Theory

Visual Representation

What is a graphic organizer? According to National Center on Accessing the General Curriculum (NCAGC) a graphic organizer can be defined as “a visual and graphic display that depicts the relationships between facts, terms, and/or ideas within a learning task.” But why is this helpful in the classroom? How does the use of “a visual and graphic display” improve the learning process for students?

Research from educational software creators Inspiration on visual thinking and learning states that visual learning helps students do the following:

- Make abstract ideas visible and concrete
- Connect prior knowledge and new concepts
- Provide structure for thinking, writing, discussing, analyzing, planning and reporting
- Focus thoughts and ideas, leading to understanding and interpretation

Some educators may argue that graphic organizers only work for visual learners, and ignore the other multiple intelligences, however, research analyzed at GraphicOrganizers.com states that the elaborate thinking skills required, such as those listed above, “dictates the subsequent success of learning far more that one’s intellectual aptitude for processing information via different presentation modes.” This means that the proportion of students who greatly benefit from visual representations of information is extremely greater than those for whom these devices do not seem to provide much help.

For students who struggle with the use of graphic organizers, such as ELL or LD students, graphicorganizers.com suggests teachers should consider several things. First, most students who have difficulty using a graphic organizer have never been taught how to read and understand them. Therefore, they should be taught to do so before asked to complete the organizer alone. Additionally, in order to use graphic organizers to their fullest potential, teacher should make sure that they provide a dual presentation of both auditory and visual representations.

Preexisting Knowledge

A theory related to graphic organizers is schema theory. According to Gloria A. Dye, author of “Graphic Organizers to the Rescue”, “schema theory states that new information must be linked to preexisting knowledge… a person takes this new information and stores it in preexisting hierarchies or channels.” To add to the prior knowledge that students have, graphic organizers organize this information and help students begin processing it. Then, it can be constructed into the existing scaffold of the students’ mind, essentially increasing learning and knowledge.
Practice

Based on the theories behind graphic organizers, there are many types that can be used in the classroom. Kansas University has divided the wide topic of graphic organizers into 6 separate categories. Educators can choose which organizers would be most effective in their curriculum.

- **Hierarchical Organizers:** Present the main ideas and supporting details in ranking order

Figure 1: Inverted Pyramid, students may use to visual the organization of traditional news stories

- **Comparative Organizers:** Depict similarities among key concepts

Figure 2: Venn Diagram, students use to compare/contrast three film versions of Hamlet
• **Sequential Organizers:** Illustrate a series of steps or place events in a chronological order

Figure 3: Plot Development Chart, student can chart fiction stories

![Plot Development Chart](image)

• **Diagrams:** Depict actual objects and systems in the real world of science and social studies

Figure 4: Water Cycle, students can visual the process; diagram borrowed from sawater.com

![Water Cycle Diagram](image)
• **Cyclical Organizers:** Depict a series of events that have no beginning or end

*Figure 5: Cycle, students can recognize the recursive thought process of Hamlet*

- Hamlet's Decision
- Hamlet's (Re)Motivation
- Hamlet's Guilt
- Hamlet's Inaction

- Hamlet's Debate

• **Conceptual Organizers:** Include a main concept with supporting facts, evidence or characteristics

*Figure 6: Essay Outline, students can use for prewriting*

<table>
<thead>
<tr>
<th>Topic #1</th>
<th>Topic #2</th>
<th>Topic #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Support</td>
<td>• Support</td>
<td>• Support</td>
</tr>
<tr>
<td>• Example</td>
<td>• Example</td>
<td>• Example</td>
</tr>
</tbody>
</table>
Lesson Plan
CP Communications: Inverted Pyramid

To introduce and organize information the topic of the inverted pyramid, I used two graphic organizers in my lessons. One was to visually represent the inverted pyramid (Figure 1). The other was to allow students to organize information following the inverted pyramid style.

To introduce the inverted pyramid, I handed out copies of a traditional news story that follows the inverted pyramid along with the pyramid as a graphic organize (Figure 1). First, I explained the pyramid to the students, allowing them to label the parts, and then had them identify the parts in the example news story. After discussion, the students were assigned a story to write using the inverted pyramid style. They received the 2nd prewriting organizer that required students to identify and organize the information important to the story. Once the organizer was completed by the students, each student had to conference with me to verify proper selection of facts, quotes, background info, etc. Once this is finished, the students wrote a rough draft of their story, followed by a final draft after peer editing.

To accommodate for any ELL/LD students in the classroom, I made sure that the organizer was explained beforehand. To assist me in this, I modeled completion of the 2nd graphic organizer using information from the example news story.

