

Office of Instructional Technologies

Middle States Self Study

INTRODUCTION

The Office of Instructional Technologies works with the entire Trinity community to leverage the technologies available to enhance the learning experience and retention of the Trinity student.

The Office of Instructional Technologies works with:

- Faculty members to incorporate instructional technologies into their ever-evolving pedagogies to further the learning experience of the student.
- Faculty and staff members to understand and utilize the specific instructional technologies available on campus.
- Faculty and staff members to develop online, hybrid, and computer-enhanced offerings for students, and fellow faculty and staff.
- Faculty and staff to provide technology-based personal professional development opportunities.
- Students to educate on how to use the technologies in concert with their faculty members.
- The entire Trinity community on troubleshooting campus instructional technologies.

OVERVIEW

The Office of Instructional Technologies conducted three major projects with the following goals:

1. To determine current faculty usage of Moodle, Trinity's Learning Management System (LMS) and technology, in general. Then, review that usage, and present training opportunities to meet any gaps and continue to develop professionally, as well as increase creative leveraging of technology and the LMS to enhance student learning and retention.
2. To determine current faculty usage of other technologies in their instruction. Then, review that usage, and present training opportunities to meet any gaps and continue to develop professionally, as well as increase creative leveraging of new & existing technologies to enhance student learning and retention.
3. To analyze and review the technologies and instrument used to gather student-teacher evaluations for each course. Then update the evaluation tool to better gather relevant data surrounding instructors and courses, especially as related to technology usage in the learning and retention process.

PROJECT #1 ASSESSMENT

Analysis of Faculty Use of Moodle and Proficiency with Technology

In the spring of 2009, Trinity adopted Moodle, university-wide, as its Learning Management System (LMS). Through the use of Moodle, our faculty members exemplify their adoption of electronic/technological pedagogy and communication.

Moodle Usage Review

Methodology

A stratified sample of instructors and courses, spanning all five collegiate units, were manually reviewed for a demonstration of Moodle skills, as determined by the attached rubric. For each reviewable skill from the competencies rubric, the faculty member earned a (1) for successfully demonstration of that skill/task, (0.5) for attempted incomplete or partial demonstration, and (0) for no demonstration of that skill/task.

These scores were tabulated, and converted to a percentage representation by competency category. Those categories were Level 1 (Basic), Level 2 (Intermediate), and Level 3 (Advanced). If a faculty member demonstrated 50% or more of the categories competencies, they were assigned that Level of competency. In the cases where the faculty member scored above 50% in multiple categories, the highest category earned was assigned.

The 100 courses chosen were selected to reflect the percentage breakdown of Trinity's spring 2015 active (not cancelled or inactive) Moodle courses. A report was run of all the active courses. We determined the percentages for each of the following data points:

- Collegiate Unit
- Academic Session
- Faculty Status
- Student Status

We used these percentages to select the number of representative courses for each data point. In addition, within each collegiate unit, we analyzed the list of all active courses for the faculty status percentages, as well as the breakdown by academic session, and course programs within that unit.

We choose the courses to represent all of these factors, both within each collegiate unit, and with the University as a whole.

Trinity's 100-course representation breakdowns:

