

FACULTY ATTITUDES REGARDING CLASSROOM TECHNOLOGY AT SCHOOLCRAFT COLLEGE



PRACTICUM IDSL 894

PATRICK R. TURNER,

SCHOOLCRAFT COLLEGE

FEBRUARY 17, 2020

INSTRUCTOR: DR. LORI GONKO



Practicum Topic: Faculty & Classroom Technology

Background: Reboot Schoolcraft Active Learning Project

Project Definition: Ascertain how Faculty at Schoolcraft College want to use technology in the classroom to inform the Next Generation Classroom Technology Project.

Deliverables:

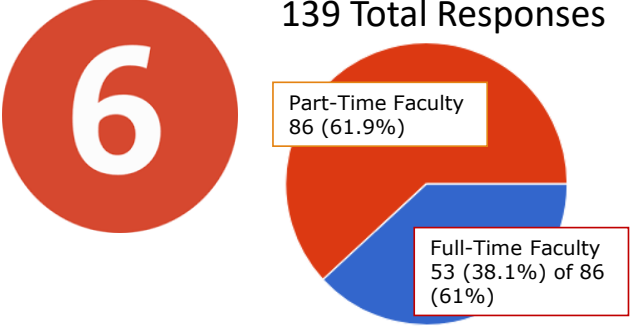
1 Interview Dean of Distance Learning to understand what methods and tools faculty typically currently use. [Added interviews with VP Instruction, Instructional Designer, and Faculty.]

2 Classroom technology scan and Literature review [incorporated into the faculty survey as proposed advancements].

3 Created a Google Forms Survey vetted by Schoolcraft Instruction Stakeholders and managed by the Research and Analytics Department. – Interview questions. Interview Notes (Results)

4 Three [Classroom] Observation Forms from class observation sessions (filled out). [Added interviews with CIOs and Deans of Distance Learning re: Advanced Classroom Technologies from Macomb CC and Northwood University.]

5 A final PowerPoint presentation to Schoolcraft Leadership Team Meeting of the work carried out and conclusions reached. It will include a survey analysis and recommended classroom technology best-practices as determined via the survey instrument.



Schoolcraft Instruction Stakeholder Interviews

Dr. Cheryl Hawkins,
VP of Instruction and Chief
Instructional Officer

1. Student success
2. Goal is move to Active or Collaborative Learning.
3. Quest for Knowledge, not validating assumption.
4. Don't assume access to technology or a car/bus; (Laptop vending machine)
5. Faculty are SMEs & teach how they were taught.
6. Consider perception of survey by participants.
7. Part vs Full Time Faculty?
8. Faculty generate revenue.

Stacy Whiddon
Dean Distance Learning
& Faculty Development

1. Frame all questions in context of instruction.
2. Students know you care by how you prepare.
3. Center for Teaching and Learning; exploit LMS.
4. Contract; re-training.
5. Faculty don't know what they don't know.
6. Learn from failure is ok.
7. Inclusive/inviting community.
8. Get faculty on a path, they need to see value.

