OBTC 2015 at University of La Verne
June 17th – 20th, 2015

Submission Template

SUBMISSION GUIDANCE

1) Title of Proposal:

Do it all wrong! Using reverse brainstorming to generate ideas, improve discussions, and move students to action

2) Abstract:

Ideas dumped? Students stumped? Case studies slumped? Try it backwards! Reverse brainstorming is known for its usefulness as a way to improve student creativity, expand ideas and expression, and draw out group discussion. In this session, we will discuss the varied and multiple uses of reverse brainstorming in the classroom. Examples of how it can be used in accounting, organizational behavior, quality management, ethics, entrepreneurship, and research courses will be discussed. We will model reverse brainstorming during the session; come join us for some backward thinking!

3) Keywords:

Reverse brainstorming; student creativity; idea creation

4) Format

__x_ Activity or exercise
__ Discussion roundtable (60 minute only)
__ General discussion session

5) Time Requested:

_x__ 30 Minutes
__ 60 Minutes (*Roundtables must select 60 minutes*)
__ 90 Minutes

6) Planning Details:

No special requirements

7) Learning Objectives or Goals for the Session:

Learning objective 1: Participants will learn the basic premise of reverse brainstorming.

Learning objective 2: Participants will be able to prepare and debrief a reverse brainstorming session in their own classroom.

Learning objective 3: Participants will be able to apply the reverse brainstorming exercise to multiple courses and multiple face-to-face and online teaching contexts.

8) Management or Teaching Topics:

Instructors are constantly looking for new and innovative ways to engage students in group discussions related to complex or difficult coursework. Too, we often spend considerable time and effort trying to find classroom techniques that will help students think more deeply and creatively about the subject matter in a way that is relevant to the particular course needs, while also providing students with a tool for sparking creativity that they can use in the workplace. This session will focus on several concrete applications of the reverse brainstorming technique; we will present those topics and curricula for which reverse brainstorming is best suited. Too, we will discuss those areas that students find most challenging when applying reverse brainstorming, especially tips for helping students turn their "bad" ideas into appropriate, creative solutions.

While reverse brainstorming has been widely utilized within the marketing literature (Titus, 2000), it has not filtered into other areas as extensively. However, we have found that the reverse brainstorming technique is valuable in a wide range of contexts—nearly any management-related area in which students are asked to develop a set of recommendations or potential solutions becomes an area in which reverse brainstorming might be useful. To date, we have used reverse brainstorming in organization behavior, accounting, quality management, entrepreneurship, ethics, and strategy courses with success. Too, we have used the technique both in face-to-face and online formats.

Importantly, reverse brainstorming is a good way to provide a "voice" to those students who may not otherwise participate fully in classroom or online discussions. The use of a reversed idea generation scenario helps to ease tensions and allow for a more unique cross-examination of cases or problems in which students first identify negative possibilities before becoming overly concerned with the 'correct' answer. It is effective in both face-to-face and online contexts (Bonk & Rynolds, 1997)

THEORETICAL GROUNDING -

Scholarly literature shows that instructors have been using brainstorming exercises in the classroom since the 1950's (Parnes & Meadow, 1959), however reverse brainstorming is not found until much later. Initially used as a method for fostering ideas for new product development and marketing groups (Tuber, 1975), reverse brainstorming is now used in multiple areas of business and industry such as project management (Maltzman & Shirley, 2012), MIS, and system design (Carayannis & Coleman, 2005). Importantly, it has become a popular e-communication technique, as it can be used with asynchronous online discussions quite effectively (Gabriel, 2007).

Reverse brainstorming is known as a way to foster idea generation, but it is also known as an effective, proactive fault-finding exercise (Chen, Liu, & Li, 2013) in which

students can preemptively determine those ideas that have the greatest prospect for success. Empirical research has shown the effectiveness of reverse brainstorming as an idea generation mechanism within industry (López-Mesa & Bylund, 2011); its use in the management classroom not only provides a technique students can use to improve their individual and group class work, it also models a tool students can apply immediately to their workplace.

9) Session Description and Plan:

This session will include a brief introduction to the exercise, an abbreviated exercise of reverse brainstorming, and a short debrief.

Agenda:

Activity	Time	Who
Introduction. Definition of reverse brainstorming and examples of its use.	5 minutes	Presenters
Small groups: Modeling exercise. Participants will be asked to reverse brainstorm a specific question that is presented to them.	15 minutes	Presenters and all participants in small groups
Large group: Discussion that includes an example of how to effectively debrief a reverse brainstorming session in the classroom or online. Participants will be asked to think of possible classroom applications for reverse brainstorming.	10 minutes	Presenters and Participants

10) For Activities and Exercises:

1. This technique can be used in most management-related classes in which students are asked to discuss problems—no matter the context. But it is especially helpful for

situations in which students are having a difficult time developing a creative set of solutions. It works well for case study work.