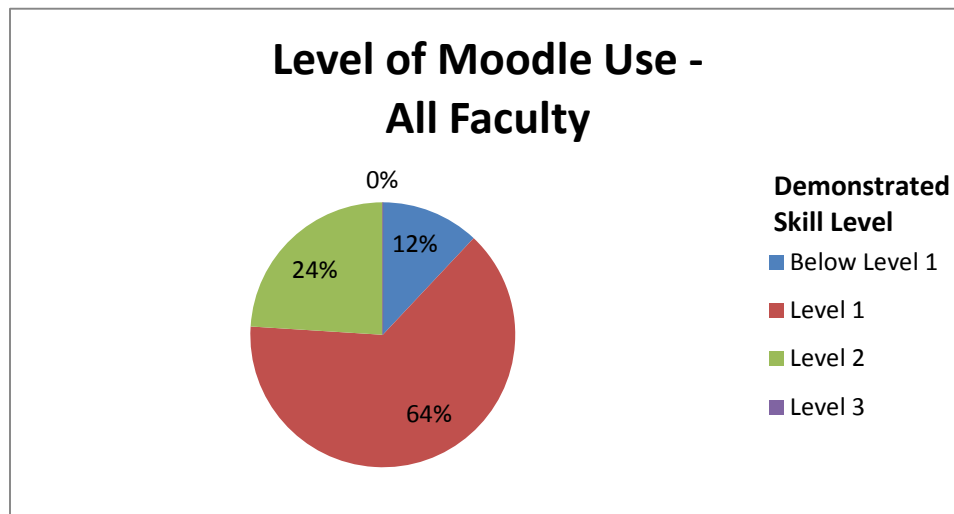
- Breakdown by Collegiate Unit

- 6 course in the School of Business and Graduate Studies (BGS)
- 54 courses in the College of Arts & Sciences (CAS)
- 14 courses in the School of Education (EDU)
- 9 courses in the School of Nursing & Health Professions (NHP)
- 17 courses in the School of Professional Studies (SPS)
- Breakdown by Academic Session
 - 50 DAY courses
 - 2 MONTHLY courses
 - 9 TERM1 courses
 - 9 TERM2 courses
 - 30 WEEKLY course
- Breakdown by Faculty Status
 - 46 courses taught by full-time faculty & instructional staff members (FT)
 - 54 courses taught by part-time faculty members (PT)
- Breakdown by Student Status
 - 77 undergraduate courses
 - 23 graduate courses

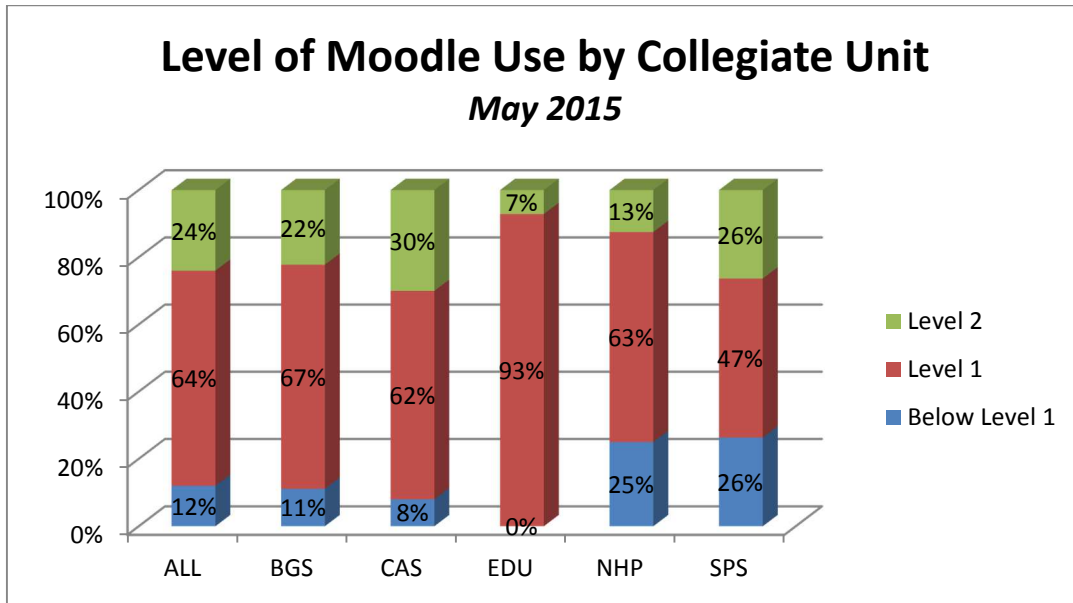
Moodle Usage Results

Based on the analysis of the 100 courses selected, we have determined the following:

