

Title

Graphic Organizers for 21st Century Learning
Formerly titled "Teaching & Learning with Graphic Organizers: Inspiration"

Target Audience

This course is intended for pre-service and in-service teachers of grades K-12.

Prerequisites

To successfully participate and complete the assignments in this course, the learner must:

- Have past experience using the classroom computer.
- Have past experience working with the Internet.
- Be familiar with taking an online course or have completed the PBS "Practice Learning Online with TeacherLine" course.
- Be familiar with elementary, middle, or high school educational content.
- Have access to a classroom or group of students in order to complete an implementation.

Course Description

Graphic organizers are dynamic and powerful tools that facilitate student learning. They present information, organize ideas, and manage concepts in a graphical or visual format, helping to develop clear and meaningful understanding. With advances in technology and the development of the read/write Web, these 21st century digital tools support critical thinking and problem solving; communication; collaboration; and creativity and innovation.

This course will help learners understand how graphic organizers can effectively support the classroom curriculum and facilitate the development of skills important for today's students. They will explore various online graphic organizer tools so as to understand what they are, how they can be used, and their learning implications in the classroom. They will also have the opportunity to implement the use of an electronic graphic organizer into the classroom or with a group of students. The course project will require learners to create a graphic organizer of their acquired learning for the course.

Instructor/Facilitator

See instructor/facilitator sheet.

Credits

To be determined by college or university

Goals



PBS TeacherLine

®

In this course, learners will explore the debate between the emphases on core curriculum vs. 21st century skills and identify the skills they feel should be the focus of the classroom today. They will learn about various graphic organizers, differences between the uses of hand-done and digital graphic organizers, and the tools that can create graphic organizers electronically. They will identify how the use of graphic organizers support higher-order thinking skills, strategies for using graphic organizers to effectively organize and develop writing, and how electronic graphic organizers can be combined with other Web 2.0 technology tools. They will also identify ways to incorporate the use of graphic organizers into classroom curriculum units.

By the end of this course, learners will:

- Develop an understanding of how graphic organizers can support 21st century skills and develop skills in critical thinking, communication, collaboration, and creativity and innovation.
- Learn to use Web 2.0 graphic organizer tools and develop strategies for using those tools in the classroom with students.
- Develop an understanding of how graphic organizers develop students' critical and creative thinking skills.
- Use graphic organizer tools with students in the classroom and learn how they can effectively enhance classroom instruction, assignments, and activities; and develop understanding.

Outline of Content and Assignments

After previewing the documents in the Course Information area, learners will proceed to Course Content to complete the following six sessions, working through each session in order. Throughout the sessions, learners are asked to articulate their ideas in various forms: they are encouraged to reflect on their ideas and experiences in their online journal; the discussions in the discussion forum are designed to allow learners to glean information from other learners' experiences. As a course project, learners will create a visual concept map or diagram in order to organize their ideas and acquired learning from the course. Learners will also be required to complete an implementation of the use of an electronic graphic organizer in the classroom or with a group of students.

This course is designed to address ISTE's *Educational Technology Standards and Performance Indicators for All Teachers*. These standards define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. This course specifically addresses the following ISTE NETS*T:

Standards 1 (a, b, c, d); 2 (a, c); 3 (d); 5 (c, d).

Visit <http://www.iste.org/standards/nets-for-teachers.aspx> for a full list of the ISTE's *National Educational Technology Standards (NETS*T) and Performance Indicators for Teachers* and more information about these standards.

Session 1: Graphic Organizers in the Classroom

The skills that many educators feel are critical for today's classroom as well as the controversies involved in determining what the focus of education should be will be presented in Session 1. Then learners will explore various types of graphic organizers and identify what they think the central focus in their classroom should be, as well as where graphic organizers fit into that focus. They will begin the course by defining their own professional goals and expectations; explaining their prior knowledge on the topic; and introducing themselves to fellow learners.

Learners will:

- Define their professional goals and expectations for this course.
- Explain their prior knowledge about integrating graphic organizers in instruction.
- Discuss and debate the skills that students need now and for the future and the relevance of this debate.
- Reflect on how graphic organizers can support the teaching of core subjects and the development of 21st century skills.

