

Survey of Faculty Use of Online Technologies 2013

Technology is here to stay. Making the best use is the
challenge. (Teacher comment)

Centre for Learning
and Teaching

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Executive Summary

In 2012, an e-Learning Team was created at the Centre for Learning and Teaching (CLT) adding a dimension of expertise in learning and teaching with online technologies that had not previously been part of CLT's core support. As a result, CLT staff began to discuss in what ways Dalhousie student and teacher¹ preferences for technology-assisted learning and teaching might be in-line with those reported in the larger national and international surveys. The discussion focussed on whether Dalhousie was part of a larger microcosm in relation to the ECAR² 2012 and 2013 *Study of Undergraduate Students and Information Technology Reports*, with the same or similar needs as identified in the surveys, or whether Dalhousie had its own, unique needs not identified in the ECAR surveys. With the 2013 HEQCO³ report showing comparability of learning across delivery modes, it seemed timely to add the voice and perspective of another Canadian University to the literature.

These conversations informed our decision to conduct student and teacher surveys on the use, effectiveness, and future of educational technologies to influence the direction of learning and teaching at Dalhousie that was supported by the VP, Academic and Provost's Office. CLT's aim was to determine the direction, focus and priorities for e-Learning and classroom technologies at Dalhousie.

A number of themes revealed in this study are similar to those contained in other studies of this type including the *ECAR Study of Undergraduate Students and Information Technology, 2012 and 2013*.

The following is a summary of the major findings from this study:

1. Online technologies are important to teaching. They can enable teachers to become more effective and efficient in their classrooms or online, and can enhance student learning.
2. Teachers would like to make more and better use of online technologies but are limited in their use because of lack of training or time to learn the technology. Teachers are split on whether or not to make recorded lectures available to students.
3. With respect to the delivery of courses, teachers prefer teaching blended (65.49%) rather than fully online (3.1%) or face-to-face courses (31.42%).

¹ "Faculty" was the name used throughout the survey, but responses came in from faculty, clinicians, instructors and graduate students – a variety of teachers who taught classes at Dalhousie. To use more inclusive language we use "teacher" instead of "faculty" for this write-up.

² ECAR: EDUCAUSE Center for Analysis and Research

³ HEQCO: Higher Education Quality Council of Ontario

However, teachers would opt for online courses (38.27%) over online programs (24.17%). The teachers who prefer teaching face-to-face courses caution about losing this time in the classroom.

4. The majority of teachers reported that they are comfortable using Blackboard Learn (BbLearn/OWL). However, of those teachers who have used BbLearn they reported that it is not easy to learn and that the system is poorly designed and lacking functionality.

Overall, 49.85% of teachers who have used BbLearn were satisfied using Blackboard Learn as Dalhousie's primary learning management system (LMS).

Overall, of the teachers using Moodle as an LMS, 85.11% were very satisfied with the system. However, the number of respondents using Moodle was much less (47) than those using BbLearn (331).

5. Nearly all respondents owned laptops (95.14%). Of those teachers who owned laptops 89.44% reported that this was the most important device for their teaching success. USB drives (57.98%), desktop computers (51.41%) and printers (42.25%) were also reported as being important tools for teaching.
6. Teachers indicated a willingness to use classroom technologies in their teaching provided they are current, well-maintained and easy-to-use. Teachers also reported that support needs to be available during all class times and that they would consider attending training sessions if they were available.
7. 62.63% of teachers reported that they are not interested in using social media tools such as Facebook and Twitter for learning and teaching in their courses.

Introduction

Technology allows us to teach differently, to meet new as well as old needs. It is helping drive innovation in teaching and learning. But in the end, decisions need to be made about how best to use technology, and for what purposes. (Contact North | Contact Nord 2014)

Smart Phones, iPads, social media, blended learning and MOOCs have been buzz words discussed and debated in higher education circles over the last few years. Much has been written about 21st century educational technologies to engage student learning and promote effective teaching practices. The 2012 and 2013 *ECAR Study of Undergraduate Students and Information Technology Reports* highlighted key foci for teaching and learning in institutions of higher education. Surveying 251 universities/colleges worldwide in 2013, including 9 Canadian universities, they found that students expect the use of technologies, prefer blended courses, prefer limits on the use of social media in the learning environment and that they want to use their mobile devices more for academic work (2012 p.5; 2013 p.4-6). The *COHERE Report on Blended Learning* (2011) noted that blended learning has resulted in “improved teaching and learning, greater flexibility for learners, greater student satisfaction, improved student performance, a confluence of literacies for the knowledge economy, and an optimization of resources”. *Inside Higher Ed’s 2013 Survey of Faculty Attitudes on Technology* found that the majority of faculty consider “online learning to be of lower quality than in-person courses on several key measures. However, a 2013 HEQCO research report noted that

... for a range of students and learning outcomes, fully online instruction produces learning that is on par with face-to-face instruction. The students most likely to benefit are those who are academically well prepared and highly motivated to learn independently. (Carey and Trick, p.2)

In 2012, an e-Learning Team was created at the Centre for Learning and Teaching (CLT) adding a dimension of expertise in learning and teaching with online technologies that had not previously been part of CLT’s core support. As a result, CLT staff began to discuss in what ways Dalhousie student and faculty preferences for technology-assisted learning and teaching might be in-line with those reported in the larger national surveys. These conversations informed our decision to conduct student and faculty surveys on the use, effectiveness, and future of educational technologies to influence the direction of learning and teaching at Dalhousie that was supported by the VP, Academic and Provost’s Office. CLT’s aim was to determine the direction, focus and priorities for e-Learning and classroom technologies at Dalhousie.

A number of the themes revealed in this study are similar to those contained in other studies of this type including the *ECAR Study of Undergraduate Students and Information Technology, 2012 and 2013*, and the “*Top-Ten IT Issues, 2014: Be The Change You See*”, EDUCAUSE Review Online:

- The majority of teachers rely on a laptop as their primary technology
- The majority of teachers prefer teaching blended courses over fully online or face-to-face
- Face-to-face interaction is important and should be sustained
- Teachers want to use the learning management system more, and they acknowledge they need more training
- Acknowledgement of the need for an e-learning strategy supported by senior administration

The majority of teachers in the Dalhousie study acknowledged the importance of online technologies to teaching and learning. The benefits perceived of using online technologies were: (1) they helped them become more efficient and effective in their teaching; and (2) they perceived that they helped to enhance their students' learning. Teachers reported that they are interested in using more online technologies in their courses, such as videos and photos, but a large number indicated they would like to learn more about copyright in this regard. Many teachers (48.33%) would like to provide recorded lectures online, while 40.31% do not want to offer recorded lectures.

In addition to what I am currently doing in all my classes, I would like online technologies to replace some straight lecture in order to make more time for discussion, etc., in class. I have started experimenting with mini-lectures through Camtasia for this, but have not yet mastered the art of delivering a lecture well in this context. The technology is easy; speaking coherently to a machine is difficult. (teacher comment)

A majority of teachers (62.34%) showed interest in using more e-textbooks in their courses. As well, 62.63% of respondents are not interested in using social media for academic purposes.

Many teachers (45.13%) are not interested in their department/faculty offering programs that can be taken completely online while some (38.27%) reported being interested in this method of course offerings. Some respondents perceived that online technologies could increase access to learning and, when used well, could also enhance the learning experience for students. Most teachers (64.59%) preferred to teach blended courses, but a large number (31.42%) preferred face-to-face teaching.

To me it is only in addition to the face-to-face experience. Online teaching does not adequately substitute for personal interaction. (teacher comment)

Respondents were asked which types of course delivery methods they used over the last 5 years. Slightly over 48% of respondents taught mostly face-to-face while 47.35% taught in a blended learning environment. A majority of teachers (65.49%) reported that they prefer teaching blended courses over completely face-to-face (31.42%) or completely online (3.1%).

[I want to be able to] provide more seamless integration of documents (including readings), images and video with class content so that classes are less about 'presenting' and more about 'discussing' and 'intersecting'. Find ways for students to bring the out of class components of a blended learning environment into sharper focus in the classroom, e.g., through a dynamic discussion or chat component in BbLearn. (teacher comment)

Only 19.56% of teachers expressed an interest in teaching massive open online courses (MOOC's). However, due to the relatively recent emergence of this teaching alternative, many teachers might not have had exposure to MOOC's; 22.22% of teachers reported that they did not know whether they would or would not be interested.

The LMS is the major technology used to teach online at Dalhousie University. However, many respondents also reported that it is the technology with which they would like to become more familiar. This point may be reflected in the reported lack of time by teachers to learn new technologies – especially when the technology is complicated and non-intuitive. These points recurred throughout the qualitative section of the survey.

These technologies can be useful, but they are also a huge time suck. I am spending a lot more time keeping up the websites than I ever did when I started, and I don't think students really appreciate the time I spend keeping up the tech side of things. Some students complain bitterly about having to use the OWL tools too extensive[ly] (e.g., posting blogs, publishing their papers for fellow students). Also, it's VERY ANNOYING that OWL/ BLS etc. keep getting more complicated. I was just at my comfort level with the last system and now the same tasks are much more difficult to figure out. A system that has far more capabilities is NOT necessarily a better system for the users. I'm sure the designers are enamored with the array of possibilities, but the rest of us just find them annoying. And why eliminate altogether functions that were simple and useful (e.g. file storage for students on the system). PLEASE let us become familiar with a new system before you feel the need to upgrade it yet again. SIMPLER IS BETTER. (teacher comment)

When it comes to training and support, teachers reported that they would find it useful to have more: (1) workshops on how to use audio and video equipment in the classroom (56.48%); (2) on-demand and just-in-time workshops on online learning topics (61.11%); and, support for online learning initiatives (50.00%). On the whole, slightly

less than 75.00% of teachers said they would like: more hands-on training with the LMS; access to up-to-date online tutorials and videos; access to pedagogic and best-practice strategies to teach online; and, information on how to engage students in an online course.

I want to be more creative, innovative in terms of my use of online technologies. I would like to ensure students are engaged with the material, and receiving multiple levels of feedback. I would like to be able to ensure I am building a community online - as I try to do in my physical classes. I need to find the time to take courses and learn about this technology, so it is mostly my responsibility to find the time. (teacher comment)

Methodology

The Centre for Learning and Teaching (CLT) conducted a survey of Dalhousie teachers in April, 2013. The survey examined the experiences and perceptions of teachers about online learning and how online technologies are used in the classroom. The survey was administered by the Office of Institutional Analysis and Research (OIAR), who subsequently provided the raw data and a summary report to CLT by June, 2013.

We used the ECAR *Study of Undergraduate Students and Information Technology* (2012) as the model from which we developed our questions. We also did a literature search and found a faculty survey which we retrieved electronically from eLearning Advisory Group wiki space, and another from Inside Higher Ed. Questions in these three surveys were either adapted for our specific use or used to help us develop other questions.

The confidential survey was a mixed research method design and thus quantitative and qualitative information was gathered. There was a total of 41 questions in the survey – 25 quantitative, 9 primarily quantitative with the option to provide additional details, 5 open-ended questions, 1 requesting primary language of the respondents and 1 requesting the email address of the respondents, if they wanted to be entered into a draw for a restaurant gift certificate.