Adam Authier
Senior Instructional
Designer

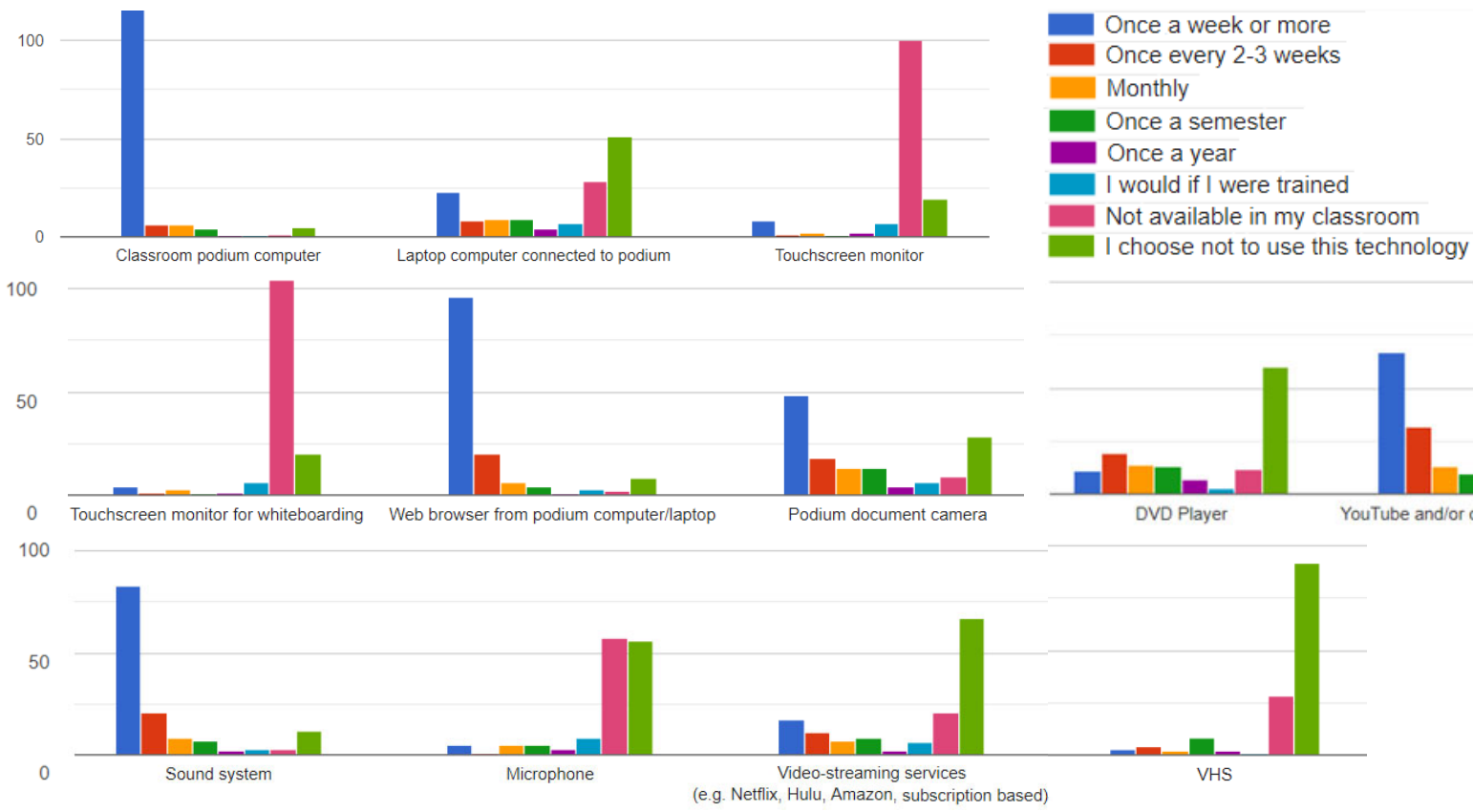
1. Build environments to make students want to learn; engagement.
2. Buy in; apply learnings.
3. Meet student where they are; tech. is just a tool to find audience.
4. Make real world/life connections via lessons
5. Draw in Faculty with small wins; learning obj
6. Eliminate barriers; OER

Ronda Suter
Faculty, Accounting

1. Show thought in providing technology
2. Can't see over podium and computer monitor.
3. More work space
4. Moveable podium.
5. Long time to switch between class tools.
6. Show you care, clean podiums & erasers
7. Instruct the Instructors; share success.
8. Kahoot free polling tool via web/smartphone

Faculty & Classroom Technology Responses

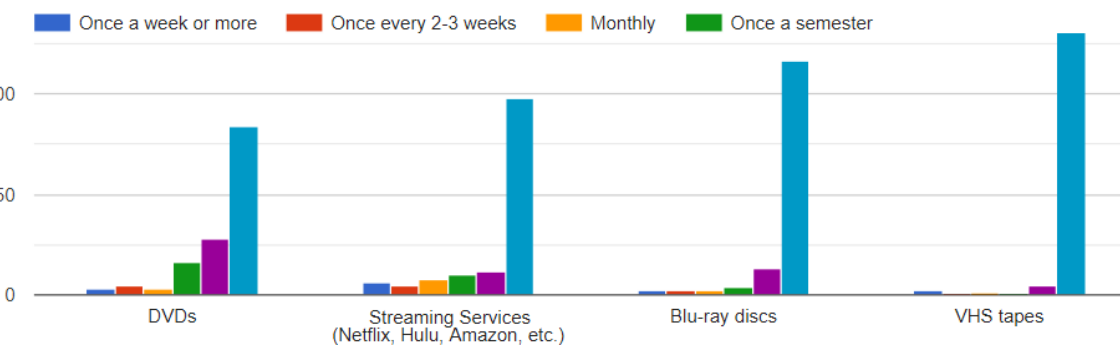
Question 2: Indicate how often you use the current classroom technologies.



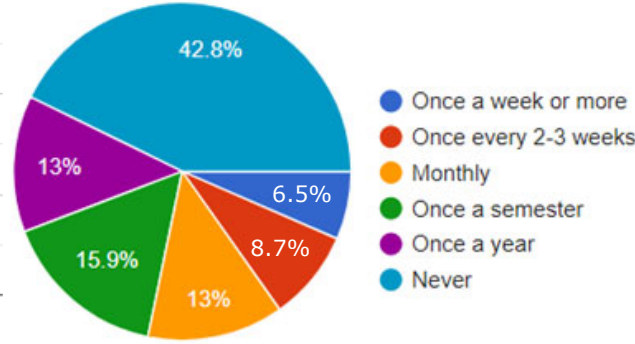
1. Computer, Browser, YouTube, Document Camera, and Sound System.
2. If trained: Touchscreen and microphone.
3. Rest never or choose not

Faculty & Classroom Technology Responses

Question 3: How often do you use your own money to purchase media-related items for instruction?

