

# Graphic Organizers Pedagogy and Retention Skills of Students with Intellectual Disability: A Sequential Explanatory Mixed Methods Inquiry

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## ABSTRACT

Retention is the capacity to hold information in the mind. It is crucial for learning, especially in transferring knowledge to long-term memory. This study examines the impact of Graphic Organizers (G.Os) on information retention among students with intellectual disabilities (I.D.) at Guadalupe SPED Center in Cebu City, Philippines. Using purposive sampling, ten (10) students with I.D. enrolled in the upper-level SPED center were selected and divided equally into control and experimental groups. A pretest-posttest design, validated lesson plan with G.Os, assessment questionnaires, and semi-structured interviews were employed. Results show significant benefits of graphic organizers, including improved comprehension, enhanced memory retention, increased appreciation for visual learning, and a preference for these methods over conventional pedagogy as themes emerged. Several recommendations are derived to optimize the use of G.Os for students with I.D. Teachers should increase the number of item questions to assess G.O. effectiveness better and seek regular feedback from students to refine their use. Given the positive effects on retention, teachers are encouraged to incorporate lesson exemplars with G.Os into English instruction.

**Keywords:** *Graphic Organizers, Intellectual Disability, retention, English Lesson, quasi-experimental*

## INTRODUCTION

Retention refers to the capacity to hold information in the mind temporarily or for an extended period. The preference is for information to be stored in long-term memory. Consequently, educators face the challenge of facilitating ideas being transferred from temporary to long-lasting memories (Valderrama & Oligo, 2021). According to Haverila et al. (2020), the issue of low student retention rates in academic institutions has been under investigation in numerous academic studies from many different points of view. Educators continuously seek improved delivery methods, enhance the teaching-learning process, create instructional materials, and align learning content with assessments.

Students with Intellectual Disability (I.D.) encounter distinctive challenges when it comes to grasping and retaining information, significantly affecting their academic performance and engagement. The conventional instructional approaches, predominantly reliant on text-based methods, often compound these challenges. Research consistently highlights the effect of educational techniques on developing a classroom atmosphere that meets the needs of students with diverse abilities, backgrounds, and learning preferences (Akbar et al., 2023). The number of students with learning difficulties is continually rising, and they exhibit a lack of desire by being less persistent in their academic work Gkora et al., (2023). It's clear that students with I.D. face

unique challenges in processing and retaining information, which conventional text-based methods often exacerbate. Their cognitive and adaptive limitations necessitate instructional strategies that not only accommodate their learning needs but actively support their retention and comprehension.

In response, Graphic Organizers (G.Os) emerge as a promising solution, employing a visually engaging and organized format to bridge the learning gap. The potential benefits of G.Os for students with I.D. provide a visual method of developing, organizing and summarizing students' learning (Kalaivani et al., 2023). G.Os are distinguished by their visual structure and organizational features, presenting a compelling alternative. Previous studies indicate their efficacy in improving information processing and retention across various learning difficulties (Hidayati & Subur, 2023; Chaitra et al., 2022).

Students diagnosed with I.D. may encounter important limits in cognitive ability and adaptive behavior, including social and practical skills that are used on a daily basis (American Association on Intellectual and Developmental Disabilities, 2020). Des Portes (2020) describes this impairment as a neurodevelopmental condition that starts in childhood and is characterized by deficiencies in intellectual functioning and adaptive functioning (practical areas of living). In contrast, intellectual disability is defined by the Individuals with Disabilities Education Act of 2018 as a condition marked by significantly below-average overall intellectual functioning in addition to impairments in adaptive behavior, both of which are noticeable during developmental stages and negatively affect a child's academic performance. Individuals with mild disability typically require occasional assistance, whereas those with profound disability often necessitate frequent support. Given the diverse needs of students with I.D., personalized teaching approaches form the foundation for their education (Ohwovoriole, 2023). These students frequently require support that caters to their diverse learning styles, and G.Os could provide a more intuitive and effective means of instruction. The prospect of seeing these tools positively impact students' academic performance and motivation is both motivating and promising.

