

Tools for Team Decision Making and Problem Solving

1 Brainwriting

Divide the class into teams of four to six students. Distribute a sheet of paper with a question or issue for debate written on the top to each team member. Have each member write down three ideas and place the paper in a center pool. Ask each member to draw a new paper from the pool and add yet three more ideas that are either completely new or extensions of the ideas already on the form. Papers are exchanged until each member's form is nearly full. Finally, ask teams to read aloud in a round robin the ideas on the forms while other teams simultaneously cross out ideas that are repeated on their own forms. Note that ten minutes of "brainwriting" usually generates from 75 to 100 ideas.

2 Decision Chart

Use this when you have to make a decision and you don't know quite where to begin. In the DECISION rectangle at the top of the page, write a brief statement that describes the nature of the decision you must make. Then, in the ALTERNATIVE IDEAS column, list a number of alternative ideas that could resolve your dilemma. Then decide on a set of criteria to be used in judging the worth of each alternative idea and list these in the slanted boxes labeled CRITERIA. Rate each individual criterion according to the scoring scale. Finally, compile the total score for each alternative idea. The best decision is probably the idea that has the highest point value.

3 Planning Tree

Use this as a tool for planning and completing a project that has a major goal and sub goals to accomplish through a variety of sequential tasks. Write your major goal in the large box. Finally, organize the sequence of tasks for the implementation of the goals in the smaller boxes. It is important that each set of tasks be grouped with the appropriate subgoal in the diagram.

4 Cause-and-Effect Chain

Use the appropriate sections of the Cause-and-Effect Chain to record a series of cause-and-effect relationships learned from a topic of study. Be sure that each CAUSE produces a related EFFECT.

5 Compare-and-Contrast Diagram

Use this diagram when you want to relate a new concept you are researching or learning to knowledge you already have on a related concept. Concept 1 and Concept 2 should be recorded in the two rectangles at the top of the page. Compare Step: Write similarities between the concepts in the *HOW ALIKE?* box. Contrast Step: Note the differences between the two concepts in the *HOW DIFFERENT?* columns.

6 Fishbone Model

Use this model when investigating any problem that has a cause-and-effect situation. The effect is written in the rectangle at the HEAD of the fish and various categories are written in the rectangles at the ends of the major BONES of the fish. Possible causes of the effect are recorded on the SMALLER BONES under the most appropriate category names.

7 Flowcharts

Flowcharts are used to organize sequences of events, actions, or decisions. A standard set of symbols is used when designing flowcharts so that all can understand them. The arrangement of the symbols will vary according to the type of sequence depicted. The symbols and how each one is used are explained.