Meaningful E-Learning (MEL)

Presentation by:
Lorraine Carter
Vince Salyers
Penny Barrett
Tina Benevides
Stephen Tedesco
Gavin Park
Jessica Biles
Christa MacLean
Maureen Mitchell
Joanne Kmiec
Most universities now utilize educational technologies and e-learning strategies to ensure consistency in course delivery and, in some instances, reduce face-to-face (f2f) contact hours for students (Carter, 2008; Carter, Rukholm, & Kelloway, 2009).

Challenges associated with e-learning include geographic and technological barriers, lack of instructional design support, inconsistent, inadequate or unreliable infrastructure support, as well as varying degrees of faculty and student experience with e-learning environments (Barrett, & Salyers, 2010; Donato, Hudyma, & Carter, 2010; Salyers, 2007; Salyers, Carter, Barrett, & Williams, 2010 a, b).

The main issue that has driven commencement of the MEL Project relates to strong and repeated anecdotal and research evidence that students and academic staff lack sufficient knowledge, skills, and/or time to enable them to integrate e-learning strategies in meaningful and sustainable ways into their teaching and learning activities.
Two Brief Case Studies

• Nipissing University & E-Learning Challenges
• University of Northern British Columbia & E-Learning Challenges
An International, Multi-University Collaboration
The term e-learning used for this research project refers to the:

“integration of pedagogy, information technology, and the Internet into teaching and learning processes. Thus, e-learning environments may include face-to-face (f2f) classrooms for which information technologies (e.g. learning management systems, video and web-conferencing, mobile devices, etc.) are used, blended and web-enhanced learning environments, and fully online learning environments.”

MEL Project Research Team (2011)
Aims & Significance

• This research is aimed at helping students and academic staff identify their needs and systematically implement support strategies for integrating e-learning technologies into their learning and teaching activities in effective, meaningful, and sustainable ways.

• The significance of the MEL Project extends across distance and classroom-based teaching and learning environments, due to contemporary trends towards increasing online and blended learning modalities within courses and curricula.
Research Questions

- What challenges do academic staff experience when utilizing e-learning strategies?
- What challenges do students experience when utilizing e-learning strategies?
- What knowledge, skills, and attitudes do academic staff require in order to effectively utilize e-learning strategies for their teaching?
- What knowledge, skills, and attitudes do students require in order to be successful with using e-learning strategies for their learning?
- What variables predict academic staff satisfaction when using e-learning strategies?
- What variables predict student satisfaction when using e-learning strategies?
- What are the characteristics of exceptional e-learning courses?
- What relationships exist between perceptions of academic staff and students in relation to the quality of e-learning courses?
The processes of the MEL project arise out of principles of participative action research and inquiry (Barrett, 2001; Reason & Bradbury, 2001; Kemmis & McTaggart, 2000), as well as design-based research’s principle of generating theoretically-informed outcome/s that are reusable (Barab & Squire, 2004; Brown, 1992; Collins, Beranek, & Newman, 1990; Dede, Nelson, Jass Ketelhut, Clarke, & Bowman, 2004; Kervin, Vialle, Herrington, & Okely, 2006; Reeves, 2000; van den Akker, 1999).
# Methods

<table>
<thead>
<tr>
<th>PROJECT PHASE</th>
<th>DATA COLLECTION INSTRUMENTS</th>
<th>TIMELINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish guiding principles for study participation and researcher involvement. <em>(Preliminary Planning)</em></td>
<td>N/A</td>
<td>June 15, 2011</td>
</tr>
<tr>
<td>Develop and/or approve documents and instruments to be used in the study. <em>(Preliminary Planning)</em></td>
<td>N/A</td>
<td>August 31, 2011</td>
</tr>
<tr>
<td>Obtain institutional ethics approval to conduct research. <em>(Preliminary Planning)</em></td>
<td>N/A</td>
<td>November 30, 2011</td>
</tr>
<tr>
<td>Recruit study participants; conduct focus groups with academic staff to generate common themes related to issues outlined in the literature review and research plan; conduct ongoing and then final verification of emerging themes with focus group participants. <em>(Phase I)</em></td>
<td>Qualitative questionnaire; developed by researchers</td>
<td>January 1, 2012-December 15, 2012</td>
</tr>
<tr>
<td>Recruit study participants; conduct focus groups with students to generate common themes related to issues outlined in the literature review and research plan; conduct ongoing and then final verification of emerging themes with focus group participants. <em>(Phase I)</em></td>
<td>Qualitative questionnaire; developed by researchers</td>
<td>January 1, 2012-December 15, 2012</td>
</tr>
<tr>
<td>Academic staff and students to complete an e-learning skills inventories (ESI) to explore their perceptions, skills, knowledge and abilities. <em>(Phase II)</em></td>
<td>ESI; quantitative questionnaire; Likert-scale; developed by researchers or available through published format</td>
<td>January 1, 2010-December 15, 2012 (to be completed concurrently with focus group phase)</td>
</tr>
<tr>
<td>Data analysis; triangulation of qualitative and quantitative data. <em>(Phase III)</em></td>
<td>N/A</td>
<td>December 15, 2012- April 30, 2013</td>
</tr>
<tr>
<td>Recommendations and subsequent interventions based on data analysis; further data collection (Phase IV)</td>
<td>TBD</td>
<td>April 30, 2013-January 31, 2014</td>
</tr>
</tbody>
</table>
• **Student and faculty E-Learning Skills Inventory**
• **Student and faculty Focus Group Questions**
Lessons Learned & Recommendations for Multi-Site Research Projects

- Dedicate sufficient planning time
- Hold important discussion to determine roles (e.g. PI, Co-PI, Collaborators)
- Develop guidelines for dissemination of knowledge activities (e.g. authorship, etc.)
- Be prepared to navigate challenges with ethics approvals external to your institution
- Be willing to negotiate and hold difficult discussions when disagreement arises
- Consider and respect different organizational structures and processes


