Enhancing Creativity in Teaching and Learning in Online, Face-to-Face and Hybrid Courses

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Abstract

- This engaging session will feature four faculty members from one school who have incorporated a number of pedagogical and technological approaches into their courses to encourage creativity in their students while continuing to nurture their own creativity as a way to stay motivated, innovative and engaged as teachers.
- It will include an interactive online activity for participants with an opportunity for feedback to the presenters and illustrate some options for encouraging and assessing creativity in higher education.
- The session will review current research on creativity and distill the findings into practical applications for generating a learner-centered environment in any kind of classroom setting.
• Introduction to the session and brief background on the topic
  – Sara Anne Hook
• Discussion of how each faculty presenter enhances creativity in teaching and learning in his or her courses or future plans for this
  – Sara Anne Hook
  – Felisa Tennant
  – Josette Jones
  – Joseph Defazio
• Participants will do an interactive online activity (Joseph Defazio)
• Participants will do a self-reflection and provide feedback on the activity
• Wrap-up and questions
Creativity in Higher Education

• Creativity must have a central place higher education in the 21st century.
• If creativity can be taught, or at least encouraged, what should faculty members at colleges and universities be doing from a pedagogical standpoint to provide appropriate opportunities and supportive environments for creativity?
• Not only is it difficult to encourage creativity, but creativity is also a characteristic that is poorly defined and difficult to measure, making it even more challenging to demonstrate that someone’s teaching has had an impact on this important facet of critical thinking.
Anderson’s Taxonomy

Shows creating (creativity) at the very top of the critical thinking pyramid.
IUPUI’s Principles of Undergraduate Learning (PULs)

• PUL2: “The process of critical thinking begins with the ability of students to remember and understand, but it is truly realized when the student demonstrates the ability to:
  – (1) apply
  – (2) analyze
  – (3) evaluate
  – (4) create, including generating and exploring new questions and solving challenging and complex problems.”
IUPUI’s Principles of Graduate Learning (PGLs)

• Demonstrating **mastery** of the knowledge and skills expected for the degree and for professionalism and success in the field
• Thinking critically, applying good judgment in professional and personal situations
• Think critically and **creatively** to improve practice in their field
• Behaving in an ethical way both professionally and personally
Overarching Questions for Faculty

1. What type of creativity or creative behavior were you trying to encourage?
2. How did you develop your teaching to promote and capture that creativity?
3. How did students respond?
4. From this experience, can you articulate any principles about the relationships between teaching, learning creativity and ways to assess creativity?
Overarching Questions for Faculty

5. Do you continue to use this assignment, technology or pedagogical technique to encourage creativity and have the results changed over time?

6. How have your courses evolved to incorporate additional opportunities for more creativity in your teaching?

7. What insights do you have about how to assess creativity in the performance of your students, especially as a component of critical thinking?

8. How does enhancing creativity in the classroom contribute to providing a learner-centered environment?
Faculty Presenters

- The four faculty presenters will be asked to think of a teaching and/or learning situation where he or she tried to encourage students to be creative or where he or she was more creative in his or her own teaching.
- Since modeling is one of the most powerful pedagogies, the presenters will share any influences, inspirations or strategies that they use to stay engaged and motivated as teachers and the approaches they take to sustain and enhance their own creativity.
Sara Anne Hook, M.B.A., J.D.

