Course Preparation for Online Learning: What Faculty Should Know

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Course Preparation for Online Learning: What Faculty Should Know

Presented by:
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University of West Georgia

Michael Waugh
University of Tennessee

SITE Conference – Nashville, TN. – March 19, 2002

Purpose of the Research

- **To determine selected perceptions of higher education instructors in Georgia who are engaged in distance education/on-line (DE/OL) teaching & learning efforts**
  - **Practices**
  - **Problems**
  - **Solutions**

Two Year Study

- **1st year – Pilot study (2000)**
  - **State University of West Georgia**
    - ***All faculty surveyed 1999 - 2000***
- **2nd year – Extended study (2001)**
  - **Selected universities in Georgia who utilize distance technologies**
    - ***Volunteer participants electronically surveyed 2000-2001***

Background

- **Distributed learning is challenging**
  - **Different from F2F format**
- **Faculty play a key role in its success**
- **A number of factors influence faculty choice**
  - **Personal vs. ordered**
  - **Incentives/ values towards distance tech**
  - **Success with students/ instructors**

DL Incentives in the Literature

- **Flexible working conditions**
- **Reaching students at a distance**
- **Worldwide audience**
- **Fun**
- **Enhancement of technology skills**
- **Increased job satisfaction**

Barriers to DL Instruction

- **Decreased interaction with students**
- **Increased work time/ lack of time to prepare for classes**
- **Lack of support & assistance with courses**
- **Time consuming to learn technology skills**
- **Inadequate compensation**

Population Surveyed

- **Legitimate sample of DE/OL "pioneers" in Georgia**
  - **All faculty at UWG using WebCT**
  - **Faculty in GA. who participate in a WebCT listserv**
  - **Faculty in the middle GA. geographic region who participate in a listserv moderated at GCSU**
  - **Other GA faculty -- contacted by peers**
- **Knowledge/perceptions based upon experience**
- **Collectively taught approximately 300 courses via DE/OL**

Instrument for 2nd Study

- **Survey modified from 2001 instrument**
  - **Put into an electronic format**
  - **Additional demographic & distance questions questions added**
- **Open & closed-ended questions**
- **Online pilot testing**
  - **Three distance experts**
- **Revised before distribution**

Factors Explored

- **Background of DE instructors**
  - Where employed?
  - Department?
  - Rank?
  - Gender?
  - Years taught in higher education?
  - Hours of training in distance?
  - # of courses taught via distance technologies?

Factors Explored

- **Technologies used for distance teaching?**
- **Training received?**
- **Experience in teaching courses both F2F & through distance technologies?**
- **Teaching format preferred?**
- **Optimal class size?**
- **Importance of f2f meetings?**
- **Assistance needed to be effective in teaching with technology?**

Data Collection & Analysis

- **Online Surveys**
  - Sent to UWG faculty - April 2000
  - Sent to two listservs that linked WebCT & distance users around the state – May 2000
- **Reminders sent after 2 weeks**
- **SPSS/ closed-ended questions**
- **Content analysis/open-ended questions**

Sample Population

(19 institutions; 66 participants)

- University of West Georgia (12)
- Southern Polytechnic State University (8)
- Georgia Perimeter (7)
- Valdosta State University (7)
- Medical College of Georgia (5)
- Georgia College and State University (4)
- Floyd College (4)
- Middle Georgia College (3)
- Albany State University (2)

Sample Population

- Armstrong Atlantic (3)
- Georgia College (2)
- Georgia Southwestern (2)
- Georgia State University (1)
- Darton College (1)
- Waycross (1)
- Bainbridge (1)
- South Georgia (1)
- Kennesaw (1)
- Coastal Georgia Community College (1)

Sample constraints

- Not random
- Not constructed
- Self-selected!
- Representative ???
  - Uncertain

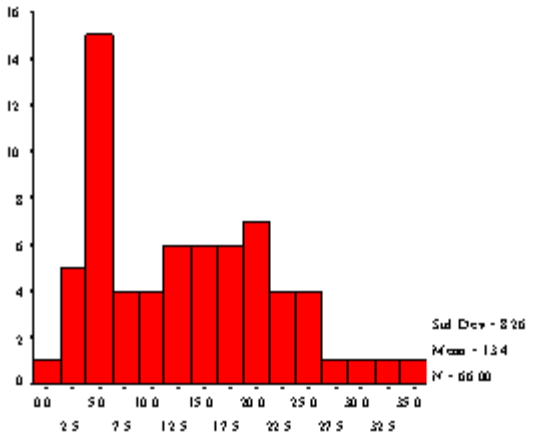
Who responded?