The quantitative data was analyzed and reported via descriptive statistics while the qualitative data was analyzed by the categorization of the data into themes. The themes emerged naturally as the co-authors reviewed the teachers' responses to the quantitative questions which asked for additional comments, or the open-ended questions. If a teacher's response fell into multiple categories (compound response), then the response was added into the count for all categories it reflected – we did not consider that the response could only fit into one category and then try to subjectively fit it into the one we thought was most represented in a compound response. Or, for questions where teachers were asked to provide multiple responses, each response was assessed and recorded in the appropriate category. In this instance the complete response could fall into one category or into multiple.

The survey findings are grouped by category as follows:

- 1. Importance and Future of the Online Environment at Dalhousie**
- 2. Use of Online**
- 3. Online Offerings**
- 4. Learning Management System**
 - a. Blackboard Learn**
 - b. Moodle**
- 5. Classroom Technology**
- 6. Device Ownership & Use**
- 7. Teacher Training & Support**

The survey was delivered to a total of 3,880 teachers of which 505 responded for a response rate of 13.02%. Of the total number of possible respondents in the sample, 1,731 were in the Faculty of Medicine. Of the 1,731 potential respondents in Medicine, only 65 responded (4% response rate). A majority of the teachers in Medicine are clinicians who deliver one or two lectures per term or serve as tutors while maintaining their practices. Because the number of teachers in Medicine was such a large portion of the total sample it affected the overall response rate. If the Faculty of Medicine responses are excluded, the response rate for the survey increases to 27.71%.

Findings

1. Importance and Future of the Online Environment at Dalhousie

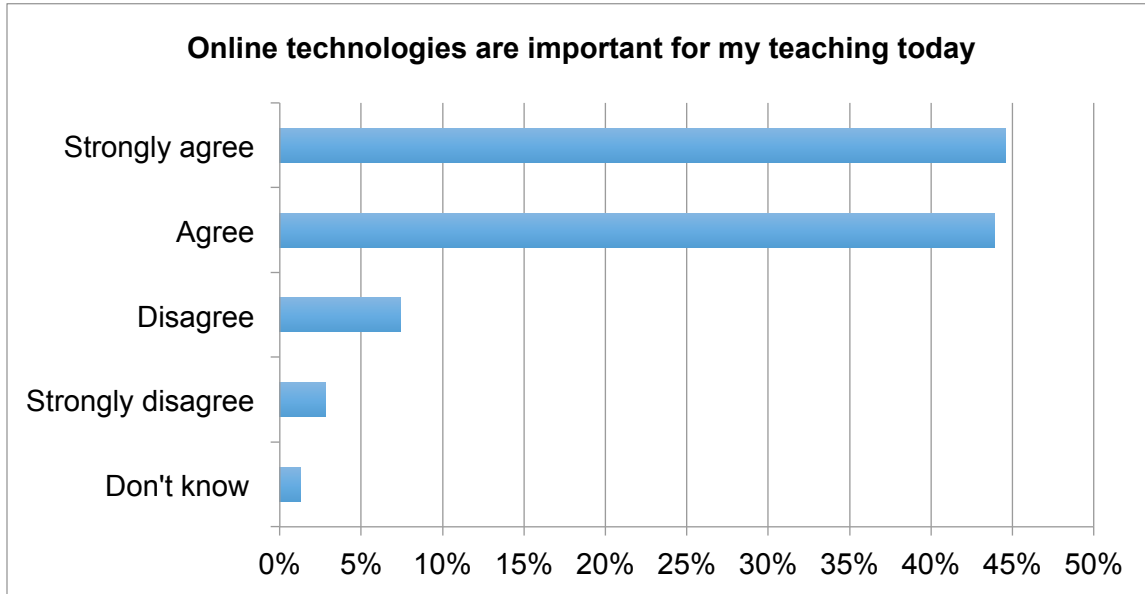
Teachers see the importance of online technologies for their teaching now (88.48%) and in the future (82.79%). A lesser percentage of teachers say that the online technologies help them become more effective (67.55%) and more efficient (60.74%), but they do recognize the benefit and potential for student learning (74.01%). The challenges with the LMS, time constraints, and the need for a multi-modal training strategy, all have an impact. These issues are identified by teachers as the top three concerns and barriers to using online technologies in their courses.

Questions 1-4; 35

Question 1

Online technologies are important for my teaching today

- 407 teachers agree/strongly agree for 88.48% of respondents.

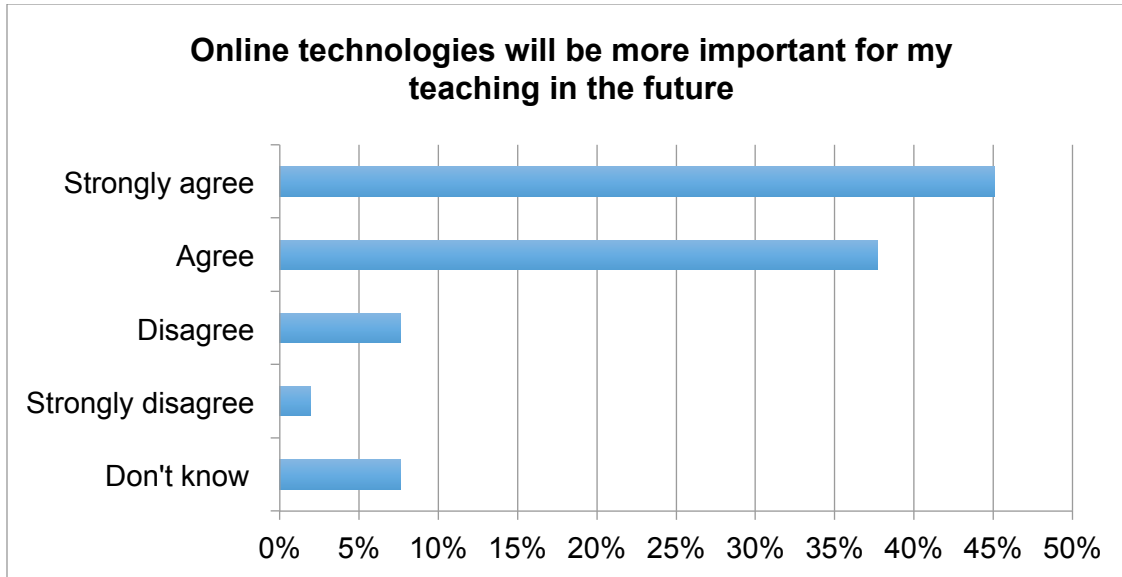


Choices	Total Response	Response Rate
Strongly agree	205	44.57%
Agree	202	43.91%
Disagree	34	7.39%
Strongly disagree	13	2.83%
Don't know	6	1.30%
Sum	460	100.00%

Question 2

Online technologies will be more important for my teaching in the future

- 380 teachers agree/strongly agree for 82.79% of respondents.

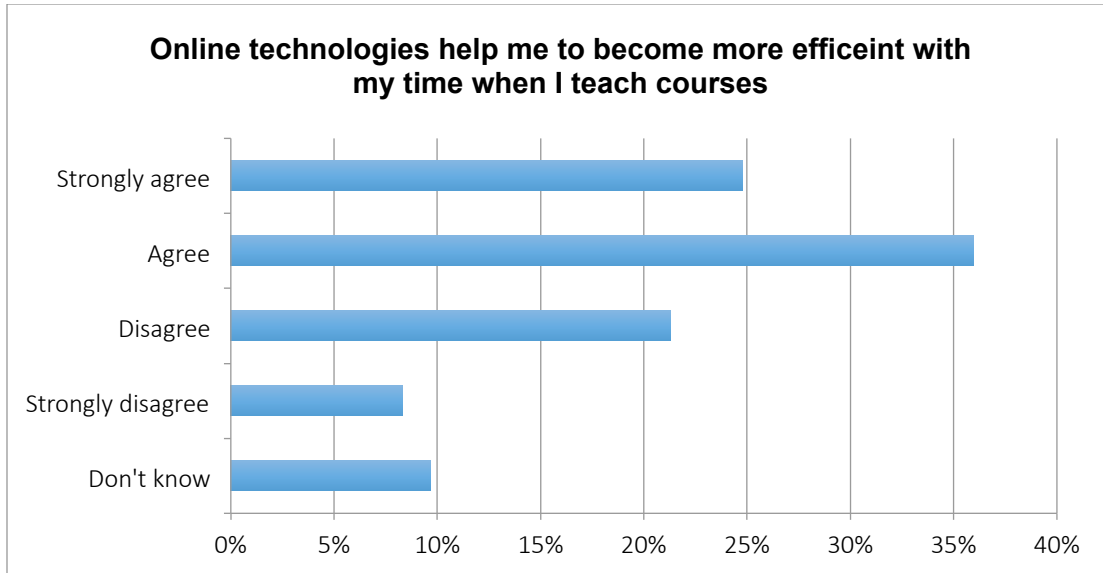


Choices	Total Response	Response Rate
Strongly agree	207	45.10%
Agree	173	37.69%
Disagree	35	7.63%
Strongly disagree	9	1.96%
Don't know	35	7.63%
Sum	459	100.00%

Question 3

Online technologies help me become more efficient with my time when I teach courses

- 277 teachers agree/strongly agree for 60.74% of respondents.

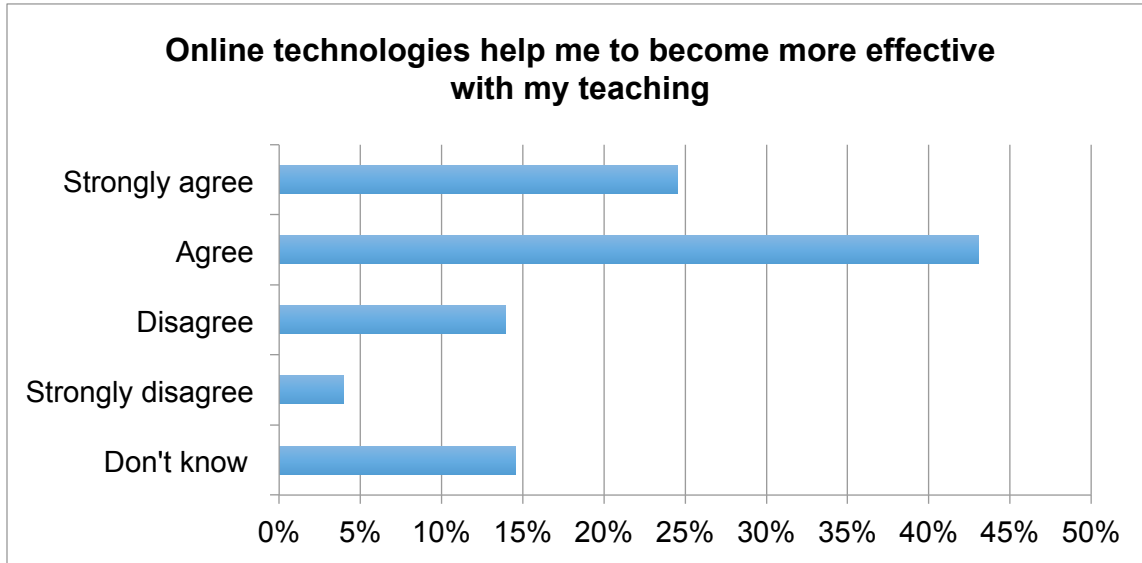


Choices	Total Response	Response Rate
Strongly agree	113	24.78%
Agree	164	35.96%
Disagree	97	21.27%
Strongly disagree	38	8.33%
Don't know	44	9.65%
Sum	456	100.00%

Question 4

Online technologies help me become more effective with my teaching

- 306 teachers agree/strongly agree for 67.55% of respondents.

