

Classrooms



Program Descriptions

Classrooms of the Future

"Learner-Centered Learning"

Tuesday, May 25, 2004

Macalester College

Program Descriptions

Game Design, The Real Deep Learning

Thom Gillespie

Indiana University

Olin-Rice 250

Active learning happens when learners are active. Using pre-designed games for learning is actually weak learning because the real work and the real learning have already happened. The real work is the design of the game or the interactive experience. If this is true then it is extremely important that the student be the game designer rather than the teacher. The role of the teacher becomes the facilitator of the design process. I'll start from my experience working with learners first as videographers, then segue to my current experience with learners as game designer with the MIME program at Indiana University and in design workshops conducted in Alaska, Hawaii and Brazil.

Bringing Dreams To Life: Technological Innovations In Teaching

David X. Swenson Ph.D.

College of St. Scholastica

Olin-Rice 250

Students of all ages become intensely engaged in video and computer games--why not so in education. This program examines the characteristics of engagement in games and explores such application in education. Immersible virtual reality, role-playing games and simulations are used as examples. Participants will contribute their "dreams" of innovation to help form a composite picture during the program. Online examples will also be demonstrated.

The Post-Web Browser Future Of Online Learning Systems

Mark P. McCahill

University of Minnesota

Olin-Rice 250

Immersive online environments such as Open Croquet enable deep collaboration using the vocabulary of gaming/simulation for education. This presentation describes work in this area at the Universities of Minnesota and Wisconsin. There will be a live demonstration of some examples of how 3D multi-user collaborative environments can transform online education.

Accommodating Diverse Learning Styles For Online Students

Laura Jarrett, Vera Kovacovic, Kathe Pelletier

Capella University

Olin-Rice 150

The online learning environment is typically more conducive to some learning styles over others. How can educators optimize their modes of delivery to better suit diverse learning styles in the online environment? Participants will gain an awareness of the current over-emphasis on the visual learning style, discuss a variety of delivery modes, and identify the benefits of incorporating multiple modes in the online course room and discuss issues and trends challenging the advancement of teaching and learning online.

What Different Types of Learners Want in Their Classroom Experiences

Dan McNamara

University of St. Thomas

Olin-Rice 150

A framework for understanding our students' alternative learning styles is constructed using the various frameworks. These frameworks are used to describe learning styles of our students and what they want to see in the classroom.

Learner-Centered Learning in Contexts: Intriguing and Disconcerting

Rujira Rojjanaprayon

University of Minnesota, Morris

Olin-Rice 150

I have experienced constraints in the "learner-centered learning" approaches, with and without technological devices. The curriculum for my program emphasizes "research and theory," not "skills enhancement/development." In this presentation I will provide an overview of the "learner-centered learning" concepts, address my personal experiences, and solicit the attendees' comments and experiences on the issues.

Teaching Novice Programmers to Read Java before Writing Java

Peter C. Patton, Ph.D.

University of St. Thomas

Olin-Rice 100

For the past two years I have been teaching ethnically and linguistically diverse classes of Freshmen Engineering, Science and Mathematics majors how to program in Java by first teaching them to be able to read the language before attempting to write programs in it. In this session we will explore whether an artificial (computer programming) language can be taught the same way we teach natural languages and if so, how do we measure progress. Natural languages are taught using another natural language as a meta-language. How do we teach Java in English when the degree of student mastery of English varies a great deal? I will describe my experience answering these questions and report classroom results

Interactive Learning Environments to Build Confidence

Nancy Hendrickson, Dr. Debra Wilcox Hsu

Seward Inc.

Olin-Rice 100

This presentation explores the process of providing an online environment that gives learners an opportunity to practice skills in engaging and semi-realistic settings. Determination of the level of immersion into a simulated environment will be discussed as well as ways to prioritize content and provide avenues for extended learning.

Are Students Meeting Program Outcomes? How Can We Know?

Lenore Kinne

Hamline University

Olin-Rice 100

We often think of learner outcomes only in terms of within-course outcomes. We are interested in knowing how well our students meet the goals/outcomes of their major department or program. A student's course grade, a global measure of success in the course, may provide little information about his or her relative strengths and weaknesses on learner outcomes addressed in that course. This presentation will share one model of an assessment system using a relational database driven electronic gradebook in a way that enables aggregation of learner outcome data for use in both student and program evaluation. Learner outcomes are assessed within courses using outcomes-based scoring rubrics, with assignment scores entered into an electronic gradebook that attaches the assignment grade with its relevant learner outcomes. This data can then be aggregated to provide formative and summative evaluation data for students, courses, and for the program.

