318. D&D - Instructional Strategies
2:15 pm to 3:15 pm
2nd Level - Grand 2

Facilitator:
FILIZ AKTAN, *Student*

Presenters

Maximizing the Use of Germane Cognitive Resources When Teaching Complex Tasks in Physics ***Yekaterina Sliva***, ODU; ***Gary Morrison***, Old Dominion University; ***Ginger Watson***, Old Dominion University
This study examined two instructional strategies for teaching complex tasks in an undergraduate physics course. Sixty-three participants were randomly assigned to either the control, self-explanation, or self-explanation and completion group. All participants received the same lecture, but homework problems were modified to include the self-explanation and completion problems. The results found that prompts to self-explain led to increased performance, did not increase time on task, and the quality of self-explanations improved with time.

The MegaTech Project: A Goal-Based Scenario for Computing Fundamentals ***Joanne E. Beriswill***, Mississippi State University
A Goal-Based Scenario (GBS) (Schank, Berman, & Macpherson, 1999) is an instructional strategy that conveys content knowledge and problem-solving skills in a motivating way. This session delineates the GBS instructional framework for the MegaTech Project, a unit project for teaching computing fundamentals to college learners. Project materials will be made available to attendees.

319. D&D - K-12 Learning Environments
2:15 pm to 3:15 pm
2nd Level - Grand 6

Facilitator:
Abdulrahman Abdulmalik Kamal, *Jeddah Education*

Presenters

A Study of Developing Students' Scientific Argumentation Skills in a Computer-assisted Project-based Learning Environment ***Pi-Sui Hsu***, Northern Illinois University; ***Margot Van Dyke***, O'Neill Middle School; ***Yan Chen***, Northern Illinois University; ***Thomas J. Smith***, Northern Illinois University
The purpose of this quasi-experimental study was to explore how 111 7th graders in the United States developed argumentation skills and science knowledge in a computer-assisted project-based learning environment. The findings indicated that with the computer-assisted program, the quality scores of collaborative argumentation were high and consistent. The difference in argumentation structure and quality of argumentation might explain a difference in science knowledge as well counterargument and rebuttal skills (argumentation) between both conditions.

Designing for the sustainable transformation of K-12 learning environments as an educational technology consultant ***Lenie George***, University of Georgia; ***T J Kopcha***, University of Georgia
The purpose of this presentation is to discuss our role as educational technology consultants for rural school districts across our state. Through this role, we have implemented a bring your own technology initiative, headed just-in-time professional development, designed learning environments for 1:1 schools, and proposed solutions to provide internet access to low-income families. We will discuss lessons learned from this role and essential principles when creating sustainable solutions to meet district needs.

320. D&D - Practical Use of Open Source and Open Educational Resources
2:15 pm to 3:15 pm
2nd Level - Grand 3

Facilitator:
Yu-Ju Lin, *University of Georgia*

Presenters

[NR] Collecting and Making Sense of Video Learning Analytics ***Michail Giannakos***, Old Dominion University; ***Konstantinos Chrorianopoulos***, Ionian University; ***Nikos Chrisochoides***, Old Dominion University
In this paper, we present an open-source and web-based video learning analytics system alongside with the first empirical results. Our system facilitates the analysis of video learning behavior by capturing learners' interactions with the video player (e.g., play, pause). The system allows any researcher or educator to create a custom video-based experiment by selecting: 1) a video lecture from YouTube, 2) quiz questions, and 3) video player buttons.

Secondary History Teacher's Online Resource Search Behaviors: Research Findings ***Ward Cates***, Lehigh University; ***Paige Hawkins Mattke***, Lehigh University
Many teachers go online to locate classroom resources. Online databases of Open Educational Resources (OERs) they may encounter frequently provide little or no scaffolding to help them identify/locate

resources. Database search engines can be confusing; results can be overwhelming. This presentation reports survey findings from 1250 high school history teachers. It discusses history OER database search engine functionality and design, help functions, OER modification, and participation in user-provided data creation.

321. D&D - Principles of Program Design and Development
2:15 pm to 3:15 pm
2nd Level - Grand 1

Facilitator:
Amy Marie Grincewicz, *Kent State University*

Presenters

Graduate Programs in Instructional Design & Technology: Factors that Support Program Development, Growth and Sustainability ***Jonathan McKeown***, University of Tampa
A new program in Instructional Design and Technology was recently developed and started at a medium sized university. As part of the development and implementation process a feasibility study and market analysis was conducted to determine the suitability of creating a new degree program in this field. This presentation will report on the results of the study from 55 businesses that hire instructional designers as well as prospective students' perceptions of our field.

Creating a New Online College from Scratch Using Sound Instructional Design Principles ***Tara Bunag***, Mount St. Mary's Online; ***Anthony Bunag***, Mount St. Mary's Online; ***Michael Cottam***, Portmont College at Mount St. Mary's
This proposal details an innovative use of instructional design during the creation of a new college. Building from the ground up allows us to avoid the challenges of a pre-existing infrastructure, and makes instructional design one of the main considerations in the creation of the college. We will discuss some of the unforeseen difficulties in attempting such an ambitious plan, along with the advantages of starting from scratch.

322. D&D - Research in Instructional Design Courses
2:15 pm to 3:15 pm
3rd Level - Clearwater

Facilitator:
Darryl Draper, *Old Dominion University*

Presenters

Expecting the unexpected: How graduate students in ID use reflective writing to explore their relationship with uncertainty and designer identity ***Monica Tracey***, Wayne State University; ***Alisa Hutchinson***, Wayne State University
Design thinking identifies designers, rather than models, as the drivers of the ID process who use reflection to manage uncertainty in the design space. As such, the designer's relationship with uncertainty becomes an important component of in the development of professional identity. This qualitative study extended previous research on reflection in an online ID graduate course by focusing on how subjects (re)considered their experiences and beliefs regarding uncertainty via reflective journal writing.

A Phenomenological Investigation of Instructional Design Students' Experiences with Digital Storytelling ***Deniz Eseryel***, University of Oklahoma; ***Omer Faruk ISLIM***, Middle East Technical University; ***Kristina Sánchez***, University of Oklahoma
A major challenge of an instructional design (ID) course is to cover the depth and breadth of the ID knowledgebase in a short semester-long-course. Can digital storytelling help address this challenge? This phenomenological study investigated the experiences and learning gains of ID students when digital storytelling activities replaced traditional methods. We present in detail our implementation and the findings of the study in an effort to demonstrate effective uses of digital storytelling in graduate education.

323. DDL - Meta and Content Analyses of Online Environments, QRDE, and Social Loafers and Free Riders
2:15 pm to 3:15 pm
3rd Level - River Terrace 3

Facilitator:
Swapna Kumar, *University of Florida*

Presenters

e-Team Learning: A Literature Review of Online, Synchronous, Collaborative Small Groups with Social Loafers and Free Riders ***Lorie Lynn Tobler***, BYU Idaho
An in-depth literature review of online, synchronous collaboration in small groups looking specifically at social loafers or free riders in the context of distance education. The research cites the benefits, drawbacks, and previous research minimizing social loafing or free riders. Future development and learning may be impacted by increasing group learning (collaboration, cooperative learning, or peer tutoring) by using a sound theoretical base to design and develop effective groups.

A Content Analysis of the Quarterly Review of Distance Education: Volume 1, Number 1 to Present ***Gary J. Anglin***, University of Kentucky;