

Using Visual Displays to Teach Academic Skills

What is the evidence base?

A *strong* level of evidence based on a high quality meta-analysis of 10 studies including 5 multiple-group designs and 5 single subject designs

With whom was it implemented?

- A total of 318 participants were included
- Students with
 - Learning Disabilities (7 studies)
 - Prelingually Deaf (2 study)
 - Mild to Moderate Intellectual Disabilities (2 studies)
- Ages ranged from 13 – 16 years old
- Males: 5 studies included samples that were predominately male
- Equal gender representation (1 study)
- Gender not reported (4 studies)
- Ethnicity
 - Not reported

What is the practice?

Visual displays are tools used to represent the complexity of the mental and physical world in which we live (Hyerle, 1996, 2000).

Visual displays are used in several ways including: graphic organizers, cognitive organizers, cognitive maps, structured overviews, tree diagrams, concept maps, and Thinking Maps (Boyle, 2000; Horton, Lovitt, & Bergerud, 1990; Hyerle, 1996, 2000).

Where is the best place to find out how to do this practice?

- To teach inferential reading comprehension using concept mapping (Boyle, 1996)
<http://www.nstattac.org/sites/default/files/assets/pdf/Boyle1996VisualID.pdf>
- To teach literal, inferential, and relational comprehension using a Venn diagram strategy (Boyle, 2000)
<http://www.nstattac.org/sites/default/files/assets/pdf/VennDiagramsBoyle2000.pdf>

Where has it been implemented?

- Regular education classroom (middle and high school)
- Special education classroom (resource, self-contained)

How does this practice relate to Common Core Standards?

- Key Ideas and Details, (Anchor Standards for Reading, Grades 6-12)
 - Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text
- Range of Reading and Level of Text Complexity, (Anchor Standards for Reading, Grades 6-12)
 - Read and comprehend literary and informational texts independently and proficiently
- Integration of Knowledge and Ideas, (Anchor Standards for Reading, Grades 6-12)
 - Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take
- Craft and Structure, (Anchor Standards for Reading, Grades 6-12)
 - Assess how point of view or purpose shapes the content and style of a text.
- Research to Build and Present Knowledge, (Anchor Standards for Writing, Grades 6-12)
 - Draw evidence from literary or information texts to support analysis, reflection, and research

How does this practice relate to the State's Career Cluster Initiative: Essential Knowledge and Skills?

- Demonstrate language arts knowledge and skills required to pursue the full range of post-secondary education and career opportunities (Academic Foundations)
 - Comprehend key elements of oral and written information such as: cause/effect, comparisons/contrasts, conclusions, context, purpose, charts/tables/graphs, evaluation/critiques, mood, persuasive text, sequence, summaries, and technical subject matter
 - Identify assumptions, purpose, outcomes/solutions, and propaganda techniques
 - Organize oral and written information
 - Identify assumptions, purpose, outcomes/solutions, and propaganda techniques

References used to establish this evidence base:

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Additional References:

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