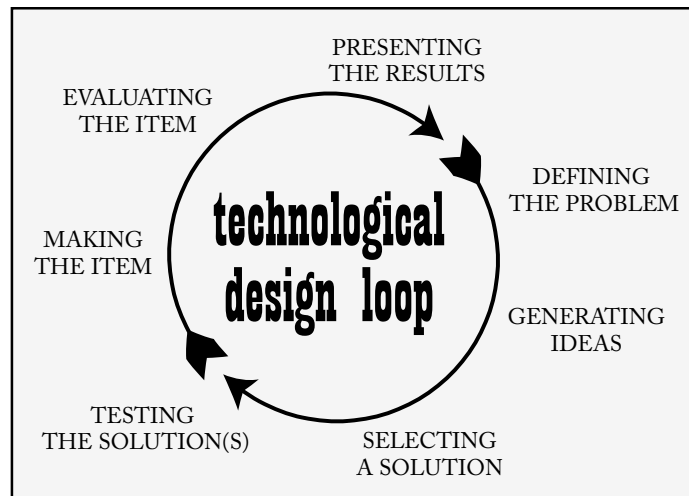


THE PROBASE DESIGN MODEL

As a constructivist, problem-based curriculum, the Probase Learning Units offer a variety of opportunities for students to engage in design activities. The Probase Learning Units have been developed for upper high school technology education students. It is assumed that students engaging in the Probase curriculum possess some prerequisite knowledge and skills regarding engineering design. If students do not have previous experience in this area, it may be necessary to provide a brief introduction to design-based problem solving. It is suggested that you use the following design model adapted for the Probase curriculum from the *Standards for Technological Literacy* (International Technology Education Association, 2000).



If you see a need to introduce the design-based problem solving process, it is suggested that you do so in a constructivist manner using a simple design problem. For example, you might have your students use the model presented above as they design a cover for a book or CD. You should attempt to use media beyond paper and pencil such as modeling clay, Styrofoam™, Balsa wood, or cardboard. Other simple design ideas include designing paper airplanes, a package for their favorite snack, a marketing flyer for a new product, an ergonomic handle for a shaving razor, or prototype cardboard seat or a model of other furniture pieces.