<table>
<thead>
<tr>
<th>Who</th>
<th>What</th>
<th>Where</th>
<th>When</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
</table>

Important Information (including at least 2 quotes)

Background information
Rubric for Use

I used this rubric to assess my conference with the students. It helped me understand where they student may be confused so we could discuss and correct it together. I also held the student responsible for taking advantage of the organizer as a tool for organization.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 W's &amp; 1H</strong></td>
<td>Some questions answered and/or answers weak</td>
<td>Most questions answered completely and/or answers could be stronger</td>
<td>All questions answered completely with strong responses</td>
</tr>
<tr>
<td><strong>Important Information</strong></td>
<td>Information and/or quotes are weak</td>
<td>Information and/or quotes are adequate</td>
<td>Information relevant and supported with strong quotes</td>
</tr>
<tr>
<td><strong>Background Information</strong></td>
<td>Information isn't relevant and/or information should be in other category</td>
<td>Information is related to story but could be stronger or not eligible to be background info</td>
<td>Background information is correct and relevant to story</td>
</tr>
<tr>
<td><strong>Use of graphic organizers as tool</strong></td>
<td>Some sections incomplete and/or information misplaced</td>
<td>Most sections completed and/or information slightly misplaced</td>
<td>All sections completed with appropriate information</td>
</tr>
</tbody>
</table>

Teaching of the Lesson: A reflection

I taught the inverted pyramid lesson as I have taught in previous years, but I incorporated the use of the writing organizer and the rubric. The inverted pyramid organizer always helps the students visualize the importance and hierarchy of the information that should be included in their stories. This is important because they are use to writing essays that are organized entirely different, so being able to see the pyramid helps them understand the difference.

The new prewriting organizer that I gave them to use was a great help. They used it to collect and organize their information and see how strong each section was. The students expressed their gratitude at having the organizer to help prewrite instead of just jumping into the story.

We conferenced, using the rubric, which helped smooth things along, and I noticed the stories that students wrote were much more organized and thorough than the ones I received last year. Previously, I had to use several drafts of the story to get to the point where the student mastered the concept. However, using the organizers helped the students grasp the concept during the prewriting stage, long before we worked on the final draft.

Learning with the Graphic Organizer: A reflection

One student in particular, Jimmy, has had a hard time comprehending most concepts in our communications class. Each piece of writing he turns in tends to be off subject and organized entirely wrong. In order to help Jimmy master the concepts I am teaching, it takes much time during class in addition to after school tutoring to conference and rewrite pieces of work. Using the graphic organizer, I
was able to conference with Jimmy and monitor his writing process closely. The first time he used the
organizer, he had the 5W's and 1H correct, but was confused about the other information. Since I was
able to use the rubric to assess his work on the organizer, we could both understand where he was weak
and I could address his questions in these areas. Then he used a new organizer sheet to redo the
assignment and was able to find the correct information for use. This was encouraging to both Jimmy
and I because usually takes several days of attempts for Jimmy to grasp a new concept.

References & Resources
These references guided this project and are invaluable for any educator looking to use graphic
organizers in the classroom.

- *Graphic Organizers* by Tracey Hall and Nicole Strangman National Center on Accessing the
  General Curriculum, March 2002, information and research supporting the use of graphic
  organizers in education

- *Graphic Organizers to the Rescue! Helping Students Link—and Remember—Information* By
  Gloria A. Dye, Teaching Exceptional Children, Jan/Feb 2000 p 72-76. Schema and scaffolding
  theory along with examples for all grade levels

- Printable Graphic Organizers for Teachers, Grades K-12. Teacher Visions
  A huge collection of printables for teachers of all grade levels. A gold mine of resources

- Q&A: What’s the Big Deal with Graphic Organizers? By Edwin Ellis, 2004, from
  [www.GraphicOrganizers.com](http://www.GraphicOrganizers.com) Resources and examples of graphic organizers, as well as research
  notes.

- Special Connections: connecting teachers to strategies that help student with special needs
  successfully access the general education curriculum Developed by the University of Kansas:
  [www.specialconnections.ku.edu](http://www.specialconnections.ku.edu)

  Inspiration provides valuable software for creating graphic organizer and also provides much
  research and resources regarding them
Self-Evaluation

What did I learn from the project?

I found the research supporting the use of graphic organizers in education to be very interesting. The schema theory and idea of using scaffolding to increase student learning is an idea I can easily incorporate into my lesson plans by having students recall prior knowledge and use what I am teaching them to build upon it.

I was also able to review the different types of graphic organizers that are available for use, something I have never been able to do. Now I am aware of the different organizers so I can use them in my classroom where applicable.

Use in the future

I anticipate using many of these organizers in my classroom. With the exception of the diagram, I made sure that I created example organizers that I can put to immediate use in my classroom.

Perception of this as a learning project

I appreciated this project because it was different from the rest of the content of the class. It was something that I found immediate use for and that will help my entire class retain knowledge. I’m glad that I got to do the project because the new information I found reenergized me to really start using graphic organizers as learning tools. However, I do believe that this project would be good for students who aren’t in a classroom setting because they would learn the knowledge before they begin teaching so they can incorporate it into the curriculum from the beginning. Although, anyone who is teaching would benefit from this project in lieu of a case study because it would applicable for immediate use in the classroom.

Though I appreciated having an alternate assignment, I believe that this project would be best served as a standard project for the class because of its meaningful content. According to the research, graphic organizers, if used correctly, can really contribute to student learning and would be valuable tool for everyone to use in their classroom.

The only improvement that I found necessary would be to streamline the project because the parts were redundant, such as sections 2, 4, and 5. They could be condensed and refined. Also, the purpose of the rubric could be explained. I questioned what the content should be because I didn’t know what it was referring to.