

# Faculty of Education

## Technology Survey



Administered May 1, 2011  
Analysis October 5, 2011

# Background

## **Overarching Research Question:**

To what extent are Faculty using technology in their courses?

## **SubQuestions:**

In what educational categories have Faculty used technology over the last two years?

In what educational categories do Faculty intend to use technology over the next year?

Do Faculty want more professional development in the various educational categories?

## **Purpose:**

This survey was intended to collect data on the Faculty's integration of technology across various instructional/learning dimensions. It was also intended to identify potential areas for future professional development efforts.

## **Survey Structure:**

This survey is organized based on educational categories or instructional strategies. These are:

- student collaboration
- communication
- interactive learning
- research
- assessment

Each of these main categories is further divided into subcategories and each subcategory had the same three question items:

- Have you used this in at least one of your courses in the last two years (2009/11)?
- Do you intend to use this in a course in the coming year (2011/12)?
- Would you be interested in enhancing your knowledge and skill with this?

There was a demographic item at the front end that determined the number of individuals teaching in the various components of the programs in the Faculty of Education. In addition, there were two open ended questions asking:

- Please make any comments about teaching and learning with technology in the Faculty.
- If you do a technology learning activity that is neat and are willing to share that, let us know and we will create a video vignette highlighting the idea.

**Administration Procedures:**

The online survey was administered at the beginning of a Faculty Council meeting with subsequent invitations to respond through emails.

**Disclaimers:**

This survey does not breakdown items by the components of the different programs in the Faculty of Education, so one assumption is that the general response is reflective of the various components of our program. In reality certain components like the M. Ed. may look slightly different but the data provides a general sense for what is happening across the Faculty in regards to integrating technology and the intentionality to use technology in the future. In addition, this data describes potential Faculty professional development needs.

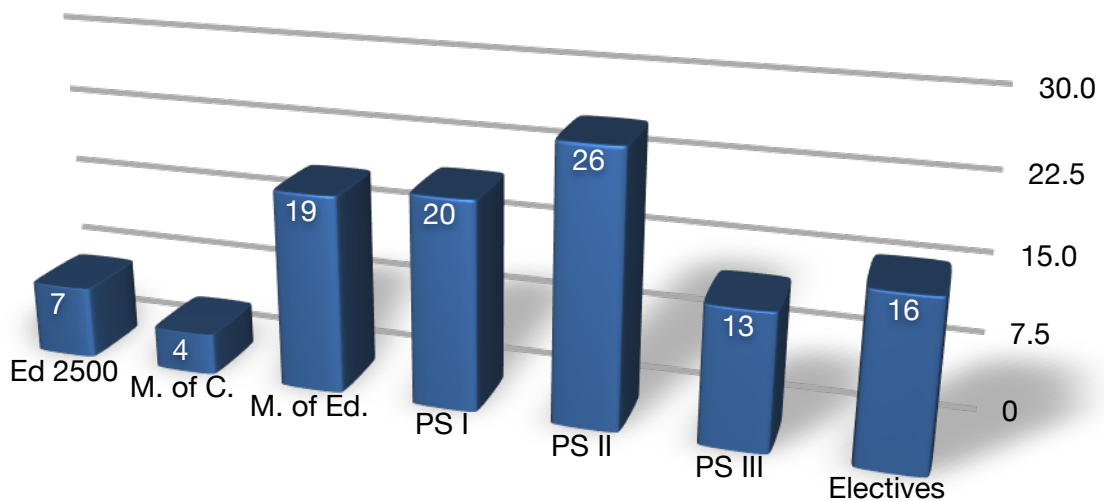
There were 35 respondents out of a possible total number of 52 which includes those on study leave, secondments (lecturers), full-time Faculty, and instructional Academic Assistants). On a few of the items there were individuals who opted not to respond so on some items the number of respondents was lower.

# Results

**Demographics:** this item was intended to get a sense for who was responding to the survey

Please specify the components of the program you have taught in the last two years- 2009/11 (you may choose multiple options).

**Number of Faculty Involved in Teaching Components**



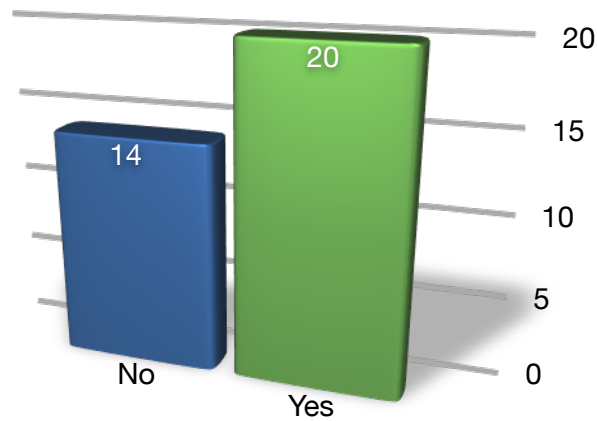
n=35 (approximately 67% of all possible Faculty)

# Student Collaboration

**Shared Documents:** you design activities where students edit/create common information online - e.g. Google docs, Wikis, etc.

Have you used this in at least one of your courses in the last two years (2009/11)?

**Shared Documents**

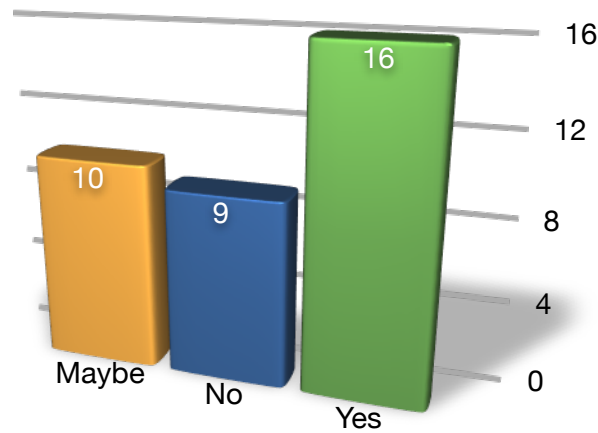


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Shared Documents - Intend to Use

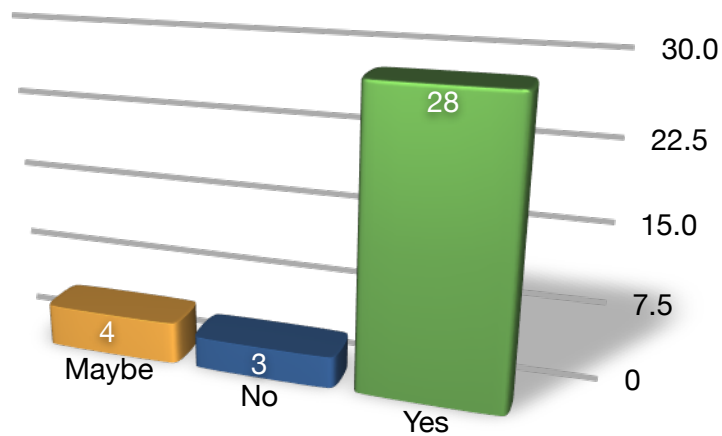


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Shared Documents - Enhancement Interest



