

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



Sara Anne Hook, Felisa Tennant, Josette Jones and Joseph  
Defazio, Indiana University School of Informatics and  
Computing, IUPUI

Maryville University SoTL Conference, October 10, 2014



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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.



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# Schedule

- 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

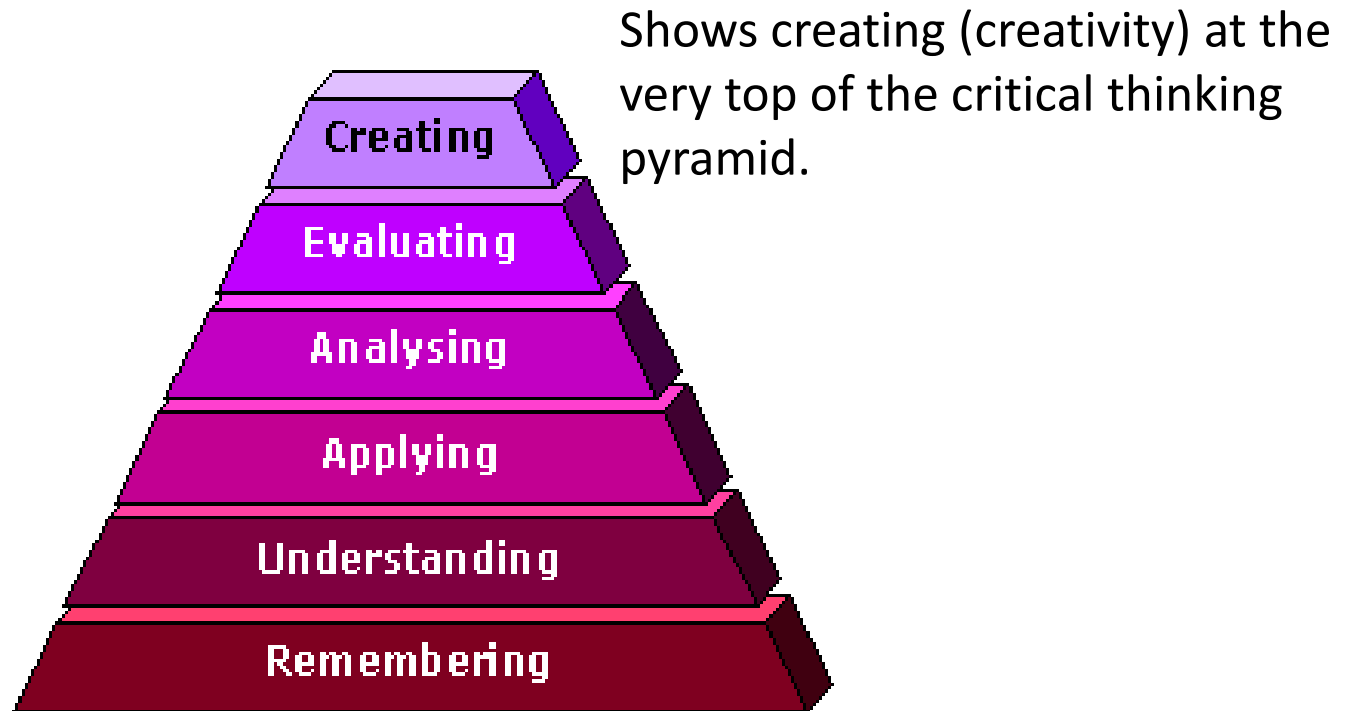
- Creativity must have a central place higher education in the 21<sup>st</sup> century.
- If creativity can be taught, or at least encouraged, what should faculty members at colleges and universities be doing from a pedagogical standpoint to provide appropriate opportunities and supportive environments 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.



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# Anderson's Taxonomy



# 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



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# 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.



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# 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



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# “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

