

Brainstorming Information

Brainstorming History

In 1939, Alex Osborn developed brainstorming as a method for creative problem solving. Osborn, a partner in an advertising agency, was frustrated by his employee's inability to develop creative ideas for ad campaigns and products working on their own. In response to this problem, Osborn began hosting group-think sessions and noticed that the quality and quantity of ideas produced was much greater than those produced by individual employees. Osborn subsequently published his book *Applied Imagination* (1953), in which he systematized his creative problem-solving methods. This book was met with great interest in academia.

Brainstorming—Osborn's Definition

- a method by which a group tries to find a solution for a specific problem by amassing a list of ideas spontaneously contributed by its members.

Osborn's rules for brainstorming sessions

- judgment of ideas is not allowed (this comes later)
- outlandish ideas are encouraged (these can be scaled back later)
- a large quantity of ideas is preferred (quantity leads to quality)
- members should build on one another's ideas (members should suggest idea improvement)

Academic Response to Osborn's Book

- Osborn's method was adapted for the Composition classroom as a Prewriting technique.
- Empirical researchers began to test the validity of Osborn's methods and conclusions.

Composition & Prewriting

- As a prewriting technique in the Composition classroom the idea of brainstorming has primarily focused on individual brainstorming in the writing process. (Ede, 1995)
- Scholars have also considered the use of brainstorming as a classroom practice and suggested variations such as the brainwriting technique which ensures that all members of the group participate and their ideas are expressed and built upon. (Rodrigues, 1983)
- Synonyms used in writing texts: Idea Generation, Mapping, Invention and Prewriting.

Empirical Research

- The controversy surrounding Osborn's technique centered on his claim that group brainstorming sessions produce a greater quantity and quality of ideas than individuals working alone. According to researchers, the exact opposite is true. (Jablin, 1978)
- Scholars have recently begun to question early findings by examining the research methods utilized in these studies and suggesting further research avenues. For example, the size of the groups in many early studies was much smaller (4-5 individuals) than the optimal group size that Osborn promoted (6-12 individuals) and researchers did not take into account the potential impact this difference would have in group dynamics or idea generation. (Mongeau, 1993)

Brainstorming Today

Brainstorming is still promoted in English texts as a prewriting technique and is grouped with clustering, looping, and prewriting. (Ramage, 2000) Though it fell out of vogue, brainstorming is once again emerging as a technique for group idea generation and business leaders are utilizing the Internet as an arena for group meetings. Many internet sites are available for research, though not all of the information is reliable.

Brainstorming Bibliography

Ede, Lisa. Work in Progress: A Guide to Writing and Revising. (3rd Edition). New York: St. Martin's Press, 1995.

- ❖ "Strategies for Successful Invention," Chapter 5 of Ede's book, explores the process an author navigates to discover ideas. The author promotes informal methods such as free writing, clustering, looping or brainstorming; the chapter's organization is typical for writing instruction books.

Jablin, Frederic M., and David R. Seibold. "Implications for Problem-Solving Groups of Empirical Research on 'Brainstorming': A Critical Review of the Literature." Southern Speech Communication Journal XLIII, no. 4 (Summer 1978): 327-356.

- ❖ This article reviews the early research on the brainstorming technique as an aide to group problem solving. The text is divided into three sections in which the author examines the history of brainstorming and its practice, a review of empirical studies on brainstorming and an investigation on theoretical explanations for the poor performance of group brainstorming. The final section examines the practical implications of the technique for teaching.

Mongeau, Paul A. "The Brainstorming Myth." Paper presented at the Annual Meeting of the Western States Communication Association. Albuquerque, NM, February 12-16, 1993. Paper published, February 15, 1993.

- ❖ The most current and useful review of empirical research beginning in 1978, this article considers the efficacy of the technique as a means of idea generation. The paper also examines the differences in how brainstorming was originally conceptualized and used and how it has been tested in empirical research noting discrepancies (group size, etc.) between the two. In the last section, the author considers possible future research questions in testing the effectiveness of the brainstorming technique for generating both quantity and quality of ideas.

Osborn, Alex F. Applied Imagination: Principles and Procedures of Creative Thinking. New York: Scribner, 1953.

- ❖ This book codified principles and procedures developed by Osborn in group-thinking or "brainstorming" sessions he directed at his advertising agency. Organized into twenty-six chapters that explore different principles and procedures of creative thinking, Chapter 25 outlines the process for creative collaboration by groups (or brainstorming sessions) for the production of creative ideas. The principles Osborn set forth in this chapter are those that scholars have adapted for use in the composition classroom and researchers interested in creativity have questioned and tested.

Ramage, John D. and John C. Bacon. The Allyn and Bacon Guide to Writing. (2d. ed.) Boston: Allyn and Bacon, 2000.

- ❖ One of the most recent instructional texts, Allyn and Bacon briefly explore group brainstorming and outline the technique for individual writers exploring topic ideas. The book includes questions for triggering brainstorming as well as the use of brainstorming in causal analysis.

Rodrigues, Raymond J. "Tools for Developing Prewriting Skills," The English Journal 72, no. 2 (February 1983), 58-60.

- ❖ The author asserts that prewriting activities, including group brainstorming, are the most important part of the writing process. As a solution to brainstorming's greatest weakness (participant's lack of time to consider the ideas that were previously generated), Rodrigues promotes brainwriting. As practiced in the classroom, small groups of students write their ideas on individual sheets of paper and pass the sheets around the group, with each student reading the previous ideas logged on the sheet and adding more ideas.

Brainstorming Websites

<http://www.brainstorming.co.uk/contents.html>

- ❖ This website has an extensive introduction to brainstorming, the history of the technique, useful definitions, and free brainstorming training for session leaders; this section covers traditional and advanced methods.

Brainwriting Assignment¹

Materials

- Classroom with small tables
- Students and instructor with watch
- Paper & pens
- Topic students can use to generate ideas (perhaps a writing assignment)

Instructions

Part I: Introduction—Choose a Topic for Brainwriting

- With the instructor's assistance students generate a topic about which individual class members can develop ideas in their small groups

Part II: Small Group Idea Generation—Instructions

- Students divide into groups of 4-5 students
- Each student takes a piece of paper and begins writing their ideas about the class-generated topic.
- When done writing the first set of ideas, students place their paper at the center of the table and pick up another student's sheet
- After reading the list of ideas, individuals add more ideas to the bottom of the list
- Students continue process of adding to other people's ideas until the teacher calls time

Part III: Idea Discussion and Organization

- After the instructor calls time, each group combines and organizes the individual member's ideas
- The group should decide upon the best ideas and then spend time building upon them in discussion.

Part IV: Class Discussion—Wrap Up

- The entire class comes together and the smaller groups share their ideas

¹ This assignment has been developed using Raymond Rodriques' article (1983) on brainwriting in the classroom and can be adapted to a class of any length or subject.