Creating a Graduate-Level Certificate Program for School Leaders: A Blended Learning, Learner-Centered Architecture

Aimee Whiteside, Joan Hughes, Scott McLeod

University of Minnesota

Olin-Rice 241

This session will explore the development process and architecture for the University of Minnesota's School Technology Leadership Initiative (STLI) a graduate-level certificate program that assists school leaders in modeling efficient technology use and in developing a plan for effective technology implementation. The one-year program has an initial summer face-to-face session, two terms of online coursework, and one final face-to-face summer session. We will examine students initial reactions to this blended learning approach, transition between the face-to-face and online environments, and students retrospective thoughts on this blended learning experience. We will also address working with Vista, a new version of WebCT, lessons as well as lessons learned.

Research Partnerships to Create Campus Support Webs for 21st Century Students

Nancy Herther

University of Minnesota

Olin-Rice 241

The Information Age has created new opportunities for learning and a far different and more complex research environment. As learners become more independent, they need 'webs' of support for their learning. One key to success is developing sophisticated skills for finding and using information effectively. Libraries and skilled librarians are key to this process. This presentation will create a better awareness of the changes in students today and how this impacts their approach to learning and research inside and outside the classroom. Understanding their use/assumptions of the Web is one critical aspect. The audience will be questioned about their own use/assumptions of different tools. Changes to course design have made far more critical the role of others in the process of independent learning. Successful examples and best practices will be presented and discussed.

Public Health 1003: Alcohol Education for Real Students

Paul Bernhardt, Rotheberger, Alexander

University of Minnesota

Olin-Rice 243

Many alcohol-education outreach efforts attempt to scare students into better health behavior. This course, based in a harm-reduction model, is the result of years of working with students to create a more favorable affect. Audience members will learn how labor-intensive developing a rich-media course is and how important it is to seek actual student input.

Video Production in the Learner-Centered Classroom: A Case Study

Aimee Houser, Gabrielle Civil

College of St. Catherine

Olin-Rice 243

Our presentation will focus on the benefits and challenges of using a video production class assignment in an English poetry class. Video production provides a way to teach to multiple intelligences and engage constructivist teaching models; the medium literally provides a visual language with which to concretize what happens when we read image-rich narrative work. The main challenge is not to let the significant time involved in developing DV competencies interfere in coursework. The project cannot work without strong collaboration between technologist and teacher, and high effort on both parts. We will discuss some of the advantages and disadvantages in applying high tech solutions to course objectives and stimulate creative thinking about using technological solutions to teaching challenges.

Conversations with Joseph Landsberger

Olin-Rice 270

Informal discussion time with COTF morning keynote speaker.

Teaching Physics with Game Design

Dr. Peter Border

University of Minnesota

Olin-Rice 250

I will report on an experimental course that taught freshman mechanics by having students design their own computer games. Making objects move correctly in the game requires understanding the physics behind the motion, and making games is a great motivator.

Integrated Graphical Game and Simulation Type PBL in Kinematics

Michael P. Hennessey

University of St. Thomas

Olin-Rice 250

I will provide an excellent example of game and simulation type problem-based-learning teaching kinematics using an integrated graphical game approach. "Optimal routing of a sailboat" was the specific problem studied, incorporating aspects of applied mathematics and engineering analysis, numerical simulation using MATLAB, and computer-aided-design (CAD) modeling using SolidWorks. Finally, high quality student-generated work is presented along with complete derivations and associated computer code.

Analyzing Purposes and Engagement through Think-Aloud Protocols in Video Game Playing to Promote Literacy

Brock Dubbels

University of Minnesota

Olin-Rice 250

A case will be made for developing a think aloud protocol to observe and investigate the way that individuals make meaning when they engage with video games. The basis of this inquiry is founded upon the idea of the necessity of relevance in reading, and the way individuals make meaning through prior readings and prior knowledge to develop understanding of novel texts and information. Of interest will be the way students look for information to develop their abilities to develop their game play.