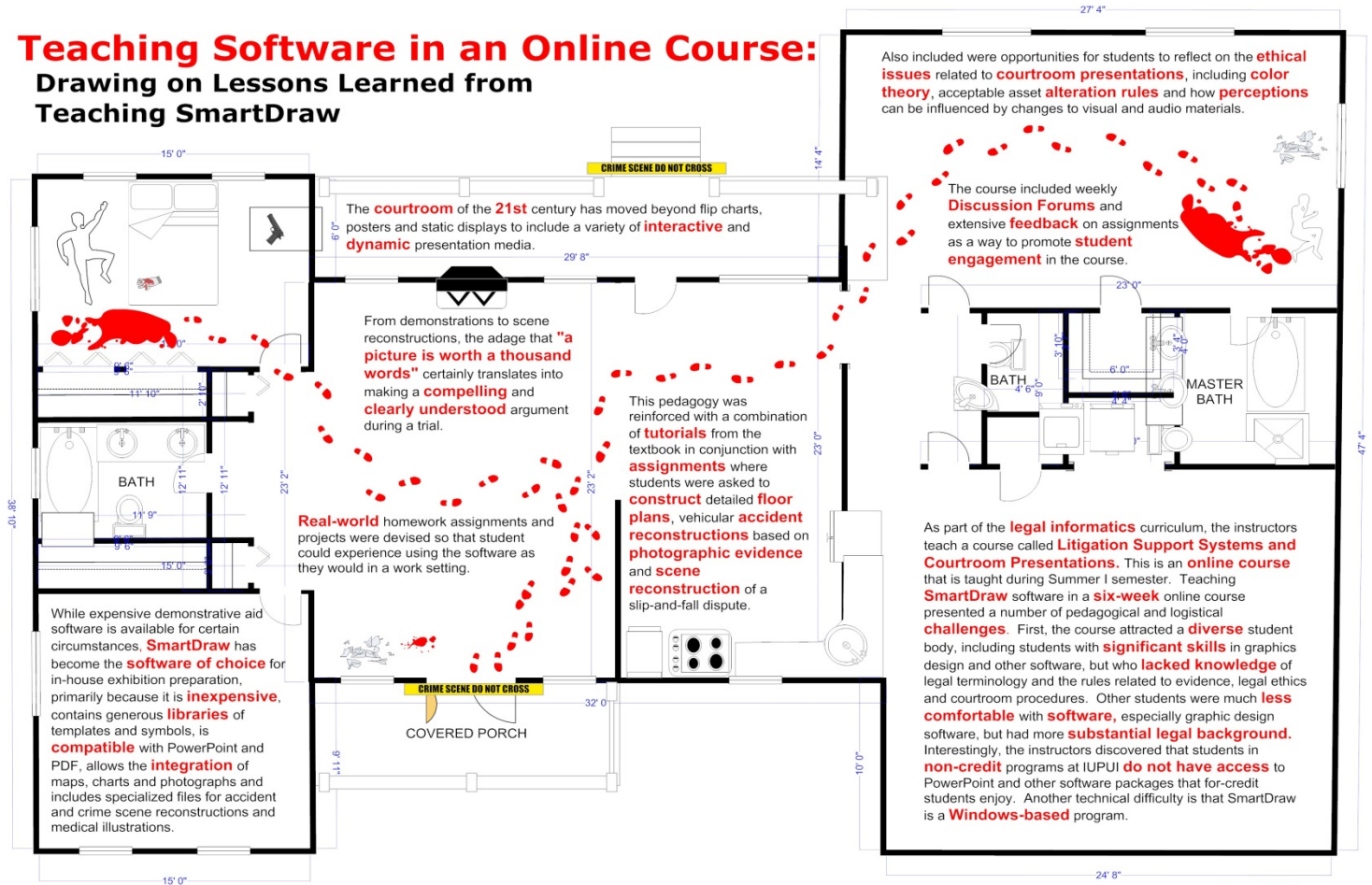


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# And a Crime Scene Recreation as a Poster

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



SmartDraw Academic Edition



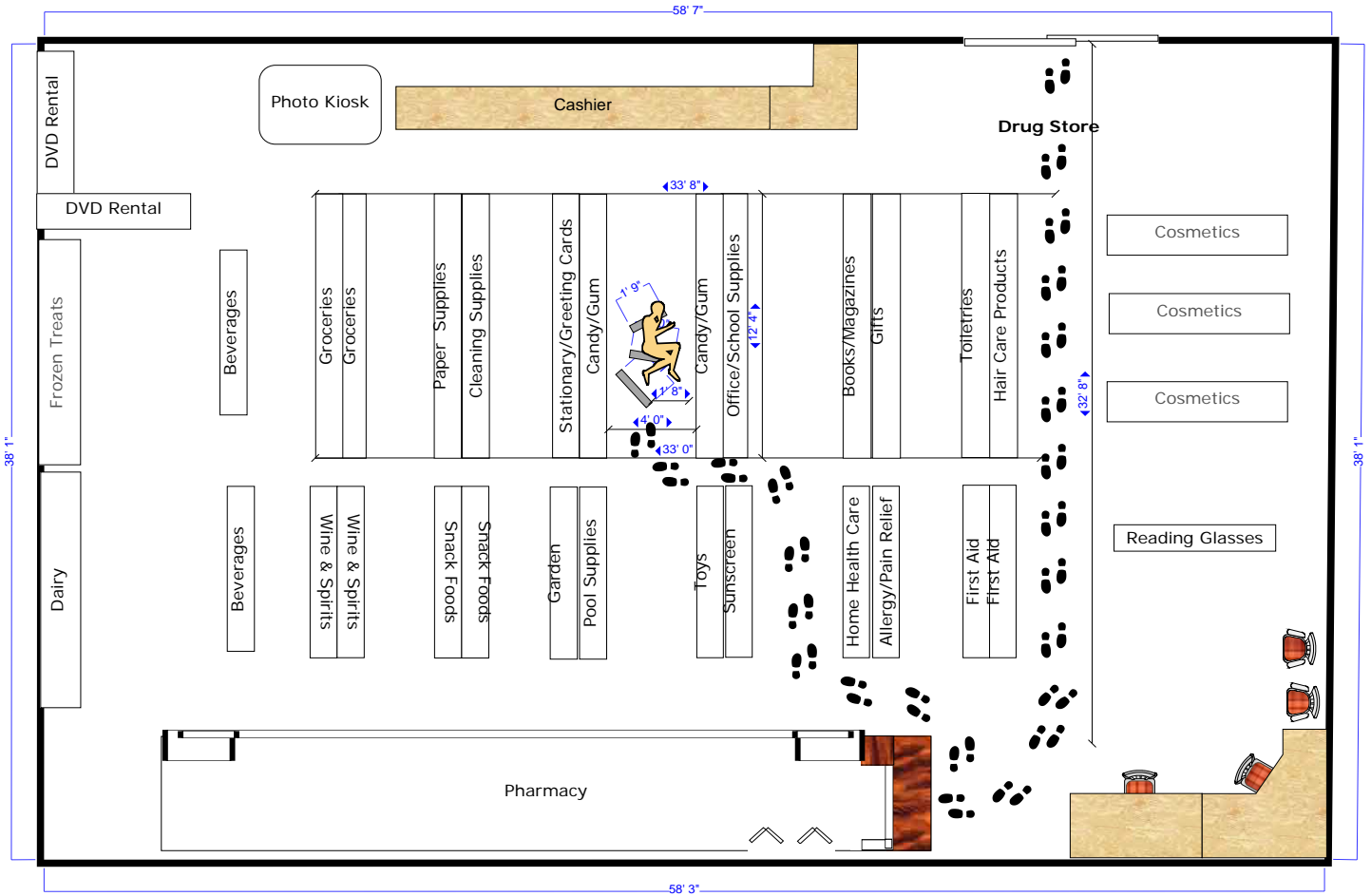
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# Examples of Student Work