n=35

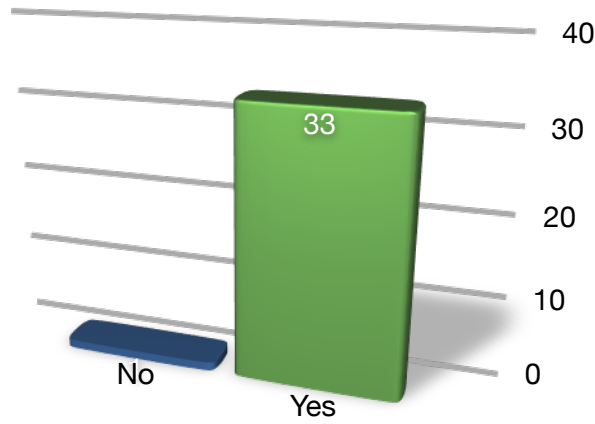
---

# Communication

**Accessing Information:** you disseminate information to students via web pages, digital video or audio, presentations (e.g. PowerPoint slides, podcasts, Youtube, Vimeo, etc.)

Have you used this in at least one of your courses in the last two years (2009/11)?

**Accessing Information**

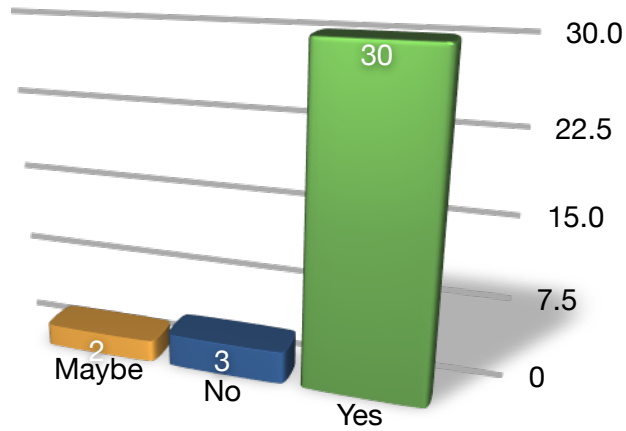


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Accessing information - Intend to Use

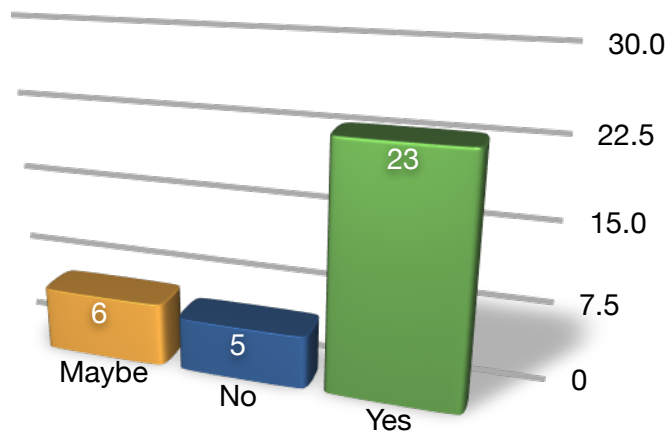


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Accessing Info. - Enhancement Interest

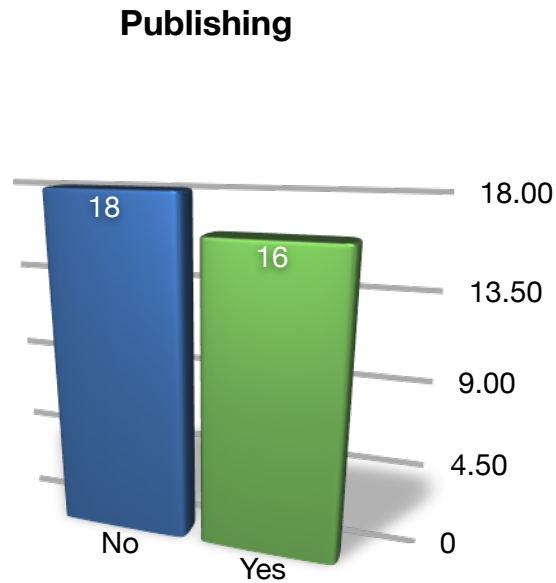


n=34



**Publishing:** you design activities where students do web authoring, create e-portfolio, etc. (e.g. Blogs, iWeb, WordPress, edu.Glogster, etc.)

Have you used this in at least one of your courses in the last two years (2009/11)?

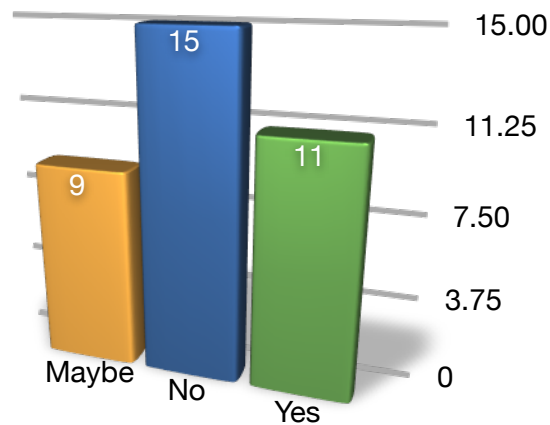


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Publishing - Intend to Use

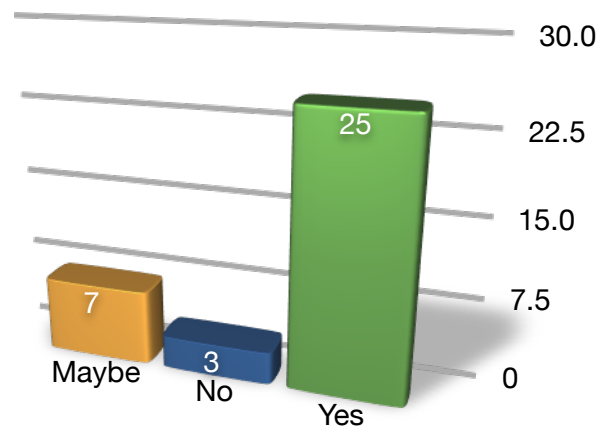


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Publishing - Enhancement Interest

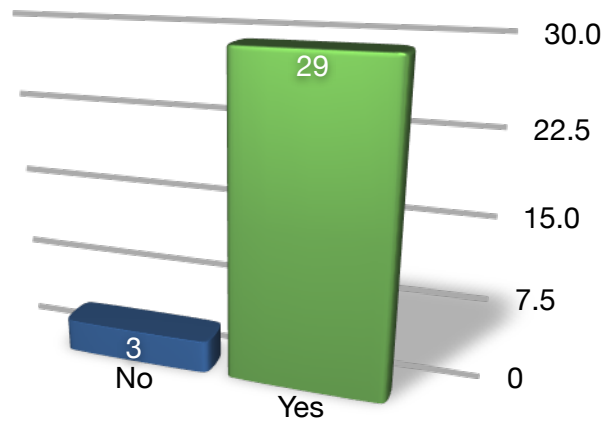


n=35

**Representational Creation:** you design activities where students create: video, audio, digital images, digital stories, or digital presentations (e.g. Power Point, Notebook, Keynote, Photoshop, iMovie, Audacity, etc.)

