a narrative story's (a) setting, (b) characters, (c) problem, (d) solution, and (e) opinion.

Participants

The participants in this research were students in a special education daily oral language classroom for sixth-grade students with a specific learning disability in a public school of small mid-western town in the United States of America. The school contained of 63.2% of the Caucasian students, 20.6% of the Hispanic students, and 11.2% African American students. The school was considered low-income, with 49.4% of the demographics who are eligible for free or reduced lunch. The intervention provided in a special education classroom, where the educator to the student ratio was one to four. Participants, ranging in age from eleven to thirteen, included two females and two males whose native languages were Spanish. All of the participants qualified for special education services because of having specific learning disabilities. They participate in the special education setting for 450 minutes per a week for Language Arts and participate in the general education setting for 675 minutes per a week for math, science, and social studies. Before this study, all of the participants' performance in reading comprehension is below their grade level. Therefore, the researcher used the Group Story-Mapping Strategy which was recommended from reliable studies to improve reading comprehension of students with learning disability.

Participants 1. Yovan is an eleven-year-old-boy who diagnosed with specific learning disability. Yovan had received special education services since 2009. Yovan participated in the general education setting for 675 minutes per a week and resaved reading instruction in the special education setting. Yovan had difficulty with grade level reading. Yovan is in the 10th percentile for a sixth grader.

Hilary, , and Jennifer.

Participants 2. Kevin is a thirteen-year-old boy who diagnosed with specific learning disability. Kevin had received special education services since 2013. Kevin participated in the general education setting for 675 minutes per a week and resaved reading instruction in the special education setting. Kevin had difficulty with grade level reading. Kevin is between the 10th and 25th percentile for a sixth grader.

Participants 3. Jennifer is a twelve-year-old girl who diagnosed with specific learning disability. Jennifer had received special education services since 2007. Jennifer participated in the general education setting for 675 minutes per a week and resaved reading instruction in the special education setting. Jennifer had difficulty with grade level reading. Jennifer is between the 10th and 25th percentile for a sixth grader.

Participants 4. Hilary is an eleven-year-old-girl who diagnosed with specific learning disability. Hilary had received special education services since 2010. Hilary participated in the general education setting for 675 minutes per a week and resaved reading instruction in the

special education setting. Hilary had difficulty with grade level reading. Hilary is between the 25th and 50th percentile for a sixth grader.

Procedures

The study was provided in a special education classroom for students with specific learning disabilities. The students were randomly assigned into two groups- a control and an experimental. The first group served as an experimental group (2 students, 1 male and 1female) and the second group served as a control group (2 students, 1 male and 1female).

	SEX		**AGE**			**GRADE**	**TOTAL**
	Female	**Male**	**11**	**12**	**13**	**6th**	
EXPERIMENTAL GROUP	1	1	1	1			2
CONTROL GROUP	1	1	1		1		2
TOTAL	2	2	2	1	1		4

A survey about comprehension skills was provided to the control group and the experimental group (see Appendix A). The researcher read each statement in the survey to the participants in the both groups so they could provide a variety of information related to their reading comprehension skills. Then, the researcher provided to both groups the same nonfiction story called *A Hero's Name*, which was selected from the Reading A-z program. The story was an appropriate reading level text for the participants based on their special education teacher recommendation. Since the participants had a specific learning disability in reading comprehension, each passage of the story was displayed with a picture to help the participants

remember the story elements. In addition, both the experimental and control groups were asked to answer the same questions that were presented on the reading comprehension test that related to the selected story (see Appendix B). However, the experimental group answered the comprehension test after implementing the intervention using the Group Story-Mapping Strategy while the control group answered the comprehension test without receiving the intervention.

Control Group. The control group was given small group reading instruction by the researcher during the scheduled reading time. Initially, the researcher presented the nonfiction story to the control group. The researcher asked the students to read aloud the passage of different lengths until they completed reading the story. The researcher gave verbal praise for students who followed the requirements of this session. Then, the researcher provided the comprehension test to the control group and asked them to answer the questions independently (see Appendix B). Then, the participants in the control group were interviewed by asking them 5 questions to assess their learning experience that related to reading comprehension difficulty (see Appendix D).