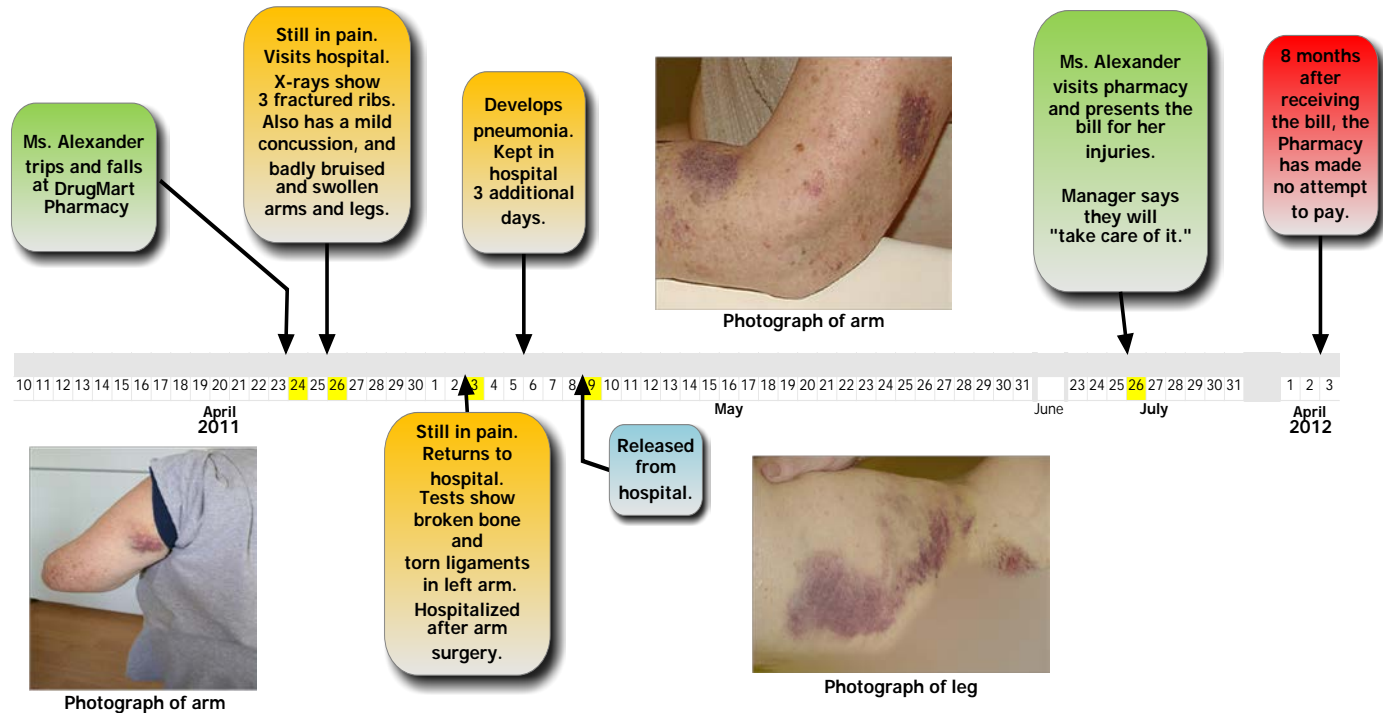
- INFO I470 Litigation Support Systems and Courtroom Presentations
- Based on a real-world event – a slip and fall in a pharmacy.
- Using SmartDraw software (accident reconstruction, including floor plans, timeline, impact on quality of life, medical expenses, lost wages) .
- Students also write a paper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







# A Year in the Life of Sally Jo Alexander



# Interior of Pharmacy – Overhead View

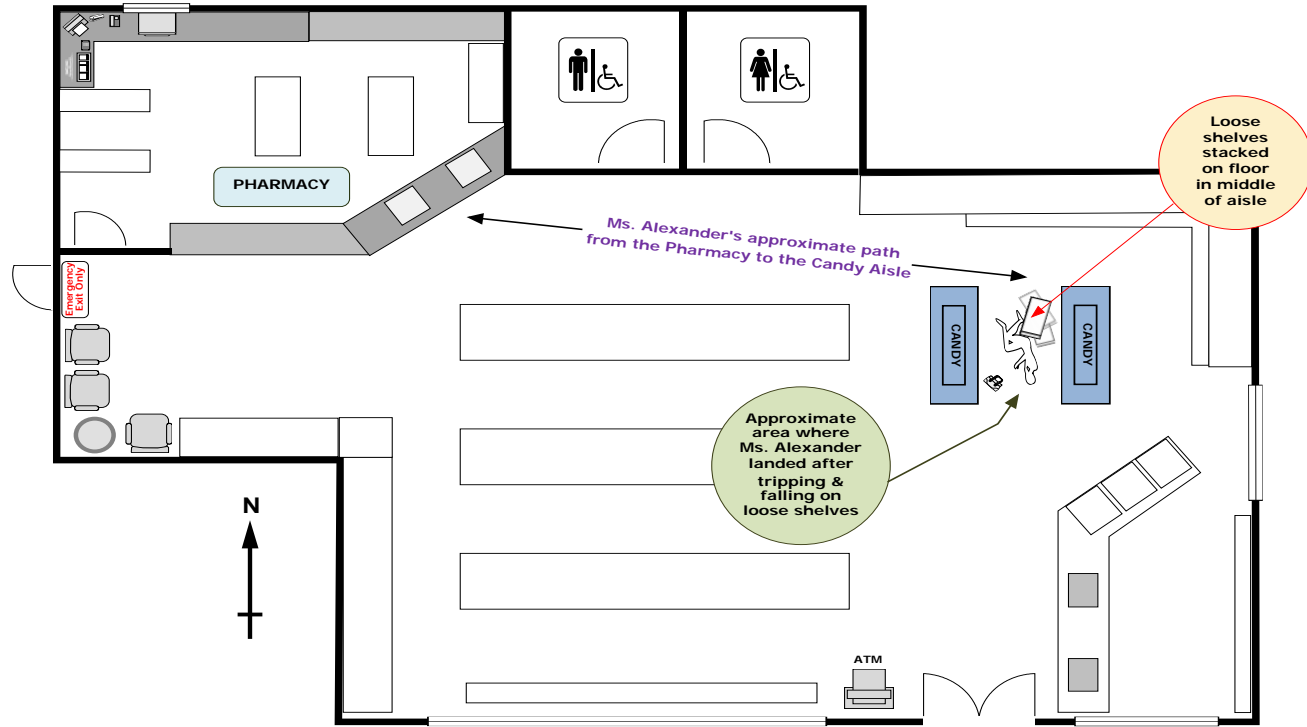


Illustration of DrugMart Pharmacy. All measurements in this and the illustrations to follow are approximate.

