A Picture is Worth a Thousand Words

Saskatchewan School Library Association

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What is an Infographic?

According to Wikipedia, infographics or information graphics are "graphic visual representations of information, data or knowledge." Dave Gray provides a more in-depth definition of infographics on his <u>Communication Nation blog</u> where he explains:

- 1) It is a visual explanation that helps you more easily understand, find or do something.
- 2) It is visual, and when necessary, integrates words and pictures in a fluid, dynamic way.
- 3) It stands alone and is completely self-explanatory.
- 4) It reveals information that was formerly hidden or submerged.
- 5) It makes possible faster, more consistent understanding.
- 6) It is universally understandable.

Although graphs, tables, charts and timelines have been created for years, infographics take these graphics one step beyond through computer programs and Internet tools that allow easier manipulation of data and conversion of information that creates story or represents patterns and connections.

Kathy Shrock's video (http://vimeo.com/kathyschrock/infographicspromo) provides additional information about infographics.

Why Infographics?

The fundamental aspects of infographics are: communication, information, knowledge and visualization. These are also important skills and literacies for 21st century students and appear in the ISTE NETs (<u>http://www.iste.org/standards/nets-for-students.aspx</u>), AASL's Standards for 21st century learners (<u>http://www.ala.org/aasl/guidelinesandstandards/learningstandards/standards</u>), as well as in the Saskatchewan curricula (<u>https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp</u>).

Infographics require students to analyze, interpret, and make meaning of information. When creating and interpreting infographics students are asked to:

- Make sense of information by looking at relationships, data and changes presented
- Critically evaluate, analyze, and interpret information
- Check sources and determine reliability
- Research and synthesise information
- Set purpose, collect information, organize information, and draw conclusions
- Respect intellectual property when using and citing resources and images
- Design, construct and create
- Communicate main idea
- Determine importance
- Understand complex relationships between data over time

How to Create Infographics

Silvia Rosenthal Tolisano created an infographic How *to Guide* (<u>http://bit.ly/mXQxWa</u>) and the TechyTeacher blog (<u>http://schools.spsd.sk.ca/curriculum/techyteacher</u>) outlines steps for creating an infographic and it has been adapted below.

1. Introduce Infographics

- Define an infographic.
- Show students a variety of different infographics.
- Develop student co-constructed criteria focused on elements of a great infographic.

Instructional Resources and Teaching Tips

- Examine a variety of different infographics to make inferences, determine importance, and to consider ways that data could be represented.
- View student samples, such as <u>World Issues Infographics</u> created by students at Greystone Heights School.

2. Decide on Focus for the Infographic

- Discuss what message they want to communicate in an engaging way.
- Examine how large amounts of data will be presented meaningfully.

Instructional Resources and Teaching Tips

• Ensure students are able to represent their thinking and new learnings through infographics.

3. Collect Data to Support Focus

- Sift through research and critically analyze information which will support and highlight the focus.
- Annotate and cite sources.

- Begin thinking about how the information will be represented.
- Tell a story.

4. Storyboard

- Synthesize, determine importance, and draw conclusions about to information.
- Begin planning infographic.
- Determine and select important information that will highlight the focus
- Storyboard and sketch out a plan.
- Be clear and concise.
- Consider images and data that will best illustrate the focus.

5. Manage and Create Images and Data

- Create visual representations which best suits your data (charts, tables, graphs, scatter plots, etc.).
- Collect copyright-free icons and images which will enhance your data.
- List sources for icons, images and data which will be used in the infographic.

Instructional Resources

- Excel
- <u>Gapminder</u>
- <u>Google's Public Data Explorer</u>
- <u>StatPlanet Map Builder</u>
- <u>Hohli</u>
- Flickr BlueMountain
- Google Advanced Search
- <u>Icon Finder</u>

6. Infographic Construction

- Build the infographic.
- Select appropriate technologies to create infographic.

Instructional Resources and Teaching Tips

- <u>Photoshop</u>
- Powerpoint
- <u>Pixlr</u>
- <u>Sketchpad</u>
- <u>Inkscape</u>

7. Assess Against Co-Constructed Criteria

• Revise if necessary

Teaching and Learning Connections

- Compare and Contrast (ex: Canada and Atlantic Neighbors)
- Analyze and Conclude: (ex: Worst Man Made Natural Disaster and the impacts)
- <u>Character Relationships</u>
- <u>What are World Issues?</u>
- Teaching with Infographics: <u>Science</u>, <u>Social Studies</u>, <u>History and Economics</u>
- Teaching with Infographics: Language Arts and Fine Arts