Read

- “Digital Natives, Digital Immigrants”
- “Executives Say the 21st Century Requires More Skilled Workers”
- “Framework for 21st Century Learning”
- “P21 Framework Definitions”
- “Visual Learning in the 21st Century”
- “Marc Prensky’s Essential 21st Century Skills”
- “Graphic Organizers”
- “Reproducible Graphic Organizers”

View Videos

- “A Vision of K-12 Students Today”
- Teaching Tip: Jim Burke on using graphic organizers”

Write in Online Journal

- Reflect on expectations for the course.
- Reflect on prior knowledge about integrating graphic organizers in instruction.
- Reflect on how graphic organizers can support the teaching of core subjects and the development of 21st century skills.

Participate in Online Discussions

- Introduce themselves to other learners.
- Discuss student needs for now and the future.

Session 2: Electronic Graphic Organizers

In this session, learners will first explore the use of electronic graphic organizers, comparing them to those created by hand. Then, they will learn about Internet technological advances and the new genre of Web tools that support critical thinking and problem solving; communication; collaboration; and creativity and innovation. Finally they will have the opportunity to explore various graphic organizers tools available through the Web.

Learners will:

- Evaluate and compare the advantages and disadvantages of using hand-done and electronic graphic organizers, including online Web 2.0 graphic organizers, in the classroom curriculum and setting.
- Determine how electronic graphic organizers can become a part of classroom teaching, including the challenges and benefits.
- Explore, analyze, and review a free, online graphic organizer tool.

Read

- “Computer-Based Concept Mapping: A Tool for Negotiating Meaning”
- “What a Concept! Using Concept Mapping on Handheld Computers”



- “Tools for Thought”
- “Archive for the ‘mind map’ Category – A smorgasbord of graphic organizers at Eduplace”
- TeachersFirst Edge-Concept maps/Mind Maps

Explore Resources

- “Integrate Inspiration® Into Your Curriculum”

View videos

- “Graphic Organizer”
- “Web 2.0 Graphic Organizers”

Write in Online Journal

- Reflect on using electronic graphic organizers in the classroom.

Participate in Online Discussion

- Discuss hand-done and electronic graphic organizers, including the use of online graphic organizer tools.

Complete Assignment

- Graphic Organizer Tool Review Assignment

Session 3: Critical Thinking and Problem Solving

This session will focus on critical thinking and the use of graphic organizers in the curriculum areas; have learners revisit a revised Bloom’s taxonomy that includes technology-related objectives; and then have learners identify and create graphic organizers that are based on higher-order thinking skills.

Learners will:

- Discuss how the development of thinking skills is important in helping students understand content and how electronic graphic organizers may enhance the process.
- Explore ways to integrate thinking techniques and strategies into instruction, including the use of graphic organizers.
- Identify graphic organizers that could help develop higher-order thinking skills from Bloom’s taxonomy.

Read

- “Energizing Learning”
- “Visual Tools for Reading Comprehension”
- “Seven Strategies to Teach Students Text Comprehension”
- “Critical Thinking and Problem Solving Skills Framework”
- “Bloom’s Taxonomy Blooms Digitally”

Explore resources

- Teacher Units”
- “Common Core Curriculum Maps”

Write in Online Journal

- Reflect on incorporating thinking strategies into instruction.



Participate in Online Discussion

- Discuss thinking, understanding content and graphic organizers

Complete Assignment

- GOs and Higher-level Thinking Skills Assignment (by the end of Session 4)

Session 4: Communication, Collaboration, and Creativity

In this session, learners will first look at the 21st century learning and innovation skills that include communication, collaboration, and creativity, as well as the need for focus in particular areas such as writing. Then, they will examine how various graphic organizer tools can support communication, collaboration, and the development of creativity.

Learners will:

- Discuss ways to use graphic organizers to overcome the challenges of improving students' writing and their ability to communicate, collaborate, and be creative.
- Reflect on the classroom implementation of using an electronic graphic organizer with a group of students.
- Identify challenges to implementing the use of an electronic graphic organizer in the classroom and ways to prepare students for the activity.

Read

- "Communication and Collaboration Skills Framework"
- "Creativity and Innovation Skills Framework"
- "Challenges Ahead" (Chapter 2, pp. 20-24)
- "What technologies can help my third grade daughter organize her writing"
- "Computer-Based Concept Mapping as a Prewriting Strategy for Middle School Students" (pages 1 and 4)
- "What is Digital Writing and Why Does it Matter"

Explore resources

- Nine Tools for Collaboratively Creating Mind Maps
- Mindmapping and Graphic Organiser Tools
- Thinking Tools: Graphic Organizers

Write in Online Journal

- Reflect on planning for electronic graphic organizers in the classroom.

