Assessment of Faculty Technology Readiness for Effective Transitioning to Online Instruction

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Assessment of Faculty Technology Readiness

for Effective Transitioning to Online Instruction

Dr. Joanne Zukowski, Montreat College

SoTL Commons Conference

March 25-27, 2015
Montreat College

- Liberal arts college founded in 1916
- Offer undergraduate/graduate degrees
  - Traditional programs at main campus, Montreat, NC
    - 395 residential students taught by full time professors
  - Accelerated Adult Studies degree programs at 7 sites
    - 400+ adults taught by adjunct faculty with expertise
Challenges

- College entered online course market late
- Student demands for online classes is increasing
- Faculty teach at multiple campus locations—some sites are 3 hours apart
- Large population of adjunct faculty have taught face-to-face in SPAS for many years
- Lack of administrators’ understanding about faculty perceptions and attitudes related to teaching online
Assessment Method

- Instrument developed to determine faculty attitudes/perceptions related to online instruction

- Rating scale used for self-assessment of skills:
  - Fundamental awareness
  - Advanced
  - Novice
  - Expert
  - Intermediate
  - Unfamiliar (N/A)

- Survey Monkey was used; Sent to 99 faculty and 69 faculty completed the assessment, or 69.6% response rate
Reality is only in the perception of one's mind.

Source: Unknown
Profile of Respondents

School of Professional and Adult Studies Faculty
Academic Disciplines

- Associate degree
  - General Studies -AS

- Bachelor degrees
  - Business Administration
  - Business Management
  - Psychology & Human Services
  - Bible and Religion

- Master degree
  - Business Administration
  - Clinical Mental Health Counseling
  - Management and Leadership
57% of Faculty Completed a Doctorate or Post-Doctorate Work
Faculty Campus Assignments

- Rocky Mount: 0.00%
- Morganton: 7.25%
- Durham: 7.25%
- Charlotte: 43.48%
- Asheville: 36.23%
- Main Campus: 5.80%
First Glance Findings

- 93% of faculty are part-time with 20% having more than 21 years of teaching experience; 49% at the college 5 or fewer years.

- Most faculty (76%) rate themselves as “Advanced” or “Expert” in communicating with students via email, yet only 50% are at those levels in communicating via MOODLE; 9% were unfamiliar with this function.

- Although 94% of faculty indicated some level of familiarity with online platforms, yet only 40% are comfortable facilitating online courses and 15% at “Intermediate” or “Advanced” levels using Lync.
Teach on ground; Don’t use MOODLE or other LMS

Teach on ground with limited MOODLE (upload handouts)

Teach ground with activities in MOODLE replacing class time

Teach completely online; no ground time

Teach both online and ground classes

Current Teaching Mode

16.18%

51.47%

29.41%

16.18%

23.53%
## Troubleshooting Self and Students’ Problems

<table>
<thead>
<tr>
<th>Level</th>
<th>Word Processing Applications *</th>
<th>Spreadsheet or Database Applications</th>
<th>Presentation Software and Media Projection</th>
<th>MOODLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>11.59%</td>
<td>8.70%</td>
<td>8.82%</td>
<td>2.99%</td>
</tr>
<tr>
<td>Advanced</td>
<td>36.23%</td>
<td>23.19%</td>
<td>26.47%</td>
<td>22.39%</td>
</tr>
<tr>
<td>Intermediate</td>
<td>36.23%</td>
<td>26.09%</td>
<td>41.18%</td>
<td>34.33%</td>
</tr>
<tr>
<td>Novice</td>
<td>10.14%</td>
<td>28.99%</td>
<td>17.85%</td>
<td>22.39%</td>
</tr>
<tr>
<td>Fundamental Awareness</td>
<td>4.35%</td>
<td>8.70%</td>
<td>4.41%</td>
<td>13.43%</td>
</tr>
<tr>
<td>Unfamiliar with this</td>
<td>1.45%</td>
<td>4.35%</td>
<td>1.47%</td>
<td>4.48%</td>
</tr>
</tbody>
</table>