2. It is important that this technique is used for problems in which: a) there are several potential solutions to the problem, b) the problem/case is solvable, c) students can choose the best solution from a set of potential solutions, and d) it is possible to identify when the problem has been "fixed."

3. Students should be asked to define, as specifically as possible, the problem they intend to solve.

4. Students should be instructed to implement a reverse-brainstorming technique in which they come up with as many "*bad*" ideas as possible for fixing the problem they have defined. They should be asked to come up with a list of at least 8-10 sets of actions that would go against the norms of the situation (depending on the context of the problem). This may mean solutions that would be in conflict with organizational norms, legal mandates, ethical considerations, generally accepted management theory or practice, or any type of solution that would likely to get the students reprimanded or fired if they were to encounter it in real life.

5. Students are asked to take their "bad" examples and, using core concepts from the course (for an Organizational Behavior course, this might include negotiation, influence, group norms, power, and politics; this will be different for other areas), turn each of the "bad" ideas into a "good" idea that the group could use to resolve the initial problem as it is defined.

6. Students should rank the "bad" ideas for the potential to turn it into a workable good idea. It should be noted that not all bad ideas can be turned into good ideas, but students should be able to turn at least half of the initial idea set into good options.

11) Implications for Teaching or for Teachers:

This session contributes to teaching by providing teachers with a fast go-to exercise that will help to get students talking and thinking. It is a flexible technique that can be used on nearly any topical area and has a generally broad appeal. Importantly, the use of reverse brainstorming has historically in the workplace; it has been used to generate ideas, especially for marketing and product development (Williams & Smith, 1990). In this same way, teachers can use this as a way to engage students in deeper discussions that challenges students to generate ideas and turn those into workable, classroom appropriate solutions. This technique is especially helpful for getting

students to think creatively during case analyses in a variety of management-related fields.

12) Application to Conference Theme:

This session describes how classes from a variety of management-related fields can use a single technique to improve idea development. Importantly, the concept of reverse brainstorming is relevant to the conference theme *Learning in Community* via its use as a group forum for enhancing discussion; the reverse brainstorming technique works best when it can be done in a group—within a *community of learners*. It creates a forum for thinking about problems and solutions in a very different and engaging way and forces students to think through both positive workplace behaviors and negative ones. Often when asked to develop ideas, we are faced with a firestorm of negative thinking; "can't" and "don't" thinking can invade student's ability to see how positive change can take place. This session helps us to provide students with a new way to take negative thinking and turn it into positive, actionable ideas that reinforce community in the classroom and turns the idea of what is "good" and "bad" in its head. Finally, this session provides students with a new way to use organizational politics to create *positive* change in a group, providing opportunities for discussion on how complex interactions and behaviors in the workplace can be both "bad" and "good" depending upon the context.

13) Unique Contribution to OBTC:
A variation of this session on reverse brainstorming has been presented, but within the very different and much more limited context of teaching positive deviance to MBA organizational behavior students. The current proposal suggests a much wider use of reverse brainstorming that can be implemented on the spot, at times when students appear to be struggling with developing creative ideas in a variety of curricular areas and in multiple classroom contexts. Importantly, this presentation has a significantly broader appeal that will engage OBTC's varied and active audience.

14)References and/or Additional Materials:

Bonk, C. J., & Reynolds, T. H. (1997). Learner-centered Web instruction for higher-order thinking, teamwork, and apprenticeship. *Web-based instruction*, 167-178.

Chen, A. L., Liu, W., & Li, X. S. (2013). On the systematic approach to enhance the quality of divergent thinking in an information age. *Extenics and Innovation Methods*, 135-139.

Carayannis, E., & Coleman, J. (2005). Creative system design methodologies: the case of complex technical systems. *Technovation*, *25*(8), 831-840.

Gabriel, M. A. (2007). Toward effective instruction in e-learning environments. *Making the transition to e-learning: Strategies and issues*, 173-180..

López-Mesa, B., & Bylund, N. (2011). A study of the use of concept selection methods from inside a company. *Research in Engineering Design*, *22*(1), 7-27.

Maltzman, R., & Shirley, D. (2012). *Green project management.* London, UK: CRC Press.

Parnes, S. J., & Meadow, A. (1959). Effects of" brainstorming" instructions on creative problem solving by trained and untrained subjects. *Journal of Educational Psychology*, *50*(4), 171-189.

Tauber, E. M. (1975). Discovering new product opportunities with problem inventory analysis. *The Journal of Marketing*, 67-70.

Titus, P. A. (2000). Marketing and the creative problem-solving process. *Journal of Marketing Education*, *22*(3), 225-235.