Participate in Online Discussion

- Discuss writing and the use of graphic organizers for communication, collaboration, and creativity.

Complete Assignment

- GOs and Higher-level Thinking Skills Assignment
- Implementing Electronic Graphic Organizers in the Classroom Assignment (by the end of session 5)

Session 5: Supporting the Classroom



Learners will continue to explore the ideas of content and 21st century skills and read about differing viewpoints on the subject. As they work on the course project, you will explore graphic organizer tools as well as other technologies.

Learners will:

- Create a visual concept map or diagram that presents what they have learned in this course and how they will be applying their learning to instruction in the classroom. (Course Project)
- Debate the issue of what schools need to do to prepare students for the 21st century.
- Reflect on how electronic graphic organizers will be incorporated into instruction.

Read

- "A Well-Rounded Education for a Flat World"
- "Really Cool Teaching Tools: Classtools.net"

Explore resources

- David Warlick: 2¢ Worth: "Can You Concept Me?", "Mapping Folder-Based Presentations," and "The Technologies We Make"
- The E.G.O. Project (Electronic Graphic Organizers)
- Teachers at Risk: "Graphic organizers are one of the most useful tools to use in the classroom"
- Taking Teaching and Learning Seriously: "Graphic Organizers and Writing"
- Science Guy in a Tie: "ACIS Cycles Graphic Organizer HW/CW"
- PBS Innovation Awards Gallery

Complete Interactive

- "Supporting Inquiry with Primary Sources"

Write in Online Journal

- Reflect on planning for the use of electronic graphic organizers.

Participate in Online Discussion

- Discuss the debate between content and skills.

Complete Assignments

- Session 5: First Draft of Graphic Organizer of Course Project
- Begin Session 6: Peer Review of Course Project (complete by the beginning of Session 6)
- Implementing Electronic Graphic Organizers in the Classroom Assignment

Session 6: Learning and Creating

Learners will discuss the idea of creativity after viewing a video of one innovator who feels creativity should be in the forefront of learning. They will also complete the course project, and then, reflect on how the creation of a graphic organizer of the learning within this course helped construct their own learning.

Learners will:

- Analyze creativity and its relationship to 21st century skills.



- Create a visual concept map or diagram that presents what they have learned in this course and how they will be applying their learning to instruction in the classroom. (Course Project)
- Reflect on how the creation of a graphic organizer of acquired learning in this course facilitated the construction of learning for the course.
- Assess their learning in this course by comparing prior knowledge and acquired knowledge.
- Analyze the learning experience in this course by reflecting about professional goals and expectations.

Read

- "Schools Must Validate Artistic Expression"
- "How graphic organizers, dish detergent, water, electric beaters, bowls, soap foam and a Professor... helped prospective teachers learn Constructivism"

View Video

- "Creatively Speaking, Part One: Sir Ken Robinson on the Power of the Imaginative Mind"

Write in Online Journal

- Reflect on the facilitation of learning through the creation of a graphic organizer.
- Reflect on acquired knowledge.
- Reflect on professional goals and expectations.

Participate in Online Discussion

- Discuss how creativity, as described by Sir Ken Robinson, is addressed by developing students' 21st century skills using graphic organizers.

Complete Assignments and Activity

- Session 6: Peer Review of Course Project
- Session 6: Final Version of Course Project
- Post-Course Evaluation Survey

Schedule

This course is scheduled to take approximately 30 hours. The number of hours identified for each course reflects time spent online, but does not reflect the total time spent completing offline coursework and assignments. All learners are different and learners will likely spend double the indicated number of hours completing all coursework depending on learning styles and work habits.

Requirements

Learners are expected to:

- Complete all assignments.
- Maintain an online journal.
- Participate and actively engage in discussions with fellow learners while contributing to the social construction of knowledge.
- Be self-directed and self-motivated.
- Ask for assistance when they need it.



Materials (hardware, software, plug-ins)

Technical Requirements

- Word processor
- Internet service provider
- E-mail

Academic Dishonesty Policy

To be inserted by university institution only

Evaluation

This course is evaluated on a letter grade basis, and may be available for graduate credit. See graduate credit details pertaining to specific graduate credit institutions.

Last Update: February 10, 2012