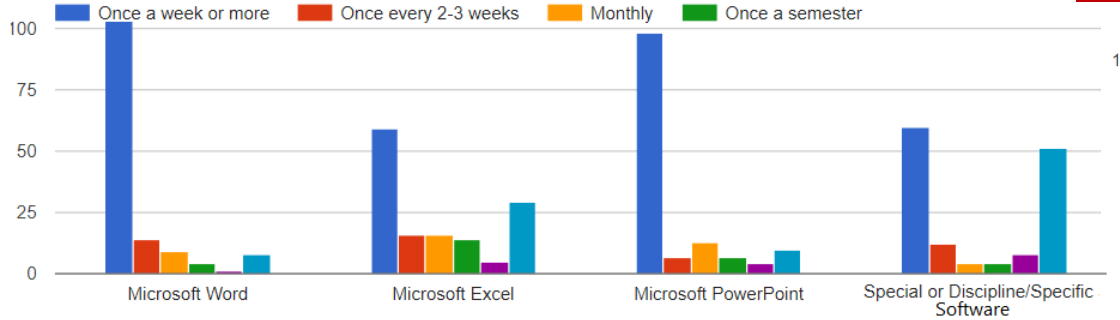


Question 4: How often do you utilize media/technology resources from the library?

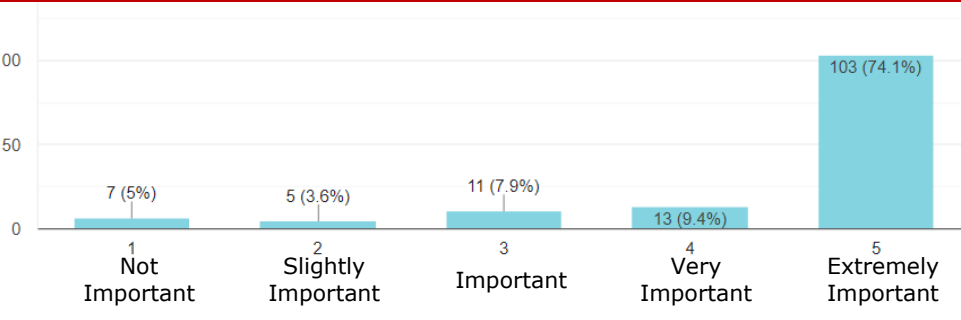


1. Don't use own money for video.
2. Few use library assets for media.
3. Most use MS Apps and some special SW.
4. WiFi is Extremely Important!

Question 5: Indicate how often you use the following programs/software for instruction?

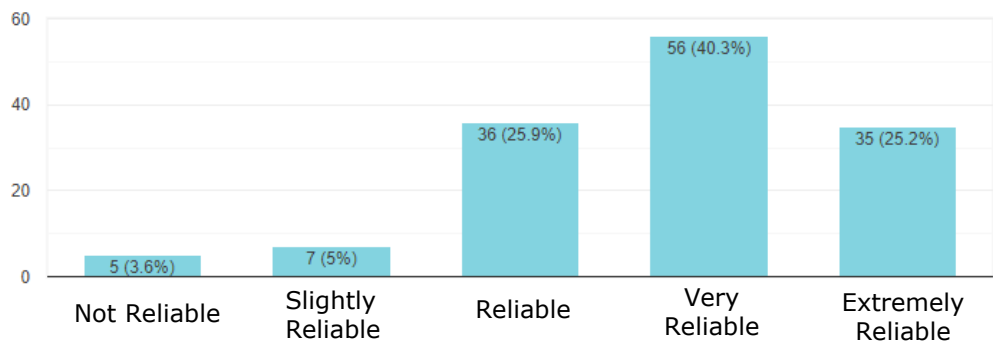


Question 6: How important is access to a reliable WiFi Network to classroom instruction?

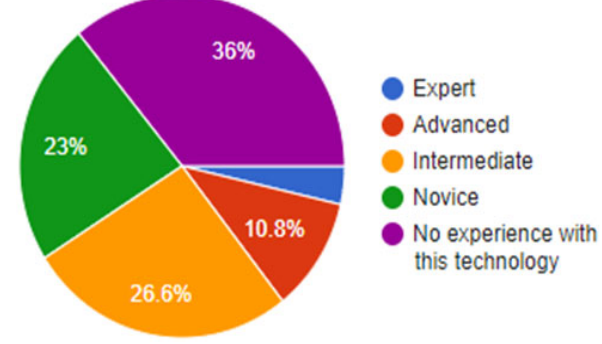


Faculty & Classroom Technology Responses

Question 7: How reliable has classroom technology been in the last year?