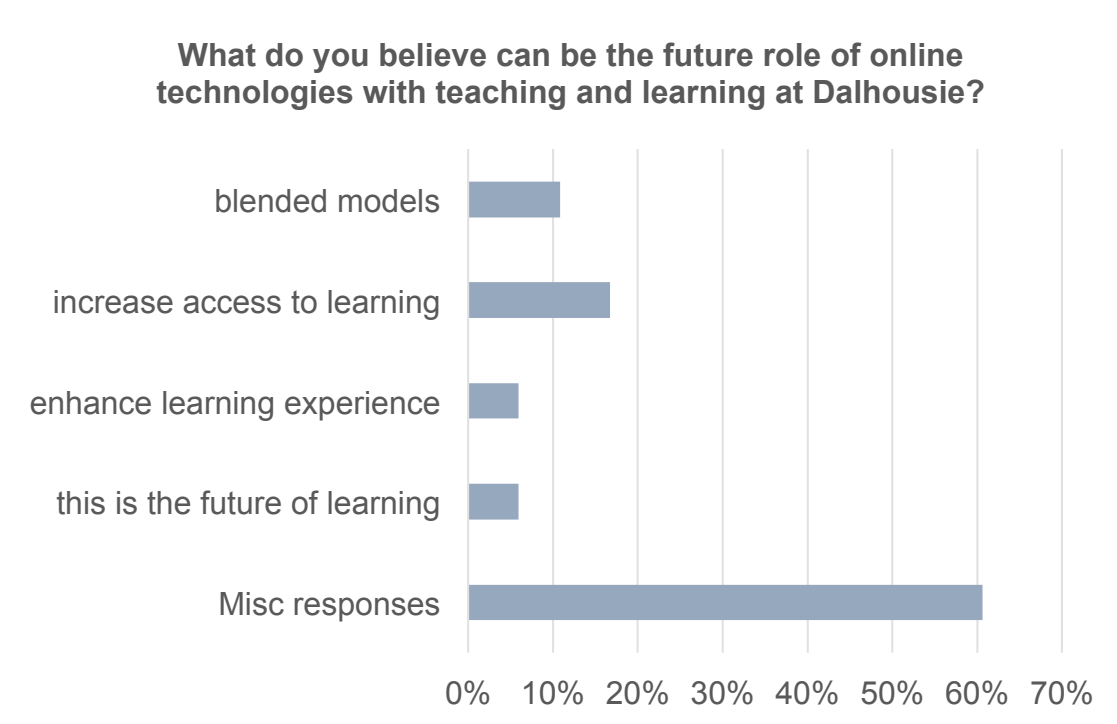


Choices	Total Response	Response Rate
Strongly agree	111	24.50%
Agree	195	43.05%
Disagree	63	13.91%
Strongly disagree	18	3.97%
Don't know	66	14.57%
Sum	453	100.00%

Question 35 qualitative, open-ended responses

What do you believe can be the future role for online technologies with teaching and learning at Dalhousie?

- 305 responses;
- 1. 16.72% increase access to learning
- 2. 10.82% blended learning
- 3. 5.90% enhance learning experience
- 4. 5.90% it's the future of learning



Choices	Total Response	Response Rate
Increase access to learning	51	16.72%
Blended models	33	10.82%
Enhance learning experience	18	5.90%
This is the future of learning	18	5.90%
Misc. responses	185	60.66%
Sum	305	100.00%

Findings

2. Use of Online

A majority of teachers (80.68%) are using Dalhousie's Learning Management Systems (Blackboard Learn on the Halifax and New Brunswick campuses, Moodle largely on the Agricultural campus, with pockets of use on the Halifax campus). Teachers reported being interested in using the LMS more, and in using more online technologies such as creative tools (SoftChalk, StudyMate, Audacity) and presentation hosts (Slideshare, Prezi) in their teaching and recognized that the technologies help enhance student learning. However, there are a number of constraints that limit the use of the technologies (See Question 34). Other technologies in frequent use include email (71.59%) and video hosts (38.18%).

Teachers are split regarding digitally capturing their lectures at 49.33% in favour and 40.31% against. Lecture capture software is going through a pilot phase and thus is a relatively new technology on the Dalhousie campus. Perhaps there needs to be a reasonable period for adoption, as there is a volume of literature that supports this technology for teaching and learning. Teachers reported (44.08%) that they are interested in becoming more familiar with this technology. For a faculty such as Medicine, for example, where all lectures have been captured since curriculum renewal in 2010, students expect these recorded lectures to be available shortly after the live lecture and lift their voices quickly if access is not available within the accepted timeframe.

Teachers would like to use more multimedia in their courses and reported the need for information on copyright to ensure videos and images are used properly in their online course spaces.

A majority of teachers recognized the benefit of using a plagiarism service such as SafeAssign (55.18%). However, few teachers are using this available Blackboard tool in their courses (15.27%). This could be due to the relative newness and more basic functionality of SafeAssign as compared with other, more comprehensive and established plagiarism detection services available.

Teachers reported an interest in using more e-textbooks in their courses (62.34%). However, while a majority of students also support the use of more e-textbooks, there is a caution about the extended amount of time required in front of a computer screen accessing these materials.

Most teachers did not see any educational advantage in using social media tools such as Facebook and Twitter for academic purposes. A majority of teachers (62.63%) were in disagreement with the use of these tools, which was similar to the students' response (66.32%).

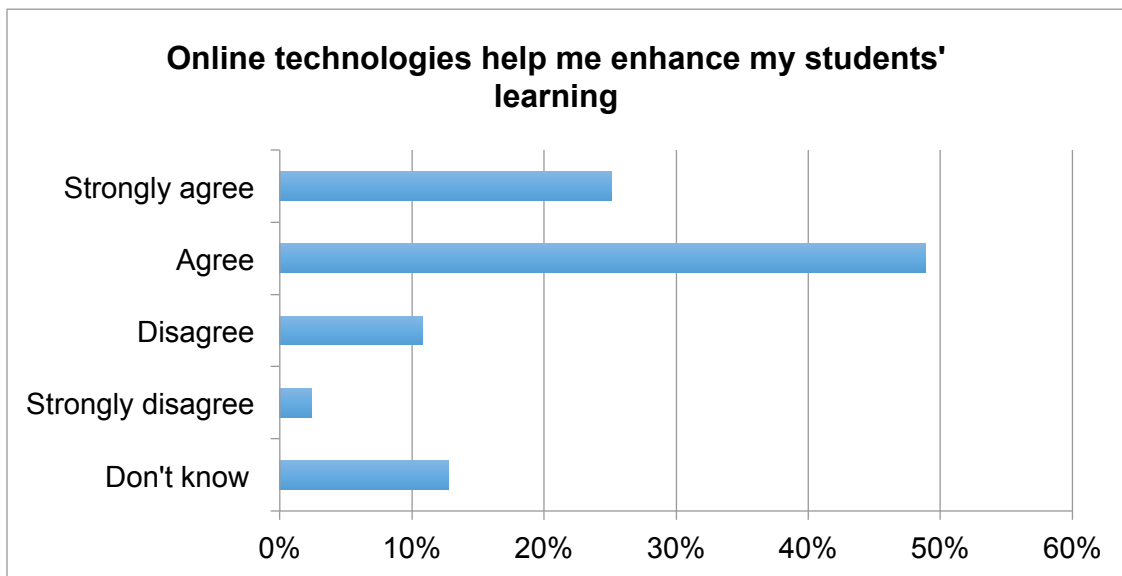
Teachers reported on the need for training, expressed concern about technology limiting face-to-face interaction and cautioned about overusing online technologies in their teaching.

Questions 5-13; 19-20; 33-34

Question 5

Online technologies help me enhance my students' learning

- 336 teachers agree/strongly agree for 74.01% of respondents.

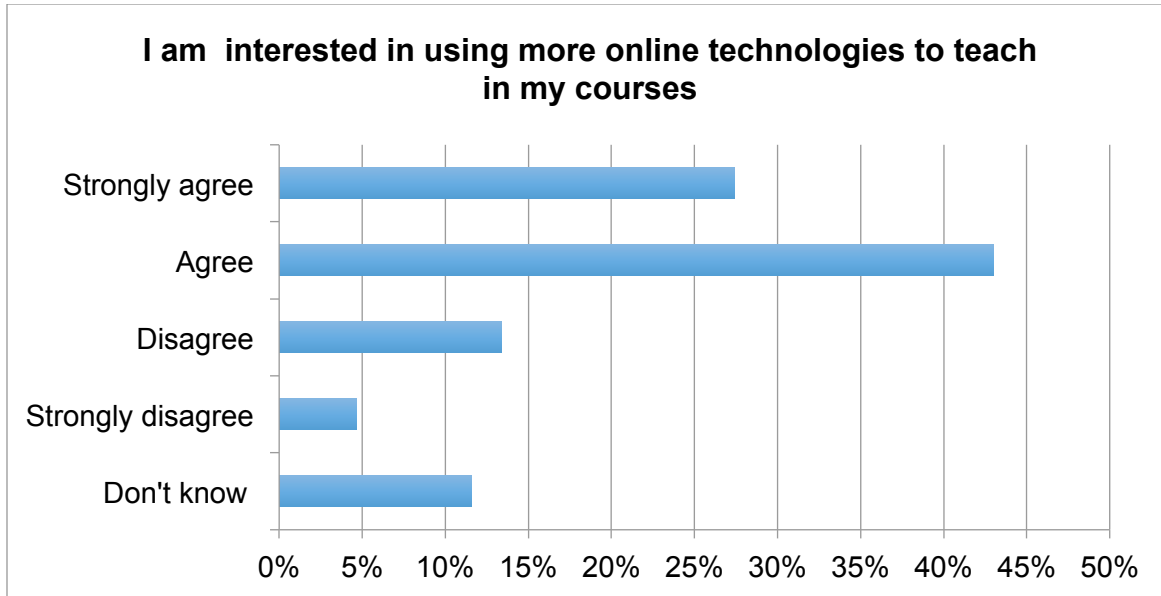


Choices	Total Response	Response Rate
Strongly agree	114	25.11%
Agree	222	48.9%
Disagree	49	10.79%
Strongly disagree	11	2.42%
Don't know	58	12.78%
Sum	454	100.00%

