

**2017 OBTC Teaching Conference for Management Educators
Response to “Call for Papers”
“Blind Review” Copy**

(1) Title, Abstract & Keywords

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

Title:

Save the Blue Frog: Utilizing Social Presence Theory to Enhance Experiential Games

Abstract:

Do you play games in virtual worlds? Do you utilize virtual reality environments to educate students?

According to Social Presence Theory (SPT), virtual platforms enhance learning outcomes by employing communication technologies to create a synthetic “sense” that students are interacting with other individuals (who may or may not actually exist) on a face-to-face basis.

During this session, we will review the history of SPT. We will then present and discuss a pair of experiential games with differing levels of social presence. Finally, we will explore emerging opportunities to extend the use of SPT into experiential learning games.

Key Words:

Social Presence Theory, Experiential Learning, Virtual Worlds

(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.

The topic of management communication plays an important role within the discipline of organizational leadership. A manager must employ his communication skills adeptly in order to

inform, persuade, and inspire his constituents to support the mission of the organization and the activities that must be performed to achieve it.¹

Social Presence Theory (SPT)² provides an important theoretical foundation for the design of communication systems. It was initially developed to guide the design of the AT&T PicturePhone during the early 1960s, and it has evolved to guide the design of various text, audio, and video communication platforms since that time.

SPT theorizes that communication processes are more effective when technology platforms create a synthetic “sense” that individuals are interacting with other individuals (who may or may not actually exist) on a face-to-face basis.

The simple use of emoticons (such as smiley faces) in text messages illustrates SPT. The complex use of anthropomorphic Artificial Intelligence personalities (such as Softbank's Pepper robot and Apple's Siri voice) also illustrates SPT.³

When management educators include experiential learning games in course curricula, SPT can improve communication processes and outcomes. Role-playing simulation games, for instance, rely heavily on communication activities between players, confederates, and synthetic robo-characters.⁴

SPT can help enliven such activities by enhancing the sense of realism that is embedded in the experiential interactions. Thus, learning games that incorporate the principles of SPT will tend to produce superior learning outcomes.

The learning objectives of this session are: (a) to define and discuss the principles of SPT, (b) to present a pair of comparative examples of experiential games that embody these principles, and (c) to engage the audience in a sample game for illustrative purposes. The session will

¹ There are numerous examples, throughout the education and practitioner literature, that explore the impact of personal characteristics on communication skills and abilities. Kraten (2009), for instance, explicitly applies the MBTI framework to the skill set of persuasive communication in his CPA Journal article “Rules vs. Principles: The Surprising Impact of Personality on Auditor-Client Interactions.”

² In an article entitled “Virtual Reality Systems in Academic Curricula and Corporate Training Programs,” Kraten and Kraten (2010) notes that SPT “... can trace its genesis to the work of AT&T Bell Labs scientist John Short, who used experimental variables from the field of social psychology to demonstrate that personal sociability, sensitivity, and warmth can be transmitted by devices such as the AT&T PicturePhone.”

³ Descriptions of applications of Artificial Intelligence have gravitated from the academic literature to the practitioner literature as the technology has extended its reach throughout society. An October 2016 article in the publication *Inc* entitled “This Humanoid Robot Could Work in a Retail Store Near You,” for instance, discusses a Japanese robot that utilizes “... the same language processing software as Apple's Siri ...” (Yakowicz 2016)

⁴ The Business Education Innovation Journal article entitled “Social Presence Theory And Experiential Learning Games” describes early versions of the games *Audit Experience!* and *Save The Blue Frog* (Kraten 2015). The current versions of these games will serve as the core of the OBTC conference presentation.

conclude with a discussion about emerging opportunities for extending the use of SPT into the audience's own experiential learning games.

By achieving these objectives, I plan to contribute to the academic pedagogy and professional andragogy of experiential education. I believe that our sample game, in particular, will provide a uniquely informative and immersive introduction to the innovative technologies that are revolutionizing this field.

(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.

I propose to deliver six modular activities during a sixty minute session, with the first three modules each requiring approximately five minutes, and the last three modules each requiring approximately fifteen minutes. These modules are:

(A) A presentation of the principles of SPT, and a brief audience discussion about contemporary applications in their own classrooms and training rooms. (5 minutes)

(B) An interactive demonstration and discussion of a role-playing education game, based solely and wholly in a virtual world⁵, entitled *Audit Experience!*⁶ (5 minutes)

(C) An interactive demonstration and discussion of a role-playing education game, based on a hybrid platform of web pages and face-to-face in-person environments, entitled *Save The Blue Frog.*⁷ (5 minutes)

(D) An open discussion that compares the effectiveness of this pair of games, and that compares and contrasts their techniques for applying SPT in the classroom. During this discussion, I will share what I have learned from my own experiences employing SPT, and from my own observations and outcomes regarding its impact on students. (15 minutes)

⁵ Cherbakov et al. (2009) refers to a virtual world as an environment that contains "virtual spaces ... for remote mentoring and learning, gaming-enhanced team building, scenario driven rehearsals, and multipurpose global events with complex social interactions."