However, the existing body of research exploring the impact of G.Os on information retention for students with I.D. remains limited. Finding effective methods of instruction and educational resources has always been one of the main problems and worries educators have had over time. Instructors have consistently located relevant resources and strategies in classroom education to meet the requirements of varied learners and foster successful learning. Educators require guidance on introducing and facilitating G.O. usage. They need to understand how teacher support impacts student retention.

This study aims to assess how well G.O. helps students with I.D. Specifically, it seeks to explore the impact of G.Os on improving information retention in the English subject of students with I.D. within educational settings. The study will focus on students with I.D. who come from upper-level grade levels and require information retention strategies from a particular educational institution, the Guadalupe SPED Center in Cebu City, Philippines. The data to be presented are the results of the pre-test, post-test, and semi-structured interviews of the students with I.D.

### **Statement of the Problem**

This study aims to assess the effect of the Graphic Organizer (G.O) method in teaching retention skills among students with I.D. Specifically, this study will answer the following question:

1. What are the pre-test and post-test performances of students with I.D. when utilizing the conventional pedagogy and the G.O. method in teaching students with I.D. in English subject?
2. Is there a significant difference in the English subject performance of students with I.D. in their pre-test and post-test scores in the following groups:
  - a. Control group
  - b. Experimental Group
3. Is there a rank sum difference between the retention performance of students with I.D. in using the G.O method and conventional pedagogy?

4. What is the learning experience of the students with I.D. with the use of the G.O. method?
5. What lesson exemplar can be proposed after the conduct of the study?

### Statement of the Hypothesis

**Ha1:** There is a significant difference between the pre-test and post-test of the control group

**Ha2:** There is a significant difference between the pre-test and post-test of the experimental group

**Ha3:** There is a significant difference between the post-test of the control and the post-test of the experimental group

## METHODOLOGY

### Research Design

The research combined qualitative and quantitative elements, adopting an explanatory sequential mixed method. The explanatory sequential mixed method begins with the collection and analysis of quantitative data. Then it follows up with the collection and analysis of qualitative data, which helps explain the quantitative results (Dawadi et al., 2021). The researchers used a quasi-experimental design, which evaluated the effect of an intervention on participants (Choueiry, 2020). The type of quasi-experimental study used is the pre-test and post-test, which was also used to evaluate respondent's attitudes or views of the intervention (Maciejewski, M. L. 2020). Both the control group, those who did not receive the intervention, and the experimental group, those who received the intervention, were given the pre-test and post-test questionnaires to compare the performance of students with I.D. using the graphic organizer method and to those who had the conventional pedagogy. The respondents also had a semi-structured interview to find challenges and opportunities of the use of the G.O. method in teaching students with I.D.

### Sampling Design, Respondents, and Environment

The purposive sampling method was used, in which the participants were selected because of

their characteristics (Frost, 2022). A total of ten (10) students with I.D. from the upper level enrolled in Guadalupe SPED Center, Rama Ave, Cebu City. It was during the Third Grading period of the Academic Year 2023-2024 that five (5) participated in the control groups and the other five (5) in the experimental group, with their informed consent and parent consent.

### Research Instrument

A lesson plan, pre-test and post-test assessment questionnaires, and semi-structured interview questions were all validated and utilized. The validation was done first by the research advisor, an educator with 22 years of teaching experience, and then by our paid statistician. Lastly, it was also checked by the Special Education teacher of the respondents with 20 years of teaching experience. The validation result was that the instruments could be used for the gathering.

The researchers acted as the main instrument and depicted a significant responsibility in this qualitative research study. Braun and Clarke (2022) highlighted a crucial role and suggested that in thematic analysis, the researcher was the driving force behind data collection, analysis, and interpretation decisions. The second instrument was the validated lesson plan that utilizes a G.O. The lesson was from the curriculum and was checked and reviewed by the SPED teacher. This ensured that integrating the lesson did not disrupt their ongoing class dynamics. The third tool was the pre-test and post-test assessment questionnaires based on the English lesson presented. Lastly, the fourth tool was a semi-structured interview of five questions for the students.