Experimental Group. The experimental group was also given small group reading instruction by the researcher during the scheduled reading time. At first, the researcher presented the nonfiction story to the experimental group and asked them to read aloud the passage of different lengths until they completed reading the story. The researcher gave verbal praise for students who followed the requirements of this session. Then, the researcher displayed the elements of the Group Story-Mapping Strategy (see Appendix C) and explained each component individually. The researcher explicitly taught the elements of the story by presenting the Group

Story-Mapping Strategy in the poster to help the participants in the experimental group to do the guided practice. The researcher first instructed the learner to describe what each component of the story map meant and responded to student answers by summarizing the meaning of each component. Then, the researcher and the participants in the experimental group discussed instances of each component in the group story-mapping strategy. Each participant was asked to read a part of the story aloud after explaining the group story-mapping strategy. When they completed reading the story, the researcher asked them to complete their story maps independently. After, the researcher provided the comprehension test to the experimental group and asked them to answer the questions independently (see Appendix B). Finally, the researcher interviewed the participants in the experimental group by asking them 10 questions to assess their learning experience that related to reading comprehension difficulty and the intervention using Group Story-Mapping Strategy (see Appendix E).

After the study. The researcher provided the intervention using Group Story-Mapping Strategy to the control group after this study was over. The researcher provided another nonfiction story from the Reading A-z program. The story was an appropriate reading level text for the participants based on their special education teacher recommendation.

Data collection. The researcher focused on three multiple points of data throughout implementing this study in order to examine the effectiveness of using the group story-mapping strategy. The first data was utilizing the Comprehension Skills Survey (see Appendix A) before reading the story to have the participants in the control group and the experimental group evaluate their comprehension skills. The comprehension skills survey was utilized to determine

whether each comprehension skill: always existed (3), sometime existed (2), or never existed (1). The second data was collected after reading the story. A comprehension test was given to the participants in the control group (see Appendix B). The comprehension test that the researcher used was created by program Reading A-Z. In addition, the researcher provided the comprehension test after providing the intervention to the participants in the experimental group. The researcher modified the test in order to make it easier for the participants with difficulties in reading comprehension because of their learning disability. Per the participants' IEP, the researcher decreased the multiple answers and eliminated one question that related to the vocabulary and instead added a question that related to the story's setting. The third data was interviewing both groups, the control group and the experimental group, by asking them open-ended questions. The control group was asked five questions to describe each participant's learning experience that related to reading comprehension difficulty (see Appendix D). Then, the experimental group was asked 10 questions after providing the intervention using Group Story-Mapping Strategy to describe the participants' learning experience that related to reading comprehension difficulty and group story-mapping strategy. This latter interview data allowed the investigator to check the opinion of each participant in the experimental group regarding the intervention (see Appendix E).

Analysis of Data

The implemented design for this research study was a post-test only design; this design is used to examine the impact of using Group Story-Mapping Strategy on the comprehension skills of students with learning disabilities.

After the comprehension skills survey was given to all of the participants in this study to evaluate their comprehension skills, the researcher quantitatively analyzed the data by looking collectively at how the participants scored themselves for each comprehension skill. First, the participant individually assessed their skills by selecting always existed (3), sometimes existed (2), or never existed (1) on the survey. Then, the researcher calculated the mean by adding the four participants' scores of each comprehension skill and divided by the total number of the participants. The mean of the participants' scores on each comprehension skill was figured.

After the comprehension test given to the participants, the researcher scored their correct answers out of ten and compared the number of correct answers between the experimental and the control group posttests. The comprehension test scores of the participants in the experimental group were compared to the comprehension test scores of the participants in the control group. The correct answers out of ten was figured.