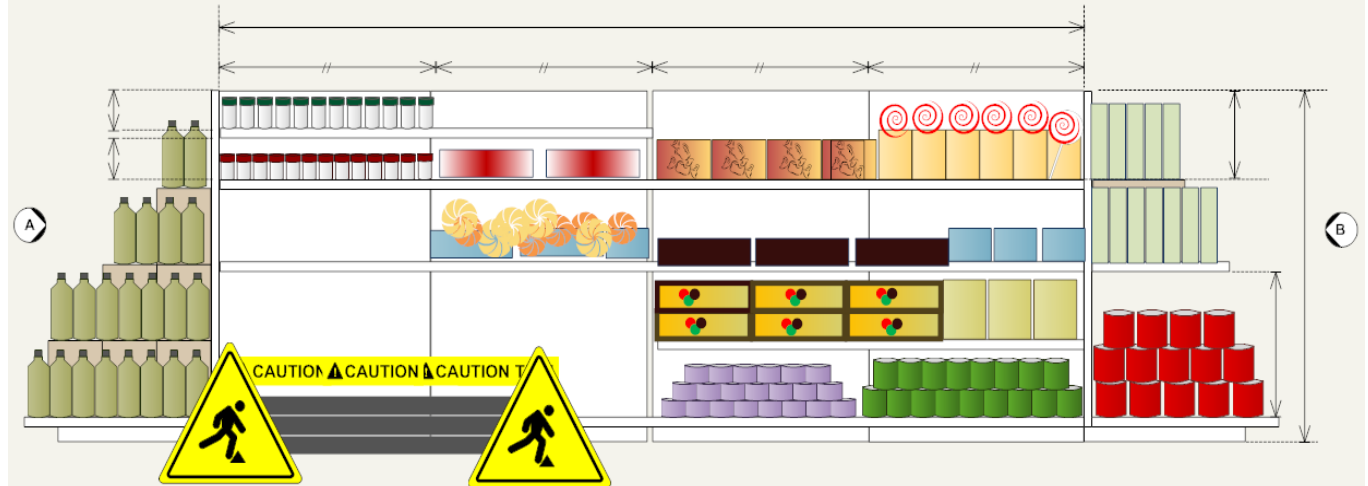
SmartDraw Academic Edition



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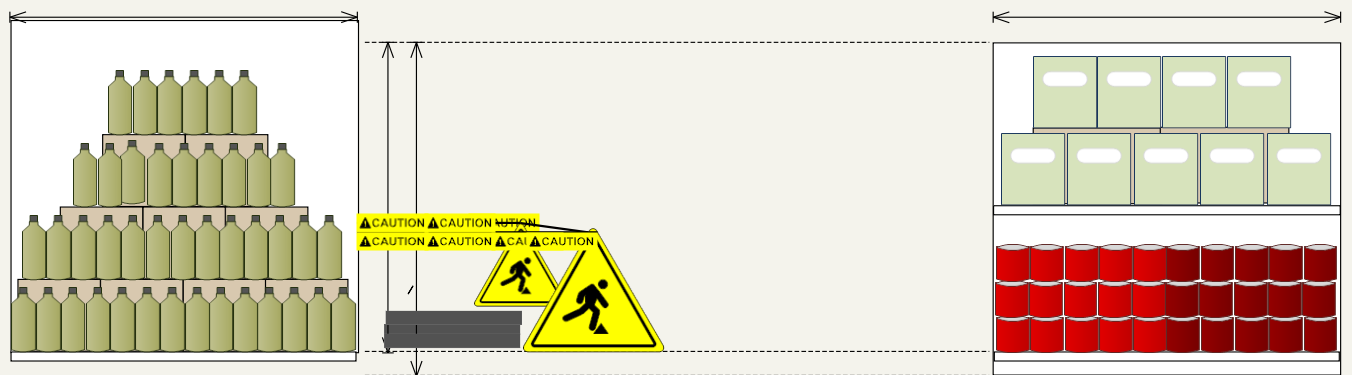
Aisle 3