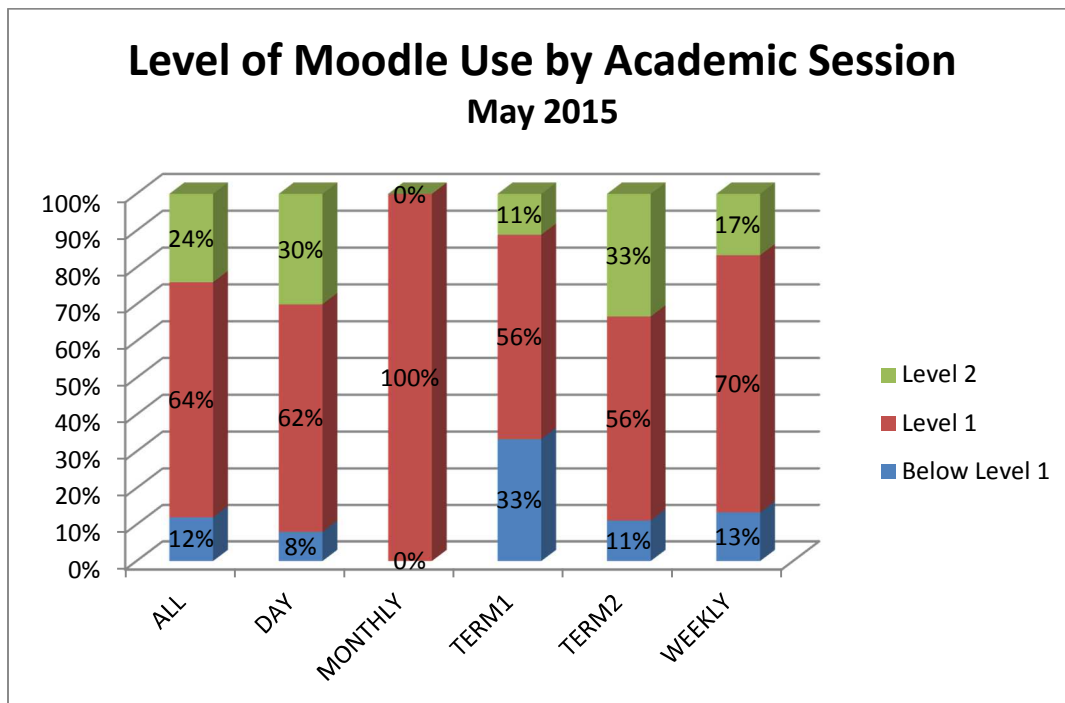
1. Six years after adoption, 64% of faculty use Moodle with Level 1 or basic skills. 24% of faculty use Moodle at Level 2 or intermediate. 12% of faculty use Moodle with below Level 1 skills. This means that the faculty member met less than 50% of the Level 1 Moodle competencies. No faculty member in the representative sample met at least 50% of the Level 3 or advanced competencies.