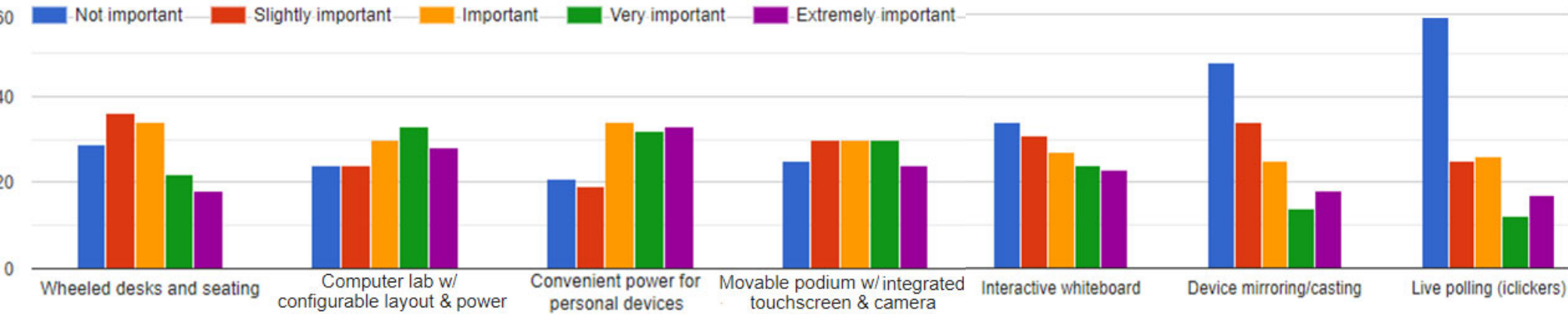


Question 9: Indicate your proficiency using advanced presentation tech. (i.e. interactive whiteboard) systems



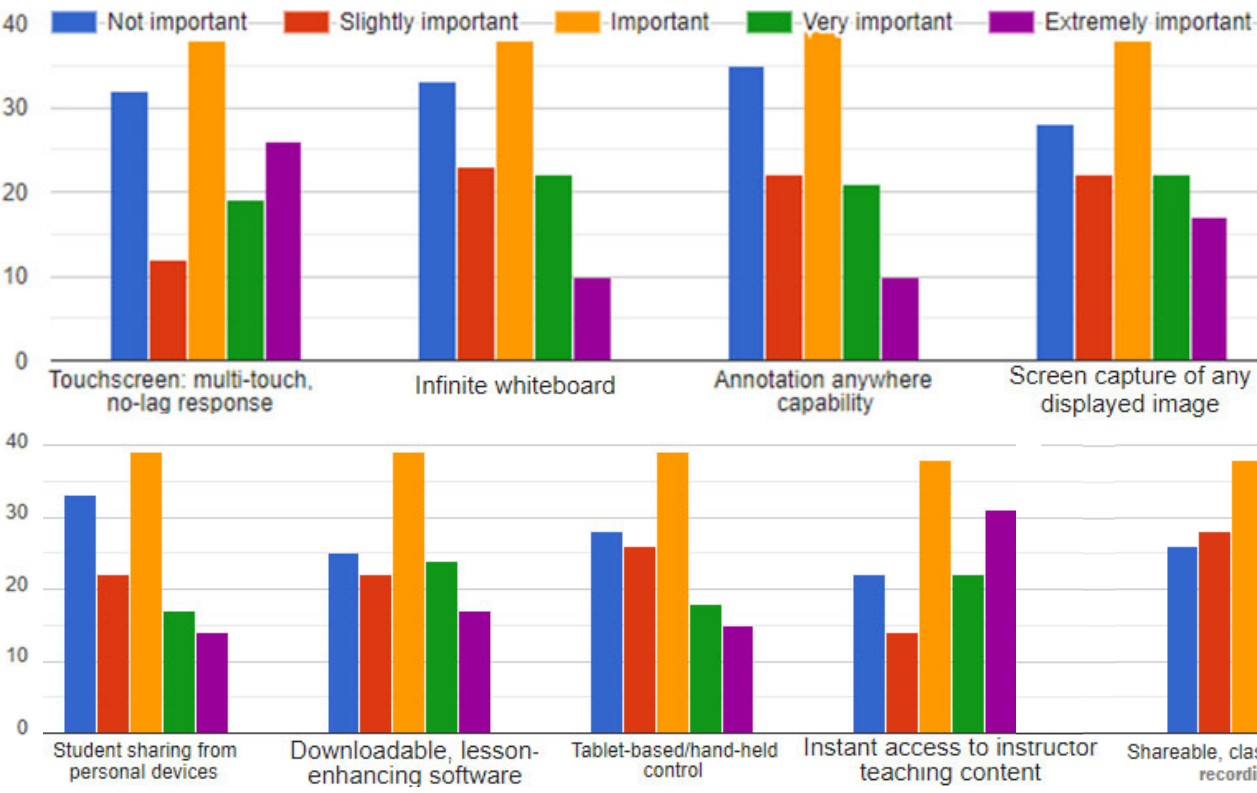
1. Schoolcraft classroom tech. is fairly reliable.
2. Half of Faculty proficient with advanced tech.
3. Moderate interest in **new** advanced tech. but questionable faculty understanding.