### Data Gathering Procedure

Necessary measures were followed by the researchers to comply with the data-gathering process. In the first stage, the notice to proceed was given by the Ethics Review Committee. After, a letter to seek permission to conduct the data implementation was presented and approved by the Cebu City Division Superintendent and school principal. Next, letters of consent were sent and signed by the guardians or parents to carry out the said assessment and interview. Also,

respondents were made aware of the purpose of the assessment and interview.

The second stage is the data collection. The data collection commenced with pre-test assessments to measure participants' baseline levels of information retention. The control and experimental groups were taught the same lesson and answered the same pre-test and post-test assessment questions. The post-test was administered immediately after every lesson in both groups. However, the intervention involves the use of G.O. was used only for the experimental group. The G.O method was used to tell the story by presenting pictures sequentially. The control group was taught by the SPED teacher of the respondents having 20 years of teaching, while the experimental group was taught by one of the researchers taking up Bachelor of Special Needs Education (BSNED) at Cebu Normal University for three years. The respondents were assured that their answers would be kept confidential and would only be used for the study. The duration of the data collection finished in one (1) day.

### **Data Analysis**

To analyze the quantitative data collected from pre-test and post-test measurements, the scores of the participants were put into a table and sent to a hired statistician using advanced statistical software called Jamovi (Ahmed & Muhammad, 2021). In descriptive statistics, the mean and standard deviation were computed. It showed how variables in the sample relate to each other and organized the data, which is essential for drawing inferential statistical comparisons (Dong, 2023). Then, inferential statistics was also utilized, which involves the use of paired t-tests and Mann-Whitney U hypothetical test to determine whether the results of a study are statistically significant, which in turn helped in making generalizations about a population based on the sample data.

Meanwhile, thematic analysis was utilized to analyze the qualitative data. Thematic analysis is a six-step process for analyzing qualitative data (Braun & Clarke, 2022). The researchers conducted semi-structured interviews with the respondents to gather relevant experiences and perceptions during and after the assessments. The researchers generated initial codes by highlighting

and labeling the essential concepts of the data obtained. Subsequently, the researchers developed themes by identifying significant patterns across the codes. Once the potential themes were found, they were thoroughly analyzed to ensure validity and relevance. This was followed by an in-depth analysis of the themes, definitions, and identification of the essential themes clearly and concisely. Finally, the researchers wrote the findings related to the respondents' experiences and perceptions, using G.O. to present the data effectively.

### **Ethical Consideration**

In the study, several ethical considerations were taken into account. First, the researchers abided by the ethical regulations, protocols, and guidelines of the Ethics Review Committee and gained approval to implement the research. Second, the letters seeking permission to conduct the research in the chosen school, Guadalupe Elementary School - SPED Center, were sent first to the Division Superintendent and then addressed to the school principal. This study had no conflicts of interest for students, teachers, or researchers. The method was carried out by health standards, with a thorough evaluation of the test's validity validated by professionals, and the study results were more beneficial than harmful to the institution.

The respondents and their guardians were made aware of the purpose of the research by providing them with the English and Sugbuanon-Bisaya consent forms, which the SPED teacher disseminated. Participants' permission to take part in the study was actively sought. They were also advised that their involvement is entirely voluntary. It was highlighted that individuals can withdraw from the study without repercussions. Participants were assured that their identities would be respected and protected if they withdrew. This ensured the protection and confidentiality of their answers. Lastly, the respondents were given a token of appreciation, and the SPED teacher was also given a certificate of appreciation in exchange for their courteous responses and valuable time spent on the research.

## RESULT AND DISCUSSION

This chapter presents the results of the quantitative data from the scores of two groups through descriptive and inferential statistics and the qualitative data from all ten students through thematic analysis.