Intelligent Agents: Assisting Educators And Students, And Accommodating Learner Diversity

George Veletsianos, Theonu Yerasimou

Macalester College

Olin-Rice 150

Intelligent agents are software entities characterized by autonomy, reactivity and reasoning. As such, they are designed to retrieve and deliver information to users in an attempt to either solve complex problems or automate repetitive tasks. Utilizing open source software, we have created Penelope: an online agent/robot whose task is to mimic instructor behavior and answer questions from pre-service teachers enrolled in an educational technology course at the University of Minnesota. The course provides an ideal testing environment because it includes students with diverse characteristics and needs. In this presentation, we will discuss the need for such an agent, its transferability in other educational settings, and how its presence can accommodate learner diversity. Furthermore, we will demonstrate how Penelope was created without the need for financial resources or programming expertise.

Technology Integration with Standards-based E-Folio

C. Candace Chou, William Watkins

University of St. Thomas

Olin-Rice 150

This session focuses on how electronic portfolio can be used as an effective method to integrate technology into K-12 curriculum for in-service teachers. This presentation analyzes the process of creating standards-based electronic portfolio and the transformation from a digital scrapbook to a purposeful collection of professional work. The MINSCU's E-Folio, a free Web-based electronic portfolio authoring system is used in this presentation. Students reviewed the ISTE NETS standards and addressed these standards in their technology integration projects. Student reflections and the pros and cons of using standards-based e-folio for in-service teachers will be discussed in this talk.

Educational Uses of Wikis and Blogs

Brad Hokanson

University of Minnesota

Olin-Rice 150

This presentation is an examination of the use of some 'new' tools in teaching a blended online/non-line course in a seminar examining design theory. While much of the course work was done in person and via a 'traditional' threaded discussion group, the innovative features were the use of 'social software'; that is wikis and blogs to encourage and develop discussion on the various topics in the course. " Wikis are a new internet based software type. Writings and ideas are posted to a wiki site and other registered users build upon and share that information. Over use, the knowledge embodied in a wiki site develops to a substantial level, supporting learning and exploration for knowledge." Blogs are personalized web-logs that record and display writings of the owner. As with many online activities, the value comes from participation, not from mere reading.

The Fence or the Ambulance: Are You Punishing or Preventing Plagiarism?

Doug Johnson

Mankato Area Public

Olin-Rice 100

Too much effort is expended in education trying to "catch" plagiarism in student work. Teachers and media specialists are using various web services and techniques using search engines to determine if or how much of student writing is lifted from online sources. While such tools are necessary and can be effective, educators should also be creating assignments, especially those that involve research, that minimize the likelihood of plagiarism in the first place. This session gives teachers the tools that help them design LPP (Low Probability of Plagiarism) projects that require original, thoughtful research. Handouts at <http://www.doug-johnson.com/handouts/fence.pdf>.

An empirical review of learning styles: Implications for computer mediated instruction?

J. Michael Pickle, John Hoover, Katie Flannery

St. Cloud State University

Olin-Rice 100

Learning styles are included in many pedagogical theories, and teachers are advised to address individual learning styles during instruction. Yet, empirical data supporting the theoretical base for learning styles is not extant, and few studies have yielded effects that can be attributed to instruction based on learning styles. In this session, we review the literature on learning styles and address the implications of these studies for computer-mediated instruction.

Just-in-Time Teaching (JiTT): Tailoring Your Class to Student Needs

Rick Goedde

St. Olaf College

Olin-Rice 241

JiTT is a teaching and learning strategy that uses the Web to provide instructors with regular and timely information about their students learning, and actively engages them in the course material. Web-based preparatory assignments are due electronically a few hours before class. Both teacher and students can focus their efforts, spending more time on areas where students appear less confident and less time where they have demonstrated competence.

Learning Objects: Instructional Content in Byte Size Pieces

Scott Strand

Bethel College

Olin-Rice 241

In this presentation we will be exploring the use of learning objects as a way of enhancing the students learning experience. As course content is developed, one can break down the material into small logical units called learning objects. A series of these learning objects can then be put together to create the final lecture. By breaking the material down into learning objects a faculty member can pick and choose the material they wish to use for any given lecture.

Hybrid Courses: Multiple Formats for Multiple Learners

George Smeaton, Ph.D.

UW-Stout

Olin-Rice 243

Examples of the use of the hybrid format as a means of facilitating multiple approaches to learning in three varied courses (Introductory Psychology, Social Psychology, and Human Resource Management) will be presented.