Question 8: Rate importance of following flexible classroom innovations in facilitating use new technology?

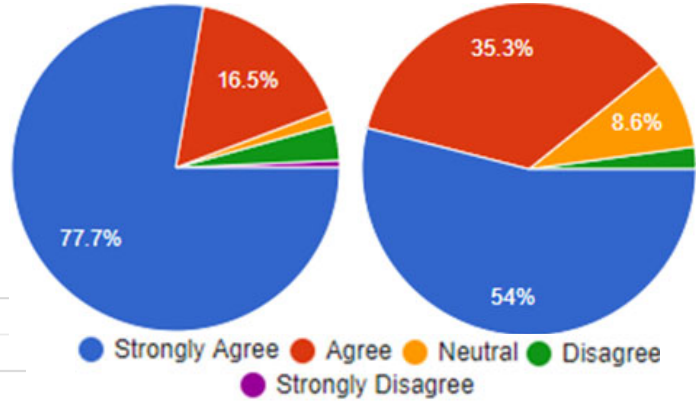


Faculty & Classroom Technology Responses

Question 10: Please rate the importance, or unimportance, of the following interactive whiteboard features in terms of their impact on successful classroom instruction.



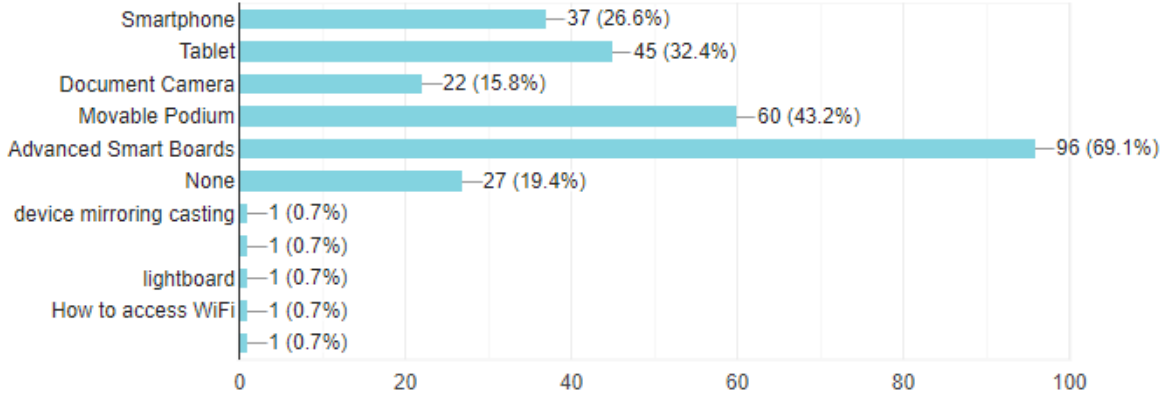
Question 11: Based on your teaching experience, rate your level of agreement : The majority of students today have access to personal devices (smartphones, tablets, laptops, desktop computers, etc.)
 Question 12: Students have come to expect the use of technology in classroom instruction.



1. Advanced interactive whiteboard features are important but seemingly not very well understood by faculty.
2. Students access to personal technology devices is universally understood and students expect its use.

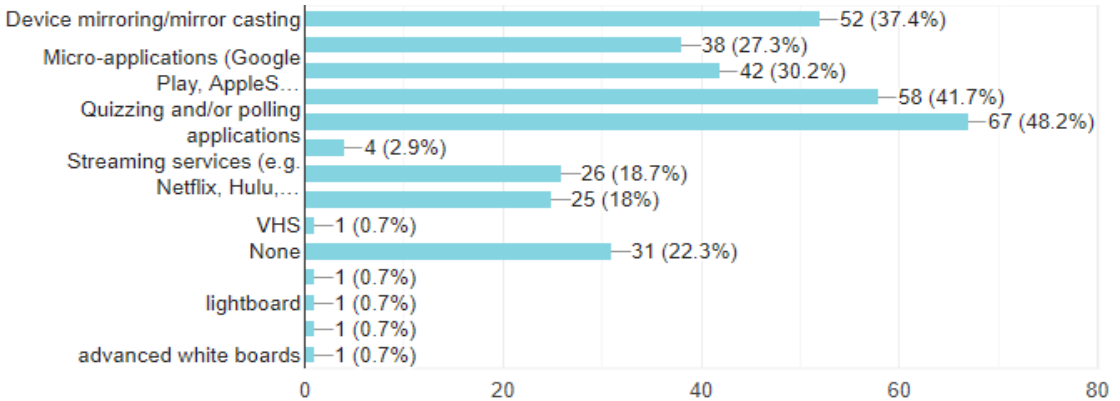
Faculty & Classroom Technology Responses

