Student Self-Assessment: Guiding Online Learners to Become Better Prepared

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Special thanks to:
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Student Self-Assessment: Guiding Online Learners to Become Better Prepared

- Ways of Helping Online Students to Get Ready
- Implementation of Student Self-Assessment
- Data Analyses and Finding
- Integration of the Finding to Improve Support
How well students do?

Online vs. On-Ground

<table>
<thead>
<tr>
<th>Grades</th>
<th>Online</th>
<th>On-Ground</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>33.8%</td>
<td>28.9%</td>
<td>4.9%</td>
</tr>
<tr>
<td>B</td>
<td>21.6%</td>
<td>24.3%</td>
<td>-2.8%</td>
</tr>
<tr>
<td>C</td>
<td>10.4%</td>
<td>16.5%</td>
<td>-6.1%</td>
</tr>
<tr>
<td>D</td>
<td>2.8%</td>
<td>4.5%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Failed (F, W, N)</td>
<td>31.5%</td>
<td>24.5%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>
Grades: Online vs. On-Ground

Grade Differences in Percentage: Online vs. On-Ground

- 6% - 13% more students failed in online courses than those in on-ground.
- What can we do to help?
Helping Online Students to Get Ready

On-Campus orientation - first week of an online semester
Online Orientation - Blackboard Vista Tutorials
One-on-one assistance from distance learning staff
Advising – What online courses look like?
Distance Learning web site, information package

Focused on the *technical aspect* of online learning.
-- Advising: What online courses look like?
-- Orientation: How to use basic tools in online learning?

• Consistent poor performance for online learners
  • 6%-13% more students failed in online courses than in on-ground courses.

Fall 2008 – Introduced READI test in Advising/Registration for Spring 2009 online students.
Student Self-Assessment

- A self-diagnostic tool that assesses students’ likelihood for success in learning online: strengths and weaknesses
  - Students take the test online at their convenience.
  - 30-40 minutes to complete
  - Questions/Tasks
    - **Personal attributes**: motivation, self-discipline, and time management
    - **Learning styles**: predominant learning style
    - **Technical competency**: skills and knowledge
    - **Reading comprehension**: speed and comprehension
    - **Typing**: speed and accuracy
Report of a READI Test

- Summary scores
  - Reading Comprehension
  - Technical Competency
  - Technical Knowledge
  - Personal Attributes

- Comparison to national average
  - Technical Competency
  - Technical Knowledge
  - Reading Competency
  - Typing Speed and Accuracy

- Detailed breakdown scores with explanations

- Resources to provide help for improvement
## Chart: Ranges of Readiness

<table>
<thead>
<tr>
<th>Section</th>
<th>Version</th>
<th>Fail</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Information</td>
<td>Standard</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Personal Attributes</td>
<td>Higher Education</td>
<td>(70)</td>
<td>(85)</td>
</tr>
<tr>
<td>Learning Styles</td>
<td>Higher Education</td>
<td>(30)</td>
<td>(65)</td>
</tr>
<tr>
<td>Reading Rate &amp; Recall</td>
<td>10th Grade Level</td>
<td>(30)</td>
<td>(65)</td>
</tr>
<tr>
<td>Technical Competency</td>
<td>Higher Education</td>
<td>(80)</td>
<td>(90)</td>
</tr>
<tr>
<td>Technical Knowledge</td>
<td>Higher Education</td>
<td>(50)</td>
<td>(75)</td>
</tr>
<tr>
<td>Typing Speed &amp; Accuracy</td>
<td>Higher Education</td>
<td>(30)</td>
<td>(65)</td>
</tr>
</tbody>
</table>

(Smartermeasure.com, 2008)
READI Implementation - Strategies

Starting in the fall of 2008 for Spring ’09 students

Provided test information to advisors and counselors.
Designed a web page linked to distance learning.
Distributed flyers on campuses.
Published an article in student newspaper.

Built into the first step of Online Orientation.
Integrated to course requirement: English, Psychology
All online course – a web link to READI web page

Distance Learning Staff
- Monitored test summary results.
- Sent to students three forms of email: Incomplete, Failed, Questionable
# READI Implementation – Summary Table

<table>
<thead>
<tr>
<th>Semesters</th>
<th># of Students Taking READI</th>
<th># of Online Students Taken READI</th>
<th># of Online Students</th>
<th>Percentage of Online Students Taking READI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring '09</td>
<td>411</td>
<td>399</td>
<td>900</td>
<td>44.3%</td>
</tr>
<tr>
<td>Summer '09</td>
<td>326</td>
<td>364</td>
<td>584</td>
<td>62.3%</td>
</tr>
<tr>
<td>Fall '09</td>
<td>317</td>
<td>657</td>
<td>1043</td>
<td>63.0%</td>
</tr>
<tr>
<td>Spring '10</td>
<td>358</td>
<td>747</td>
<td>1139</td>
<td>65.6%</td>
</tr>
<tr>
<td>Total</td>
<td><strong>1412</strong></td>
<td><strong>2167</strong></td>
<td><strong>3666</strong></td>
<td><strong>58.8%</strong></td>
</tr>
</tbody>
</table>
Data Analyses