### Pre-test and post-test performances of students with I.D in Control and Experimental groups

**Table 1.** Pre-test Performance Profile of the Control and Experimental Groups

|               | Mean | SD    | description |
|---------------|------|-------|-------------|
| Control - Pre | 4.00 | 1.000 | BA          |
| Exp - Pre     | 2.00 | 1.225 | BA          |

*Note: BA- Below Average, A-Average, AA-Above Average*

Table 1 shows the Pre-test Performance Profile of the Control and Experimental Groups. The mean is 4.00 and a standard deviation of 1.000 for the control group, and a mean of 2.00 and a standard deviation of 1.225 for the experimental group indicate below-average performance on the pre-test. These values compare the groups' performance to the population's mean, with negative values indicating performance below the average. This emphasizes the importance of alternative methods in learning, and not relying on conventional pedagogy. Mandasari & Aminatun (2020) found that Vlogging to learn English can significantly improve the student's performance, especially in speaking skills. Also, Alhassan & Osei (2022) proved that for children with I.D. in the English language, the integration of drawing is more effective in increasing the acquisition and understanding of language skills compared to the standard methodologies used in the study's research environment. Meanwhile, Utami et. al., (2021) recommended that educators investigate and test several approaches in the classroom to determine which works best for students with I.D. Furthermore, Utami et. al., found common solutions for students with I.D. used were

repetition, posters, YouTube videos, and adaptation of the instructions. This implies that using GOs as a learning approach can significantly improve students' English performance.

**Table 2.** Post-test Performance Profile of the Control and Experimental Groups

|                | Mean | SD    | description |
|----------------|------|-------|-------------|
| Control - Post | 4.80 | 0.447 | A           |
| Exp - Post     | 5.80 | 0.447 | AA          |

*Note: BA- Below Average, A-Average, AA-Above Average*

Table 2 shows that both the control and experimental groups showed improvements from their pre-test to post-test performances. The control group had a mean of 4.80 and a standard deviation of 0.447, classified as average. In contrast, the experimental group had a mean of 5.80 and a standard deviation of 0.447, labeled above average. However, the experimental group displayed a higher post-test than the control group. This suggests that the intervention or G.O. method applied to the experimental group significantly enhanced their understanding or mastery of the topic. According to Ratnakar (2022), G.O.s cater to different learning styles, and the diverse needs of every student, and support inclusive education, since it uses a variety of presenting styles. This includes students with I.D. In a study by Bhat et. al., (2023), using a visual organizer and methodical training, students with mild and severe I.D. were able to learn character comparisons from a story that had text adaptation. Meanwhile Brady et. al., (2021), used a Technology-based graphic organizer to improve writing for students with I.D. and writing difficulties. Compared with the results of the conventional method, as shown in the post-tests, the use of G.O.s is more effective and consumes less time. However, the gap between the post-tests of the two groups is only a bit. The assessments only contained six questions; it is recommended that more questions be manageable for students with I.D. This can provide a more comprehensive evaluation of the effectiveness of G.O.

**Significant Difference in the English Performance of Students with I.D.**

**Table 3.** The Test of Normality to determine the hypothesis test

|               |                | t            | p           |
|---------------|----------------|--------------|-------------|
| Control - Pre | Control - Post | Shapiro-Wilk | 0.902 0.421 |
| Exp - Pre     | Exp - Post     | Shapiro-Wilk | 0.902 0.421 |

As presented in Table 3, the collected data is normally distributed in both the control and experimental groups for the paired t-test hypothetical testing. The p-values of the pre-test and post-test were greater than 0.05 and passed under the Shapiro-Wilk test. This implies a normal distribution, so a paired t-test can be used to find the mean difference between the two groups.

**Table 4.** Difference between the Pre-test and Post-test performance of the Control group and Experimental Group

|               |                | t     | df   | p     |
|---------------|----------------|-------|------|-------|
| Control - Pre | Control - Post | -1.37 | 4.00 | 0.242 |
| Exp - Pre     | Exp - Post     | -6.52 | 4.00 | 0.003 |

Table 4 shows a significant difference in the student’s performance in the experimental group compared to the control group through the paired T-test result. The control group using the conventional pedagogy (  $t = -1.37$ ;  $df = 4.00$ ;  $p=0.242$ ) shows no significant difference in their English performance in pre-tests and post-tests. On the other hand, the experimental group that utilizes the graphic organizer method ( $t -6.52$ ;  $df= 4.00$ ;  $p= 0.003$ ) shows a statistically significant difference in the English performance of the students with I.D. in the pre-test and post-test. It is not by chance that the experimental group was affected by the intervention.