- Teaches primarily in the Undergraduate Informatics program, specifically legal informatics courses
- All her courses are online
- How she enhancing creativity in her teaching
  - Team-teaching with a colleague who is very different
- How she encourages creativity among her students
  - Teaching INFO I470 Litigation Support Systems and Courtroom Presentations
- Future plans for enhancing creativity in teaching and learning
“When the Lawyer Met the Artist”

- Left brain versus right brain
- Linear thinker versus holistic
- Well-organized approach versus “outside of the box”
- M.B.A. and J.D. versus M.S. in Media Arts & Science, now pursuing Masters in Art Therapy
- Teaching legal informatics and business courses (“stay within the boundaries) versus “Seeing Sideways” (encourages risk taking)
- Different teaching strategies (“over-teaching”? due dates)
- Team grading – feedback from two perspectives
- Each brought her own strengths and expertise:
  - Course content (law, ethics, power of story, art of persuasion, color theory, design theory)
  - Software (SmartDraw)
Creative Thinking: Using a House Screen as Poster
And a Crime Scene Recreation as a Poster

Teaching Software in an Online Course: Drawing on Lessons Learned from Teaching SmartDraw

The courtroom of the 21st century has moved beyond flip charts, posters and static displays to include a variety of interactive and dynamic presentation media.

From demonstrations to scene reconstructions, the adage that “a picture is worth a thousand words” certainly translates into making a compelling and clearly understood argument during a trial.

Real-world homework assignments and projects were devised so that student could experience using the software as they would in a work setting.

This pedagogy was reinforced with a combination of tutorials from the textbook in conjunction with assignments where students were asked to construct detailed floor plans, vehicular accident reconstructions based on photographic evidence and scene reconstruction of a slip-and-fall dispute.

As part of the legal informatics curriculum, the instructors teach a course called Litigation Support Systems and Courtroom Presentations. This is an online course that is taught during summer semester. Teaching SmartDraw software in a six-week online course presented a number of pedagogical and logistical challenges. First, the course attracted a diverse student body, including students with significant skills in graphics design and other software, but who lacked knowledge of legal terminology and the rules related to evidence, legal ethics and courtroom procedures. Other students were much less comfortable with software, especially graphic design software, but had more substantial legal background. Interestingly, the instructors discovered that students in non-credit programs at IUPUI do not have access to PowerPoint and other software packages that for-credit students enjoy. Another technical difficulty is that SmartDraw is a Windows-based program.

The course included weekly Discussion Forums and extensive feedback on assignments as a way to promote student engagement in the course.

Also included were opportunities for students to reflect on the ethical issues related to courtroom presentations, including color theory, acceptable asset alteration rules and how perceptions can be influenced by changes to visual and audio materials.
Examples of Student Work

- INFO I470 Litigation Support Systems and Courtroom Presentations
- Based on a real-world event – a slip and fall in a pharmacy.
- Using SmartDraw software (accident reconstruction, including floor plans, timeline, impact on quality of life, medical expenses, lost wages).
- Students also write a paper addressing persuasive, creative and ethical issues in constructing a presentation for use in the courtroom.
A Year in the Life of Sally Jo Alexander

Ms. Alexander trips and falls at DrugMart Pharmacy

Still in pain. Visits hospital. X-rays show 3 fractured ribs. Also has a mild concussion, and badly bruised and swollen arms and legs.

Develops pneumonia. Kept in hospital 3 additional days.

Ms. Alexander visits pharmacy and presents the bill for her injuries. Manager says they will "take care of it."

8 months after receiving the bill, the Pharmacy has made no attempt to pay.


Released from hospital.

Released from hospital.

Photograph of arm

Photograph of arm

Photograph of leg

Photograph of leg

Photograph of arm

Photograph of arm

Photograph of leg

Photograph of leg

Photograph of arm
Interior of Pharmacy – Overhead View

Illustration of DrugMart Pharmacy. All measurements in this and the illustrations to follow are approximate.
Pharmacy Floor Plan
**Accident Description:**

Plaintiff arrived at the pharmacy to pick up her prescription. She entered through the main entrance and crossed the front of the store. She proceeded to walk toward the candy aisle. Upon turning up the aisle, she tripped over shelving units which were placed on the floor. The fall resulted in the plaintiff’s injuries.
Accident Scene Cross-Projection

