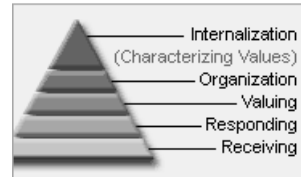


Benefits of Visual Ranking

Developing Skills in the Affective Domain

The *Visual Ranking Tool* facilitates projects that emphasize the higher levels of Bloom's affective domain taxonomy.

Bloom's Taxonomy for Affective Domain



At the values level, students use the tool to apply criteria to an item in order to place it in a hierarchy. At the organization level, students contrast different values and resolve conflict between them. At the internalization level, students use new knowledge to modify their organization and to persuade others of the value of their organization.

The tool is designed to be used in projects where collaboration, cooperation, and persuasion are at work. It is intended to promote classroom discussion, argumentation, and defense of individual or team choices. All of these activities involve the social interactions that are critical to learning. By promoting social interaction in the classroom, the *Visual Ranking Tool* supports students' own constructive thinking and their engagement in cognitive operations. (Jonassen, 1991; Salomon, 1993)

The *Visual Ranking Tool* also has great potential to facilitate "transformative communication" (Polman and Pea, 1997) through which both teacher and students equally and effectively participate in inquiry-based learning. Of course, the success of such learning opportunities depends on a capable teacher to provide scaffolding to students in making constructive arguments as well as in defending their own positions.

Giving Students Control and Access

Visual Ranking allows the ordering process to be accomplished with a Web-based tool that the individual learner controls. The use of an online tool offers benefits that complement the activity of making ordered lists. Students can easily reorder the items and, through comment boxes, explain why each item is placed where it is. Using the Internet to communicate, students can compare their lists with those created by various audiences: students in the same class, students at other (even

distant) locations, parents, or other adults who are experts in a particular topic.

Promoting Social Interaction in the Classroom

Isenberg and Jacobs (1981) argue that hands-on, manipulative materials are useful for students to acquire classification skills, because students can refine their skills to apply a rule in creating and sorting subsets through trial and error, observation, and making inferences. All these activities are facilitated by having the tool available online. In addition, a Web-based tool simplifies management of classroom projects; student lists are stored online, where they can be accessed by teacher or student at any time, from any computer connected to the Internet.

References

- Bloom, B.S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals: Handbook I, cognitive domain*. New York: Longman.
- Bransford, J., Brown, A., & Cocking, R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.
Retrieved from www.nap.edu/html/howpeople1
- Hunt, M. (1999). Teaching historical significance. In J. Arthur and R. Phillips (Ed.), *Issues in history teaching*. London: Routledge.
- Isenberg, J. & Jacobs, J. (1981, May/June). Classification: Something to think about. *Childhood education*, 284–288.
- Jonassen, D. What are cognitive tools? (1991). In M. Kommers, D. Jonassen, & J. Mayes (Eds.) *Cognitive tools for learning computers and system sciences*, 81. Berlin: Springer-Verlag.
- Polman, J., and Pea, R. (1997). *Scaffolding science inquiry through transformative communication*. Paper presented at the 1997 NARST Annual Meeting, Oak Brook, IL.
- Salomon, G. (1993). On the nature of pedagogic computer tools: The case of the writing partner. In S. Lajoie and S. Derry (Eds.) *Computers as cognitive tools*. Hillsdale, NJ: Erlbaum.