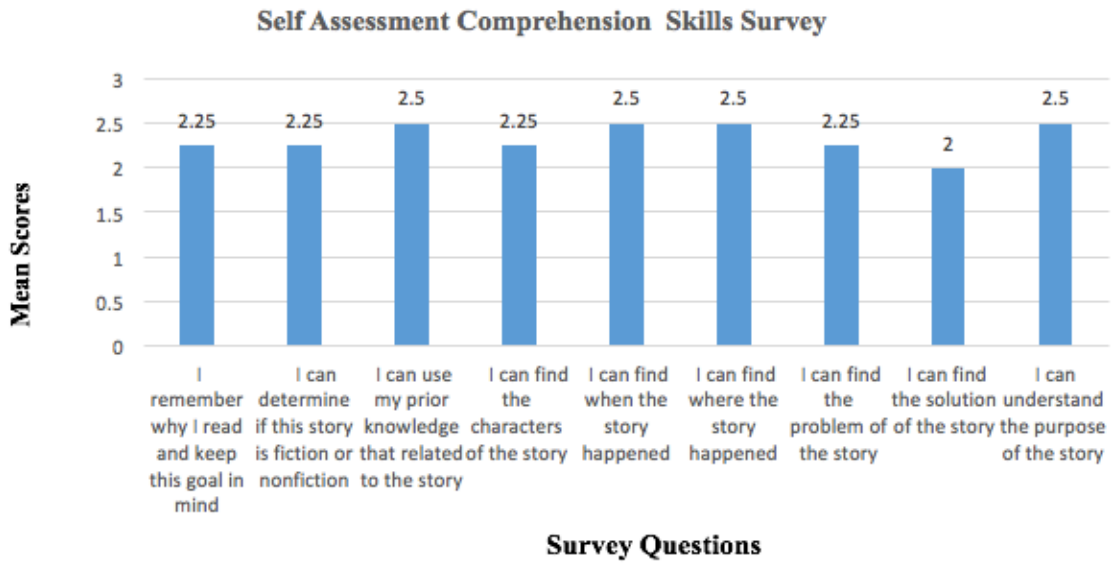
Following the comprehension test, the researcher interviewed each participant in this study to enhance and triangulate the data from the means on the survey, comprehension test answers, and students' interview responses. After interviewing the participants, the researcher looked for consistency of comments and analyzed the interview data based on how the participants evaluated themselves in the comprehension skills survey, and if it made sense to the participants on how they did in the comprehension test. Thus, the researcher could see if there was consistency across all of the three measures.

Results

This research attempted to study: What impact does Group Story-Mapping Strategy have on students with learning disability student's reading comprehension skills? The result of this study demonstrated that using the Group Story-Mapping Strategy helped students to comprehend the text easily.

The finding of the comprehension skills survey was figured before implementing the intervention using group story-mapping strategy. The chart illustrated the means of the four participants' scores on each comprehension skill, and illustrated nine comprehension skills survey questions (See Figure 1).

Figure 1. ***Self Assessment Comprehension Skills Survey***



The graph presented the mean scores of the four participants who were Hilary, Yovan, Kevin, and Jennifer. The researcher agreed that the participants in this study could remember

why they read and keep this goal in their mind. Based on the previous observation, the participants had their own purpose to read. For example, when the teacher required the students to read, they read in order to answer the questions that related to the text and have the opportunity to earn some candies. They tried to maintain their purpose of reading in their mind to have the advantages of it.

On the second question which was the ability to determine if the story was fiction or nonfiction, the participants scored themselves 2.25 out of 3. The researcher agreed that the participants could accurately determine if the story was fiction or nonfiction because all of the participants answered the question correctly that related to this skill on the comprehension test. Moreover, during the interview, Yovan said, "If I have a choice to read a story, I prefer to read a fiction story because I enjoy reading it; it is easier for me to read it and understand it." Kevin, Jennifer and Hilary gave similar responses. Jennifer added to her response that she preferred to read fiction stories similar to Amulet books.

On the third question, regarding the ability to use their prior knowledge that related to the story, the participants scored themselves 2.5 out of 3. The researcher expected that their score would be below 2 because of the participants' performance in the reading class. Based on the previous observations, all the participants had no ability to use their prior knowledge and relate to the story. When the teacher reviewed with the class and asked them what they remembered about the story, no one responded.

On the fourth question, which focused on the ability to find the characters of the story, the participants scored themselves 2.25 out of 3. The researcher discerned that the participants

could find the characters of the story because all of the participants correctly answered the question on the comprehension test that related to this skill.