Have you used this in at least one of your courses in the last two years (2009/11)?

### Representational Creation

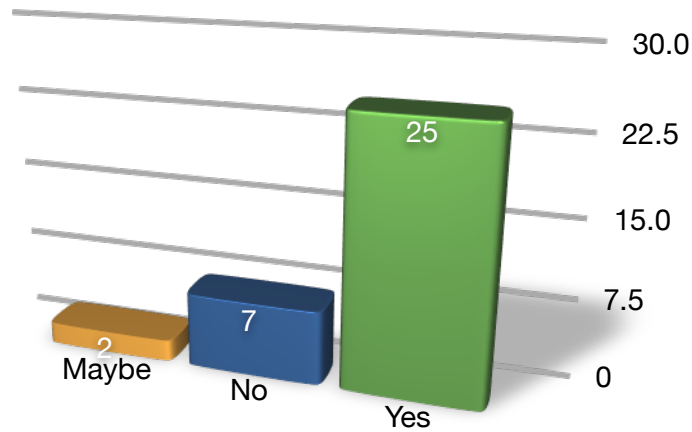


n=32

---

Do you intend to use this in a course in the coming year (2011/12)?

### Representational Creation - Intend to Use

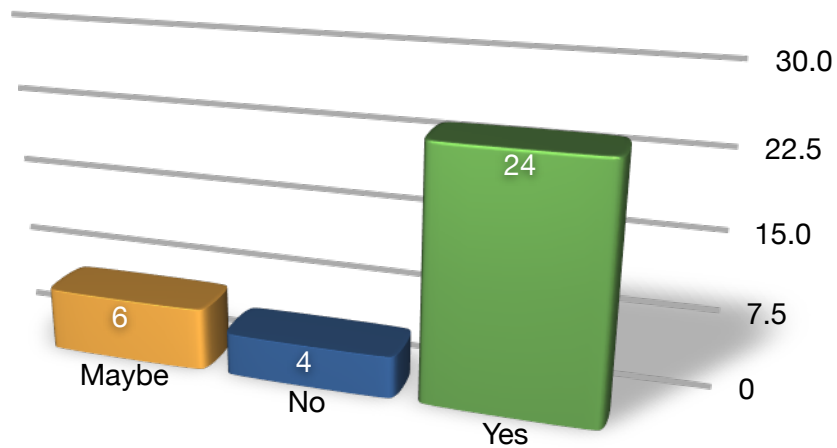


n=34

---

Would you be interested in enhancing your knowledge and skill with this?

### Representational Creation - Enhancement Interest

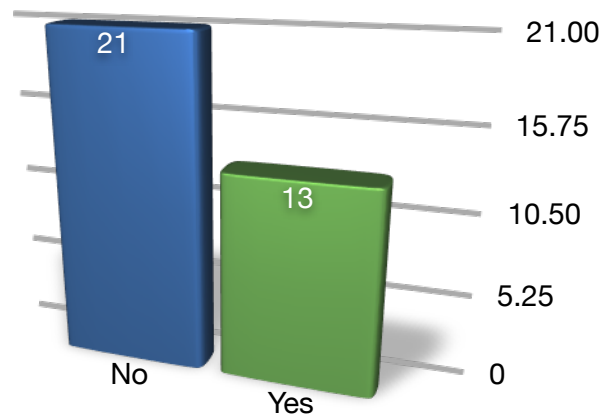


n=34

**Class/Group Discussions - in real time, face to face:** you engage students in chat sessions, web conferencing (e.g. Skype, iChat, Adobe Connect), or video conferencing (Vidyo)

Have you used this in at least one of your courses in the last two years (2009/11)?

### Real-time Group Discussion

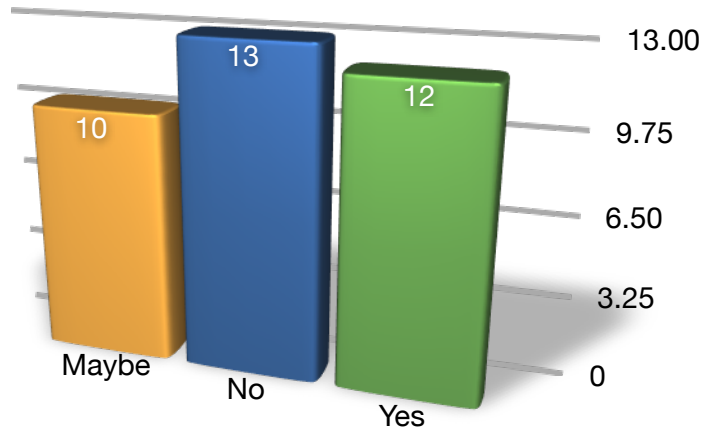


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Real-time Group Discussion - Intend to Use

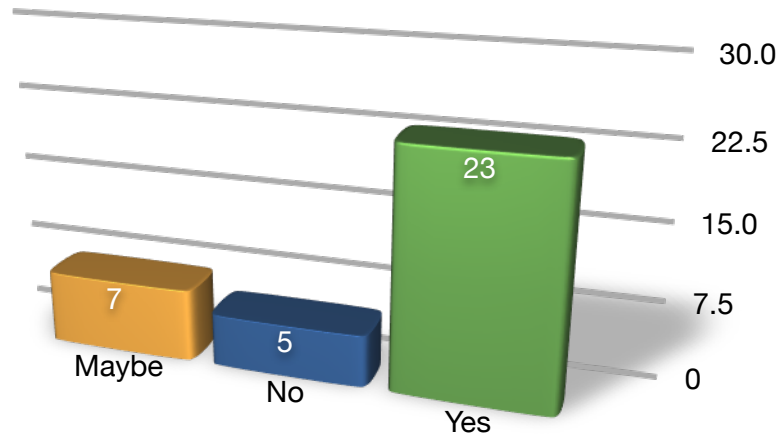


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Real-time Discussions - Enhancement Interest

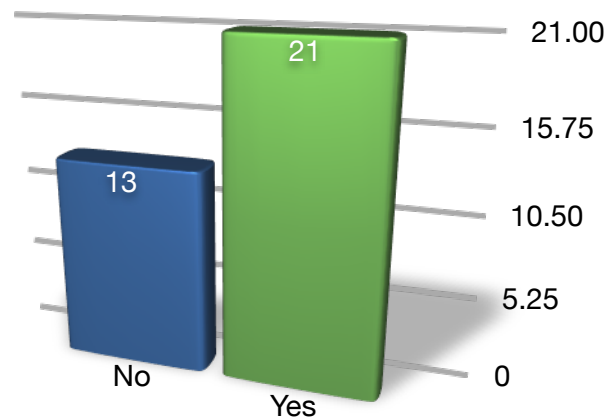


n=35

**Class/Group Discussions - not in realtime:** you engage students in discussion forums (**asynchronous** conversations) (e.g. Moodle/WebCT discussion forums, VBulletin, etc.)

Have you used this in at least one of your courses in the last two years (2009/11)?

