Effectiveness of Learning Methodologies and Platforms

Moderator
Elaine Lawrence
Head: School of Computing and Communications
Faculty of Engineering and Information Technology at
University of Technology, Sydney, Australia
Guest Panelists

• **Kristen DiCerbo, Ph.D.** is an evaluation specialist focusing on teaching and learning research at the Cisco Learning Institute.

• **Professor Luvai F. Motiwalla** is currently a *Professor and Chair* of Operations and Information Systems Department in the College of Management at the University of Massachusetts, Lowell
Guest Panelists

• **Dr. Harry Wang**, (1st Honours B.Sc, Grad Dip in IT, PhD, CCAI) is the Quality Assurance Manager (QAM) for Cisco Networking Academy programs in Australia and Pacific Islands (AUPI).

• **Jozef Janitor** Currently he is employed at the Centre of Computers at the Technical University of Kosice. His research areas include VoIP and IP Telephony fields, mobility and migration in IP data networks and Quality of Service in data networks.
Guest Panelists

- Professor Eugenijus Kurilovas
- Ministry of Education and Science of the Republic of Lithuania
- Professor Tomeu Serra
Measuring the Effectiveness...Kristen

- Asking Questions
- Designing Research
- Sharing Results
- Benefits
Simplifying Outcomes Assessment Through Web-based Systems

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Funded by the Davis Education Foundation, Maine, USA
eOutcomes Project Overview

- Design and develop an web-based outcomes assessment system
  - e-capture the course activities info (e.g., assignments, discussions, or exams) from a learning management systems (LMS) and
  - e-categorize activities relative to the business admin program’s stated learning objectives

- Facilitate institutes for course development and assessment portfolios.

- Enhance reporting quality for administration and accreditation

- Reduce overall administrative costs through digital assessment, reporting, & tracking processes
Example of eOutcomes Reports

Digital Dashboard

- 15 online courses
- 13 faculty
- 4 colleges, and
- 1094 students

UMASS

THE DAVIS FOUNDATIONS
Best Practices: Outcomes Assessment

A successful outcomes assessment project requires

- Sustainable commitment from senior administration (Provost, Dean, …)
- Ongoing technical support for faculty
- Full support & involvement from LMS & IT support staff
- Commitment & support from faculty
- Sustainable incentives for faculty
Architecture of Lithuanian e-Learning system:  Professor Eugenijus Kurilovas
System components quality evaluation and optimisation

**Learning components:**
- Learners prerequisites / requests (p)
- Goals (competencies) (c)
- Learning objects / content (o)
- Teaching / Learning methods / Units of Learning (m)
- Assessment methods / objects (a)

**e-Learning system (environment) components:**
- LO repositories (r)
- Virtual learning environments / Web 2.0 tools (e)

**Optimisation (utility) function (with components quality evaluation criteria weights):**
\[ f(X) = \sum_{i=1}^{m} a_i f_i(X) \]

- \( i = \{\text{components quality evaluation criteria}\} \)
- \( X = \{\text{alternatives (p, c, o, m, a, r, e)}\} \)
BDL Discussion

ICNS – LMPCNAP, 2009
Valencia, Spain
Harry Wang

Harry Wang
harry.wang@bhtafe.edu.au
BDL Model and Implementation in AsiaPac

- **Opportunities**
  - Cost effective solution
  - Accessibility and flexibility

- **Challenges**
  - Geographic distance
  - Language and culture diversity
  - Mutual recognition
  - Assessment

- **Possible solutions**
  - Collaboration with other academies
  - E-learning environment – tools
CATC Spain

Valencia, 23th april 2009
Dr. Bartomeu J. Serra
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Winners

Finalists

Nominated

Call for Participants

NetAcad Students

Laptop + Financial Monitoring + Access to finance

1,000€ / Test Idea

Business Plan Practical Training

Feedback + Nomination

INFORMATION + PROMOTION

NOV

JUL

JUN - APR

JUN - APR

JUN - MAR
• Audience: Persons in NetAcad Spain
  
  – 13,963 students
  – Entrepreneurs (45%): 6,283
  – Target Group (4%): 251 projects/year
  – # Possible projects: 25
  – Test Academies NetAcad: 5% students are entrepreneurs
CNA Implementation @ FEEI, TUKE

- Study program at FEEI, TUKE
Issues that we face(d)

• Exams
  – Cheating
  – Language issues

• Can we grade students with the CNA Gradebook?
  – G1 = 20+P+(1-P/20)((WP-80)/2+(SBA-70)/3)
  – G2 = Few questions exam ;-) 
  – Grade = G1+G2

• Direct Lab Access
Lessons Learned

- Improve creativity
  - Avoid step-by-step manuals when possible
  - Challenge labs
  - Homeworks
  - Projects
- Module exams are better when not graded
- Add additional information to the lectures
- Motivate students with lectures and presentations from Networking Professionals (Cisco SE, Cisco partners, etc.)