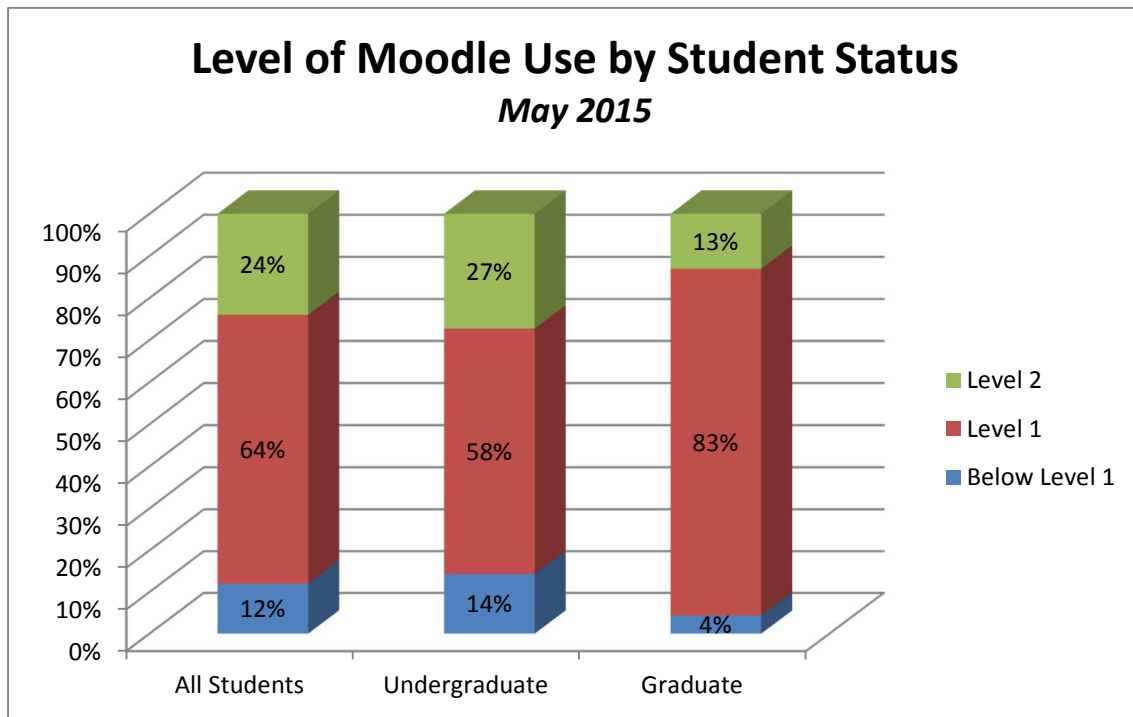
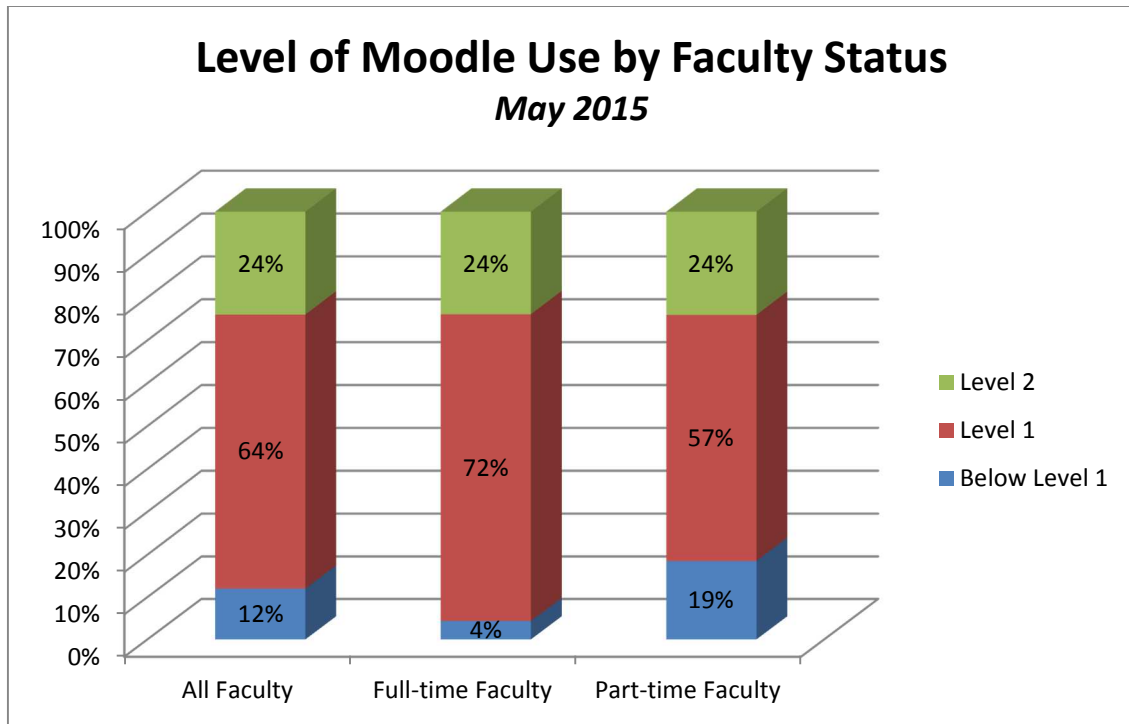
- The greatest skill level percentage of the faculty users, in all collegiate units, is the Level 1 skills. As no faculty member demonstrated Level 3 skills, Level 3 has not been included in this chart.



- The breakdown of Moodle use by academic session has two notable points. First, all of the DAY courses are the same as the CAS courses. Second, given the small percentage of MONTHLY courses, there were only two MONTHLY courses in the 100-course sample.



4. The breakdowns of Moodle use by faculty status and by the status of the students in the course examined are below.



5. Overall the skill with the highest demonstrated use was uploading and posting a course syllabus at 90%, followed by the submission of final grades by the posted deadline at 92%, the use of additional file resources other than the syllabus at 88%, and the submission of the Enrollment Verification financial aid report by the posted deadline at 87%. These are all Level 1 skills.

With the demonstrated Level 2 skills, the highest demonstrated use was tied at 65% for both setting up your gradebook and successfully creating and using an attendance activity.

Four of the faculty members demonstrated the Level 3 skill of creating and using a wiki activity. Four different faculty members set-up and successfully gather response through the feedback activity, also a Level 3 skill.

Moodle Usage Results Summary

Six years after the adoption of the Moodle learning management system, 88% of the faculty members demonstrate Moodle use at a Level 1 or Level 2 level. The full-time faculty and instructional staff use Moodle at a Level 1 level greater than the part-time faculty. However, Level 2, or intermediate, Moodle use is comparable.