Question 6

I am interested in using more online technologies to teach in my courses

- 316 teachers agree/strongly agree for 70.37% of respondents

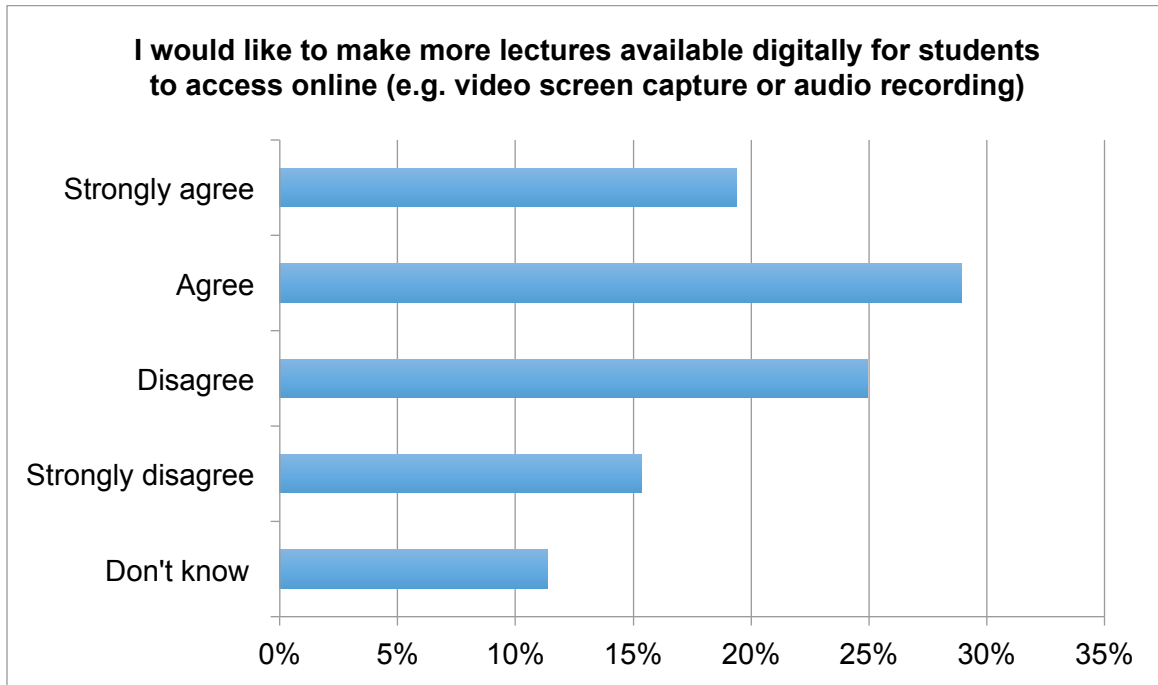


Choices	Total Response	Response Rate
Strongly agree	123	27.39%
Agree	193	42.98%
Disagree	60	13.36%
Strongly disagree	21	4.68%
Don't know	52	11.58%
Sum	449	100.00%

Question 7

I would like to make more lectures available digitally for students to access online (e.g. video screen capture or audio recording)

- 217 teachers agree/strongly agree for 48.33% of respondents.
- 181 teachers disagree/strongly disagree for 40.31% of respondents.

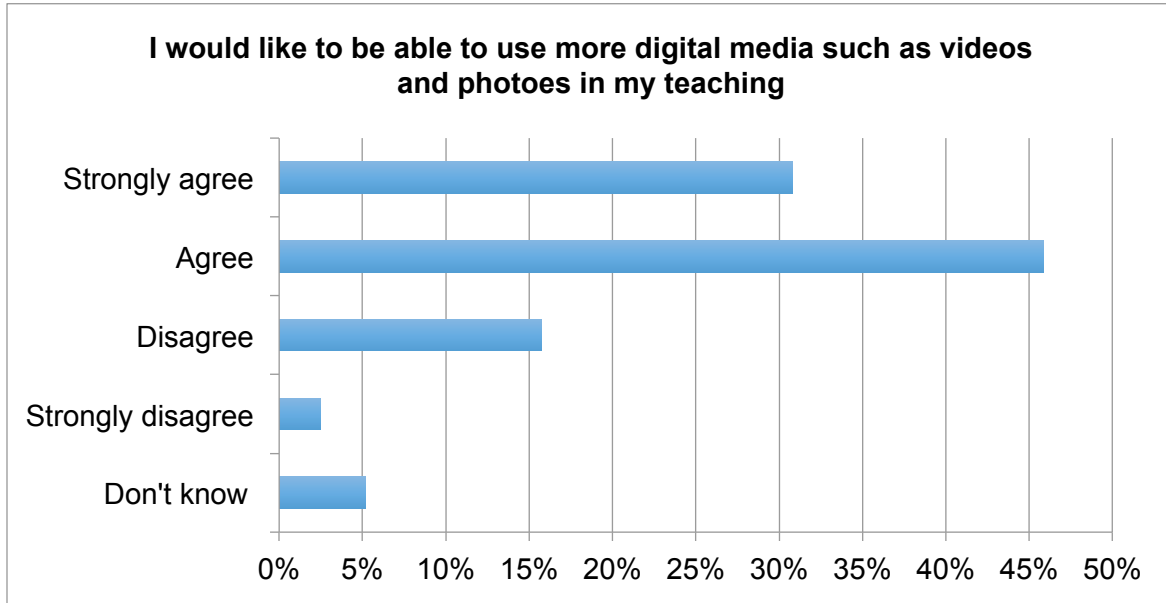


Choices	Total Response	Response Rate
Strongly agree	87	19.38%
Agree	130	28.95%
Disagree	112	24.94%
Strongly disagree	69	15.37%
Don't know	51	11.36%
Sum	449	100.00%

Question 8

I would like to be able to use more digital media such as videos and photos in my teaching

- 341 teachers agree/strongly agree for 76.63% of respondents.

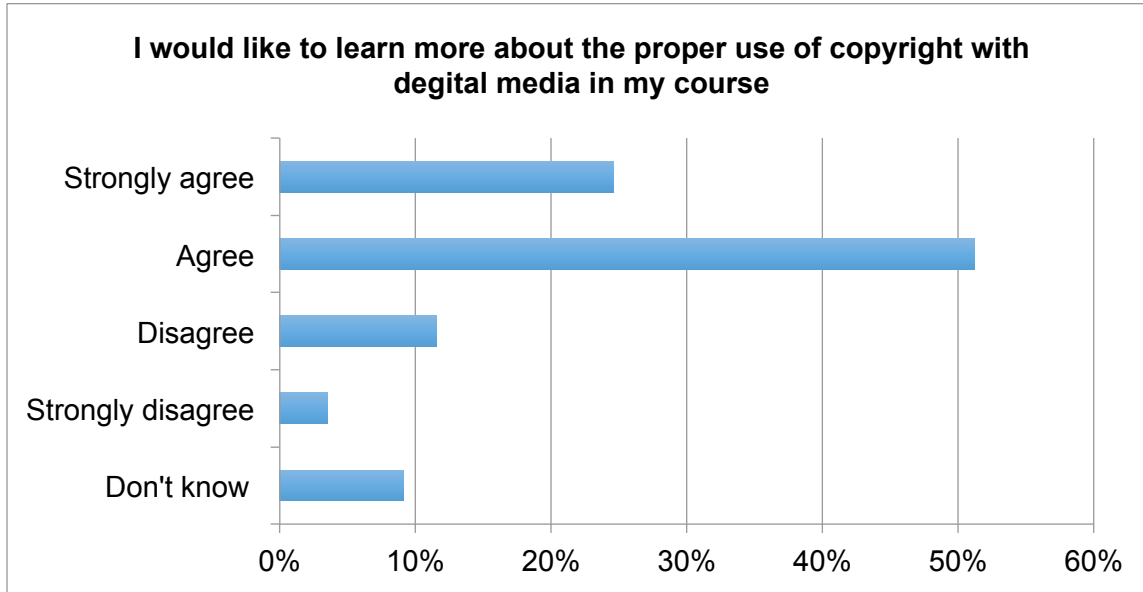


Choices	Total Response	Response Rate
Strongly agree	137	30.79%
Agree	204	45.84%
Disagree	70	15.73%
Strongly disagree	11	2.47%
Don't know	23	5.17%
Sum	445	100.00%

Question 9

I would like to learn more about the proper use of copyright with digital media in my course

- 342 teachers agree/strongly agree for 75.83% of respondents

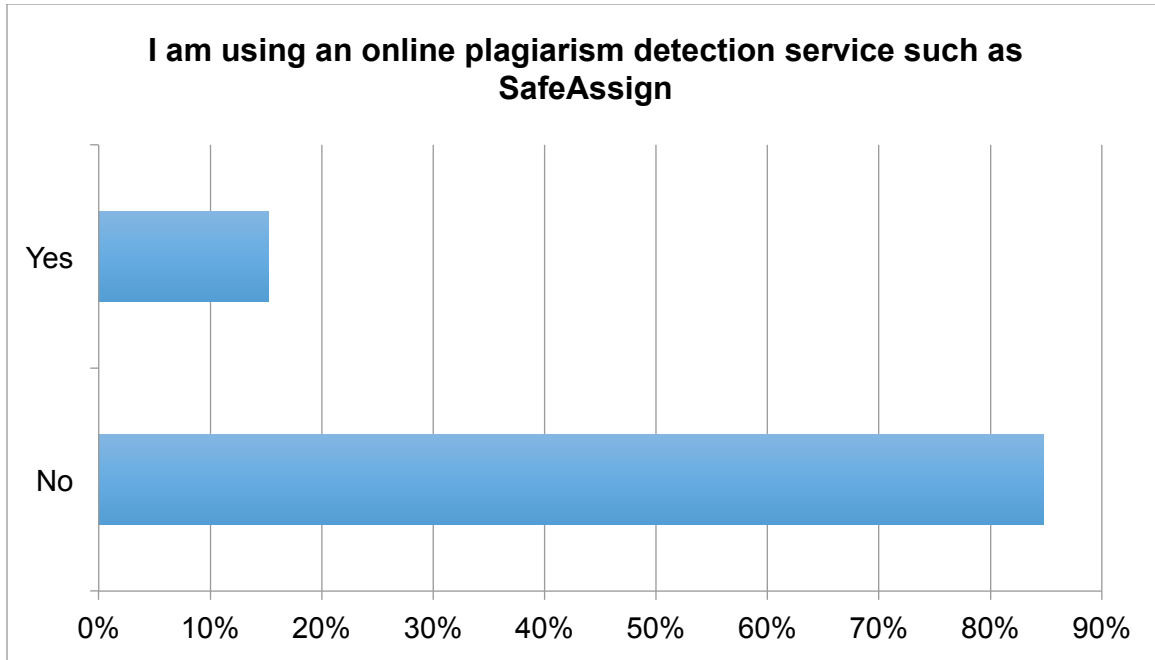


Choices	Total Response	Response Rate
Strongly agree	111	24.61%
Agree	231	51.22%
Disagree	52	11.53%
Strongly disagree	16	3.55%
Don't know	41	9.09%
Sum	451	100.00%

Question 10

I am using an online plagiarism detection service such as SafeAssign

- 383 teachers respond no for 84.73%, 69 teachers respond yes for 15.27%.