### Not Real-time Group Discussion

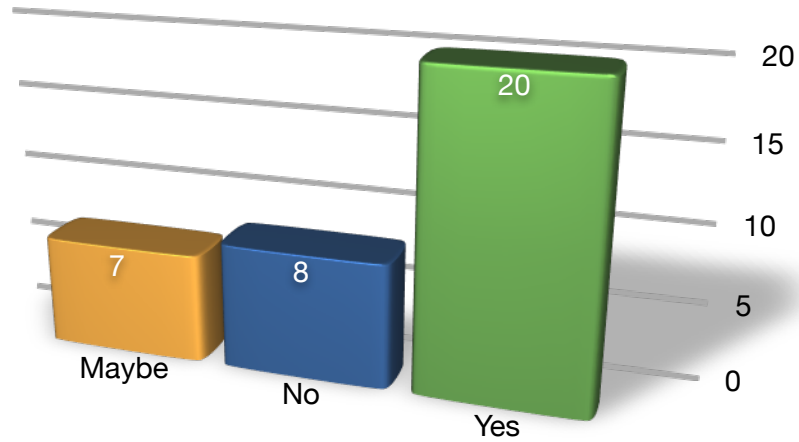


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

**Not Real-time Group Discussion - Intend to Use**

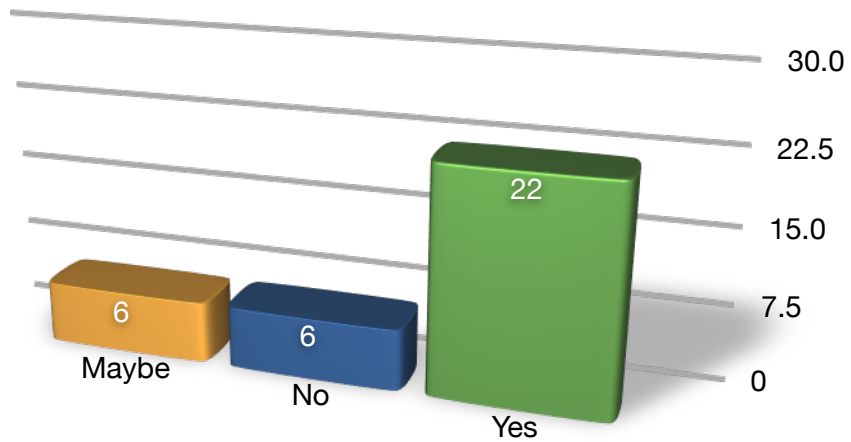


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

**Not Real-time Discussions - Enhancement Interest**



n=34

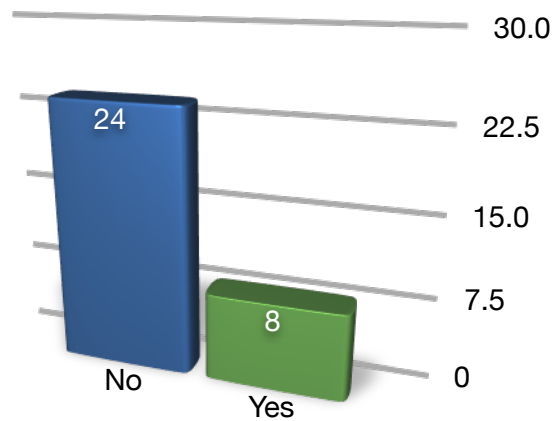


# Interactive Learning

**Individual Activity:** you provide opportunities for students to do online simulations, educational games, or interactive demonstrations; the action is controlled by the individual learner

Have you used this in at least one of your courses in the last two years (2009/11)?

**Individual Activity**

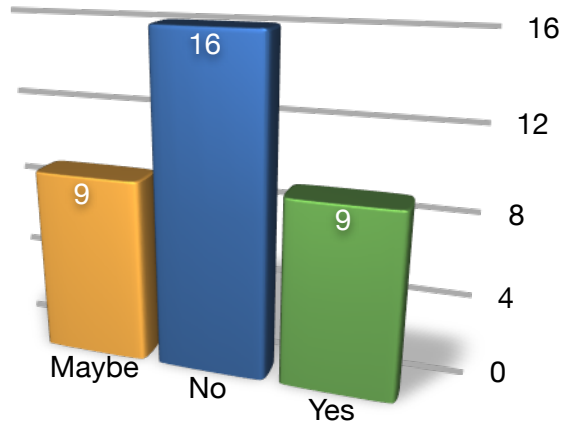


n=32

---

Do you intend to use this in a course in the coming year (2011/12)?

### Individual Activity - Intend to Use

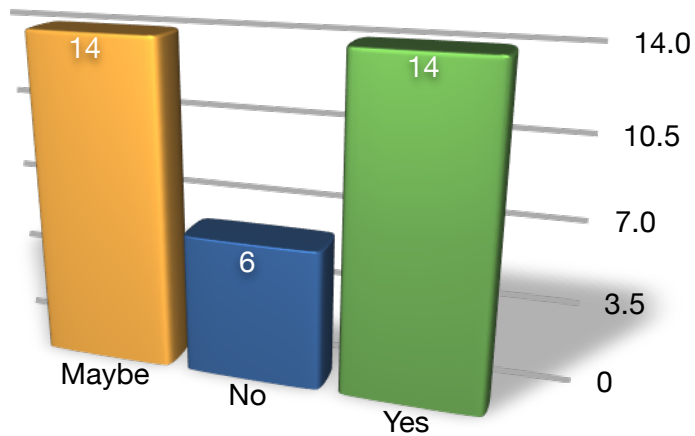


n=34

---

Would you be interested in enhancing your knowledge and skill with this?

### Individual Activity - Enhancement Interest

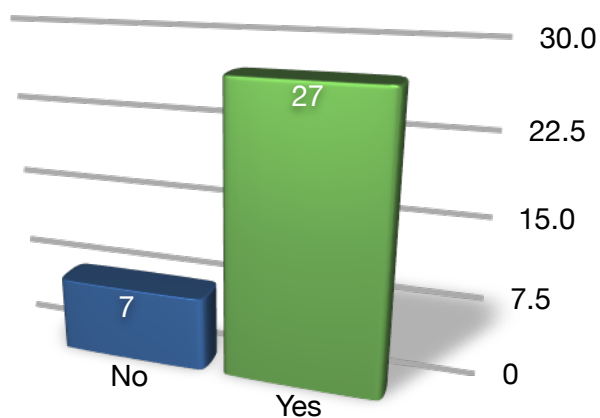


n=34

**Group or Class Activity:** you involve students in group/class use of interactive whiteboards or Internet activity demonstrations; the action is controlled by individual learners in front of the class

Have you used this in at least one of your courses in the last two years (2009/11)?