Moreover, the discussion or teaching of the control group was through the traditional

storytelling by the teacher without pictures, relying only on the text, modulation of voice, facial expressions, and questions to engage the learners, which made the discussion time longer than the experimental group. Meanwhile, for the experimental group, the researchers showed a picture of every event in the story, as the story was told. According to Rahmat (2020), G.O.s aids in information processing as it is a substitute for written information, and makes learning less challenging for students with limited vocabulary. The findings are also supported by Guo et al., (2020) that including visuals brings a positive effect on students’ reading comprehension, especially text with pictures. In addition, the meta-synthesis of Santika et al. (2021) concluded that G.O.s can help students improve their understanding of the reading material through the segregation of relevant and irrelevant details. This implies that G.O.s can influence the learning of a student with an I.D

**Significant Rank Sum Difference in the Retention Performance of the Students with I.D.**

**Table 5.** Presents the Test of Normality to determine the hypothesis test.

|           |              | t     | p     |
|-----------|--------------|-------|-------|
| Pre-test  | Shapiro-Wilk | 0.859 | 0.074 |
| Post-test | Shapiro-Wilk | 0.509 | <.001 |

As presented in Table 5, the collected data is not normally distributed for the independent T-test hypothetical testing. The p-value of the post-test is less than 0.05 and did not pass the Shapiro-Wilk test. This implies that the Independent T-Test can’t be used and so as an alternative, the Mann- Whitney U is used. It is similar to the independent t-test, it checks the difference between two independent samples but does not need the data to be normally distributed. It is the non-parametric counterpart to the t-test. Instead of checking the mean gain difference, the rank sum difference is checked.

|                |   |
|----------------|---|
| <b>Theme 1</b> | Ease of Understanding                         |
| <b>Theme 2</b> | Appreciation of Visual Elements               |
| <b>Theme 3</b> | Enhances Memory Retention                     |
| <b>Theme 4</b> | Preference of the Usage of Graphic Organizers |

**Table 6.** Difference between the rank sum of the experimental group’s post-test.

|           |                | t    | p     |
|-----------|----------------|------|-------|
| Post-test | Mann-Whitney U | 2.00 | 0.021 |

Table 6 showed a significant difference in the rank sum of the retention performance between the control group and the experimental group. The results of the Mann-Whitney U test showed a post-test ( $p=0.021$ ) below 0.05, making the result statistically significant between the two groups. The intervention provided better results.

Moreover, the English lesson used in the study was entitled “A Way to Help Mother.”. After the discussion of the experimental group, a sequence graphic organizer and the three pictures used in the discussion were presented for the Generalization. Learners were tasked with arranging the events of the story. The difference and increase in performance of the experimental group support the findings of Carantes (2021), emphasizing the importance of instructional materials in improving overall reading comprehension proficiency. It is evident, especially during the discussion. Additionally, visuals help improve comprehension for students with I.D. (Wadihah & Fauzi, 2021). In a study by Yarosh (2021), the use of visual syllabi allowed students to retain more information than the only-text syllabi, as it accommodates both visual and verbal learners. Furthermore, Edgar Dale’s Cone of Experience suggests learners generally remember more when they can see and hear content simultaneously than text alone, visual aid alone, and hearing alone. The study only utilizes one short story, so it is recommended that future researchers use lengthy stories to determine if utilizing G.O.s can retain more information. This implies that using the G.O. can increase the retention performance of students with I.D. compared to conventional pedagogy.

### Themes Encountered

The analysis of the responses revealed four themes that described the experiences of the students with I.D. in using the G.O. method. The themes that emerged are as follows:

#### Theme 1. Ease of Understanding

Results have shown that graphic organizers (G.O.s) facilitate an easier understanding of the story’s context for students with I.D. in the experimental group. The use of G.O. helps to enhance reading comprehension, facilitates recognition in the text structure, and promotes a positive perception towards its use (Rahat et al., 2020). This was supported by the responses of the experimental group, indicating that G.O. helps to ease their understanding of the story as they stated that:

*“Ganahan ko naay step. Makahibaw ko sa story.” -Informant 2 (I like it because there are steps, and I will learn the story.)*

*“Angayan permi para makalearn sad ta ug masabtan nako or masabtan sa lain classmates sila tanan. Dali ra masabtan ang in ana” -Informant 3 (It would be nice if we use graphic organizer always to help us understand easily)*