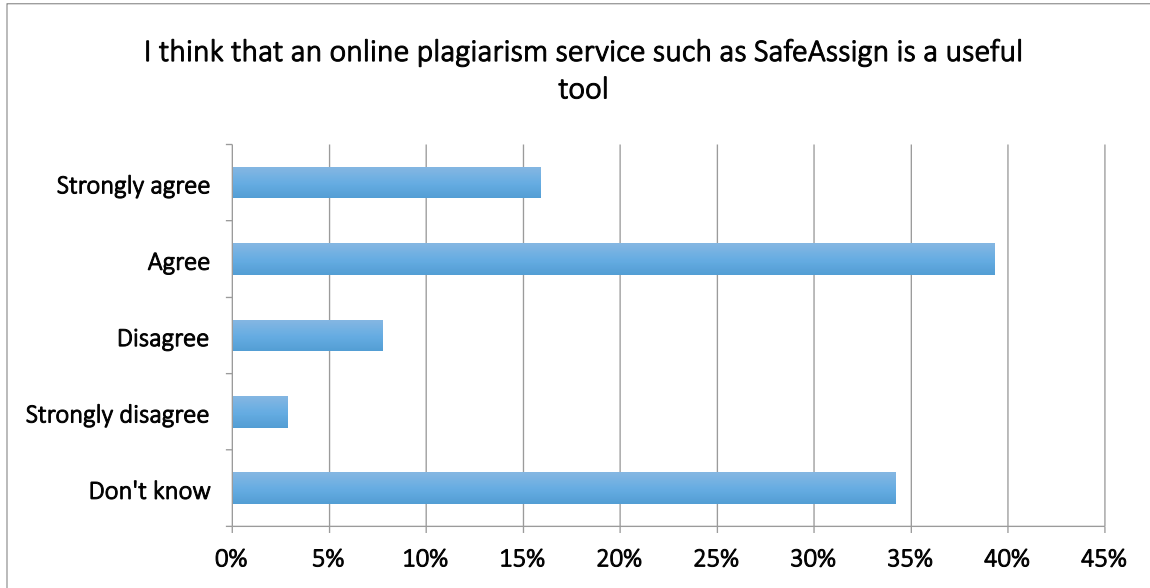


Choices	Total Response	Response Rate
Yes	69	15.27%
No	383	84.73%
Sum	452	100.00%

Question 11

I think that an online plagiarism service such as SafeAssign is a useful tool

- 250 teachers agree/strongly agree for 55.18% of respondents, 155 teachers or 34.22% don't know.

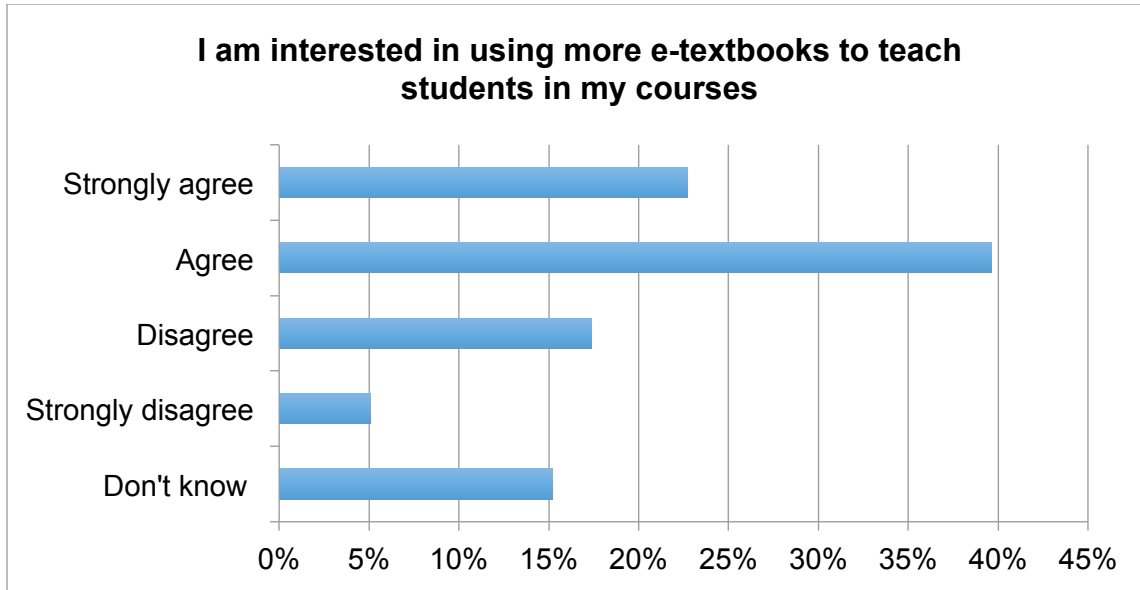


Choices	Total Response	Response Rate
Strongly agree	72	15.89%
Agree	178	39.29%
Disagree	35	7.73%
Strongly disagree	13	2.87%
Don't know	155	34.22%
Sum	453	100.00%

Question 12

I am interested in using more e-textbooks to teach students in my courses

- 283 teachers agree/strongly agree for 62.34% of respondents.

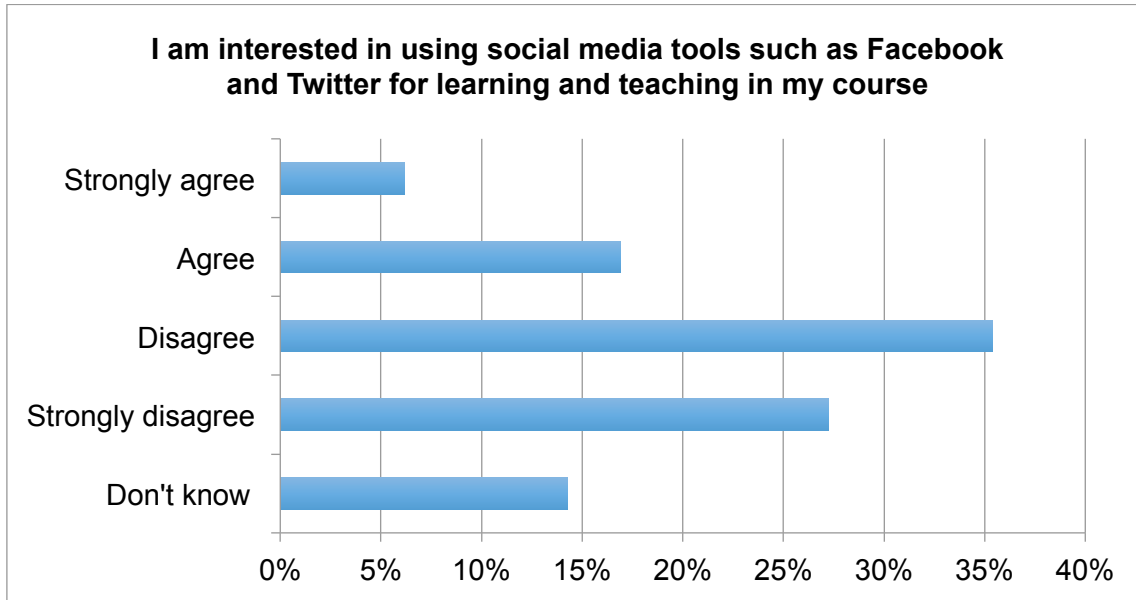


Choices	Total Response	Response Rate
Strongly agree	103	22.69%
Agree	180	39.65%
Disagree	79	17.40%
Strongly disagree	23	5.07%
Don't know	69	15.20%
Sum	454	100.00%

Question 13

I am interested in using social media tools such as Facebook and Twitter for learning and teaching in my course

- 285 teachers disagree/strongly disagree for 62.63%,
- 105 or 23.07% agree/strongly agree,
- 65 or 14.29% don't know.

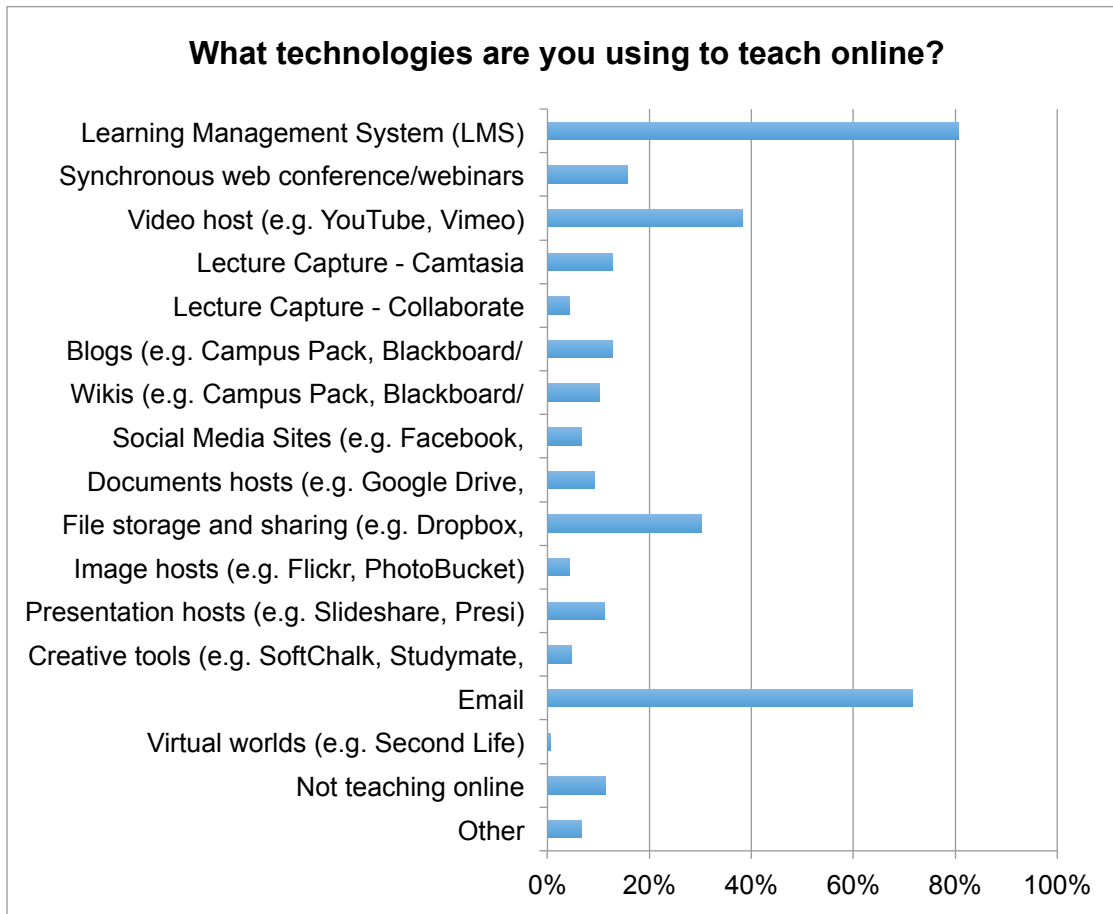


Choices	Total Response	Response Rate
Strongly agree	28	6.15%
Agree	77	16.92%
Disagree	161	35.38%
Strongly disagree	124	27.25%
Don't know	65	14.29%
Sum	455	100.00%

Question 19

What technologies are you using to teach online? Please check all that apply – (top three responses below):

- 1. 355 80.68% Learning Management System
- 2. 315 71.59% Email
- 3. 168 38.18% Video hosts (i.e., YouTube, Vimeo)