**Group/Class Activity**

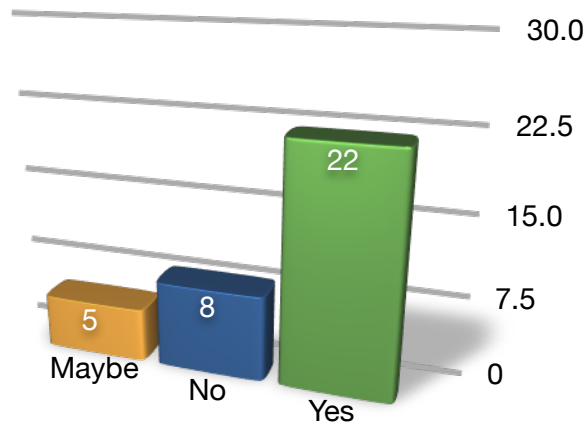


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Group/Class Activity - Intend to Use

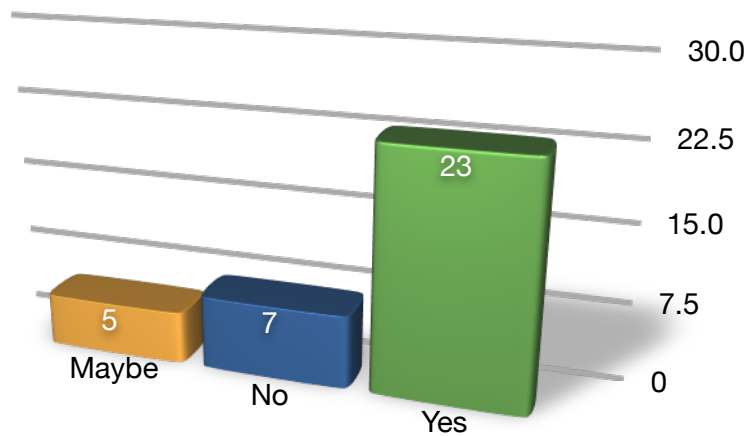


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Group/Class Activity - Enhancement Interest



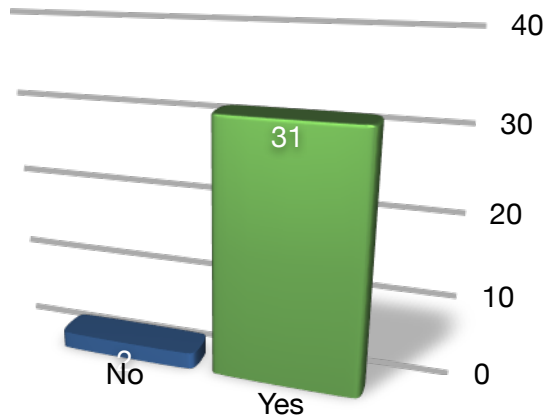
n=35

# Research

**Find Resources:** you encourage students to find online information to complete a report or create representations (e.g. Google, discussion of search strategies, searching etc.)

Have you used this in at least one of your courses in the last two years (2009/11)?

**Find Resources**

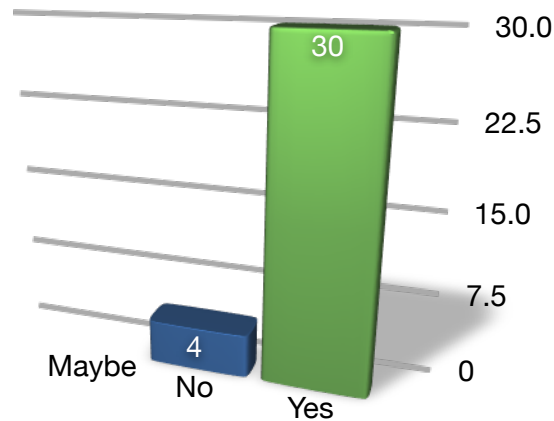


n=33

---

Do you intend to use this in a course in the coming year (2011/12)?

### Find Resources - Intend to Use

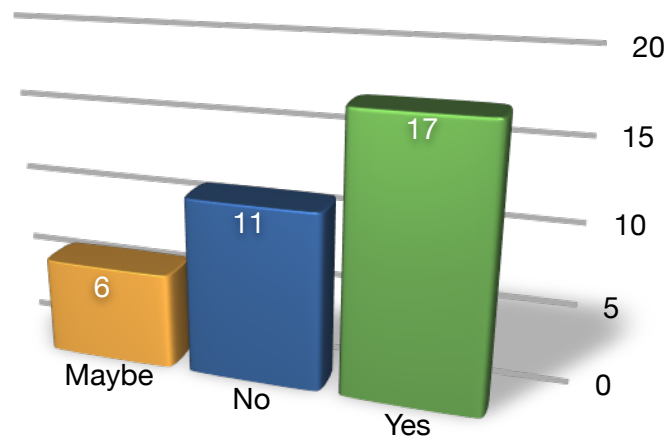


n=34

---

Would you be interested in enhancing your knowledge and skill with this?

### Find Resources - Enhancement Interest

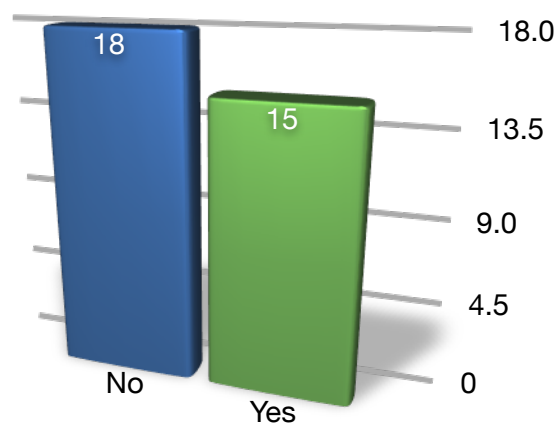


n=34

**Analyze and Represent Data:** you design activities where students use numeric data analysis tools (e.g. Inspire Data, SPSS, manyeyes, Excel, etc.), or text data analysis (e.g. Wordle)

Have you used this in at least one of your courses in the last two years (2009/11)?

### Analyze and Represent Data

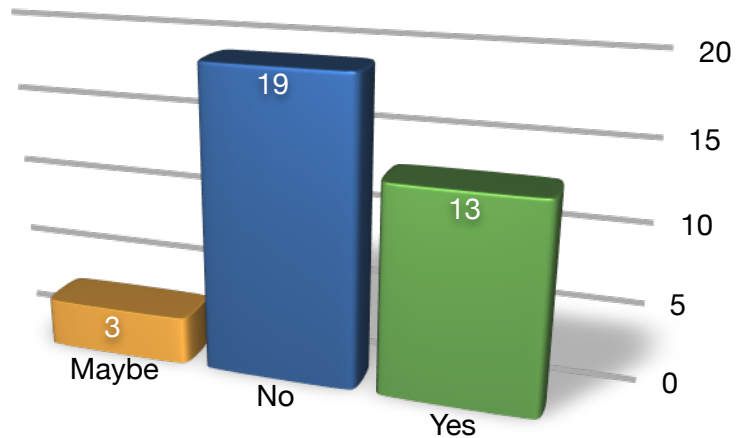


n=33

---

Do you intend to use this in a course in the coming year (2011/12)?