- **Gender**
  - Female (n=32)/ Male (n=32)
  - Not reported (n=2)
- **Ranks**
  - Professor (n=17)
  - Associate Prof. (n=17)
  - Assistant Prof. (n=23)
  - Instructor (n=5)
  - Adjunct (n=4)

Who responded? - Field

- **Health, Nursing and Medical (n=19, 29%)**
- **Language, Social Science and Humanities (n=15, 23%)**
- **Education (n=12, 18%)**
- **Math and Science (n=9, 14%)**
  Business (n=7, 11%)
- **Engineering (n=4, 6%)**

Who responded? - Years of Experience



years of experience

Why motivated to begin using distance technologies?

- **Students & technology (>involvement with tech.) = 39**
- > Quality of course = 36
- Meet student needs at a distance = 35
- Student demand for distance = 32
- Flexibility in working cond. = 27
- > Interaction with students = 20
- It was required = 17

Training Received – Prior to Teaching

- No training (n=15, 23%)
- 1-5 hours (n=19, 29%)
- 6-10 hours (n=13, 20%)
- 11-15 hours (n=2, 3%)
- 16-20 hours (n=4, 6%)
- 20+ hours (n=13, 20%)

# of courses taught using DE/OL tech

- **Classes taught:**
  - 14 faculty = 1 class, 15 fac. = 2 classes,
  - 5 fac. = 3classes, 4 fac. = 4 classes,
  - 5 fac. = 5 classes, 6 fac. = 6 classes,
  - 2 fac. = 7 classes, 8 fac. = 2 classes,
  - 1 fac. = 10 classes ,
  - 11 fac. = > 10 classes, 1 fac. = no resp.
- Bimodal
- Approx. 45%
  - taught 1 or 2 courses
- Approx. 20%
  - taught 10 or more courses

What is DE/OL?

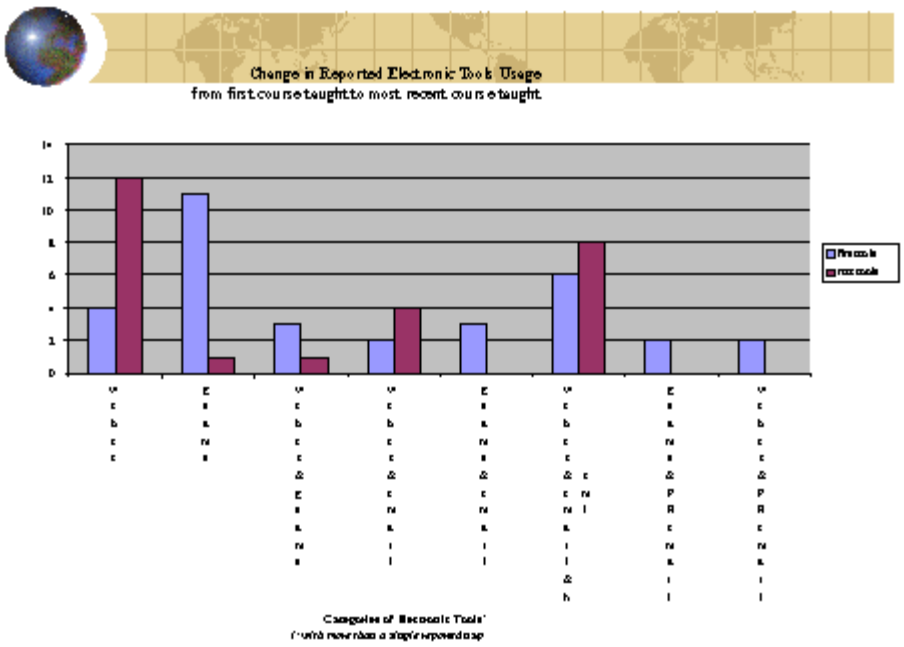
- **Respondents offered similar definitions**
- **These definitions included the following concepts:**
  - **use of electronic media (GSAMS, Internet, others) for conducting much or all of a course;**
  - **teachers/learners separated by time and/or space,**
  - **interactions synchronous and asynchronous**

What electronic tools are used?
(check all that apply)

- **WebCT, GSAMS, Web Course-in-a-Box, TopClass, Blackboard, Lotus Notes**
- **Others…**
  - html-coded materials
  - Internet e-mail, private e-mail
  - Bulletin boards, conferencing systems,
  - Internet newsgroups, MUD or MOO environments,
  - Listservs, web-based course calendar, chat rooms

What electronic tools are used?

