Assessing and grading students' graphics

Students need to understand that they are expected to master skills for constructing graphics and that their grade in your class will be based, in part, on mastering as well as using these skills.

Evaluating the quality of a student's graphic organizer is best undertaken using a rubric that addresses several dimensions. Each of these are briefly explained below.

Assessing the Quality of a Graphic Organizer

____**Appropriate Structure   1-5 pts**
Did the type of graphic organizer selected match the best structure of the information to be communicated via the graphic?

____**Accuracy & Depth   1-5 pts**
Does the graphic depict accurate information that reflects in-depth understanding of the topic?

____**Essential Information   1-5 pts**
Is essential information about a topic depicted on the graphic?

____**Appearance   1-5 pts**
Is writing neat and legible? Free of rips, smudges, wrinkles, etc.?

____ Total score

____ divided by 20 points possible X 100 %

Was an appropriate format used for the type of information depicted? The graphic organizer formats selected by the student should match the type of information the students is attempting to communicate (i.e., a hierarchical graphic should display hierarchical information, a cyclic sequence should depict a cycle of events, and so forth). To evaluate this, you need to analyze the content of the information depicted on the student's graphic, form a judgment about what type of information the student is attempting to communicate, and then determine if the graphic used to depict the information is the most appropriate choice.

Appropriateness of Format

4-5 points **Sophisticated expert presentation**
Excellent match between the structure of the information depicted on the graphic and the format used to depict it. All entries on the graphic consistently reflect the same information structure.

2-3 points **Novice presentation**
Occasional mismatch between the structure of the information depicted on the graphic and the format used. Overall, appropriate format used to depict the information.

0-1 point **Erroneous presentation**
Frequent mismatch between the structure of the information depicted on the graphic and the format used. An entirely different organizer format would have been more appropriate, given the nature of the information the student was attempting to communicate.

For example, if a student depicted information on a hierarchical graphic, but closer examination of the details noted on the graphic indicates that many of them address how the concept differs from something else, then the wrong graphic format was selected. A more appropriate graphic might have been Compare/Contrast frame.

Likewise, if the student has selected a Compare/Contrast graphic to depict important information, but the information noted on the graphic is not comparing two concepts but rather just listing a range of details about a single concept, then the wrong graphic was used to display the information. A more appropriate one might be one of the hierarchical formats such as a web or flow chart.

Does the graphic depict accurate information that reflects an in-depth understanding of the topic?

Accuracy and Depth of Knowledge

4-5 points **Sophisticated expert presentation**
Information on the graphic is accurate and reflects a very in-depth knowledge of the topic.

2-3 points **Novice presentation**
Questionable accuracy of some information.

0-1 point **Erroneous presentation**
Frequent inaccurate data represented on the graphic; superficial presentation that generally lacks substance.

Naturally, the students' graphic should reflect accurate information. While accuracy is important, it is also critical to consider the relative sophistication of the student's understanding of the topic. This can range from a very simple, superficial, or surface-level understanding of the topic to very complex, in-depth, or sophisticated levels. Relative levels of depth of knowledge can be reflected by several indicators. These include: indicators, These include:

- The amount of information depicted on the graphic,

- The complexity and appropriateness of vocabulary used on the graphic,

- The type of graphic used (the ability to construct some graphics require greater understanding of the topic – ability to construct problem/solution, cause/effect, and cyclic process graphics may require more knowledge about the subject than hierarchic, linear sequence, or compare/contrast graphics.

Ultimately, however, you will have to use your own best judgment to make this determination. With only a little experience, determining students' relative level of understanding of the topic as evidenced by the graphic organizer will become obvious to you.

How well does the graphic depict essential information about the topic?

A graphic constructed by a student might reflect a set of highly pertinent ideas, all of which are important elements of the concept being presented. On the other hand, the student may have included information that is only tangetially related to the central big idea and not particularlyl relevant. For example, the student may have included Kennedy's brth date on a graphic designed to depict key events about the Kennedy presidency. While the birth date may be accurate, the detail is not relevant to the topic of the graphic.

Essential Information

4-5 points   Sophisticated expert presentation
Reflects important main ideas/topics that are central to understanding the topic. Details depicted are essential for understanding the main idea.

2-3 points   Novice presentation
Some, but not all, of the essential main ideas are included; the graphic may be missing some essential details.

0-1 point   Erroneous presentation
Few, if any, of the relevant main ideas/topics are depicted; much of the information is esoteric and nonessential.

On the other hand, the student may have omitted pertinent information that should have been included. For example, a graphic depicting key events of the Kennedy presidency should include something about the Bay of Pigs invasion. If this topic were omitted, then essential information would be missing. You will need to use your expertise about the topic to form a judgment about how well the student's graphic depicts essential information.

Also consider whether there is a central "big idea" present and, if so, whether it is precise. Most students include a title for their graphic. However,

some titles are better than others are, depending on how informative they are. The best titles precisely communicate a central "big idea." For example, for a graphic designed to address key events of the Kennedy presidency, the student might use one of the following titles:

"Kennedy"
     vs.
"Kennedy's Crises"
     vs.
"Kennedy's Cuban Missile Crises"

The third choice, "Kennedy's Cuban Missile Crisis," most clearly and precisely communicates what the graphic is about.

Another dimension that should be considered is whether a central idea is present at all. Many novice learners create graphics depicting a "collection," as opposed to an "organization," of facts that are loosely related to the title. For example, it would not be unusual for a novice learner to create a graphic showing a variety of facts about Kennedy, but none of them communicating a more central "big idea" about him. In contrast, a really cohesive graphic will depict information, all of which is clearly interconnected and logically enhances understanding of the central big idea.

What is the appearance of the graphic?

Appearance

4-5 points   **Sophisticated expert presentation**
Neat, legible writing. Color used to facilitate understanding. Space is used effectively so that information is easy to interpret. Information is presented in creative, unusual ways that nonetheless is easy to interpret.

2-3 points   **Novice presentation**
Basically neat and legible, but information is crammed together and difficult to interpret effectively.

0-1 point   **Erroneous presentation**
Crowded information, writing difficult to read, smudges, wrinkles, etc.

Obviously, the bottom line is that a student's graphic is neat and easily readable. The graphic should be free of dark erasure smudges, tears, hamburger grease, crammed-full-of-information boxes, writing up the sides of margins, and so forth.

In addition to neatness, you might want to consider other aspects of appearance, such as how appealing the graphic is, whether ideas are presentedin creative and unusual ways, whether the graphic is enhanced with pictures, color, and so forth. While you may not want to punish a student for failing to embellish the graphic, you should certainly consider reinforcing students who do this, perhaps by giving them extra credit points.