### Analyze and Represent Data - Intend to Use

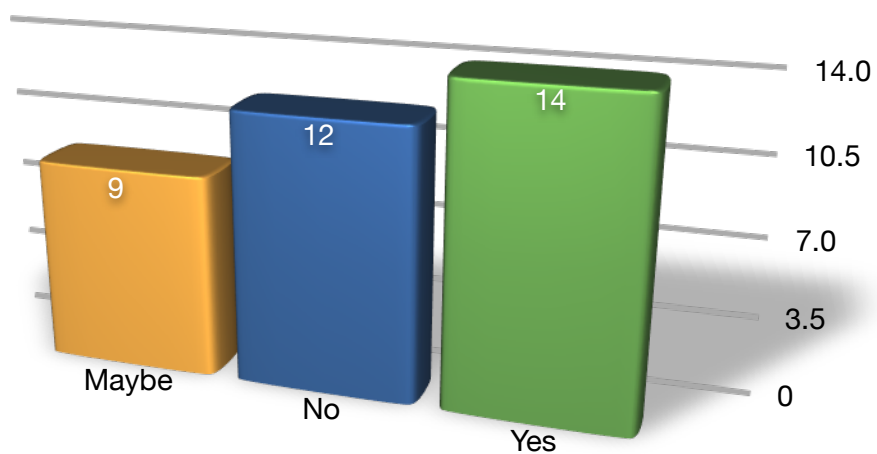


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Analyze and Represent Data - Enhancement Interest



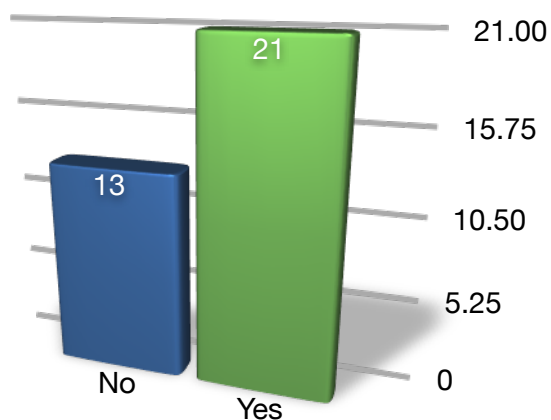
n=35



**Evaluate Sources:** you create opportunities for students to discuss authenticity and validity of online sources

Have you used this in at least one of your courses in the last two years (2009/11)?

### Evaluate Sources

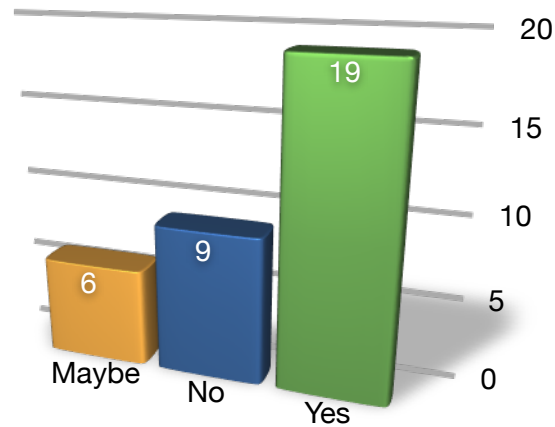


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Evaluate Sources - Intend to Use

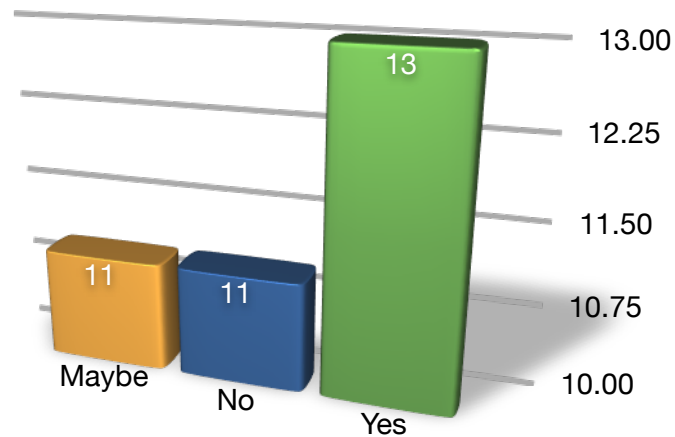


n=34

---

Would you be interested in enhancing your knowledge and skill with this?

### Evaluate Sources - Enhancement Interest

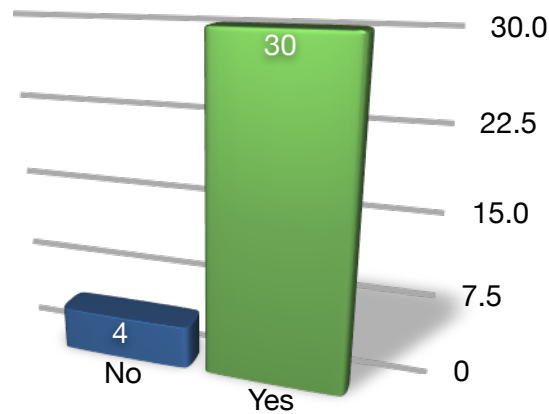


n=35

**Referencing:** you systematically encourage students to properly cite online sources or use an electronic bibliographic system (e.g. Endnote)

Have you used this in at least one of your courses in the last two years (2009/11)?

### Reference Online Sources

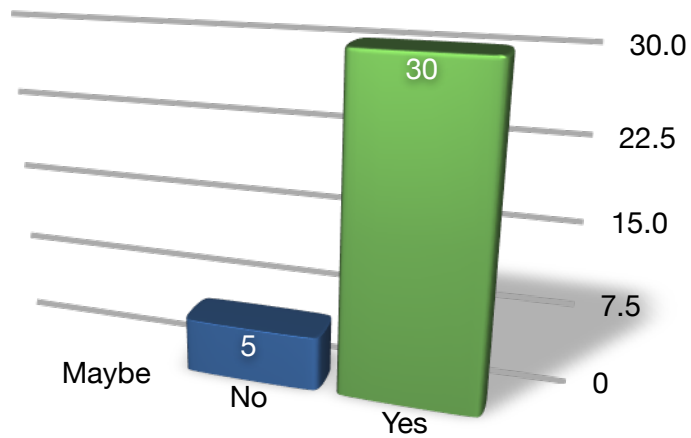


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Reference Online Sources - Intend to Use

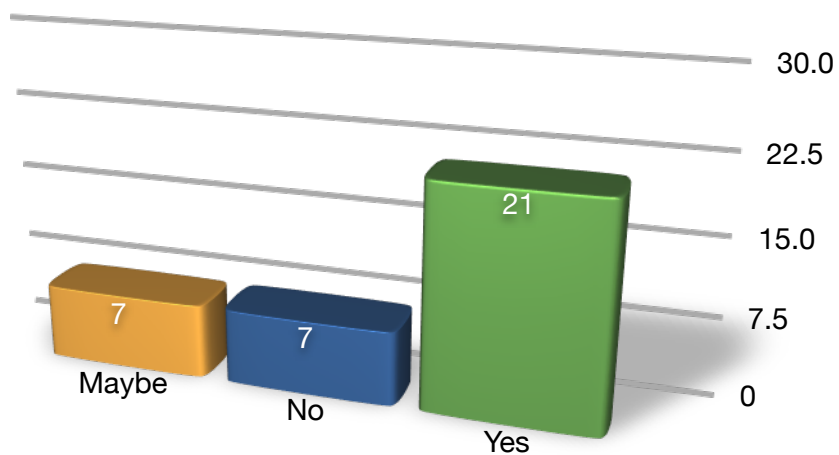


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Reference Online Sources - Enhancement Interest