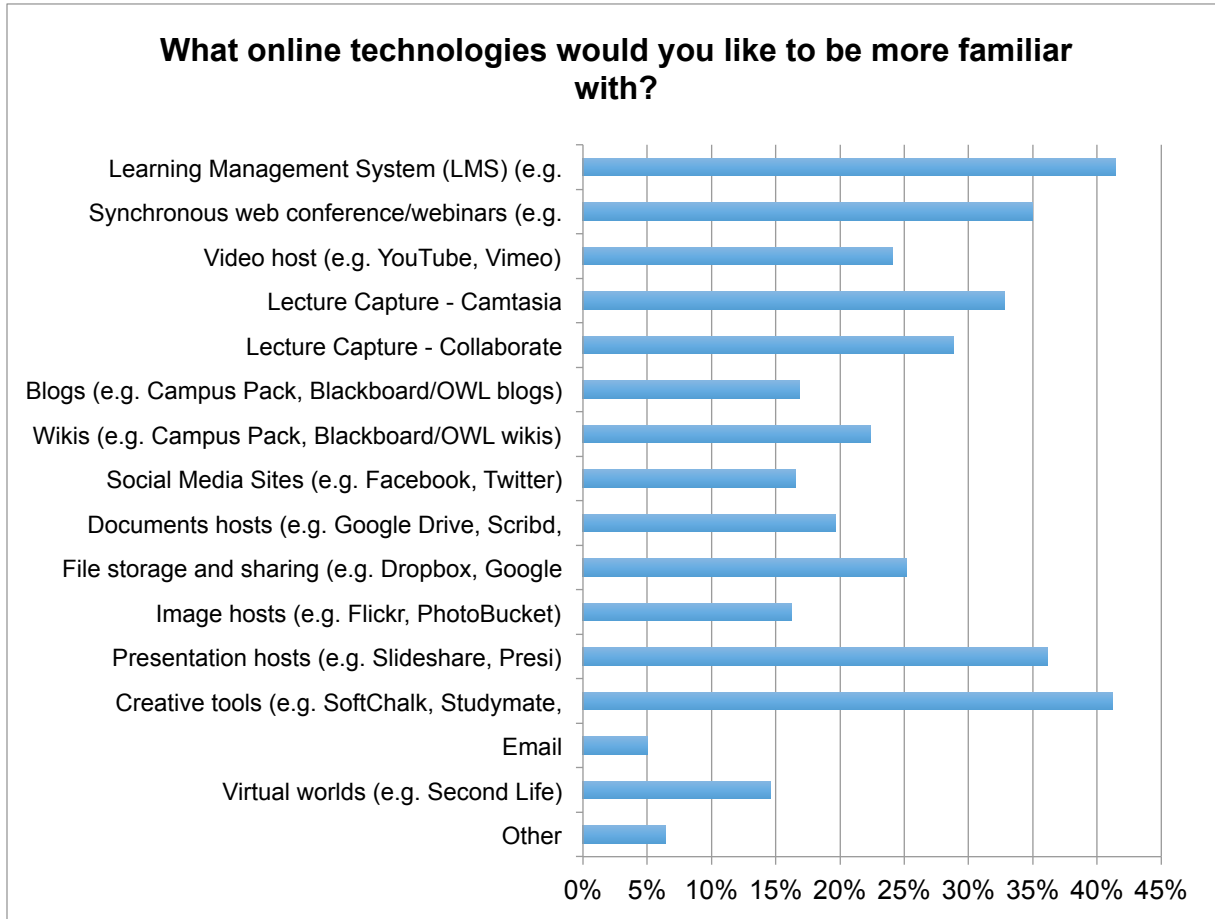


Choices	Total Response	Response Rate
Learning Management System (LMS) (e.g. Blackboard, Moodle, Other)	355	80.68%
Synchronous web conference/webinars (e.g. Blackboard Collaborate, Skype)	69	15.68%
Video host (e.g. YouTube, Vimeo)	168	38.18%
Lecture Capture - Camtasia	56	12.73%
Lecture Capture - Collaborate	19	4.32%
Blogs (e.g. Campus Pack, Blackboard/OWL blogs)	56	12.73%
Wikis (e.g. Campus Pack, Blackboard/OWL wikis)	45	10.23%
Social Media Sites (e.g. Facebook, Twitter)	29	6.59%
Documents hosts (e.g. Google Drive, Scribd, DocStoc)	41	9.32%
File storage and sharing (e.g. Dropbox, Google Drive)	133	30.23%
Image hosts (e.g. Flickr, PhotoBucket)	19	4.32%
Presentation hosts (e.g. Slideshare, Presi)	49	11.14%
Creative tools (e.g. SoftChalk, Studymate, Audacity)	21	4.77%
Email	315	71.59%
Virtual worlds (e.g. Second Life)	3	0.68%
Not teaching online	50	11.36%
Other	29	6.59%

Question 20

What online technologies would you like to be more familiar with? Please check all that apply - (top three responses below):

1. 148 41.46% Learning Management System
2. 147 41.18% Creative tools (e.g., SoftChalk, StudyMate, Audacity)
3. 129 36.13% Presentation hosts (e.g., Slideshare, Prezi)

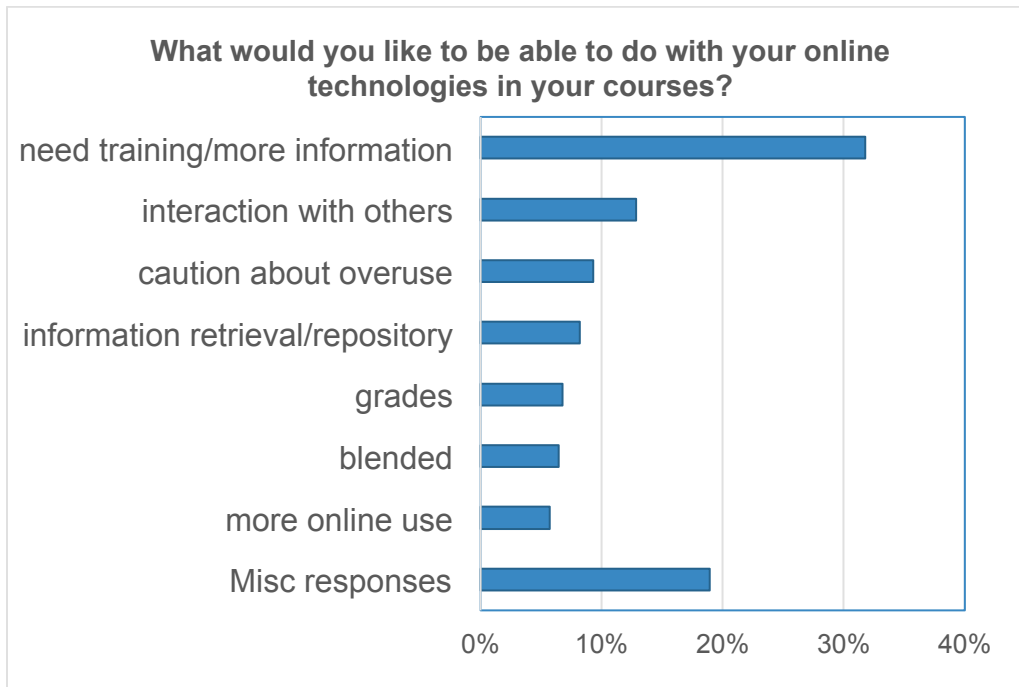


Choices	Total Response	Response Rate
Learning Management System (LMS) (e.g. Blackboard, Moodle, Other)	148	41.46%
Synchronous web conference/webinars (e.g. Blackboard Collaborate, Skype)	125	35.01%
Video host (e.g. YouTube, Vimeo)	86	24.09%
Lecture Capture - Camtasia	117	32.77%
Lecture Capture - Collaborate	103	28.85%
Blogs (e.g. Campus Pack, Blackboard/OWL blogs)	60	16.81%
Wikis (e.g. Campus Pack, Blackboard/OWL wikis)	80	22.41%
Social Media Sites (e.g. Facebook, Twitter)	59	16.53%
Documents hosts (e.g. Google Drive, Scribd, DocStoc)	70	19.61%
File storage and sharing (e.g. Dropbox, Google Drive)	90	25.21%
Image hosts (e.g. Flickr, PhotoBucket)	58	16.25%
Presentation hosts (e.g. Slideshare, Presi)	129	36.13%
Creative tools (e.g. SoftChalk, Studymate, Audacity)	147	41.18%
Email	18	5.04%
Virtual worlds (e.g. Second Life)	52	14.57%
Other	23	6.44%

Question 33 qualitative, open-ended responses

What would you like to be able to do with online technologies in your courses?

- 280 responses, (top three responses below)
- 1. 89 31.80% need training/more information,
- 2. 36 12.86% interaction with others,
- 3. 26 9.30% caution about overuse

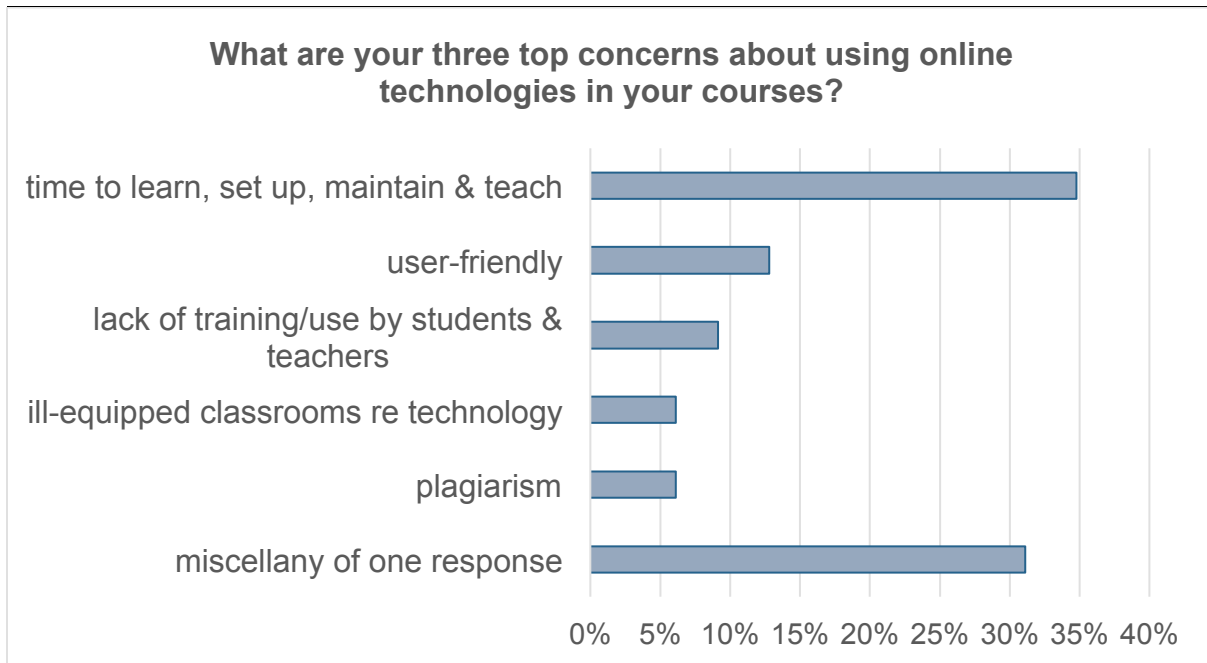


Choices	Total Response	Response Rate
Need training/more information	89	31.79%
Interaction with others	36	12.86%
Caution about overuse	26	9.29%
Information retrieval/repository	23	8.21%
Grades	19	6.79%
Blended	18	6.43%
More online use	16	5.71%
Misc. responses	53	8.93%

Question 34 qualitative, open-ended responses

What are your top three concerns about using online technologies in your courses?

- 164 responses (top three responses below).
- 1. 57 34.76% time to learn, set up, maintain & teach
- 2. 21 12.80% user-friendly
- 3. 15 9.15% lack of training and use by students and teachers



Choices	Total Response	Response Rate
Time to learn, set up, maintain & teach	57	34.76%
User-friendly	21	12.80%
Lack of training/use by students & teachers	15	9.15%
Ill-equipped classrooms re technology	10	6.10%
Plagiarism	10	6.10%
Misc. responses	51	31.10%

Findings

3. Online Offerings

Teachers were not looking to offer more courses (45.13%) or programs (61.64%) online, although there was agreement by 38.27% of teachers to offering more online courses, compared with 24.17% of teachers who reported their department/faculty should offer more online programs. Faculties most interested in offering more online programs were Agriculture (66.7%), Computer Science (62.5%), Health Professions (55.9%), and Management (62.1%). Management was the only faculty where the majority of teachers reported that there should be more online programs offered (58.6%).

