Creative Challenges: Contributing Real-World Solutions from Classroom Learning

Innovation Description

At the heart of design problems in many domains lies human behavior. Although college students in the liberal arts are in the process of acquiring a great deal of knowledge about human behavior, they often fail to see the value and applicability of what they’re learning. They may limit their role to one of passive “intake,” or “What to I need to know for the exam?” However, pairing a course with a corresponding online design challenge can activate students’ enthusiasm and curiosity: they apply new concepts to current, real-world problems while a course is running, rather than postponing their sense of agency to someday after graduation. Responding to design challenges shifts their focus to “output,” or “What can I contribute that will help people actually solve this problem?”

In fall 2017, members of PSYCH 443 “Creativity” simultaneously participated in the initial stages of a design competition hosted by OpenIDEO, a platform seeking crowdsourced solutions to the question: “How might we inspire experiences and expressions of gratitude in the workplace?” In-class learning supported students through creative problem-solving stages -- research, ideas, refinement, review -- and allowed students to give and receive feedback on their ideas. Sharing their ideas with a much broader audience gave additional weight to the steps of redefining problems and opportunities, generating innovative alternatives, and taking action to implement ideas. A key contribution of the innovation is the way it encourages students to think of their knowledge as useful for a variety of purposes and to try out its value in the world.

Examples of Teaching Innovation

Marketing, Design, & Idea platforms
- Graphic = community co-creation
- Innovation Exchange = open innovation marketplace
- Queen's Creative = crowdsourcing anything creative
- Brand Tags = crowdsourcing lead generation
- CrowdSPRING = student challenges
- LeadVine = marketplace for creative solution
- WildDesign = crowdsourcing next generation
- Innoget = research intermediary platform
- IdeaConnection = idea marketplace and problem solving
- 99designs = elite sourcing platform
- IdeaConnection = idea marketplace and problem solving
- Ideaken = collaborative crowdsourcing
- Innovation-community.de = community of innovators & creators

Research & Development platforms
- Innovation = open innovation problem solving
- IdeaConnection = idea marketplace and problem solving
- PRESANS = beta - connect and solve R&D problems
- Innoget = research intermediary platform
- One Billion Minds = online problem solving
- Innovation-community.de = community of innovators & creators

Public Crowdsourcing
- Innovation = open innovation problem solving
- Science Commons = generic license agreements
- IdeaConnection = idea marketplace and problem solving
- Fold it = puzzles for science
- Sapiens = IP marketplace
- Yet2.com = IP marketplace

Student Comments

“This course taught me life-skills that I never anticipated gaining in a psychology course.”

“Each class began by discussing a recently published research paper on a step in the process of creativity. An activity helped us connect the findings of the study to our lives. Each class topic also tied into the course’s overall creative project of applying gratitude in the workplace.”

“This project helped me gain some valuable tools to aid with creativity in the future.”

“The structure of class included readings on the brain mechanisms, tricks to better our own creative processes, different activities to practice the components of creativity, and projects to take our classroom learning outside of the classroom.”

“By discussing constraints as a group, I was able to better guide my own generation of ideas and do more ‘editing’ to make legitimate and thought-out ideas, rather than just pushing out unfeasible strategies.”

“Seeing so many different ideas in one place also inspired me to think of more ideas, and to see that no two ideas are exactly alike. This helped me feel like I can offer something unique even though I am still a student.”

Examples of organizations sponsoring open, online competitions suitable for classroom Creative Challenges.

Students learn about a process for creative problem solving for real-world problems.

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Dr. Seifert would like to acknowledge the following:
- The students of PSYCH 443 for their openness, creativity, and willingness to explore new learning experiences with me.
- Michael Dimitrakos, Peter Feiler, and Ramaswami Mahalingam for their contributions to the course in Fall Term 2017.
- Patti Reuter-Lorenz, Rick Lewis, Julie Boland and Brian Wallace of the Department of Psychology for their support of instructional innovation.