*50 % of faculty were either Intermediate or Advanced in their ability to use Tracking Changes.*
A combined total of 17% incorporate new technologies or functions consistently.
Comparison of Faculty by Degree Level and Skill Levels Using MOODLE Tools

Doctoral and Post Doctoral level faculty reported higher awareness and ability levels than Master’s level faculty in the following tool areas:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>External Tool</th>
<th>Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>Feedback</td>
<td>Quiz</td>
</tr>
<tr>
<td>Database</td>
<td>Forum</td>
<td></td>
</tr>
</tbody>
</table>

Master’s level faculty reported higher awareness and ability levels than doctoral faculty in the following tools:

<table>
<thead>
<tr>
<th>Glossary</th>
<th>Questionnaire</th>
<th>Wiki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>Survey</td>
<td>Workshop</td>
</tr>
</tbody>
</table>
Adjunct faculty reported higher skill levels than full-time faculty in the following areas:

- Troubleshooting file formatting and word-processing problems
- Troubleshooting spreadsheet and database software problems
- Troubleshooting laptop and presentation problems
- Troubleshooting questions about MOODLE
- Use of Turnitin for checking written assignments
Comparing Technical Skills by Employment Status (continued)

Adjunct faculty reported higher familiarity than full-time faculty with the following MOODLE activity tools:

- Assignment
- Chat
- Choice
- Database
- External Tool
- Feedback
- Forum
- Glossary
- Lesson
- Questionnaire
- Survey
- Turnitin
- Wiki
- Workshop

Adjunct faculty also reported higher skill levels than full-time faculty in use of the MOODLE digital gradebook.
Comparing Technical Skills of New and Experienced Faculty

With MOODLE activity tools, faculty who had taught at the college level for 11-15 years reported the highest skill levels.

Faculty with 11-15 years of college level teaching experience reported the highest skill levels with use of MOODLE resource tools and with use of the MOODLE gradebook.

Faculty with 6-10 years of experience reported the highest skill level in developing and facilitating courses in MOODLE and with communicating with their students via MOODLE.
Other Findings Noted

Only **28%** of faculty review current literature related to online teaching and learning.

Over **90%** of faculty indicated they would attend training if held virtually, but have concerns about the reliability of college technology.

Only **4%** of SPAS faculty feel they are “Expert” in using the digital gradebook in MOODLE; **22%** are unfamiliar with this online tool.
Barriers to Technical Skills Mastery

- Lack of time: 41.82%
- Lack of understanding: 30.91%
- Lack of interest: 30.91%
- Lack of sufficient training: 47.27%
- Lack of information from IT: 14.55%
- Fear of making mistakes: 12.73%
- Lack of confidence in troubleshooting: 27.27%
- Lack of confidence in college technology: 12.73%
Related Research

One study found primary incentives for faculty to embrace online resources focused on intrinsic rewards, such as self-gratification, fulfilling a personal desire to teach, and the opportunity to provide innovative instruction.

Obstacles included time requirements and the need to develop the necessary technological skills.

Implications for Transitioning Faculty

APPROACH

- Must deliver technology information and training in a flexible way continuously, not think “event”

- Build a system for preparing faculty for IT changes that will impact them

- Establish ongoing dialogue with IT staff to provide input from faculty BEFORE system are upgraded or changed that affect online instruction
1. Communications
   ✓ Consider a Twitter account for communications
   ✓ Send faculty technical information on a regular basis (in increments so not to overwhelm)

2. Resources
   ✓ Utilize the Faculty Room in MOODLE to archive materials including video tutorials; Add relevant articles from current literature
3. Training
   - Determine pedagogy and content for each skill level
   - Provide hands-on training sessions to enable faculty to gain competencies to move up to next skill level
   - Identify “tech mentors” to support colleagues
3. Training (cont.)

- Continue to provide all new hires with hands-on training and a handbook containing step-by-step instructions for using basic online tools.

- Continue to encourage and support best practices in integration of technology into ground courses.
  - Highlight faculty and their successful practices in web communications.

- Continue to evaluate and modify training materials, meetings, and skills training as needed.
Questions ?