*“Okay siya, nindot siya naa sabtan story” -Informant 4 (It is okay; it is excellent so that I can understand the story)*

The responses revealed that the students with I.D. in the experimental group understood the story more easily as G.O. was being utilized during the instruction. According to Astuti (2020), applying the G.O method is an effective strategy for enhancing reading comprehension. This serves as a visual tool that helps in the construction and organization of the information they see or read. G.O. presents the content with visual support in a format that is more accessible and comprehensible for students with I.D. compared to the conventional way of presenting it with text alone. It also makes complex information into manageable parts, easing cognitive overload and enhancing understanding (Alnemr, 2020). Additionally, using the G.O method for teaching reading is suitable for young

students as it aligns with how the brain processes visual information, making it easier to grasp meanings through visuals. However, G.O should also be integrated with other instructional strategies to accommodate varied learning styles and levels of the students (Imsa-ard, 2022). This implies that the use of G.O.s enhances the comprehension and promotes information retention in literary analysis, making G.O.s essential in inclusive education for empowering students to succeed in exploring literature.

### **Theme 2.** Appreciation of Visual Elements

Results have shown that students with I.D. express their appreciation for the visual elements of the graphic organizer. This was supported by the responses of the experimental group, indicating that students with I.D. appreciate the visual elements in the G.Os as they stated:

*"Ganahan ko. naay picture og sa story"*  
- **Informant 2** ( *I like it. I like it because there are pictures .* )

*"Wala man, nadali ang pagsabot tungod sa picture"* - **Informant 3** ( *I can understand better, especially with pictures.* )

The responses indicate that students with I.D. in the experimental group favored G.Os for their visual elements. Combining text with images is generally believed to impact children's learning and attention positively. Wadihah and Fauzi (2021) stated that "Image media is a visual format that can enhance communication by making it more tangible. These images also help readers better understand the text." Through images, the students were able to grasp the meaning of the text more. It enhances reading comprehension and thus helps better retain information. According to Jacob et al. (2021), pictorial illustrations often make texts more appealing and engaging for readers. These illustrations not only improve information retention but also enhance the understanding of complex topics, which supports the development of effective problem-solving skills. Perspective from Richard Mayer's Cognitive Theory of

Multimedia Learning (2021), pictorial illustrations are designed to boost ability through the multimedia effect by presenting relevant information visually and aiding in the construction of mental models. Images, charts, and diagrams create mental associations that are easier to remember than text alone. This dual coding of information, both visual and verbal, captures the attention and interest of students with I.D. This implies that students with I.D utilize the visual elements in G.Os to support and enrich their memory retention.

### **Theme 3.** Enhances Memory Retention

Results have shown that students with I.D. in the experimental group indicated that using G.O. enhanced their ability to retain information. Reshma (2023) states that G.O. helps students improve their comprehension and enhances their memory retention. This was supported by the responses of the experimental group, indicating G.O. is a tool for improving memory retention as they stated that:

*"Remember sa story"* - **Informant 2**  
( *Remember the story* )

*"Oo, mas dali kasabot dali mahinumduman"* - **Informant 4** ( *Yes, so that I can easily understand and remember it* )

*"Nakatabang ra mn. Ka remember ramn ko tanan."* - **Informant 5** ( *It helped. I remember everything.* )

The responses indicated that students with I.D. in the experimental group benefited from using G.O.s, which helped improve their memory retention skills. Chung (2023) states that visual aids like images, flashcards, and infographics enhance comprehension and information retention. Similarly, Wang et. al (2021) found that students who used G.O. performed better on retention and comprehension tests, reported greater learning satisfaction, and experienced less difficulty. The G.O.s aids in memory retention by creating strong mental connections and making it easier for students to recall information later. This implies that G.O.s effectively support memory retention for students with I.D.