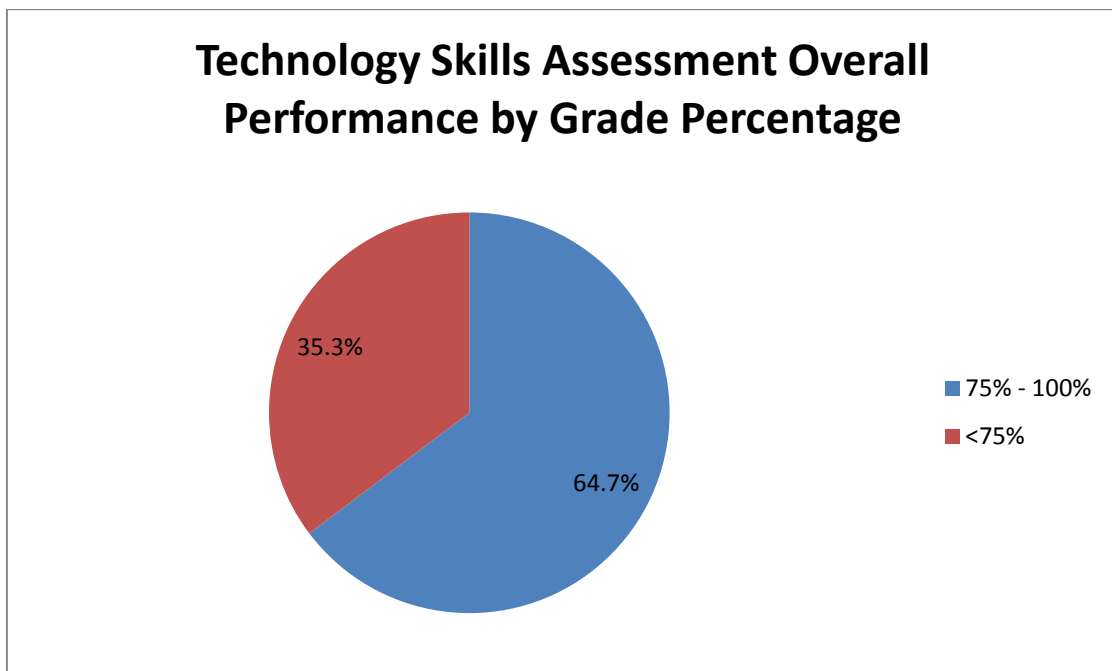
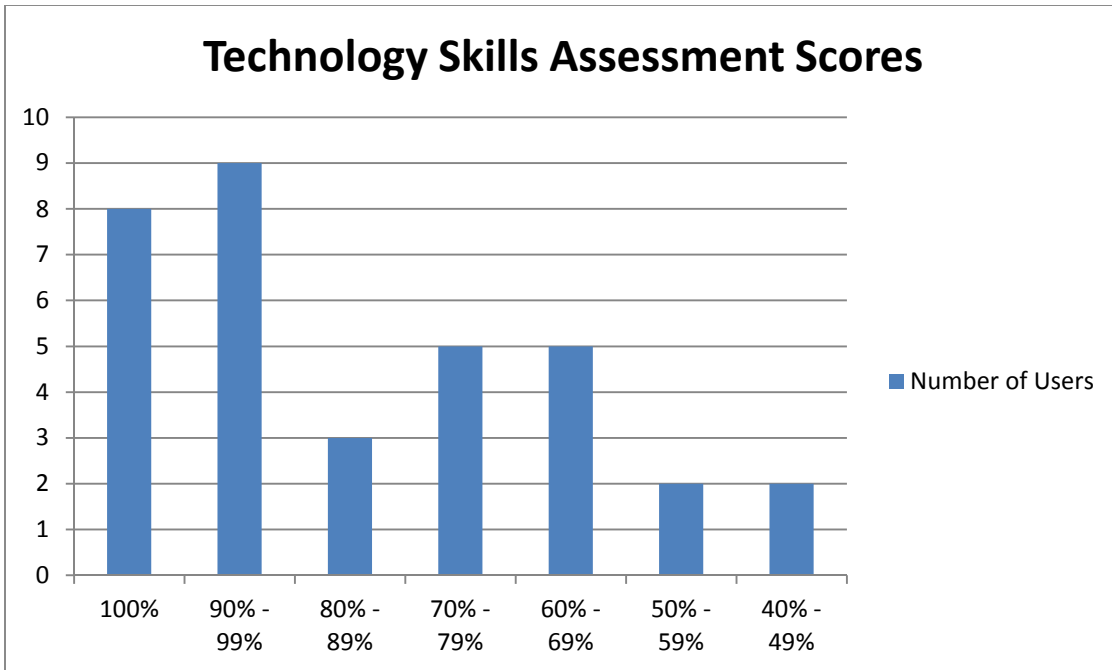
The School of Education demonstrated extremely high Moodle adoption with 100% of the courses surveyed demonstrating Level 1 or 2 skills, with no one below Level 1. The School of Professional Studies showed the highest percentage of users below Level 1. However, this unit also had the second highest percentage of Level 2, intermediate users.

