Graphic Organizers Introduction Outline

AIAI Grant UDL Example ~ Towson University

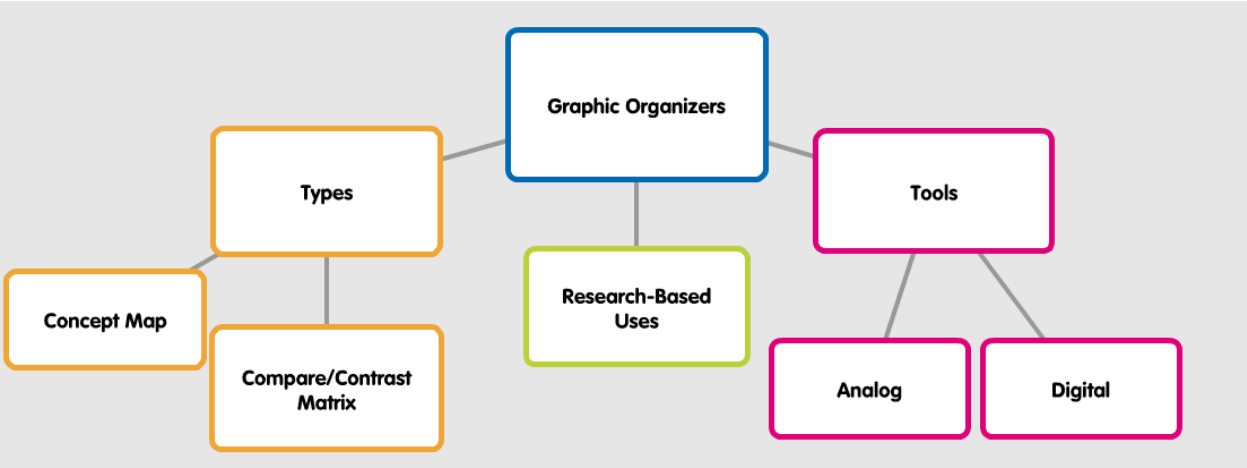
Faculty Developer: Audrey Cutler Email

Course/Program or Department: Office of Academic Innovation

Notes: 1 file

Graphic Organizer Topics

- Types
  - Concept Map
  - Compare/Contrast Matrix
- Research-based Uses
- Tools
  - Analog
  - Digital



Graphic Organizers Overview

Overviews on graphic organizers:

- Article: Graphic Organizers and Implications for Universal Design for Learning
- Brief Video: How to Use Graphic Organizers (Janet Harton)

Research-Based Best Practices

1. Instructors use advance organizers before a lesson to provide an overview and connect past and future concept. Advance organizers may include graphic organizers.
2. Students receive training how to construct graphic organizers.
3. Students work collaboratively to construct graphic organizers.

4. Students are required to explain the thinking behind their maps and the relationships between elements.

Concept Map Overview

Foundations and overview of concept maps from Joseph D. Novak and Alberto J. Cañas:

- Psychological Foundations of Concept Maps
- Constructing Good Concept Maps

Tools

When students create graphic organizers, the simplest methods are non-digital (e.g., pen and paper). A variety of digital tools are available, but few tools are free and all would require accommodations when created or used by visually impaired individuals. Therefore, none of the tools should be used without alternatives for students.

TU-Supported Apps

These tools can be used for mapping and are available at Towson. Each can be used for collaboration.

- PowerPoint SmartArt
- Google Docs Drawing Tools

Other Apps

These tools can be used to create free maps, but may be limited in the number of maps and the privacy of maps.

When using any non-TU supported technologies, faculty should research whether the tool is accessible, and if not, what alternatives they can provide to ensure that all students have equal and fair access to the content.

App	Availability	Free Maps	Features	Accessibility
Popplet (Click "Try It" for instructions and a demo)	Online for desktops and as an ipad app	10 maps	• Simple interface • Can upload images and draw • Collaboration tools	Inaccessible for screen readers, therefore cannot be a course requirement
Cmap	Online for desktops and as an ipad app	Unlimited (I believe)	• Specifically designed for concept maps • Text-based • More complex • Collaboration possible	Inaccessible for screen readers, therefore cannot be a course requirement

App	Availability	Free Maps	Features	Accessibility
Padlet	Online for desktops and as Apple and Android apps	Unlimited	• Simple Interface • Collaboration tools • Easily add links to media and attachments • No connectors	Inaccessible for screen readers, therefore cannot be a course requirement

Related Research

Dexter, D. D., & Hughes, C. A. (2011). Graphic organizers and students with learning disabilities: A meta-analysis. *Learning Disability Quarterly*, *34*(1), 51-72.

Kim, A. H., Vaughn, S., Wanzek, J., & Wei, S. (2004). Graphic organizers and their effects on the reading comprehension of students with LD A synthesis of research. *Journal of Learning Disabilities*, *37*(2), 105-118.

Nesbit, J. C., & Adesope, O. O. (2006). Learning with concept and knowledge maps: A meta-analysis. *Review of educational research*, *76*(3), 413-448.

Singleton, S. M., & Filce, H. G. (2015). Graphic organizers for secondary students with learning disabilities. *Teaching Exceptional Children*, *48*(2), 110-117.

Strangman, N., Vue, G., Hall, T., & Meyer, A. (2003). *Graphic organizers and implications for universal design for learning.* Wakefield, MA: National Center on Accessing the General Curriculum. (Links updated 2014). Retrieved [insert date] from http://aem.cast.org/about/publications/2003/ncac-graphic-organizers-udl.html