

TLEF Project Plan Document

Developing Learning Communities in an Interdisciplinary Health Science Course Through Technology Integration

Statement of Project Goals

The current complexity of solving problems in a health care environment requires students to possess a combination of disciplinary clinical skills, interdisciplinary team skills and a fluency in the use of information technology. Virtual Communities of Practice (CoP) are emerging as possible mechanisms to address the increasing challenges of health service delivery and provide a means for health professionals to manage their work in complex and often fragmented contexts. Given these challenges, Universities must: 1) adapt educational environments to address learner needs through the integration of technology; 2) prepare students to work and function in virtual CoPs upon graduation; and 3) research the development and effectiveness of these environments.

Interdisciplinary (IntD 410) Health Team Development course provides students with an interdisciplinary health care team learning experience through working in teams of 6-7 students to problem solve various clinically-based scenarios. At the end of the course students have a deeper understanding of the roles and responsibilities of other health disciplines, understand the interrelationship among the disciplines and are able to develop on-going collaborations. Two types of course delivery will be available for students: 1) Face-to-Face and 2) Blended Learning. The majority of the students will enroll in the Face-to-Face version of the course. Establishing a virtual learning community with IntD 410 students will create the foundation for further innovation in collaborative health care education and practice. One technological tool to facilitate the development of virtual learning communities is an internet desktop.

The desktop will be used for students to select a clinical area of interest, facilitate group work with the collaborative tools, view videos, access course manual, library search engines and other discipline/content resources.

Project Objectives

Upon completion of the 5 weeks of IntD 410 the following research objectives will be undertaken:

1. Comparison of desktop use between the Face-to-Face and Blended Learning formats with respect to:
 - a. Satisfaction;
 - b. Perception of effectiveness;
 - c. Degree of utilization, and;
 - d. Influence of learner characteristics
2. Analysis of Blended Learning format with respect to:
 - a. Characteristics of web-mediated discourse within teams;
 - b. Influence of e-portfolios on achieving course learning objectives

Research

Comparison of desktop use between Face-to-Face and Blended Learning Formats with respect to:

<i>Objective 1a: Satisfaction with the internet desktop</i>		
Activity	Education/Research Approach	Expected Outcomes
Determine student satisfaction with the internet desktop	<ul style="list-style-type: none"> • Survey all students (paper &/or on-line) • Focus Groups <ul style="list-style-type: none"> ○ Face-to-face – randomly selected cohort ○ Blended – all students approached 	<ul style="list-style-type: none"> • ease of use • desktop components to add/delete
<i>Objective 1b: Perception of effectiveness of the internet desktop</i>		
Activity	Education/Research Approach	Expected Outcomes
Determine perception of effectiveness with the internet desktop	<ul style="list-style-type: none"> • Survey all students (paper &/or on-line) • Focus Groups <ul style="list-style-type: none"> ○ Face-to-face – randomly selected cohort ○ Blended – all students approached 	<ul style="list-style-type: none"> • amount of interaction/collaboration with teammates • frequency of use • did the desktop facilitate collaboration as a team & increase knowledge of other disciplines
<i>Objective 1c: Degree of utilization of the desktop</i>		
Activity	Education/Research Approach	Expected Outcomes
Document activity in desktop related to: <ul style="list-style-type: none"> • virtual group work area, and • content & discipline specific resource areas 	Document: <ul style="list-style-type: none"> • # of log-ins to desktop • amount of time spent per log-in • applications used (frequency & duration) • how applications were launched 	<ul style="list-style-type: none"> • Description of desktop use in face-to-face and blended learning formats
<i>Objective 1d: Influence of learner characteristics</i>		
Activity	Education/Research Approach	Expected Outcomes
Collect learner characteristics at pre-course	Learner characteristics collected when register to use desktop: <ul style="list-style-type: none"> • Index of Learning Styles • Age • Discipline • Gender • Year of University 	<ul style="list-style-type: none"> • Determine relationship between learner characteristics and usage of desktop

Analysis of Blended Learning Format

<i>Objective 2a: Describe characteristics of web-mediated discourse within teams</i>		
Activity	Education/Research Approach	Expected Outcomes
Describe characteristics of web-mediated discourse within teams	Discourse analysis of team interactions related to two areas: <ul style="list-style-type: none"> • Role Establishment - how a team member presents him/herself • Interactions - characteristics of the interactions among team members 	Determine individual variation with: <p>Role establishment:</p> <ul style="list-style-type: none"> • Individual voice (e.g. who one speaks to & for what purpose) • Discipline voice (e.g. use of professional knowledge) • Participant style/patterns (e.g. presence, use of emoticons) <p>Interactions:</p> <ul style="list-style-type: none"> • Engagement (e.g. duration of communication, # of exchanges) • Participant structure (e.g. turn-taking, interrupting, participation frequency)

		<ul style="list-style-type: none"> • Discipline vocabulary (e.g. discipline 'jargon')
<i>Objective 2b: Determine influence of e-portfolios on achieving course learning outcomes</i>		
Activity	Education/Research Approach	Expected Outcomes
Determine difference between use of e-portfolios and regular reflections related to course learning outcomes	<ul style="list-style-type: none"> • Content analysis of interdisciplinary e-portfolios for the 6 teams using them & the 6 teams completing regular reflections on team process 	Difference between teams using the e-portfolio and regular reflections in: <ul style="list-style-type: none"> • developing team process skills • knowledge of role of other disciplines • interrelationship among disciplines

Dissemination Plan

Spring 2007

- Presentation of early findings to Communities of Practice Interest Group
- Begin drafting manuscript(s) to submit to peer-reviewed journals (e.g. Medical Teacher, Journal of Interprofessional Care or Journal of Allied Health)
- Abstract submission to E Learn conference in October

Summer 2007

- submit manuscripts to peer-reviewed journals

Fall 2007

- abstract submission to Interprofessional conference in Spring 2008