Question 13: I would like more information/training in using the following classroom HW technologies:



1. Use of advanced smartboards
2. Use of movable Podiums.
3. Moderate interest otherwise.

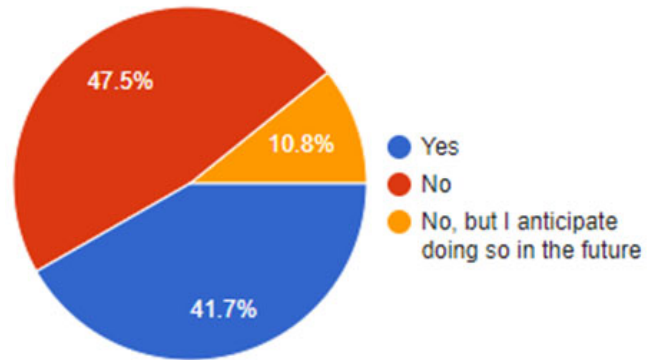
Question 14: I would like more info/training on the following systems, functions, and/or technological applications:



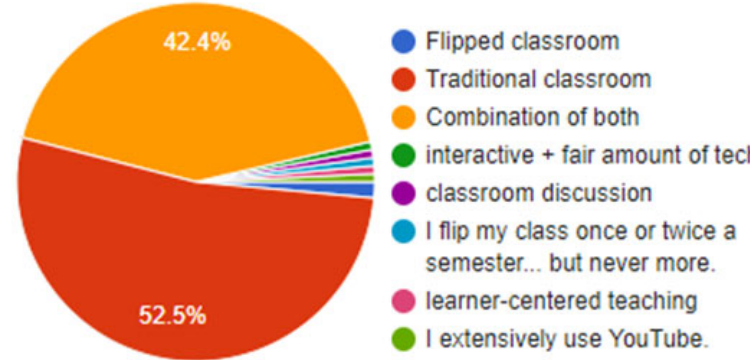
1. Use of quizzing and polling applications.
2. Device Mirroring/ Casting.
3. Moderate interest otherwise.

Faculty & Classroom Technology Responses

Question 15: Have you ever tried the flipped classroom approach?

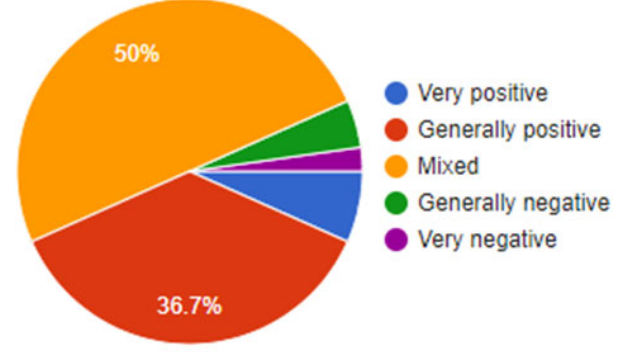


Question 16: Based on the definition provided, which of these two methodologies best describes your classroom instruction style?

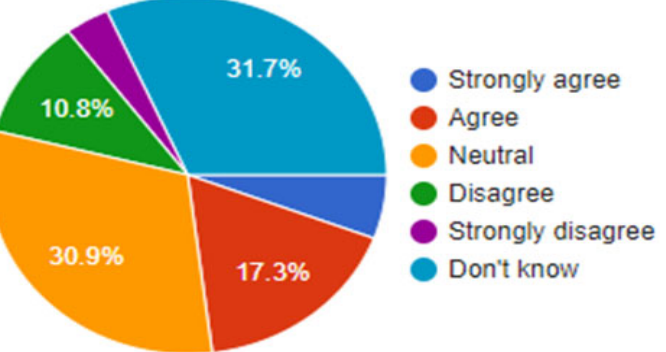


1. Less than half tried flipped classroom.
2. Only mixed has been used

Question 17: What were your students' responses to the flipped classroom experience?



Question 18: Please rate your agreement to this statement: Students understand material better in flipped, vs traditional, classroom model?



1. Student reaction has been positive/mixed.
2. Better understanding via flipped method is indicate but many do not know for sure.

Classroom Observation of Technology Use

ACCT 202 - Principles of Accounting (Corp. Stock Types/Structure)

Math 150 – Calculus and Analytic Geometry

POLS 105 – Survey of American Government

Highest level of technology use

- Prepared & engaged
- Campus opportunities
- Web-base voting of proxy shares of Disney™ stock
- Parallels to current lesson
- Probing question/validate.
- Engaged all students.
- Remediation & deep learn.
- Fun game via Quizzizz™ web/tablet/smartphone
- Retained Learning/Earning
- Students pick score goal
- Extra-Credit for creativity
- Teams Cheering
- Review most missed Q's.