SmartDraw Academic Edition

A: End Rack

B: End Rack



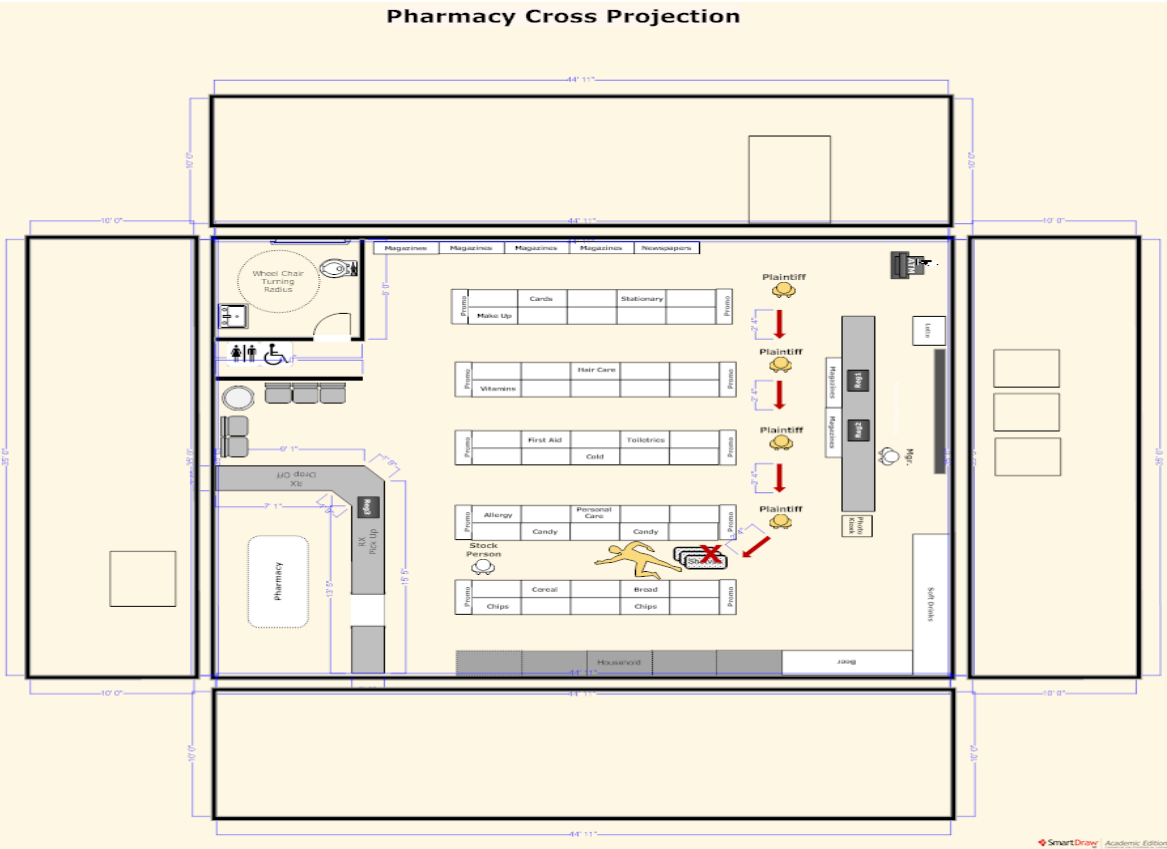
SmartDraw Academic Edition



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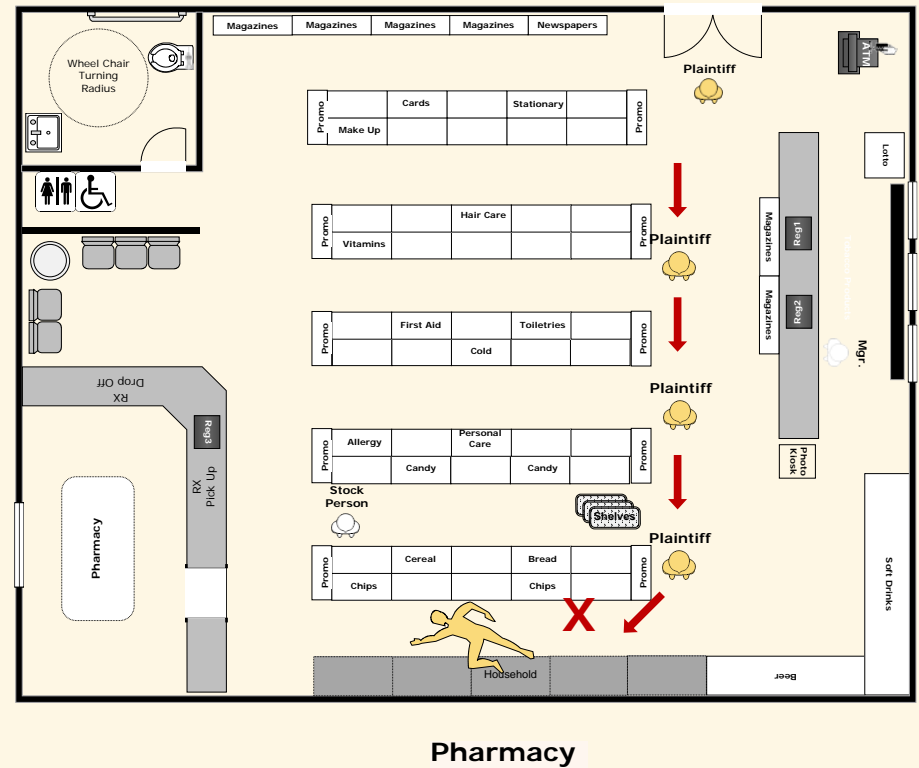
# Pharmacy Floor Plan



