DePaul Center for Urban Education Research Base

Graphic Organizers develop thinking abilities and knowledge.

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<th>Core Element</th>
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<td>Students use graphic organizers to clarify content</td>
<td>Teachers expand their use of graphic organizers to present ideas and to enable students to analyze information in a variety of graphic organizers. Teachers use the PQROST structure to embed organizers in the development of knowledge. Students use graphic organizers across the curriculum. Students write to explain what graphic organizers show.</td>
<td>Graphic organizers structure analysis and enable students to identify and interpret relationships and patterns; they are a &quot;scaffold&quot; that supports analytic, inferential and evaluative thinking.</td>
<td>Bergerud, Lovitt, and Horton, 1988. Darch and Carnine, 1986.</td>
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The following research supports the emphasis on the use of graphic organizers:

Underlying graphic organizers is the theoretical construct that the visual and verbal organizational structure of the diagram consolidates information into a meaningful whole so students do not have the impression that they are being taught a series of unrelated terms, facts, or concepts. In effect, the diagram itself acts as a nonverbal, visuospatial referent that alerts the student to the interrelationships between ideas and their logical connections to superordinate, equal, or subordinate pieces of information (13).

This article investigates the effectiveness of graphic organizers for three classifications of secondary students enrolled in content area classes: students with learning disabilities, remedial student, and students in regular education. The results of three separate experiments indicated that graphic organizers, whether teacher-directed, student-directed with text references, or student-directed with clues, produced significantly higher performance than self-study for each group of students.

One teacher noted that he was able to move through textual material at a faster pace using graphic organizers because they
effectively combined reading, studying, and evaluation within one class period. Another beneficial aspect of using a written protocol is that, in the event of teacher absence, a substitute teacher can implement the lesson without detriment to the quality of instruction. Hence, the economic utilization of classroom time and the standardization of classroom procedures may be considered positive manifestations of the manner in which graphic organizers were implemented in this research (22).

Bergerud, Lovitt, and Horton (1988) reported that high school students classified as learning disabled and remedial recalled a greater number of facts from a life science text when material was presented graphically than when presented by using a study guide or when learned through self-study. Darch and Carnine (1986) demonstrated that elementary-aged students with a learning disability learned significantly more social studies and science content when taught with visual displays than when taught by a teacher-directed activity involving reading and discussing text (13).