Moderate use of technology

- Prepared & engaged
- Moved in and around students
- Students used Doc Camera to review homework solutions.
- Proposed and asked about alternative approaches.
- Used online graphing calculator to show alternative methods.
- Discussed errors & remediated ways of remembering content.
- Engaged in constructive criticism about peer methods & success. Instructor encouraged & thanked presenters.

Mild use of technology

- Prepared & mildly engaged
- Suggested watching State of Union Address to apply.
- Discussed attendees and significance.
- Used Power Point Slides as source of lecture as primary method.
- Stayed at front of class.
- Posed questions but little response.
- Reviewed previous content but did not ask Q's.

1. Nothing replaces faculty enthusiasm and engagement.
2. Employing student use of personal devices is an effective method to elevate engagement.
3. Gamification is also an effective means to elevate excitement and student caring.
4. ACCT 202 exemplifies “students know you care by how you prepare.”

Peer College/University CIO & Staff Interviews

Michael Zimmerman
Chief Info. Officer,
Macomb Comm. College

5-7 years of Active Learning

- Long term initiative for active learning – iterations
- Model Active Learning class.
- 3 White Board projectors, flexible furniture, tablet based controls, 5 student collaboration pods.
- Laptop “vending machine”
- Wireless video connections.
- Convenient student power in all common areas; USB
- Power towers.
- Move public computer labs to library common areas.

Michael Balsamo, Director
of Learning Resources,
Macomb Comm. College

Founder of

- Primary user of Active Learning classroom. Wireless controls
- Room configured in rectangle.
- Casting content on proj and monitors simultaneously.
- 50%+ of faculty actively use advanced classroom technology
- Tech competency required in new faculty orientation.
- Departments can require min. tech and templates for faculty.
- Active use of FDC – Faculty Development Center to keep faculty technologically current

Robert Wisler
Chief Info. Officer,
Northwood University

New Upgrades for Active Learn.

- Pervasive addition of student collaboration spaces.
- Classroom upgrade to active learning format with flexible furniture & modern flexible tech. controls

1. Efficient seamless tech control via tablet helps faculty/student engagement.
2. Convenient power facilitates student casual collaboration.
3. Collaboration rooms with easy technology promotes student collaboration.
4. Faculty Development Center
5. Required minimums in classroom Tech. & required Competency

Conclusions: Improve Faculty Teaching Outcomes

- Faculty must lead in instruction first & then technology.
- Faculty culture and attitude is paramount in:
 - Faculty behind in tech competency compared to students.
 - Creating faculty's passion at same level in students.
 - Meeting students at their level technologically.
 - Making students "care," leading to deep learning.
- Successful Active Learning models exist (e.g., MCC):
 - Ongoing retraining in a Faculty Development Center.
 - Minimums required in Classroom Technology & Methods.
 - Demonstrative technology competency requirements in new Faculty Orientation.
- Classroom technology trends and requirements:
 - Active learning / collaborative environments.
 - Flexible Classroom (easy to go from lecture to pods).
 - Advanced display systems with easy instant wireless connection by faculty and students.
 - Easy and convenient access to power for personal devices.
 - Absolutely easy/reliable technology – "It just works!"

Student Learning
Outcomes Drive
Student Success



QUESTIONS?

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Spare/Removed Slides

x

• x

Practicum Topic: Faculty & Classroom Technology

Background: Reboot Schoolcraft Active Learning Project

Project Definition: Ascertain how Faculty at Schoolcraft College want to use technology in the classroom to inform the Next Generation Classroom Technology Project.

1

Create & execute a survey of faculty regarding technology use and trends. What methods and tools do faculty not use that would make teaching and learning more effective if they did?

2

Visit 4 to 8 class session from selected Schoolcraft Faculty to understand types of teaching and learning being used and how they are impacted by technology.

3

Interview Dean of Distance Learning to understand what methods and tools faculty typically currently use.

4

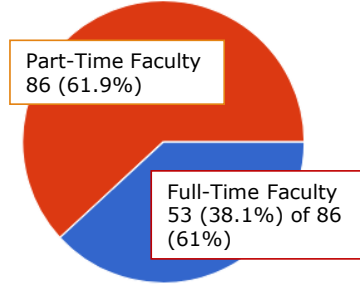
Perform a classroom technology scan to determine what is currently available.

5

Do a small literature search to determine state of the art technology and methods.

6

Full Time vs Part Time



Practicum Topic: Faculty & Classroom Technology

Project Deliverables:

1

Interview questions.
Interview Notes (Results) – Created a Google Forms Survey vetted by Schoolcraft Instruction Stakeholders and managed by the Research and Analytics Department.

2

Three [Classroom] Observation Forms from class observation sessions (filled out). [Added interviews with CIOs and Deans of Distance Learning re: Advanced Classroom Technologies from Macomb CC and Northwood University.]