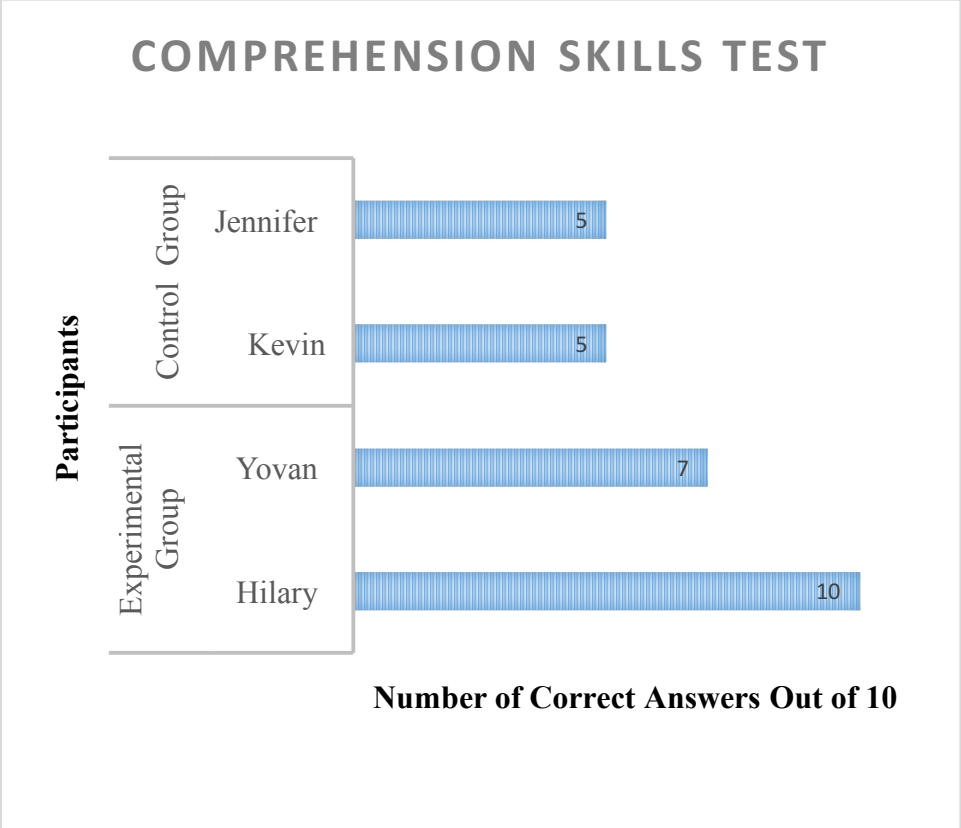
The fifth and sixth questions emphasized the ability to find when and where the story happened, and the seventh and eighth questions determined the ability to find the problem and the solution of the story. The participants scored themselves 2.5 out of 3 on the fifth and sixth questions, 2.25 out of 3 on the seventh question, and 2 out of 3 on the eighth question. Based on the participants' responses in the comprehension test, the researcher determined that the participants' actual scores were less than what they scored themselves because individuals Kevin and Jennifer, who were the participants in the control group, did not correctly answer the questions on the comprehension test that related to these questions. However, Hilary and Yovan, who were the participants in the experimental group, answered the questions on the comprehension test that related to these questions because of the intervention using group story-mapping strategy.

On the ninth question which featured the ability to understand the purpose of the story, they scored themselves 2.5 out of 3. The researcher believed that the participants' actual scores were below than what they scored themselves on this skill. Based on the participants' responses on the interview, Kevin said, "When I tried to read each word correctly, I suddenly lost the purpose of the text." All of the participants in this study gave the same response.

The findings of the comprehension test were displayed in the following graph as a proof of the impact in using Group Story-Mapping Strategy regarding comprehension skills of students with a learning disability. The graph showed both the difference between the performance of the

participants in the experimental group who received the intervention and the performance of the participants in the control group who did not receive the intervention. It displayed each participant's individual correct score out of 10 in each group (see figure 2).