A large number of teachers have mostly taught face-to-face courses (48.23%) in the last five years, followed closely by blended courses (47.35%). Their preference reverses to 65.49% preferring to teach blended courses compared to 31.42% for face-to-face.

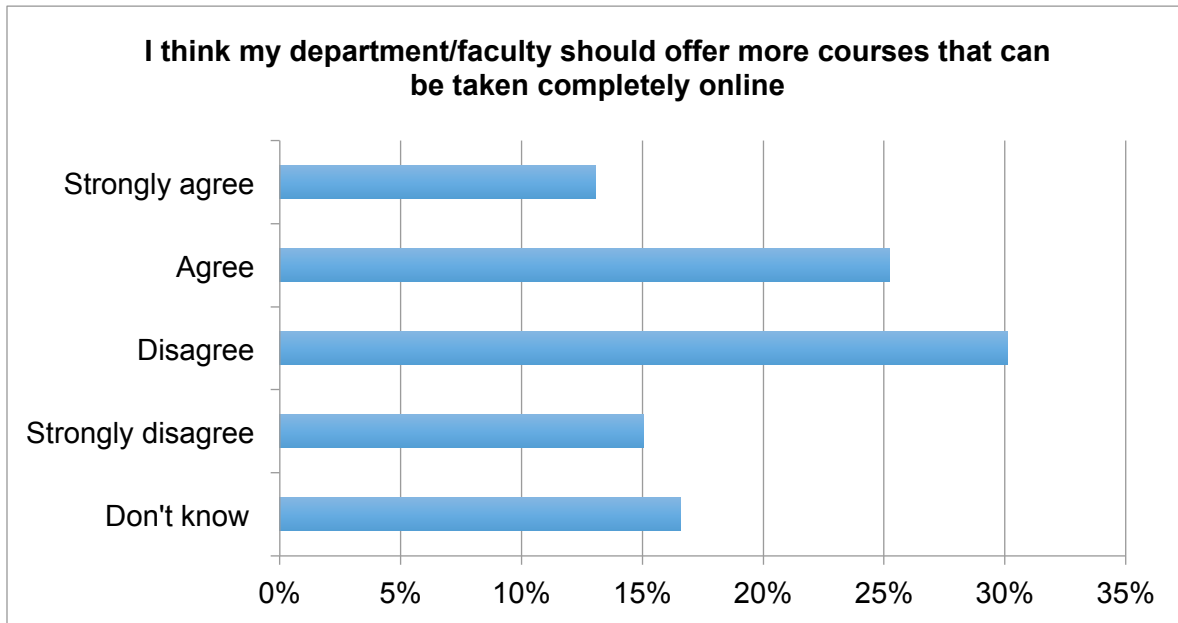
A majority of teachers (58.22%) indicated that they were not interested in teaching Massive Open Online Courses (MOOC's). A significant number (22.22%) reported that they did not know whether or not they were interested in teaching a MOOC, which probably has to do with the newness of this form of educational offering.

Questions 14-18

Question 14

I think that my department/faculty should offer more courses that can be taken completely online

- 173 teachers agree/strongly agree for 38.27%;
- 204 disagree/strongly disagree for 45.13%;
- 75 or 16.59% don't know.

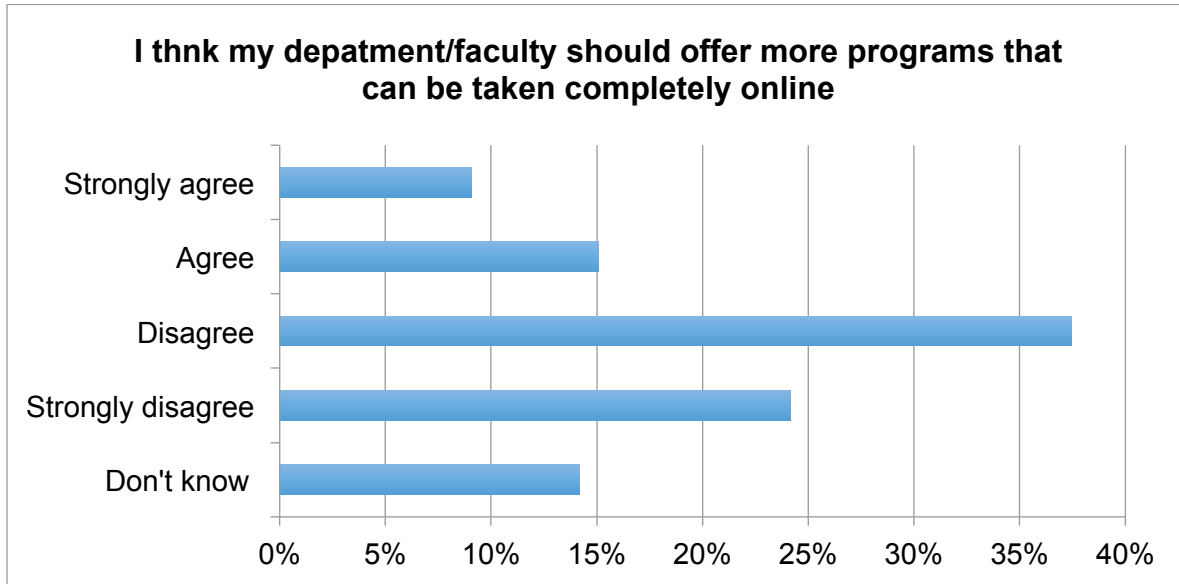


Choices	Total Response	Response Rate
Strongly agree	59	13.05%
Agree	114	25.22%
Disagree	136	30.09%
Strongly disagree	68	15.04%
Don't know	75	16.59%
Sum	452	100.00%

Question 15

I think my department/faculty should offer more programs that can be taken completely online

- 109 teachers agree/strongly agree for 24.17%;
- 278 disagree/strongly disagree for 61.64%;
- 64 or 14.19% don't know.

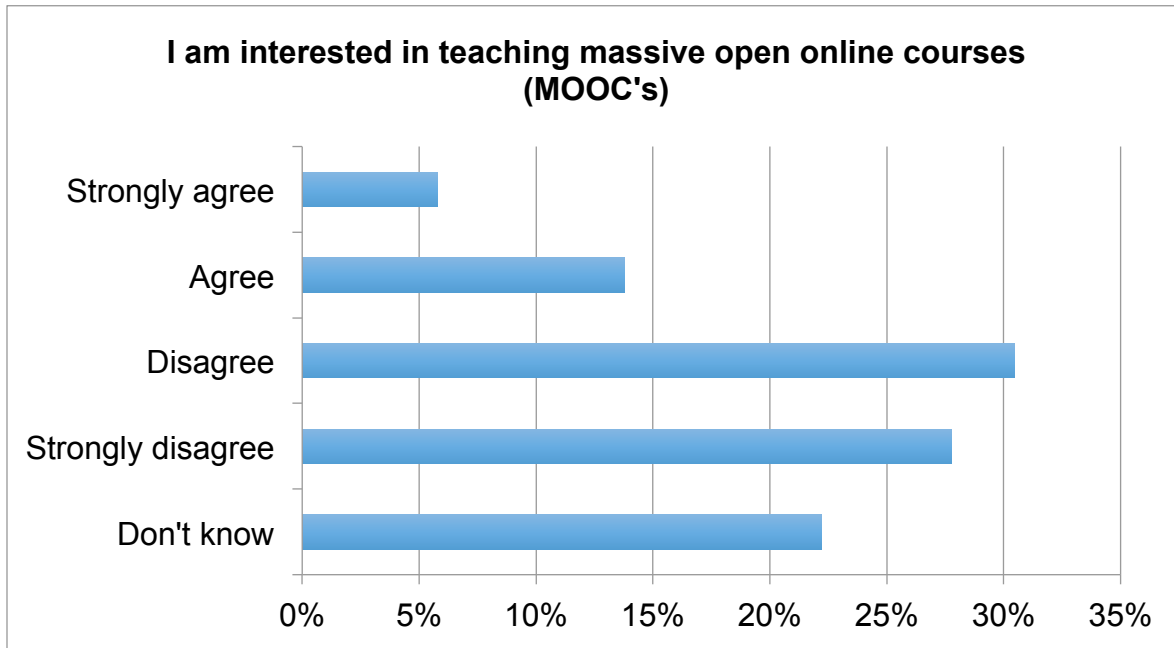


Choices	Total Response	Response Rate
Strongly agree	41	9.09%
Agree	68	15.08%
Disagree	169	37.47%
Strongly disagree	109	24.17%
Don't know	64	14.19%
Sum	451	100.00%

Question 16

I am interested in teaching massive open online courses (MOOC's)

- 88 teachers agree/strongly agree for 19.56%;
- 262 disagree/strongly disagree for 58.22%;
- 100 or 22.22% don't know.

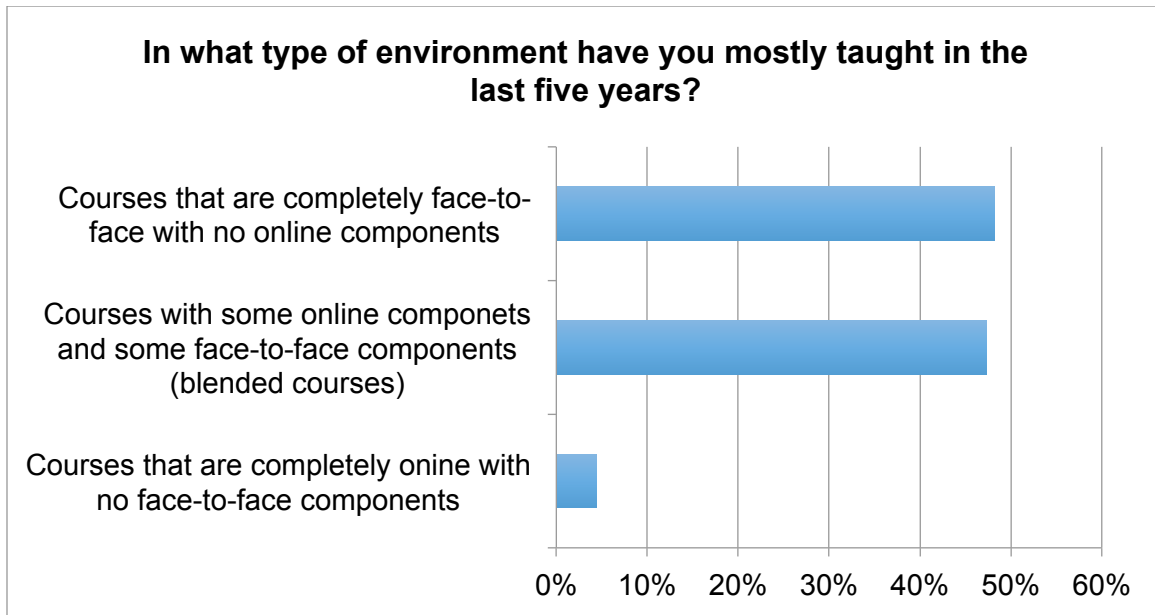


Choices	Total Response	Response Rate
Strongly agree	26	5.78%
Agree	62	13.78%
Disagree	137	30.44%
Strongly disagree	125	27.78%
Don't know	100	22.22%
Sum	450	100.00%

Question 17

In what type of environment have you mostly taught in the last five years?