⁶ The current version of this educational game has been uploaded to the virtual world *Second Life*. To visit the virtual sites of the game, teleport to a community known as Commerce Town that has been constructed at a site labeled SCU2. It is a supplemental community to the virtual world campus of Southern Cross University in Lismore, Australia. The Commerce Town site contains the facilities of the following simulated organizations: an accounting firm named Rowe & Co., a flour mill named Premium Bakers Flour, a Bakery, and a Shipyard.

⁷ The learning materials of the *Save The Blue Frog* case are posted online at savethebluefrog.com.

(E) A sample game that engages the entire audience as players, in a manner that encompasses the virtual world, web page, and face-to-face in-person communication environments. This sample activity will be an extension of the original *Save The Blue Frog* game reviewed in Module (C). (15 minutes)

(F) A discussion of emerging opportunities to implement these experiential activities in management education exercises, including an honest conversation about the comparative advantages and pitfalls of this approach. During this discussion, I will focus on the experiential "sample game" activity, and will help participants understand how to apply SPT in their own learning environments. (15 minutes)

All of the members of the audience will engage in these interactive demonstrations, discussions, and activities. The Second Life virtual worlds platform, the Wordpress blog and web site platform, and various Providence College communication technology platforms will be utilized to demonstrate the experiential games.

(4) Application to Conference Theme

How does your session fit with the overall OBTC theme of Navigating the Changing Currents?

The changing currents of technology are endowing web based communication platforms with powerful new capabilities to create a sense of social presence among management education students. According to SPT, instructors can employ this sense to create more engaging experiential games and other role-playing activities.

Four of the five areas that are listed in the *Call For Papers* are relevant to this session. These areas are:

(a) *Developing effective classroom experiences for our students in the changing academic environment.* The use of online technologies help create "classrooms without walls," thereby extending the classroom experience.

(b) *Providing unique ideas for utilizing the changing and evolving technology to enhance the learning experience.* Virtual reality and virtual worlds represent changing and evolving technologies.

(c) *Creating a forum for demonstrating effective tools to be utilized in navigating higher education.* The demonstration of the sample game provides such a forum.

(d) *Generating dialogues on important topics related to the changing demands of higher education that need to be navigated.* Role-playing simulations can help educators meet contemporary demands to help students develop critical thinking skills in a "real world" context.

(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?

I propose to deliver six modular activities, as defined in Section (3) of this document. I have previously presented the first four modules (A) through (D) at other conferences, and I have published portions of their content in several journal articles. The final two modules (E) and (F), though, consist of new material that has not been presented or published elsewhere.

Because the new material builds upon the older content, I believe that it will be helpful to present all six modules at the conference. However, if I condense the older material into a briefer period of time, I should be able to present this material within a thirty minute session.

Incidentally, the original version of the *Save The Blue Frog* game won the *Best Research Paper Award* at the Strategic and Emerging Technologies Workshop of the American Accounting Association in Atlanta, Georgia in August 2014.

Earlier, the original version of the *Audit Experience!* game won the *Innovation in Teaching Award* at the 17th Annual Symposium on Ethics Research in Accounting of the American Accounting Association in Washington, DC in August 2012.

GAME SNAPSHOTS



The Learning Center, utilized in both games, designed as a wine bar in a vineyard.



The Collaboration Center, designed as an annex to the Learning Center.



The Conference Center and Classroom, designed as an annex to the Learning Center.



The Flour Mill in the game Audit Experience!

Save The Blue Frog!

an integrated accounting case involving valuation, sustainability, controls and risk, and ethics

HOME #1 VALUATION #2 SUSTAINABILITY #3 CONTROLS & RISK #4 ETHICS & MORALITY QUESTIONS?

#1 Valuation

The senior partner at BFAC has decided to ask the global energy firm WOW (i.e. World of Water, Inc.) for more information about the Vastarian hydroelectric project. He learns that WOW has secured a contract from the government to manage a \$50 million hydroelectric power plant facility that is now under construction by a firm that is owned by the brother of the King of Vastaria.

WOW's project fee proposal was based on a valuation estimate that relied on a rudimentary [profit and cash flow spreadsheet model](#). The BFAC partner is concerned that the spreadsheet model incorporated a limited set of assumptions that were compiled from sources of questionable accuracy.

The partner asks you to assess whether the spreadsheet model provided sufficient data to WOW to determine whether the project itself is financially feasible. If not, then the partner fears that he may need to inform WOW that they should consider a complete withdrawal from Vastaria.

WELCOME TO VASTARIA!



home of the blue frog

CASE CONTENT (FOR STUDENTS)

[Client Information](#)

[Client Spreadsheet Model](#)

[Feedback Survey](#)

The web based game materials in the game Save The Blue Frog.

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