# Accident Recreation

## 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.



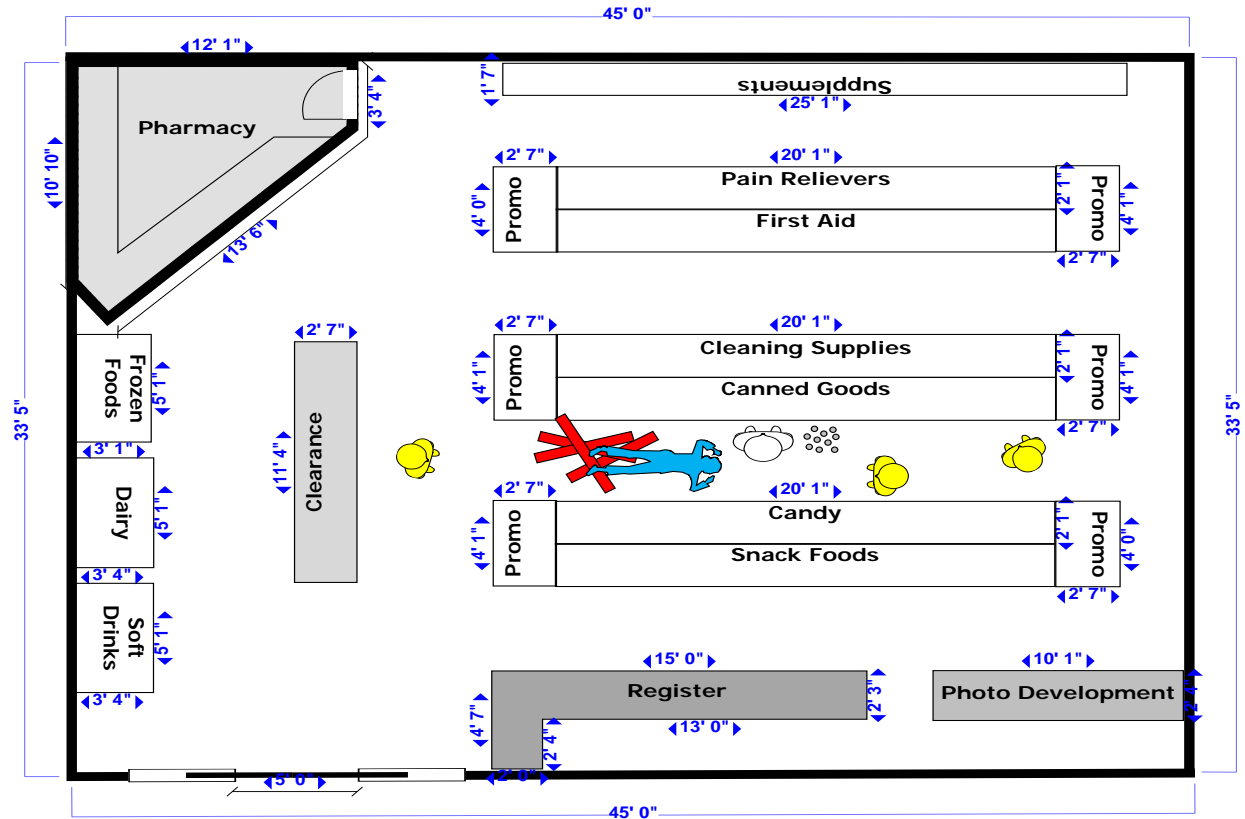
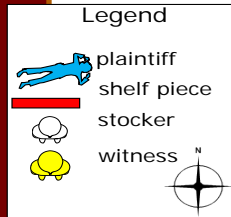
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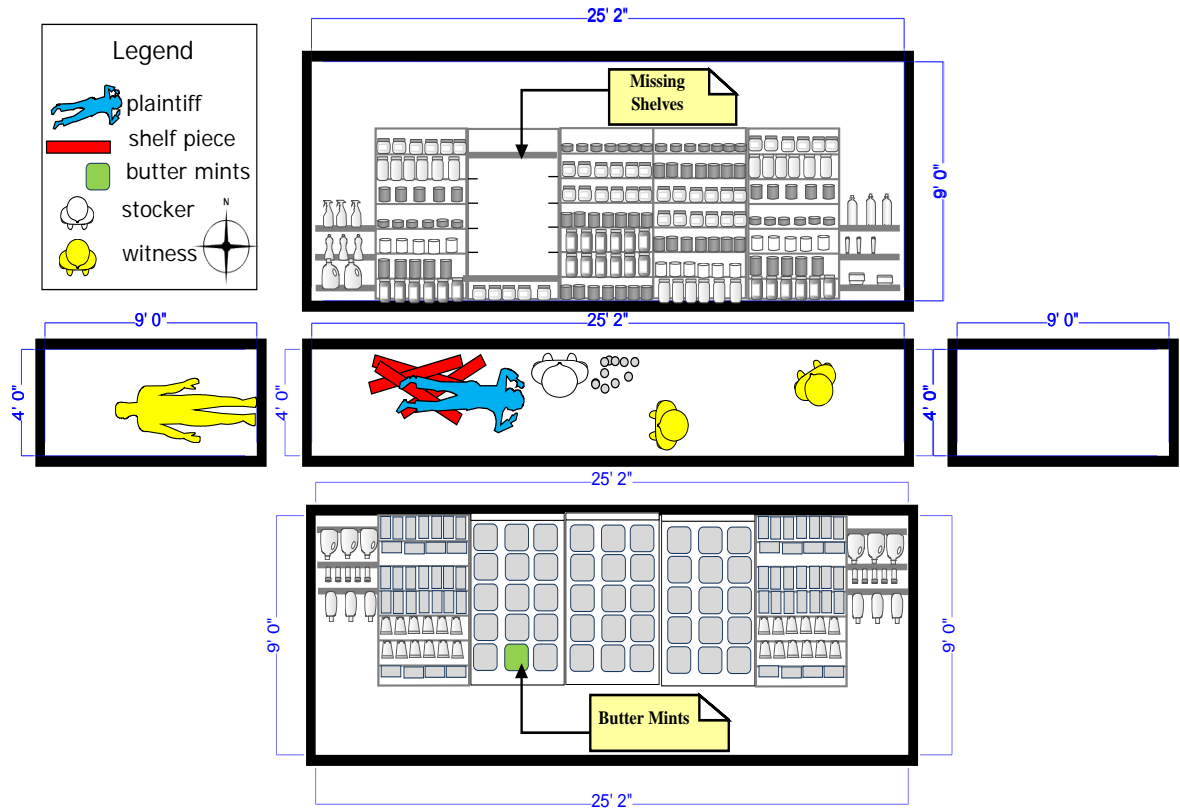
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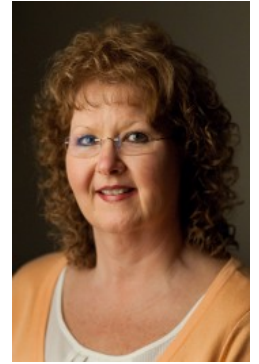
# Accident Scene Overhead



# Accident Scene Cross-Projection



# 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



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The screenshot shows a web browser window displaying the MindTap interface for the textbook 'Medical Terminology' by Ann Ehrlich and Carol L. Schroeder. The browser's address bar shows the URL <http://ng.cengage.com/static/nb/ui/index.html?nbId=3980&nbN>. The page title is 'Medical Terminology' and the author information is 'Ann Ehrlich, Carol L. Schroeder, Ann Ehrlich, Carol L. Schroeder'. The main content area features a table of contents with the following chapters listed:

- Chapter 2: The Human Body in Health and Disease
- Word Part Review
- Chapter 3: The Skeletal System (highlighted in blue)
- Chapter 4: The Muscular System
- Chapter 5: The Cardiovascular System
- Chapter 6: The Lymphatic and Immune Systems
- Chapter 7: The Respiratory System
- Chapter 8: The Digestive System
- Chapter 9: The Urinary System
- Chapter 10: The Nervous System

The interface includes a search bar at the top, a navigation menu on the left, and a sidebar on the right with icons for 'A-Z', 'Home', and 'Help'. The Windows taskbar at the bottom shows the time as 8:47 AM on 10/9/2014.