Technology Skills Assessment

In addition to the review of Moodle usage and proficiency, two surveys were sent out to faculty covering general technological skills. This included an assessment portion in addition to a self-identification section. The results from these will be used to tailor professional development sessions.

The skills assessment instrument contained 16 questions broken down as 15 1-pt multiple choice questions, and one 5-pt matching question. This quiz covered extremely basic technology knowledge, including word processor usage, internet browser layout and navigation, and general technology nomenclature like URL and tablet. There was a 5:00 minute time limit.

Thirty-four faculty members took the technology skills assessment. The mean score was 80.6%. The range and count of scores is displayed on the next page.

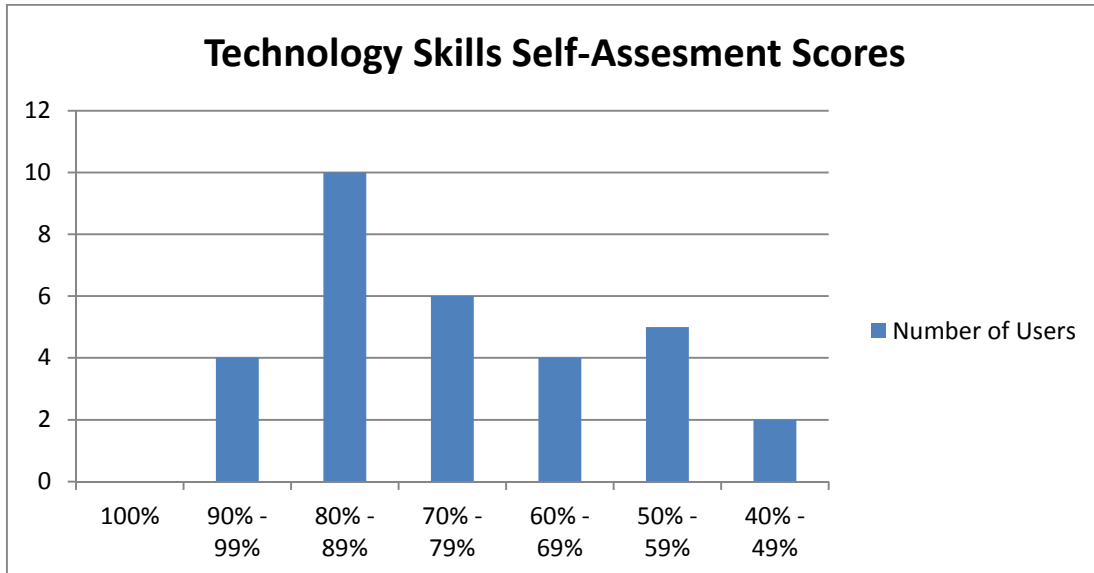


The second survey was a self-assessment instrument. It contained 32 questions in the categories of Computers, Email, Internet, Social Media, Software, and Personal Disposition towards Technology. These questions reflected the skill set tested in the first survey. Each question had a choice of the following answers (point value listed):

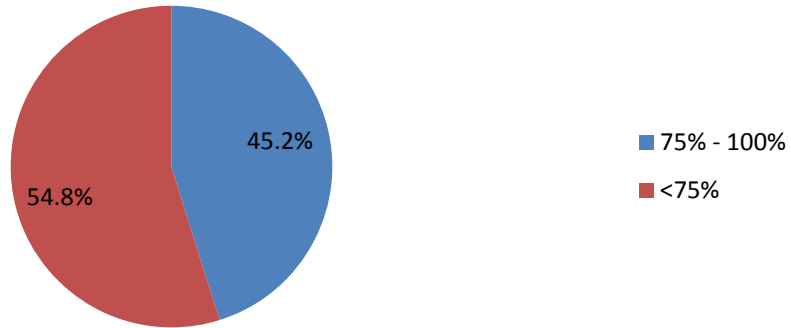
- **Extremely Confident** - I can do this task(s) on my own without assistance on the first try, and can teach someone else how to do it. **4 points.**
- **Confident** - I can do this task(s) successfully on my own without assistance. **3 points.**
- **Capable of Learning** - I can do this task(s) successfully with some assistance the first few times. **2 points.**
- **Guidance Needed** - I could accomplish this task each time, but only with assistance. **1 point.**
- **Not in my skill set** - This is not something I am confident that I could learn and perform. **0 points.**

No one marked themselves as “Extremely Confident” for all of the questions.

