

OBTC 2017 at Providence College June 14th – 17th, 2017

Submission:

Issue-Based Problem Solving:
A pedagogical approach enabling students to understand and address business challenges

SUBMISSION GUIDANCE

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Submission for the 2017 OBTC Teaching Conference for Management Educators

1) Title, Abstract & Keywords In your abstract, please include a brief session description (not to exceed 100 words), and three to four keywords. If your proposal is accepted, this description will be printed in the conference program.

Title	Issue-Based Problem Solving:
	A pedagogical approach enabling students to understand and address
	business challenges
Abstract	This session will provide an introduction and practical examples of Issue-based Problem Solving (IBPS), a framework management and strategy educators can use to help bridge the theory-practice divide in the classroom. Adapted from techniques used by management and strategic consulting firms, we show how IBPS can be used over several classes teach students to logically and systematically identify and deconstruct business challenges, and to propose practical solutions to complex organizational challenges. In this session, we will introduce three component frameworks (SCEQ, Question Trees, and Communication Trees) and explore ways they can be used to supplement existing content in strategy, consulting or general management.
Keywords	Problem solving
	2. Communication skills
	3. Problem-based learning (PBL)

2) Teaching Implications:

What is the contribution of your session to management pedagogy/andragogy? Specifically, please include your learning objectives, and describe what management and/or teaching topics are relevant to your session, and why. Also, include theoretical, disciplinary, or theoretical foundations that will help reviewers understand how your ideas fit within the broader field of management.

Management consulting firms created Issue-Based Problem Solving (IBPS) to systematically identify, deconstruct, and propose solutions to address their client's complex problems. It builds upon ideas such as including the Pyramid Principle (Minto, 2002) and practices at McKinsey Consulting (Raisel, 1999).

Our college has adapted Issue-Based Problem Solving for use in an undergraduate strategy curriculum. While IBPS works well with strategy classes, its core principles can be adapted for use in a variety of management subjects, including but not limited to consulting and general management. IBPS builds upon the Problem-based Learning (PBL) pedagogical framework, and various approaches to implementing problem-solving in the classroom (Bigelow, 2004, Goltz et al, 2008, Sherwood 2004).

Specifically, we teach IBPS as three sequential and interdependent processes:

- 1) The "SCEQ" framework is used to identify a specific and singular core question the leaders of an organization must address,
- 2) "Question trees" then enable students to deconstruct their chosen core question into subquestions that can be answered with data, and finally
- 3) "Communication trees" help students to structure a present a compelling recommendation to both receptive and skeptical audiences.

3) Session Description and Plan:

What will you actually do in this session? If appropriate, please include a timeline estimating the activities will you facilitate: how long will they take, and how will participants be involved? Please remember that reviewers will be evaluating how well the time request matches the activities you'd like to do, and the extent you can reasonably accomplish the session's goals. Reviewers will also be looking for how you are engaging the participants in the session.

We will introduce participants to the three components of IBPS by allowing them to use the system themselves as if they were the students. Participants will learn how to identify a core question using the SCEQ process, answer that question using a question tree (a.k.a. "issue tree", and present their recommendations using a communication tree.

Time	Topic
0:00 - 0:15	Introduction to IBPS: From the consulting world to the classroom
	We begin by providing an overview of the origins of Issue-Based Problem
	Solving, including a discussion of its value to consulting practices and how
	faculty adapted it for a required undergraduate strategy class.
0:15 – 0:35	Step 1: Using SCEQ and Identifying a Core Question
	This important first step requires students to describe the <u>S</u> ituation,
	Complications, and Enablers facing a particular organization, before
	identifying a single broad Core Question. We describe how to introduce this
	framework to students using practical examples. In small groups,
	participants to go through the steps of creating a core question for an
	organization of their choosing.
0:35 - 0:55	Step 2: Creating a Question Tree
	Once participants identify a Core Question, the systematic use of Question
	Trees (often known as Issue Trees) enable students to break down a broad
	and difficult question into sub-questions that can ultimately be answered
	with data. Participant groups will then create a simple question tree for their
	core question identified earlier.
0:55 – 1:15	Step 3: Creating a Communication Tree
	In this final step, students learn how to structure the recommendations
	resulting from their Question Tree analysis into a compelling argument that
	can be presented to both receptive and skeptical audiences.
	Recommendations targeted at receptive audiences begin with the proposed
	solution; those targeted at skeptics rely heavily on the data collected in Step
	2.
1:15 – 1:30	Concluding remarks and open discussion
	In this final section, we will discuss both the opportunities and potential
	challenges of implementing IBPS into various management classes.

4) Application to Conference theme: How does your session fit with the overall OBTC theme of *Navigating the Changing Currents*?

Just as the academic environment and management education are changing, so too is the world our student face upon graduating. As management educators, a large part of our role is to help prepare students for that world. In 2015, the National Association of Colleges and Employers (NACE) surveyed 260 employers to learn the most important skills employers were looking for in recent college graduates. The second most popular answer was a tie between two responses: the "ability to make decisions" and "solving problems." IBPS is a pedagogical approach that helps a student do both, and as such, it is particularly relevant to students preparing to enter the working world.

IBPS helps students to avoid various "decision traps," including the overconfidence in judgment and "shooting from the hip," (Russo and Schoemaker, 1989). IBPS requires that students "think beyond the textbook" at every stage; students perform each step of IBPS by collecting and organizing their own information. When organized as a group project, IBPS also enables students to learn from each other by combining teamwork and problem solving (Goltz et al., 2008). In the end, many students come to appreciate the fact that often the best solutions to complex problems come not from finding the right answer, but from relying on their ability to be an independent and critical thinker.

5) Unique Contribution to OBTC:

Have you presented the work in this proposal before? If so, how will it be different? Is
this proposal under current review somewhere else? If so, please explain. How will your
proposal be different for the OBTC conference?

One of the three authors has presented an example of IBPS at the 2016 OBTC conference. In that session, IBPS was presented through the use of a single exercise, examining the causes of the 2003 Space Shuttle Columbia disaster, an exercise used in our classes as a prelude to introducing IBPS. This proposed program for 2017 provides participants with a higher-level overview of how IBPS can be used not only to identify a core question, but develop and present solutions.

References

- Bigelow, J. D. 2004. Using problem-based learning to develop skills in solving unstructured problems. *Journal of Management Education*, 28(5): 591–609.
- Goltz, S. M., Hietapelto, A. B., Reinsch, R. W., & Tyrell, S. K. 2008. Teaching teamwork and problem solving concurrently. *Journal of Management Education*, 32(5): 541–562.
- Minto, B. 2009. *The pyramid principle: logic in writing and thinking*. Pearson Education. Raisel, E. M. 1999. *The McKinsey Way*. New York: McGraw-Hill.
- Russo, J. E., Schoemaker, P. J., & Russo, E. J. 1989. *Decision traps: Ten barriers to brilliant decision-making and how to overcome them.* Doubleday New York, Sherwood, A. L. 2004. Problem-based learning in management education: A framework for
 - designing context. *Journal of Management Education*, 28(5): 536–557.