Figure 2. ***Comprehension Skills Test***



The chart indicated low performance of the participants in the control group. Jennifer and Kevin gained the same score on the comprehension skills test with only 5 correct answers out of 10. However, the figure indicated higher performance of the participants in the experimental group who were given the comprehension skills test after the intervention. Yovan gained 7correct answers while Hilary gained 10 correct answers out of 10.

The interview data showed that the participants in the control group had trouble understanding what they read. When the investigator asked what each one knew about reading comprehension, both Jennifer and Kevin stated that reading comprehension was "too hard" because they had difficulty in understanding the main idea or the purpose of the text which led them to answer the comprehension test questions incorrectly. Jennifer said, "I like reading, but I feel frustrated when I try to understand what each word in the text means." Quite interestingly, Kevin said, "I do not like to read because when I tried to read each word correctly, I suddenly lost the purpose of the text." When the investigator asked what they think would help them better understand the text, both Jennifer and Kevin stated that they need to read the text many times in order to understand it.

The interview data showed that the participants in the experimental group preferred using Group Story-Mapping Strategy and believed that it helped them understand what they read. When the investigator asked whether or not the participants had trouble understanding what they read before using group story-mapping, Hilary mentioned that she did not like reading because it is too hard to understand some words in the text while Yovan stated that sometimes he thought of different things such as football games instead of paying attention on the reading text. The participants agreed that using Group Story-Mapping Strategy was useful, and it helped them organize their thoughts, memorize all the elements of the text, and answer the comprehension questions correctly. When the investigator asked if the participants thought that Group Story-Mapping Strategy assisted them to comprehend the story better, both participants said yes. They stated that the questions on the Group Story-Mapping Strategy allowed them to focus on the important information that they needed to know from reading the story. Hilary said, "Group

Story-Mapping Strategy helped me to organize my thoughts and helped me remember when I wrote the answers down." Yovan agreed with Hilary and added that it was "too easy" to answer the questions after using the group story-mapping. Both participants said that using Group Story-Mapping Strategy helped them to answer the comprehension questions more easily. When asked if they would use the Group Story-Mapping Strategy in the language class, they said, "Yes, if the teacher in the language class would let us. We think it would help us improve our reading skills." The participants were also asked if they wanted to use Group Story-Mapping Strategy when reading even if they do not have to use it. Yovan responded that he wanted to use Group Story-Mapping Strategy if there was a comprehension test on a specific text but did not want to use it for each text he read because it took a long time; Hilary said she wanted to use it because it makes reading the story easier.

Conclusion

The main purpose of this action research was to examine the effectiveness of using group story-mapping on ESL students with a learning disability in reading comprehension. Based on the results of this study, the participants in the experimental group demonstrated considerable improvement in reading comprehension after being provided with the intervention using group story-mapping strategy. Thus, the finding suggested to use Group Story-Mapping Strategy in order to assess ESL students with learning disabilities in their comprehension of the text due to its helpfulness in providing them a method to organize their thoughts and recognize the story elements such as the main character, setting/time, and solution. This finding is consistent with

previous research studies on group story-mapping (Boulineau et al., 2004; Isikdogan & Kargin, 2010).

It was found in the results of this study that the participants' scores in the experimental group who received the intervention using group story-mapping was indeed higher than the participants' scores in the control group who had not received the intervention using group story-mapping. However, Hilary, a participant in the experimental group, benefited from the Group Story-Mapping Strategy more than Yovan who was her peer in the same group. This might signify that some students need to be motivated to be interested to read the text or the story. For example, Yovan said, "I do not like reading." Based on the participant's response, the educators should utilize a rewards system and inform the students with learning disabilities that there is a reward for each one who focuses on what he or she reads and then performs well on the test. The researcher wondered if the reward would encourage Yovan to be focused, interested, and motivated to read and gain 10 correct answers out of 10 on the comprehension test.

Another reason might have kept Yovan from gaining a full mark on the comprehension test. For instance, some students have poor visual skills which means that some students can not recognize the information that is stated in a visual aid such as group story mapping. Therefore, it is recommended to teach students with learning disabilities various visualizing skills so the educators can use group story-mapping to improve their students' comprehension skills. If there is an opportunity for the researcher to do another study in the future, it would involve the positive impact of using video games to improve visual skills of students with learning disabilities.