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# Josette Jones, PhD

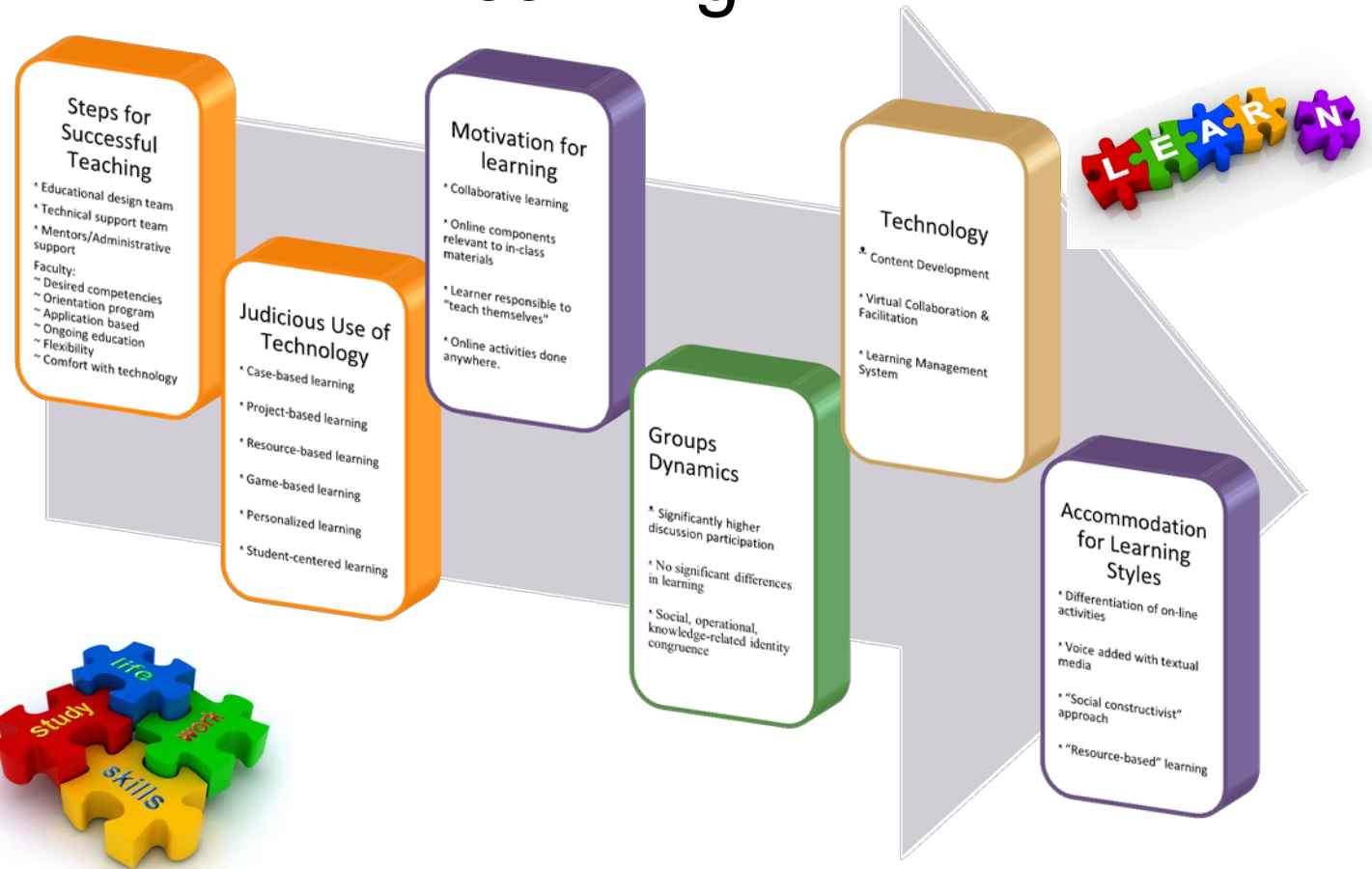
- Teaches primarily in the graduate Informatics program, specifically health informatics courses
- Many of her courses are online
- How she enhancing creativity in her teaching
- How she encourages creativity among her students
- Future plans for enhancing creativity in teaching and learning



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# Along the Continuum of Instructional Technology: Blended Learning



# 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



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# Suicide Intervention/Prevention: A Health Education Simulation



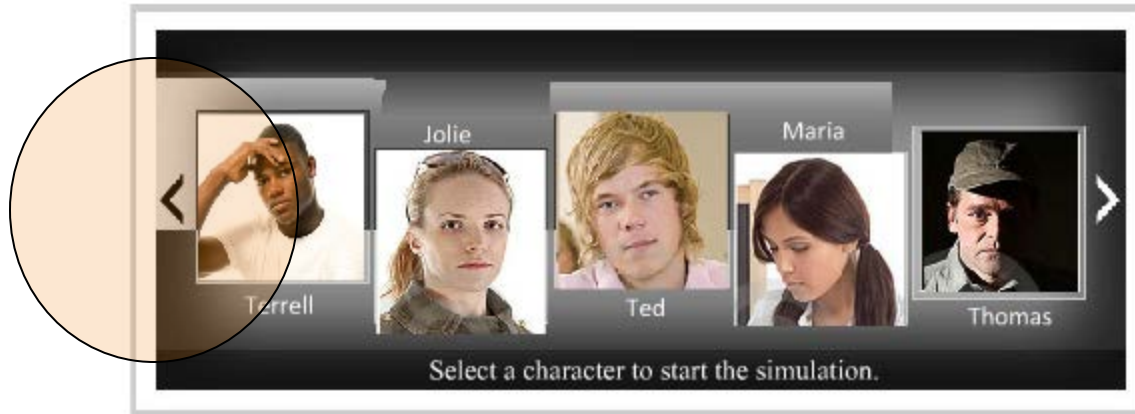
<http://mypage.iu.edu/~jdefazio/index.html>



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## SUICIDE INTERVENTION/PREVENTION



In a face-to-face teaching environment, students explored the cross-disciplinary research in health education, psychology, and media arts and science.

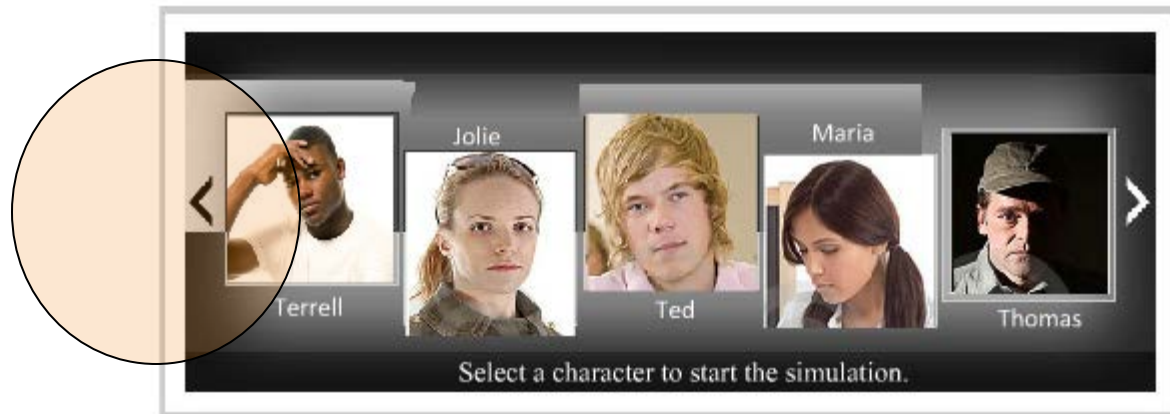


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## SUICIDE INTERVENTION/PREVENTION



Interest in the use of interactive simulation or serious games in health education is growing.

