

Developing an Invention Idea by Brainstorming for Creative Solutions



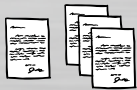
Student Guide

A Tornado of Ideas pg. 6



Suggested Activity

To reinforce Invention Concept Three, turn to page 14 of this Guide to complete the “More Than One Answer” activity with the class.



Copymaster

Copy the “Invention Idea Survey” copymaster on page 19 of this Guide, and distribute it to the class.



DVD Connection

Please refer to your Invention Thinking DVD for great inspirations.



Internet Connection

For more great class activities and inventive thinking resources, check online at www.bkfk.com/toolkit.



Print Resources

Alex Osborn, *Applied Imagination* (For additional print resources, see inside back cover.)

Invention Concept Overview

Now that your students have had an introduction to the inventive process, it is time for them to find a problem and brainstorm invention ideas to solve it.

Introducing the Invention Concept

Tell students that they are one step closer to *becoming an inventor!* The next step involves learning how to brainstorm to develop an invention idea even further.

Discussion Points

Explain to students that brainstorming is a process of creative thinking used by an individual or by a group of people to generate numerous ideas. Brainstorming is the most important element in each of the stages of inventive thinking. Brainstorming comes with a number of rules; be sure to review them with your students. Visit www.bkfk.com/toolkit for brainstorming rules and additional teaching resources.

Before your students begin to find their own problems and create unique inventions or innovations to solve them, you can assist them by taking them through some of the steps as a group.

Finding the Problem

Let the class list problems that need solving. Select one problem for the class to solve using the steps below. Use the brainstorming technique and focus on capturing lots of ideas.

- a. Find several problems. Select one to work on.
- b. Analyze the situation.
- c. Think of many, varied, and unusual ways of solving the problem.
- d. List the possibilities. Be sure to allow even the silliest possible solution.
Creative thinking must have a positive, accepting environment in order to flourish.

Finding a Solution

- a. Select one or more possible solutions to work on.
- b. Improve and refine the idea(s).
- c. Share the class or individual solution(s)/invention(s) for solving the class problem.

Coaching Tips

Resist the temptation to comment on ideas when in “brainstorming mode.” Just get juices flowing to produce a quantity of ideas and then cull quality from the list.

Extension

Solving a “class” problem and creating a “class” invention will help students learn the process and make it easier for them to work on their own invention projects.