In addition, only four participants were involved in this study. The small size of participants in this study led the domain of the potential data to be narrowed, constituting a weak portrait for analysis. Despite the limitation, this study demonstrated that using group story-mapping is an effective strategy to improve comprehension skills of students with learning disabilities.

Through working in this study, it was learned that action research should focus on one issue to increase the chance to solve it. Furthermore, this action research gave the researcher a better understanding on how to analyze the collected data and how it is important to analyze the study's data before doing an action so the researcher can avoid any kind of changes in the procedure section. Moreover, reading more than 15 studies to know what other researchers found enhanced this researcher's knowledge with various perspectives and valuable information that related to reading strategies such as group story-mapping.

The most important lesson the researcher gained after this study was that there is a need to plan courses in Saudi Arabia schools to train the new educators on how to use Group Story-Mapping Strategy to improve reading comprehension of students with learning disabilities. When the new educators become aware of both the advantages of using Group Story-Mapping Strategy and the positive results of it from the previous studies, they will have the desire to gain more information on how to use it to help their students with reading difficulties to comprehend the text more easily.

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Appendix

Appendix A:

survey:

Name: **Date:**

Reading Comprehension Skills	Rating Scale		
	1	2	3
1. I remember why I read and keep this goal in mind			
2. I can determine if this story is fiction or nonfiction			
3. I can use my prior knowledge that related to the story			
4. I can find the characters of the story			
5. I can find when the story happened			
6. I can find where the story happened			
7. I can find the problem of the story			
8. I can find the solution of the story			
9. I can understand the purpose of the story			

1= Never 2= Sometimes 3= Always

Appendix B

The comprehension test

Name: **Date:**

Instruction: Read each question carefully and choose the best answer.

1- **What was the main problem between Frank and Bobby?**

   A. **Frank picks on bobby a lot.**
   B. **bobby picks on Frank a lot.**

2- **Frank signed his name as Francis, which means he----------.**

A. **Wrote his name on something.**
B. **Was will known.**

3- **Three of the sentences below are supporting details. Which sentence tells the mean idea?**

A. **There was famous explorer named sir Francis Drake**
B. **There were many king named Francis**
C. **Saint Francis was famous for talking to animals.**
D. **Many important people had the name Francis.**

4- **Read this sentence: Frank was embraced when his teacher called him Francis. Dose this sentence tells a problem or a solution?**

A. **It is a solution.**
B. **It is a problem.**
C. **It is both problem and solution.**

Name: **Date:**

5- Which of the following sentence tells an opinion?

A. Frank is a nickname for Francis
B. Francis is a wonderful name.

6- How did Frank's teacher create a solution?

A. She called Bobby's parents in for a conference.
B. She asked the students to present oral reports about their first name.

7- How did frank feel about his name at the end of the story?

A. He was proud about his name.
B. He wanted to be called Frank all the time.

8- How did other students learn about Frank's full name?

A. Frank decided to tell everyone his real name.
B. A different teacher called class roll and did not know Frank's nickname.

9- What type of book is *A Hero's Name*?