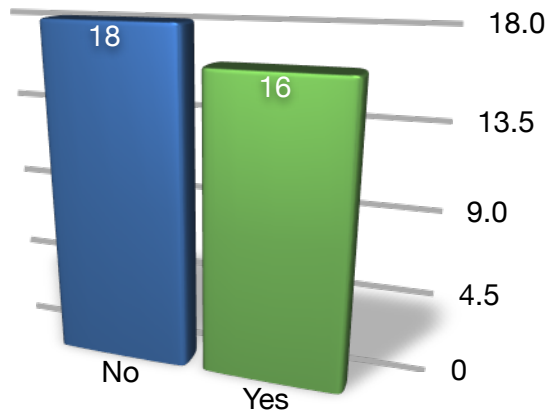
n=35

# Assessment

**Summative Evaluation:** you have students take online exams or use online grade-books (e.g. the gradebook inside WebCT or Moodle)

Have you used this in at least one of your courses in the last two years (2009/11)?

**Summative Evaluation**

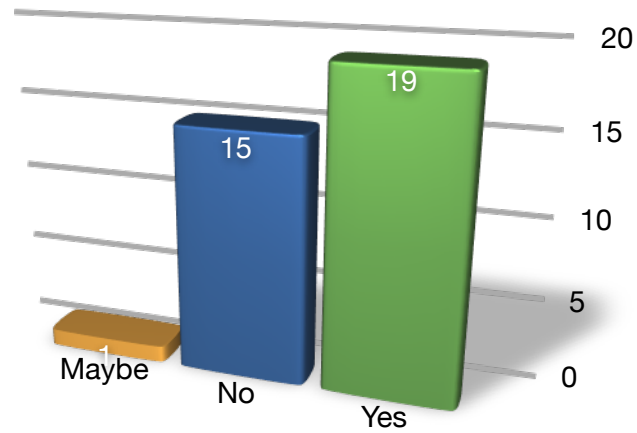


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Summative Evaluation - Intend to Use

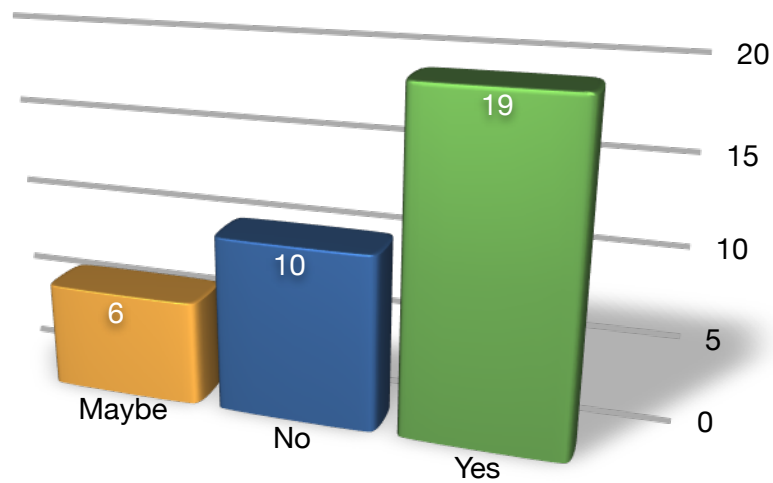


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Summative Evaluation - Enhancement Interest

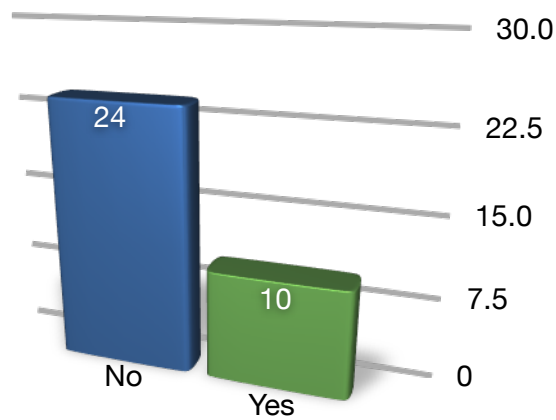


n=35

**Formative Assessment:** you assess students using remote clickers to register answers, online surveys or quizzes, online comments (e.g. Comments in Word documents), or online peer assessment (e.g. Moodle Workshop or Discussion forums, etc.)

Have you used this in at least one of your courses in the last two years (2009/11)?

### Formative Evaluation

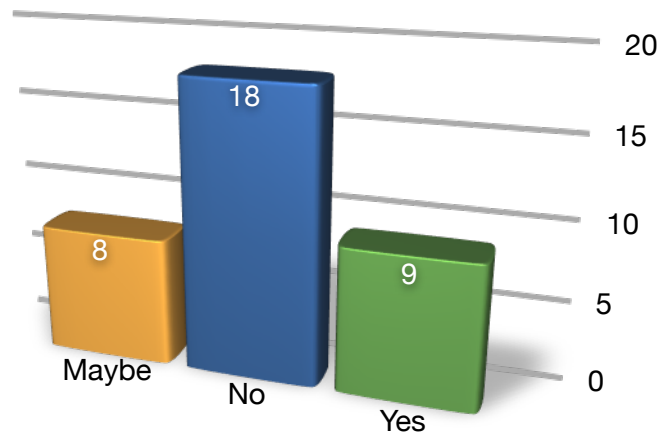


n=34

---

Do you intend to use this in a course in the coming year (2011/12)?

### Formative Assessment - Intend to Use

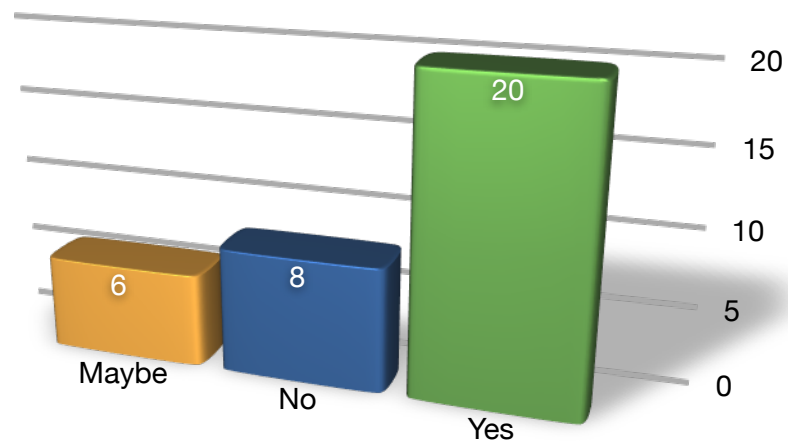


n=35

---

Would you be interested in enhancing your knowledge and skill with this?