- **First time with a DE/OL course**
  - **41 unique combinations of electronic tools reported**
- **Most Recent time with DE/OL course**
  - **36 unique combinations of electronic tools reported**


Change in Reported Electronic Tools Usage
from first course taught to most recent course taught
12
10
8
6
4
2
0

Taught same course F2F & DL

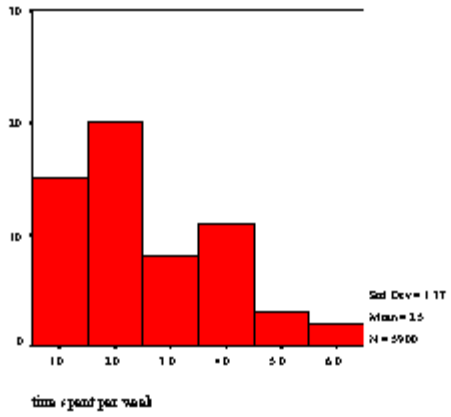
- **86% of sample taught the identical course in both instructional environments.**
- **Preferences**
  - **53% prefer a mix of both.**
  - **22% prefer F2F**
  - **15% prefer neither one**
  - **10 % prefer DE/OL.**

Which Medium Requires Most Time Involvement

Total Sample…

- **DE/OL -- 89%**
- **F2F -- 2%**
- **Both (equally time cons -- 9%**

Average additional time per week



How much more time preparing for entire distance course?

- **1-3 hrs. = 15**
- **4-6 hrs. = 20**
- **7-9 hrs. = 8**
- **10-12 hrs. = 11**
- **13-15 hrs.**
- **16 or > hrs. = 2**
- **More clarification needed next study**

Average additional time per course

- N = **39 responses**
- **Mean = 59.47 hours per course**
- **s. d. = 56.49 hours per course**
- **MANY hours but highly variable across instructors**

Value of F2F aspect of DE/OL

- **81%** report that F2F is a valuable component of their DE/OL classes.
- 19% report the F2F IS NOT a valuable component of their DE/OL classes.

Which format yields the greatest return on instructor investment?

- **F2F (n=23, 38%)**
- **Electronically-mediated teaching (n=15, 25%)**
- **A mix of the above two (n=5, 8%)**
- **Depends on the course (n=4, 7%)**
- **Both are equal (n=3, 5%)**
- **Depends on the students (n=9, 15%)**
- **Depends on the course and students (n=2, 3%)**

Optimal DE/OL class size?

- N = **53 responses**
- **Mean (ideal class size) = 19.8 students**
- **Range = 43**
- **Standard Deviation = 7.7**
- **Approximately 12-28 depending on the level of students, course and interaction desired/required.**

Plans to continue DE/OL

- **86% report plans to continue teaching using DE/OL technologies.**
- **6% report plans NOT to continue teaching using DE/OL technologies.**
- **8% were uncertain.**

How can your campus help? - 1

- **Plan and then institute programs, not vice versa.**
- **Continue support for effort**
- **More support, release time**
- **More tech support; new technologies**
- **Reduce class sizes**
- **Stop insisting on specific technologies (WebCT)**
- **Address materials ownership issues**
- **Recognize effort required; factor in to teaching load**

How can your campus help? - 2

- **Provide more training**
- **Require students to take intro. computer class**
- **Recognize student variables related to electronic formats**
- **Acknowledge efforts in terms of P&T, prof. effort**
- **Student assistant help**
- **Stress development of hybrid classes (not 100% DL)**
- **Eliminate institutional control**

Lessons Learned

- **DE/OL (instruction mediated through one or more forms of technology) can provide a rich (richer?) instructional experience**
  - **a cost associated with this gain**
    - **If > interaction with students > time involvement for instructor**

Lessons Learned

- **F2F interactions with students are highly valued.**
- **When possible, use mixed instructional models**
  - **(partially F2F and partially DE/OL).**
- **The necessity of F2F is unclear but its value may far outweigh its inconvenience/expense.**

Conclusion

- **Reduce class sizes in DE/OL (to enable greater interaction with the instructor)**
- **Factor increased instructor effort into workload and personnel policies**
- **Increase support for faculty engaged in this effort,**
  - **(ie., TAs, technical support, development support)**
- **OR, expect DE/OL efforts to be less interactive; potentially less successful**

Conclusion

- **Use appropriate media for appropriate aspects of the instruction.**
- **Arranging for physical meetings may be awkward when students reside a considerable distance from the instructor**
  - **such meetings may be critical to the success of the instruction.**

Future Research

- **Extend the study to other states to enlarge the data base and exploratory findings**
- **Contact information**
  - bmckenzi@westga.edu
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- ## A number of factors influence faculty choice
  - Personal vs. ordered
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Lessons Learned

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        -

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Lessons Learned

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Conclusion

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