A. Fiction.
B. Non-fiction.

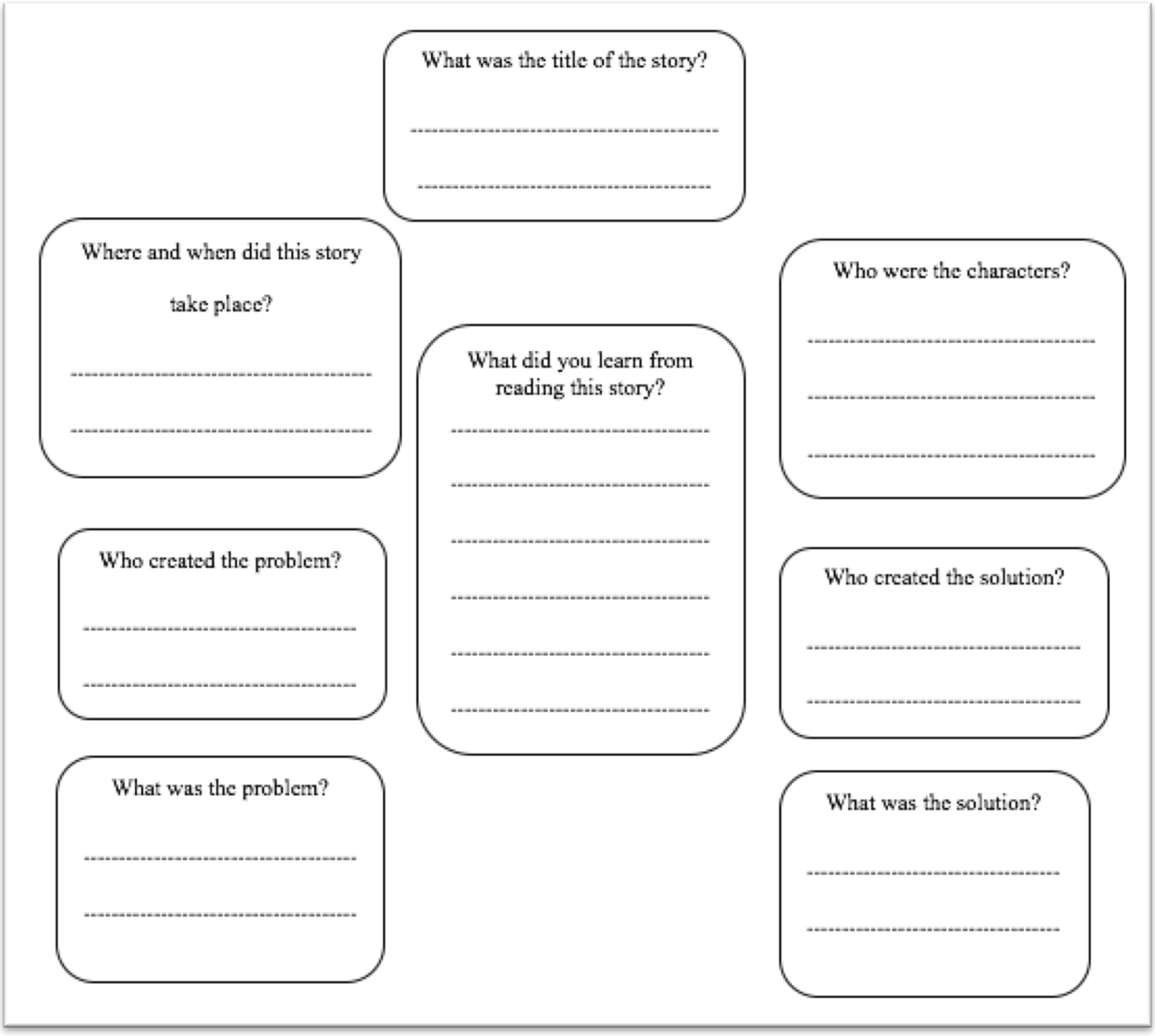
10- When did this story take place?

A. On Friday.
B. On Thursday.

Appendix C

Name: **Date:**

Group story-mapping



Appendix D

Name: **Date:**

Control Group Interview Questions

Interview questions	Responds
What do you prefer to use during the reading time the highlight or your finger? Why?	
How do you feel about reading?	
What does reading comprehension mean to you?	
Do you have trouble understanding what you read? Why?	
What do you think would help you better understand the text? Why?	

Appendix E

Name: **Date:**

Experimental Group Interview Questions

Interview questions	Responds
What do you prefer to use during the reading time the highlight or your finger? Why?	
How do you feel about reading?	
What dose reading comprehension means to you?	
Do you have trouble understanding what you read? Why?	
How do you feel about doing group story mapping strategy? Explain?	
Do you think that you understand the story better after doing the group story mapping? Why?	
What do you like about group story mapping? Can you explain?	
What do you not like about group story mapping?	
Will you use group story mapping by your self while I am not around? Why?	
Do you wish that other teacher use the group story mapping? Why?	