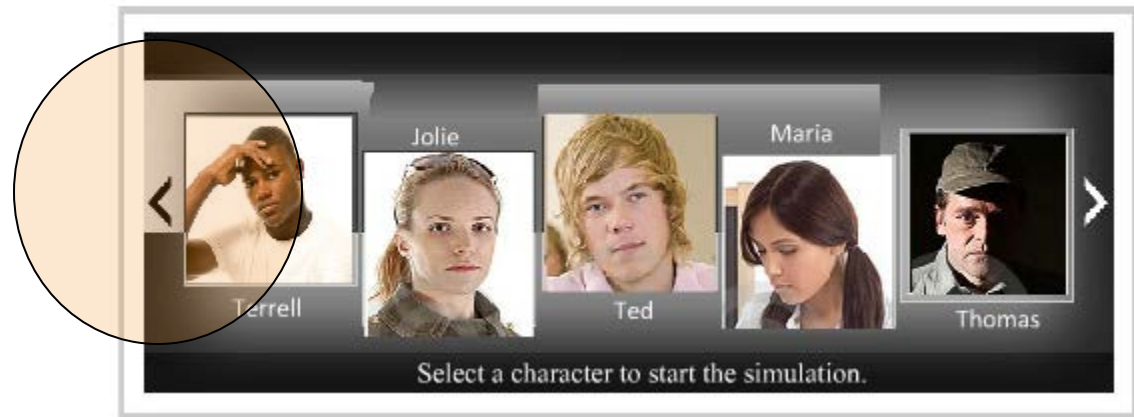
A truly effective simulation provides a cross-disciplinary view into the worlds of art, social sciences, health and technology.



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## SUICIDE INTERVENTION/PREVENTION



Scene 1

Scene 2

Scene 3

Scene 4

Scene 5

Scene 6

Matching Game

Completing the simulation should take between 20-30 minutes.

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.



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## SUICIDE INTERVENTION/PREVENTION



Scene 1

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Matching Game

Completing the simulation should take between 20-30 minutes.

### Goals for the Suicide: Intervention/Prevention Simulation

#### Goal

- Raise awareness of risk factors
- Model appropriate intervention and help seeking behaviors
- Inform of resources for help-seeking
- Model appropriate follow-up behaviors

#### Example

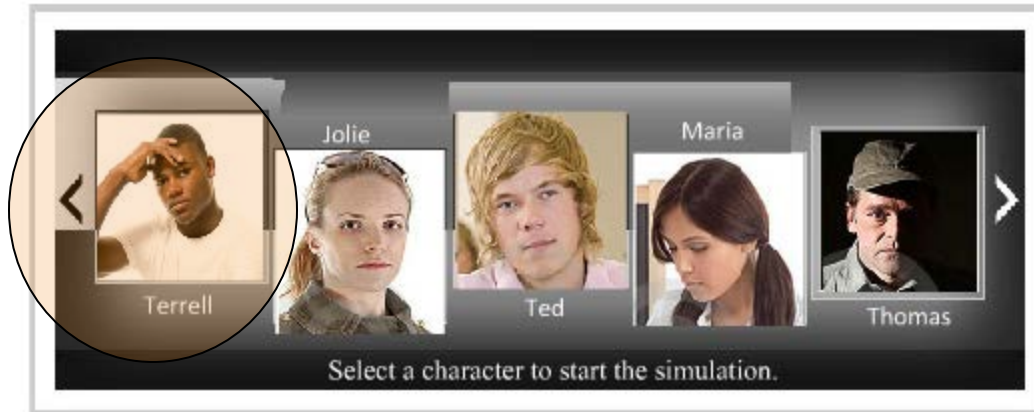
- Marked change in behavior or appearance
- Caring, empathy, compassion
- Present sources for help and guidance
- Follow-up, provide continual support



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## SUICIDE INTERVENTION/PREVENTION



Scene 1

Scene 2

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Scene 5

Scene 6

Matching Game

Completing the simulation should take between 20-30 minutes.

### Signs of Suicidal Tendencies

Anger  
Anti-Social  
Anxiety  
Avoidance

Depression  
Excessive Drinking  
Sleep Problems  
Withdrawn



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## SUICIDE INTERVENTION/PREVENTION



Scene 1

Scene 2

Scene 3

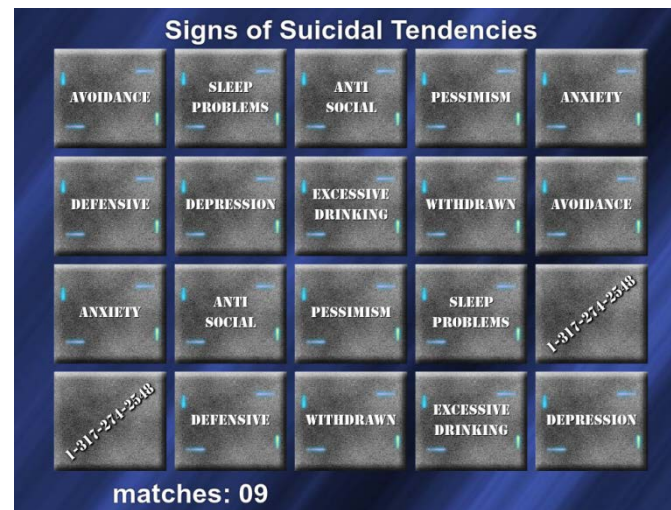
Scene 4

Scene 5

Scene 6

Matching Game

Completing the simulation should take between 20-30 minutes.



<https://www.iupui.edu/~twsip1/game/matchingGame.html>



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# Self-Reflection

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

<http://www.surveymonkey.com/s/2GMJTY8>



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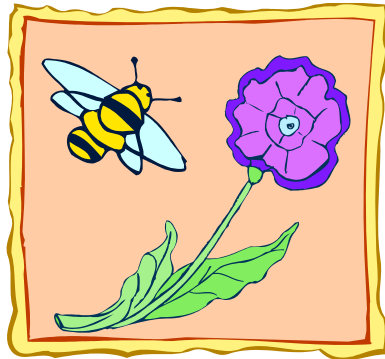
# Wrap-up and Questions

- 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.



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