### Formative Assessment - Enhancement Interest



n=34

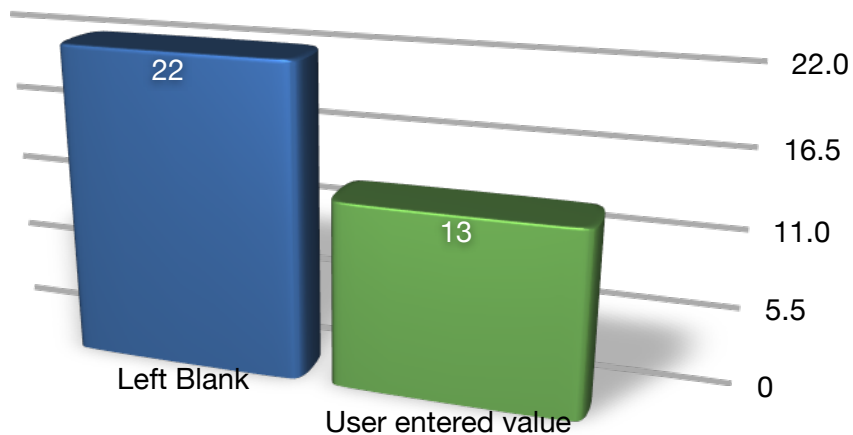


# Comments & Showcase

**Comments:** this indicates how many Faculty left comments on the survey

Please make any comments about teaching and learning with technology in the Faculty.

**Comments**



n=35

There were really not enough comments to do a theme analysis - better just to read all the comments. If one were to suggest common themes it would be the importance of using technology appropriately (not forced). The other main idea is that there was a call for opportunities to enhance and expand knowledge, skills and vision for technology.

**Comments:**

I think we have a great support system for doing innovative or creative things with technology in our classrooms through hardware, software and human resources.

It is important that we focus on appropriate and authentic pedagogical uses of the technology, rather than on the technology as an end in itself.

As you can see I have tried many of the items addressed in your survey - what you didn't ask about is depth/breath of use. Even though I have tried most I still need to learn more so as to make the learning richer.

Technology must always serve to enhance/maximize teaching and learning, not the other way around. When and if using technology in the classroom makes sense to do so I'm in full support but we must not use technology simply because the 'bells and whistles' are cool.

We need more opportunities in our courses across programs to demonstrate their use of the technologies.

I look forward to learning about more creative strategies for using the technologies/tools listed in the questions, something that goes beyond the basics.

I find discussing critical insights associated with the context-specificity of technology integration especially useful in my classes. Many of my students appreciate hearing that the technological imperative isn't deterministic but, rather, value-laden; an approach arising from within a specific educational context, purpose and perspective.

There's room for more opportunities for faculty to learn basic and advanced skills --we need multiple session "courses" offered at convenient times with lots of hands on experience.

I find staff extremely facilitating and helpful in supporting new learnings. The key from my perspective is the opportunity for 1-1 support after workshops. That is sometimes challenging to access. A mentoring program might prove useful.

Moodle seems pretty cool. I used WebCT extensively, Moodle looks better, but we'll see. So assume I'm using Moodle features. Re other tech, the more my colleagues adopt some of these, the more likely I am to back away. Eg., see my presentation <http://www.slideshare.net/Runte/thinking-beyond-the-bandwagon> . I will use lowest tech possible to achieve learning objective -- model tech as (appropriate tool) as opposed to 'new is better'

Really appreciate the support provided ( Ken, Scot and Kevin) all of it excellent - courteous, patient and understanding. In preparing my courses for next year Ken provided and continues to provide outstanding support.

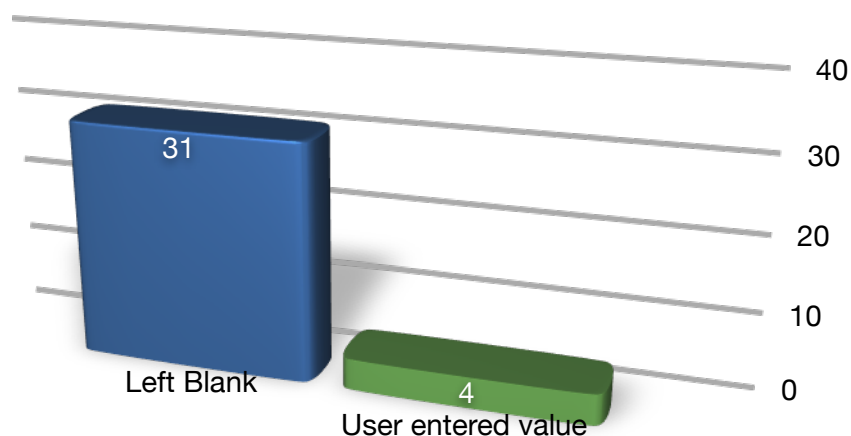
Marlo: I've answered "No" to Questions 2 & 3 in each set gas I'm done at the end of June, 2011. My answers would clearly be different if I were to continue teaching into 2011/12. Thanks for the opportunity to complete the survey. Art

We need more training - we need CRDC or someone to offer weekly training, mentoring, etc

**Showcase Innovation:** this was an attempt to identify innovative instructional approaches that integrated technology which might become exemplars

We would like to share innovative activities using technology. If you do a technology learning activity that is neat and are willing to share that, let us know and we will create a video vignette highlighting the idea.

### Showcase Innovation



n=35

#### Suggestions:

It would be great to document the grade 5 project with Mike Mountain Horse school - need to get FOIP forms back.

I made a series of video productions for one of my M.Ed classes. Might be interesting to get student feedback and video their responses for dissemination to faculty.

I am creating a series of videos posted on my website for use as instructional resources in several of my classes.

Use of Workshops in Moodle

# Conclusions and Questions

## **Conclusions:**

The results of the survey do suggest that Faculty are using a wide variety of technologies in their classes to address a number of different teaching/learning strategies.

## **Questions:**

- Is the main question of this survey a useful one to be asking?
- If Faculty are using technology as suggested in the results, is it being used effectively and are we modeling and talking to your students about appropriate use of technology? There is some indication here that we are modeling and talking about it but certainly this survey did not address explicitly to the level Faculty are integrating technology.
- If Faculty are integrating it in their courses do we need to plan formal interventions to encourage more technology use?
- How can the Faculty of Education continue to inform and encourage the appropriate use of technology by instructional staff?

# Bibliography

- Alberta Education. (2003). *Information and communication technology outcomes*. Retrieved Feb. 11, 2011, from <http://education.alberta.ca/teachers/program/ict/programs.aspx>
- Alberta Education. (1997). Alberta education's knowledge, skills, and attributes. *Ministerial Order (#016/97)*. Retrieved Feb. 11, 2011, from <http://education.alberta.ca/department/policy/standards/teachqual.aspx>
- NETS Project. (2007). National educational technology standards for students. *ISTE*. Retrieved Feb. 11, 2011, from <http://www.iste.org/standards/nets-for-students.aspx>
- NETS Project. (2008). Preparing teachers to use technology. *ISTE*. Retrieved Feb. 11, 2011, from <http://www.iste.org/standards/nets-for-teachers.aspx>
- Orr, D., Mrazek, R. & Meadows, J. (2009). Emergent Technologies for Environmental Education: Assessing the Efficacy of the Level of Adoption On-Line Survey. In T. Bastiaens et al. (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2009* (pp. 1026-1035). Chesapeake, VA: AACE.