• Research Question
  ◦ Whether READI scores relate to students’ grades in online courses?
    • Personal Attributes, Reading Comprehension, Technology Knowledge/Skills, Learning Style, Typing Speed

• Correlation Study
  ◦ Correlation between the READI scores and the final grades
## Correlations - Spring ’09 and Summer ‘09

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Number of Cases</th>
<th>Personal Attributes</th>
<th>Reading Comprehension</th>
<th>Technology Knowledge</th>
<th>Technology Competency</th>
<th>Learning Styles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring ’09</td>
<td>386</td>
<td>Significant at 0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer ’09</td>
<td>342</td>
<td>Significant at 0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Personal Attributes
- a big player in student success
  - motivation
  - self-discipline
  - time-management
Integration of Data Analyses to Support Potential online students

Advising - emphasizing personal attributes
Our help focuses on technology - how to use technology, how to navigate the course, and troubleshooting, but it is Student’s Responsibility to complete the work.

Registered Students: Success tips

Online orientation – Step 3
On-campus orientation
MxCC Distance Learning Facebook
Information package

Continuing the implementation of student self-assessment.
# Correlation Study - Four Semesters

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Number of Cases</th>
<th>Personal Attributes</th>
<th>Reading Comprehension</th>
<th>Technology Knowledge</th>
<th>Technology Competency</th>
<th>Learning Styles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring '09</td>
<td>386</td>
<td>Yes = 0.00</td>
<td>Near = 0.07</td>
<td>Near = 0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer '09</td>
<td>342</td>
<td>Yes = 0.03</td>
<td></td>
<td></td>
<td>Near = 0.07</td>
<td></td>
</tr>
<tr>
<td>Fall '09</td>
<td>619</td>
<td>Yes = 0.00</td>
<td></td>
<td>Yes = 0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring '10</td>
<td>715</td>
<td>Yes = 0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>2062</td>
<td>Yes = 0.00</td>
<td></td>
<td></td>
<td>Yes = 0.03</td>
<td></td>
</tr>
</tbody>
</table>

**Statistically significant correlation - Personal Attributes, Technology Competency**

**Personal Attributes** consistently play a major role in student success. **Technology Competency** affects student success.
After READI was implemented, 3% - 5% more students failed in online courses than in on-ground courses. Fewer online students failed when READI was implemented.

<table>
<thead>
<tr>
<th>Differences</th>
<th>Sp'07</th>
<th>Sum '07</th>
<th>Fall '07</th>
<th>Sp'08</th>
<th>Sum '08</th>
<th>Fall '08</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.9</td>
<td>-5.7</td>
<td>7.7</td>
<td>3.5</td>
<td>-4.6</td>
<td>8.7</td>
</tr>
<tr>
<td>B</td>
<td>-2.8</td>
<td>-11.2</td>
<td>-4.82</td>
<td>-1.7</td>
<td>5.2</td>
<td>-7.9</td>
</tr>
<tr>
<td>C</td>
<td>-6.1</td>
<td>2.8</td>
<td>-4.9</td>
<td>0.7</td>
<td>5.1</td>
<td>-5</td>
</tr>
<tr>
<td>D</td>
<td>-1.7</td>
<td>1.3</td>
<td>-2.1</td>
<td>-0.2</td>
<td>3.53</td>
<td>2.8</td>
</tr>
<tr>
<td>Failed (F, W, N)</td>
<td>7.0</td>
<td>13.0</td>
<td>6.9</td>
<td>6.4</td>
<td>9.9</td>
<td>9.3</td>
</tr>
</tbody>
</table>
What is Next?

Find ways to help more students succeed.
--- 3% - 5% more students failed in online courses than in on-ground courses.

- Reading comprehension affects student grade (McNulty, 2010).
- To assist poor readers who take online courses
  - Assist students with the interpretation of SmarterMeasure test results.
    - Develop a tutorial on how to interpret SmarterMeasure result.
  - Online Orientation
    - Text-based -> a human-like tutorial – screen captures, voices, interactive – self-test
  - On-Campus Orientation
    - Web Conference – accommodating the students who cannot come to the campus for orientation. They can be anywhere but log on and go through orientation with a lead instructor.
  - Course Design
    - Develop more presentations with professor’s voice in online courses
Special Thanks

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