Thirty-one faculty members took the technology skills self-assessment.



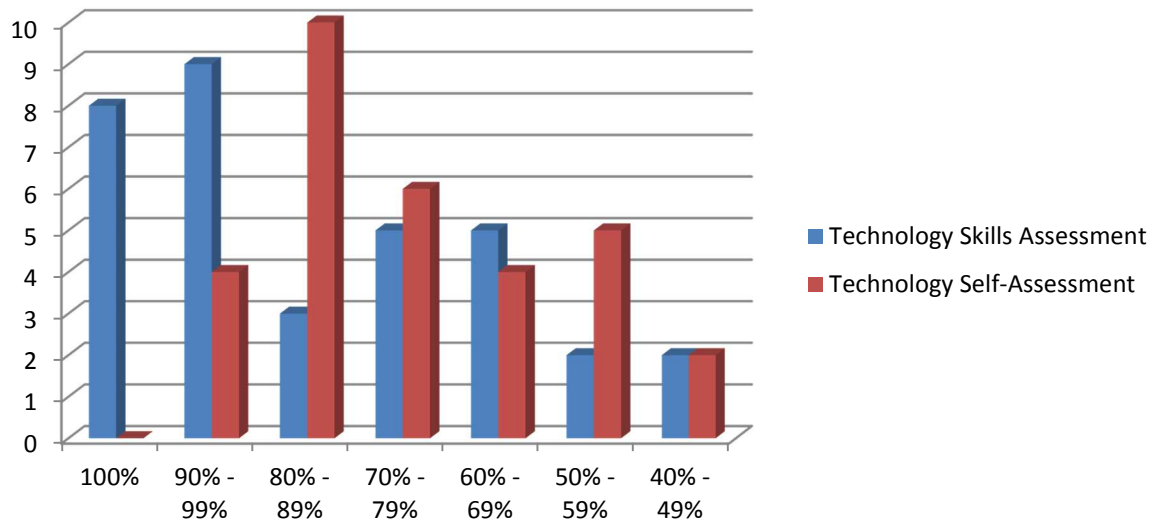
Technology Skills Self-Assessment Overall Performance by Grade Percentage



PROJECT #1 DISCUSSION

Overall, the average score for the Technology Skills Assessment was 80.6%, while the average score for the Technology Skills Self-Assessment was 75.9%.

Technology Survey Scores Comparison



The scores on the Technology Skills Assessment showed that 64.7% of the scores were 75% or greater, while the user confidence displayed in the Technology Self-Assessment had only 45.2% of the users marking themselves at a 75% or greater level.

Moving forward, in addition to specific skill sets, processes should be developed to instill confidence in the faculty's new and existing technology skills. By the end of next school year,

reasonable goals would be to have 75% of the faculty score 75% or greater in the Technology Skills Assessment, and have 60% of the faculty score 75% or greater on the Technology Self-Assessment.

PROJECT #2 ASSESSMENT

Analysis of Faculty Use of Technology in Pedagogy

A survey was sent out to faculty members through the University's Faculty Development Committee. This survey queried faculty members on their technology usage in the classroom. These examples illustrate Trinity's commitment to the use of instructional technologies to enhance the learning experience and retention of the Trinity student.

Specifically, faculty members were asked to select, or provide their own answers, to the following, as it pertains to use in the classroom:

- Types of technology
- Social media sites or apps
- Multimedia sites or apps

Faculty members were asked to provide examples of these uses. The faculty members were then also asked about the challenges they face with technology and technological implementation, as well as which technologies the faculty members would like to implement in the next three years. The faculty members were also asked upon which technologies would like to be trained.

In addition to Moodle, Trinity offers additional instructional technologies, as listed below:

- AirPlay Server
- iTALC
- Lync 2013
- SMART Boards
- Student Response System, i.e., clickers

We are working on increasing the responses to a level where the data can be used to draw conclusions.

PROJECT #3 ASSESSMENT

Analysis of Student-Teacher Course Evaluations

Course evaluations are currently gathered through a custom, online survey tool in Moodle. This project will review completion rates by collegiate unit, as well as faculty status. A review various methods previously attempted will be covered.

The evaluation instrument will be reviewed and revised accordingly.