3

Interview Dean of Distance Learning to understand what methods and tools faculty typically currently use. [Added interview with Senior Instructional Designer.]

4

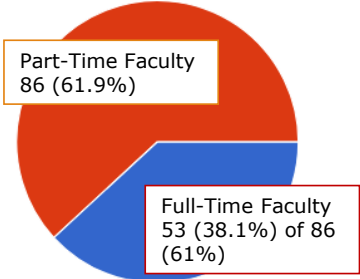
A final PowerPoint presentation to Schoolcraft Leadership Team Meeting of the work carried out and conclusions reached. It will include a survey analysis and recommended classroom technology best-practices as determined through the use of the survey instrument.

5

Literature review summaries and selected items from the classroom technology scan [incorporated into the faculty survey as proposed advancements].

6

Full Time vs Part Time
139 Total Responses



Faculty & Classroom Technology Agenda

Detailed Deliverables listed in sections presented.

- Schoolcraft Instruction stakeholder's interview feedback
- Survey responses (Full Time and Part Time Faculty):
 - Technology currently in use by Faculty.
 - Faculty use of video, Microsoft apps, WiFi, and reliability.
 - Faculty use of advance classroom technology.
 - Faculty rate importance of advanced touchscreen whiteboards.
 - Faculty assumptions on student access and use of technology.
 - Faculty desire for more info/training.
 - Faculty use of a "flipped classroom" model (Active Learning).
- Evaluation of classroom observations and use of technology.
- Advanced technology at another College and University
- Review of Schoolcraft Employee and IT Satisfaction Survey Results
- Conclusions

Faculty & Classroom Technology Responses

Question 19: What types of tools, technology, furniture, or other resources do you feel would best enhance your ability to use the flipped classroom teaching method?

- Instructor tablet; streaming videos
- Better technology in the classroom, along with ability to still utilize DVDs
- Internet-connected devices for all students (Chromebooks, computer lab, tablets, etc.)
- Movable furniture in the classrooms
- I do not prefer the “flipped” method to traditional teaching styles
- Flexibility of movement of furniture, technology
- Training & examples of these methods in a professional development class
- I usually have access to medical props from nursing and also buy certain items to drive home nursing concepts
- Students access their LMS, textbooks, & calculator from smart phones
- Smart board
- Computers on every desk with a printer in the room
- Art & craft supplies
- Faster internet in the classroom, more advanced technology—one of my classroom podiums does not even allow me to freeze an image on the screen so my students can look at one things while I play audio of something else.
- Not related to flipped teaching, but I would like to have a screen I can project documents onto AND a board I can write on (Two separate areas) without having to switch back and forth.
- Polling software and devices would be awesome, but I use PowerPoint and each students holds up a piece of paper (folded into four sections marked A,B,C, and D).
- My only issue is the volume not always working or DVD not playing
- Reliable and fast online access; movable desks and chairs
- Please get rid of chalkboards
- Easier hook up to a laptop
- Redesign the floorplan to promote working in groups
- Training
- Furniture
- Access to technology for students who do not have private access
- Furniture
- Ability to create recordings and keep a library of resources
- Moveable furniture, good internet access
- I’m not sure
- The ability to produce more custom digital course content for my students to use at home before coming into the classroom
- N/A
- Moveable furniture, places for everyone to plug-in devices
- What we currently use works fine
- Available computers
- Use of a tablet
- Think boards
- Navigator plus

Other Schoolcraft Survey Feedback on Technology

From: Employee Survey Results

How has Schoolcraft College fallen short on values?
 The cabinet is **forcing changes onto faculty**, and declaring that if they do not change they will be fired. **Faculty and Curriculum should drive the changes in classroom technology**. Not forcing computer changes upon faculty and telling them they have to change how and what they teach. It appears to me that the cabinet is out of touch with the students and student's needs. Most of all the decisions seem to be based from research 10 years out of date, and they tell people that it surprises them of what they learn from the old studies. Focus seem to have been lost, no longer focus on the students—an *employee* (p. 21)

What do you like about the direction Schoolcraft College is going?
 It's **moving toward an active learning environment which will be highly beneficial** to student engagement and experience—an *employee* (p. 22)

What are your concerns about the direction Schoolcraft College is going?
 We are **not keeping up with the education** needed for today's new students. They are very technology driven. Out **IT abilities are well behind what incoming students are wanting**. Our new programs are only of interest to a small group of people. We haven't started anything new in years—an *employee in Finance & Business Services* (p. 23)

From: IT Satisfaction Scorecard



Faculty & Classroom Technology Responses

Question 20: Questions or comments about classroom technology?

- None
- Would prefer to stick with Blackboard rather than other LMS
- Your first set of questions assumed that these features were available in my classroom. They are not. I thought we weren't supposed to use Netflix