#### **Theme 4.** Preference for the Usage of Graphic Organizers

The results showed that students could see the connection between different elements and grasp relationships more easily using G.O.S. Students preferred graphic organizers over traditional teaching methods. They found that G.O.s helped them to visualize and connect information more effectively than verbal explanations alone Torrefranca et al. (2022). This was supported by the responses of the experimental group that:

*"Ganahan ko na gamiton permi ni Ma'am Tess." – Informant 1 (I would like Ma'am Tess to use it)*

*"Oo, para makatabang si teacher namo." – Informant 2 (Yes, so that the teacher can help us learn more)*

The responses from the informants strongly imply that students with I.D. find G.Os. significantly beneficial for their learning process. The students not only find G.Os. helpful but also desire their consistent use in the classroom. Therefore, in order to make the biggest impression, these materials need to be properly chosen, arranged, polished, and employed in a course (Garzon-Diaz, 2021). Additionally, research backs up the idea that instructional materials that are appropriate and relevant help students perform better because they facilitate the gathering and presentation of knowledge in the classroom (Kaku & Arthur, 2020; Nja et al., 2020; Taculod & Arcilla, Jr., 2020). This helps them comprehend and apply the content more easily. Students can better understand and remember concepts when connections between components are shown, and complete G.O.s are provided. This implies that using G.Os. enables teachers to support students more effectively by making lessons more straightforward and comprehensible.

#### **Lesson Exemplar**

Special Education- Upper Intellectual Disability  
English

Graphic Organizer Method

These generated lesson exemplars were improved by using G.O. methods in teaching retention skills among students with I.D. at the upper level. The following are the intended learning outcomes of each lesson exemplar crafted. Please refer to the Appendix J to see the lesson exemplar:

##### **Lesson Exemplar 1:**

- Identify the beginning, middle, and end parts of the events happening in the story, "Plants Need Water"
- Share the importance of responsibility and caring for nature;
- Demonstrate how the events of the story are arranged by solving a puzzle.

##### **Lesson Exemplar 2:**

- Recognize the events that took place in the story "A Wet Afternoon."
- Shares the importance of carrying essentials;
- Organizes the events of the story using a graphic organizer.

##### **Lesson Exemplar 3:**

- Identify the events, such as in the beginning, middle, and end parts of the story "A Big Fire."
- Share the importance of safety tips during a fire;
- Arrange the events of the story using a graphic organizer.

##### **Lesson Exemplar 4:**

- Summarize the story "The Ant and the Grasshopper" in their own words using the sequencing board.
- Develop the habit of working;
- Demonstrate the importance of having goals in life.

##### **Lesson Exemplar 5:**

- Recognize the events that took place in the story "Flora's Godmother."
- Shares the importance of physical uniqueness;

- Organizes the events of the story using a graphic organizer.

## CONCLUSION AND RECOMMENDATIONS

This study aimed to assess the impact of G.Os on improving information retention in English subjects for these students. The implications for inclusive education are substantial, as implementing graphic organizers can improve learning outcomes for students with I.D. by making complex information more accessible and enhancing retention, aligning with Edgar Dale's Cone of Experience. However, the study was implemented over a single day and focused solely on upper-level students with I.D. Moreover, it only included a simple short story. These limitations indicate that future research should consider extended implementation periods, a wider variety of participants, and more complex instructional materials to validate and expand upon these findings. This study contributes to the existing body of knowledge by providing empirical evidence on the effectiveness of G.Os in enhancing information retention among students with I.D. in English subjects. It also addresses a gap in the literature regarding the specific application of G.Os for students with I.D., offering valuable insights into how such methods can be effectively integrated into instruction. The findings serve as a foundation for future research, encouraging further exploration into the use of graphic organizers in diverse educational settings and with a broader range of instructional materials.

Based on the findings, the following are the various recommendations emerge regarding the optimal utilization of graphic organizers for students with intellectual disabilities:

1. Teachers should increase the number of item questions by incorporating graphic organizers to determine their effectiveness compared with conventional pedagogy.
2. Future researchers can employ longer stories to assess the effectiveness of G.Os in information retention compared to conventional pedagogy.
3. Teachers should regularly seek feedback from students to continuously refine and adapt the use of G.O. to suit their needs better.
4. Given the positive impact of graphic organizers on retention, it is recommended that teachers develop and incorporate lesson exemplars with graphic organizers into English instruction for students with intellectual disabilities.

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