

# Concept Mapping: A Tool for Both Sensing and Intuitive Learning Styles

By John W. Pelley, Ph. D.

Type practitioners agree that each dimension of type contributes to learning. As in earlier studies on type and academic performance, I also have found that the strongest influence in this area is that of the sensing and intuitive functions. Our sensing function is used to focus on *information*, both what we already know and what is new information. Our intuitive function is used to construct meaningful *relationships* between the known and new information. Thus both sensing and intuition make essential contributions to our learning.

Concept mapping can be a valuable tool for developing both sensing and intuitive skills in students of both preferences. This study method uses circles (or other shapes) called “nodes” to enclose key concepts. The shapes are linked with lines and words describing

The student should create his or her own concept map, not just copy one presented by the teacher. Sensors need to understand that it is natural to be uncomfortable at first as they change the way they study. Instead of reading linearly through the text, they now need to explore the text for ways to organize the information by groups. They must also learn to connect material located far apart physically in the text by drawing crosslinks between nodes in their maps.

It is helpful for students to talk about the map since verbalizing seems to help sensors identify patterns. Learning through concept mapping becomes an active discovery process for the sensing type student. Those who become confident in the method often say, “I see the material differently now!” This reflects the development of their intuitive skills.

topic areas. They are also uncertain about whether “I did it right.” Therefore, sensing students may need to be walked through the process the first time or two with reassurance that more than one correct diagram is likely for any subject. They will greatly appreciate the teacher reviewing their maps and commenting specifically on the levels of hierarchy, the way they grouped the general concepts, and especially cross links they discovered between different branches of the hierarchy.

Intuitive students, on the other hand, often resist concept mapping because they feel they already see the relationships in the material and see no point in writing them down. The teacher needs to show such students examples of how concept mapping provides a structure on which to hang details they otherwise may overlook or forget.

Students of both types go through an initial period of adaptation as they change from passive readers to discoverers. Once they

adopt the method, they are usually pleased with the insights it provides, the ease of review for exams, and the overall savings in time. Most important, it taps into an intelligence that is already there, but not accessed.

Of course both sensing and intuitive students are far from homogeneous in their use of their preferred mental functions. They will have developed their own types and their own skills to different extents. All, however, need to develop the capacity to actively organize new information so it forms associations with what is already known. Concept mapping can help students of both sensing and intuitive preferences achieve that integration.

See Sample Concept Map

Dr. Pelley, INTP, is a biochemistry teacher who now consults with medical schools on type applications to teaching and learning issues. He can be reached at [john.pelley@ttuhsc.edu](mailto:john.pelley@ttuhsc.edu) or (806) 743-2543.

Constructing a concept map (See example below)

Select the topic to be studied. Since it is going to be subdivided, the size of the topic is not critical. It can be part of a lecture or material that is covered in several lectures.

Identify the major concepts by listing or highlighting them in the text, paying particular attention to material in lecture notes that was especially emphasized.

Rank the concepts (and facts) from most general to most specific.

Try to branch out at each level with more than one link.

Arrange the concept map with the most general, or inclusive, concept at the top level, enclosed in a circle of other shape. Link it to more specific concepts placed on the next level and enclose those as well. Label connecting lines with linking words that explain the relationship, if needed. Arrowheads can show direction, cause-and-effect, etc.

Identify and draw cross-links between related concepts. This is a powerful step in developing integrative thinking.

The top down type of diagram shown in the illustration is far more useful for sensing types than a “cluster” pattern that spreads out from the center like a spider web.

Sample concept maps