Legend
- plaintiff
- shelf piece
- butter mints
- stocker
- witness

Butter Mints
Missing Shelves
Felisa Tennant, MIS, RHIA, CCS

- Teaches in the undergraduate Health Information Administration (HIA) program
- Teaches both face-to-face and online courses
- How she enhancing creativity in her teaching
- How she encourages creativity among her students
- Future plans for enhancing creativity in teaching and learning
Josette Jones, PhD

- Teaches primarily in the graduate Informatics program, specifically health informatics courses
- Many of her courses are online
- How she enhancing creativity in her teaching
- How she encourages creativity among her students
- Future plans for enhancing creativity in teaching and learning
Along the Continuum of Instructional Technology: Blended Learning

- **Steps for Successful Teaching**
  - Educational design team
  - Technical support team
  - Mentor/Administrative support

- **Motivation for learning**
  - Collaborative learning
  - Online components related to in-class materials
  - Learner responsible for "teach themselves"
  - Online activities done anywhere.

- **Judicious Use of Technology**
  - Case-based learning
  - Project-based learning
  - Resource-based learning
  - Game-based learning
  - Personalized learning
  - Student-centered learning

- **Groups Dynamics**
  - Significantly higher discussion participation
  - No significant differences in learning
  - Social, operantional, knowledge-related identity congruence

- **Technology**
  - Content Development
  - Virtual Collaboration & Facilitation
  - Learning Management Systems

- **Accommodation for Learning Styles**
  - Differentiation of on-line activities
  - Work added with textual media
  - "Social constructivist" approach
  - "Resource-based" learning

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INDIANA UNIVERSITY SCHOOL OF INFORMATICS AND COMPUTING AT IUPUI
Joseph Defazio, M.S., Ph.D.

- Teaches in the undergraduate and graduate Media Arts and Science programs
- Teaches primarily face-to-face
- How he enhancing creativity in his teaching
- How he encourages creativity among his students
- Future plans for enhancing creativity in teaching and learning
Suicide Intervention/Prevention: A Health Education Simulation

http://mypage.iu.edu/~jdefazio/index.html
In a face-to-face teaching environment, students explored the cross-disciplinary research in health education, psychology, and media arts and science.
Interest in the use of interactive simulation or serious games in health education is growing.

A truly effective simulation provides a cross-disciplinary view into the worlds of art, social sciences, health and technology.
The Suicide Intervention/Prevention Simulation was designed with six scenes and one terminology matching game.

The main character in this interactive simulation is Terrell, a college-aged student who exhibits signs of mental depression.
Goals for the Suicide: Intervention/Prevention Simulation

<table>
<thead>
<tr>
<th>Goal</th>
<th>Example</th>
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<tbody>
<tr>
<td>• Raise awareness of risk factors and appearance</td>
<td>Marked change in behavior or appearance</td>
</tr>
<tr>
<td>• Model appropriate intervention and help seeking behaviors</td>
<td>Caring, empathy, compassion</td>
</tr>
<tr>
<td>• Inform of resources for help-seeking</td>
<td>Present sources for help and guidance</td>
</tr>
<tr>
<td>• Model appropriate follow-up behaviors</td>
<td>Follow-up, provide continual support</td>
</tr>
</tbody>
</table>
Signs of Suicidal Tendencies

- Anger
- Anti-Social
- Anxiety
- Avoidance
- Depression
- Excessive Drinking
- Sleep Problems
- Withdrawn
Suicide Intervention/Prevention

Select a character to start the simulation.

Scene 1
Scene 2
Scene 3
Scene 4
Scene 5
Scene 6
Matching Game

Completing the simulation should take between 20-30 minutes.

https://www.iupui.edu/~twsp1/game/matchingGame.html
Self-Reflection

• Participants will complete a self-reflection (short online questionnaire)

http://www.surveymonkey.com/s/2GMJTY8
Wrap-up and Questions

- Any experiences to share from the online activity and the self-reflection?
- Any questions for the four presenters?
Thank you for attending the 2014 Maryville University SoTL Conference

Please contact us if you have questions about our presentation.