Currently the course evaluation instrument contains 31 Likert scale questions, 3 open-ended questions, and 5 demographical questions. The instrument is broken down over six webpages, in a non-mobile-friendly web template. A paper option is not offered. The course evaluation is completely anonymous with no way to track completion of individual students and no way to tie specific answers to individual students.

While the schedule varies slightly from session to session, generally the course evaluations are open the two weeks prior to exams. The decision was made previously not to keep the course evaluation instrument open during final exams to encourage students to complete the evaluations as it related to the entire semester of work, not simply one final exam. Overall course evaluation completion rates over the past three years have ranged between 22.5% and 33.4%.

Academic Term/Year	No. of Students	No. of Completed Evals	Percentage Completed
Spring 2015	6,526	1,809	27.72%
Fall 2014	7,348	2,454	33.40%
Spring 2014	7,218	1,686	23.36%
Fall 2013	8,076	2,297	28.44%
Spring 2013	7,885	1,774	22.50%

The courses evaluations for the most recent semester, Spring 2015 at this time, are broken down:

Group	No. of Students	No. of Completed Evals	Percentage Completed
ALL	6,526	1,809	27.72%
DAY	3,943	1,306	33.12%
MONTHLY	87	9	10.34%
TERM1	473	90	19.03%
TERM2	436	69	15.83%
WEEKLY	1,587	335	21.11%
BGS	360	81	22.50%
CAS	3,943	1,306	33.12%
EDU	512	127	24.80%
NHP	340	67	19.71%
SPS	1,284	219	17.06%
Undergraduate	5,567	1,592	28.60%
Graduate	872	208	23.85%
PT Faculty	3,295	784	23.79%
FT Faculty & Instr. Staff	3,231	1,025	31.72%

Please Note: This data was adjusted to remove undergraduate internships, independent studies, and directed research.

Various methods have been tried over the years to increase the completion rate. These include:

- Multiple emails announcing the opening, duration, and closing of the evaluations to both faculty and students.
- Posters and flyer signage throughout all academic buildings on campus.
- Updated language on the main page of Moodle.
- Stickers and buttons awarded to students upon self-identification of course evaluation completion.
- Encouraging faculty to leverage the fact they can see current completion rates (and only current completion rates) while the course evaluations window is still. As an example, one professor rewards her classes with extra credit if they reach above a 90% completion rate.
- An administrator or program chair visits each class during its last class period, to ask students to complete the evaluations then on their mobile devices or on the teacher workstation, if it is appropriately private.

Moodle Competency Rubric

Faculty using Moodle should:

- Have a Moodle course home page for 1 or more courses visible to students
- Demonstrate awareness of Trinity’s policies, protocols, & etiquette with respect to the use of technology
- Ability to use and demonstrate the following functionalities to students with confidence, including competencies as noted below:

Last updated December 2014

Knowledge, Skill, or Ability	Level 1 (Basic)	Level 2 (Intermediate)	Level 3 (Advanced)
Assign and submit Midterm and Final Grades through Gradebook	X	X	X
Complete Enrollment Verification ONCE each Semester	X	X	X
Create a complete and welcoming User Profile	X	X	X
Create and post Assignment Activities (e.g., Upload a single file, Advanced uploading of files, Online Text)	X	X	X
Create, monitor, and reply to threaded discussion Forums	X	X	X
Locate, copy and insert Internet Links (URLs)	X	X	X
Post introductory Text for Course using “Label” area	X	X	X
Rearrange your Course’s Workspace by manipulating Blocks	X	X	X
Send Email Announcements / Communications to Full Class, Smaller Groups & Individuals through Quickmail	X	X	X
Upload and post a Course Syllabus	X	X	X
Upload and post Word/Excel/MS product files, PDFs, and images	X	X	X
Create additional Web or Text Pages for the Course		X	X
Create and use a Gradebook in relation to the course syllabus		X	X
Create and use Daily Attendance		X	X
Create events and other reminders using the Calendar		X	X
Design, create, and administer online Quizzes or Exams		X	X
Embed video content from outside websites like YouTube		X	X
Import content from one course into another course		X	X
Create, upload and/or post digital multimedia objects including video and audio files, interactive assignments, etc.			X
Design and create student activities for peer editing and collaboration (e.g., Glossaries, Wikis, Workshops modules)			X
Design, create, and administer online “Lessons”			X
Design, create, and administer online feedback activities (Choice, Feedback, Survey modules)			X
Teach others how to design and post digital multimedia objects			X
Use Chat feature for online, synchronous interaction with students			X