- 1. 218 48.23% Courses that are completely face-to-face with no online components
- 2. 214 47.35% Courses with some online components and some face-to-face components (blended courses)
- 3. 20 4.42% Courses that are completely online with no face-to-face components

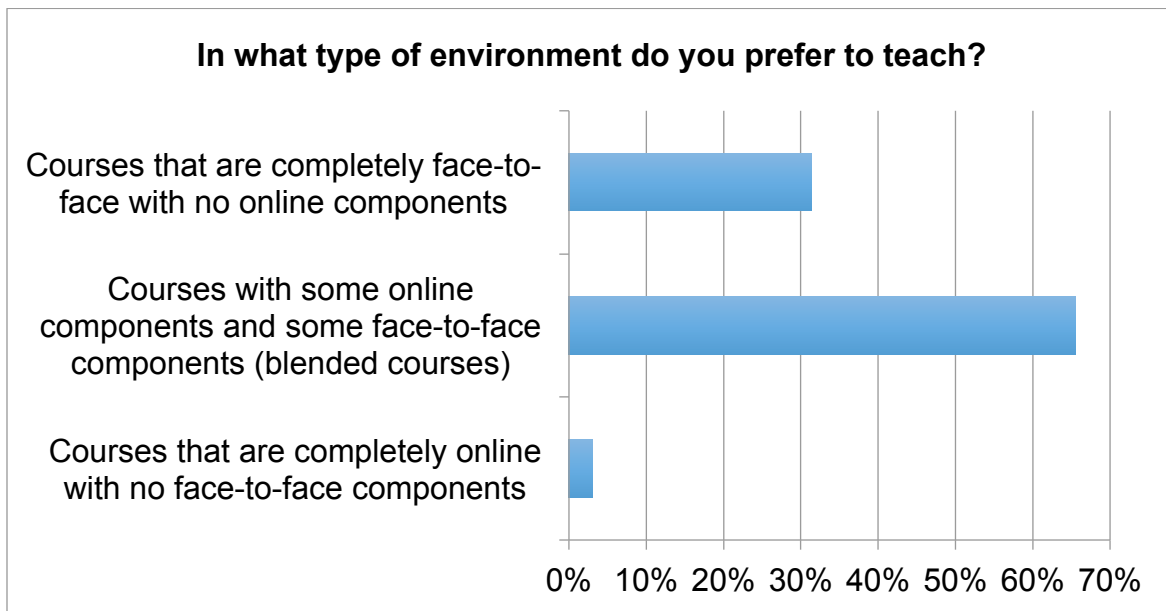


Choices	Total Response	Response Rate
Courses that are completely face-to-face with no online components	218	48.23%
Courses with some online components and some face-to-face components (blended courses)	214	47.35%
Courses that are completely online with no face-to-face components	20	4.42%
Sum	452	100.00%

Question 18

In what type of environment do you prefer to teach?

1. 296 65.49% Courses with some online components and some face-to-face components (blended courses)
2. 142 31.42% Courses that are completely face-to-face with no online components
3. 14 3.1% Courses that are completely online with no face-to-face components



Choices	Total Response	Response Rate
Courses that are completely face-to-face with no online components	142	31.42%
Courses with some online components and some face-to-face components (blended courses)	296	65.49%
Courses that are completely online with no face-to-face components	14	3.10%
Sum	452	100.00%

Findings

4. Learning Management System⁴

At the time of this survey Dalhousie supported two Learning Management Systems since the merger with the Agricultural campus in 2012 – officially, Blackboard Learn for the Halifax and New Brunswick campuses, and Moodle for the Agricultural campus. There are also individual teachers on the Halifax campus using Moodle independently, so there is not a clear-cut division amongst the campuses. 42 teachers participated in the survey from the Agricultural campus and 464 from Halifax and New Brunswick campuses. Therefore, the data for each of the LMS's will be presented separately.

a. Blackboard Learn/BbLearn

(BbLearn also has the generic acronym OWL which stands for Online Web Learning)

The majority of teachers (76.61%) use BbLearn, and the primary ways they use it were to add content (94.05%), communicate with students (80.06%), and manage and deliver grades (69.94%). Teachers reported that they would like to know more about creating and managing quizzes (44.15%), creating collaborative activities (43.02%), and using communication tools (36.6%).

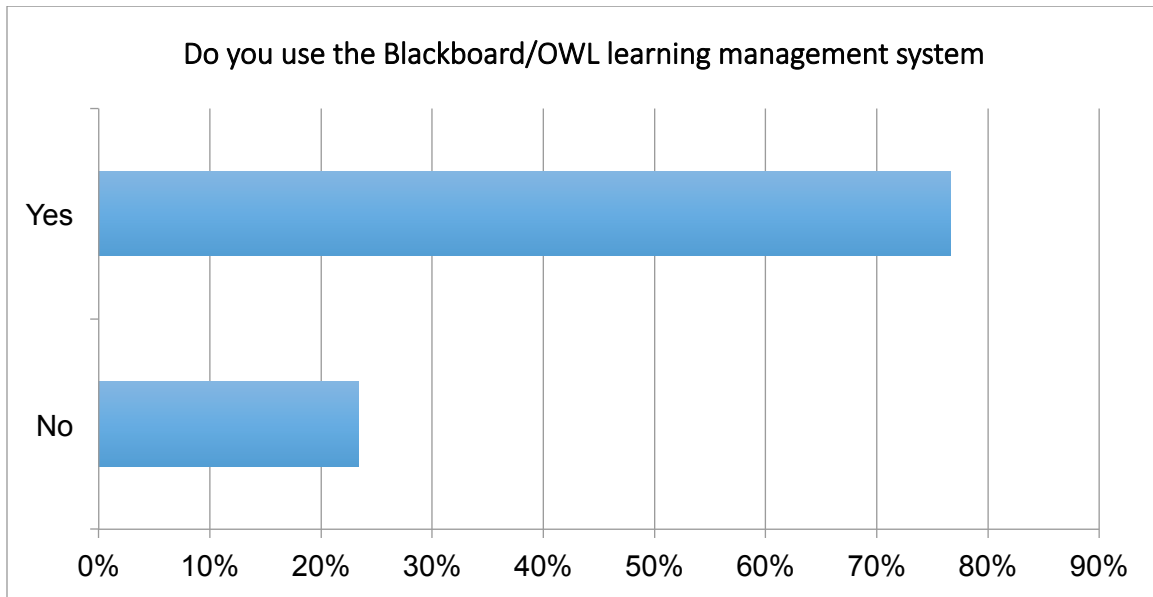
A majority of teachers responded that they could complete their tasks effectively (75.23%), efficiently (55.01%) and that they felt comfortable using the system (66.26%). However, a majority of teachers did not find the system easy to use (53.96%) and did not think the system was well-designed (52.87%).

Overall satisfaction with Blackboard Learn was 49.85%.

Blackboard can be an efficient delivery method for content in terms of reaching the students, but it is not an efficient use of the instructor's time. I can make up a quiz by hand or using a word processor in an hour, but it might take me 5-10 hours to construct it using Blackboard (if the goal is to have open-ended times that students can do quizzes then you need to have 2 or 3 sets of questions) (teacher comment).

⁴ Effective Fall, 2014, all active courses at the Agricultural Campus were re-created in Blackboard Learn. By Winter, 2015, all active courses will have been re-created in Blackboard Learn so that Dalhousie is using one institutional learning management system – Blackboard Learn.

Questions 21-23
Question 21

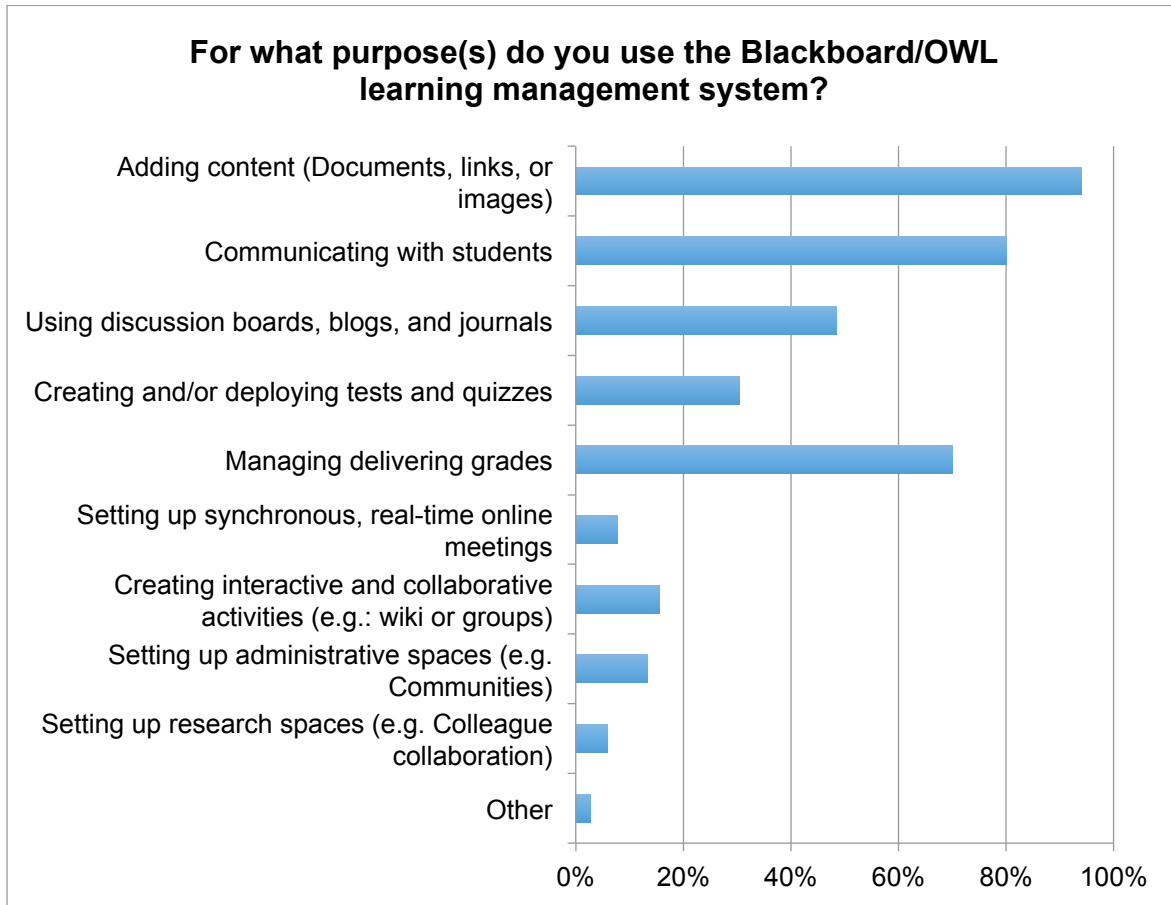


Choices	Total Response	Response Rate
Yes	344	76.61%
No	105	23.39%
Sum	449	100.00%

Question 22

For what purpose(s) do you use the Blackboard/OWL learning management system?
Please check all that apply. (top three responses below):

- 1. 94.05% adding content (documents, links, or images)
- 2. 80.06% communicating with students
- 3. 69.94% managing and delivering grades

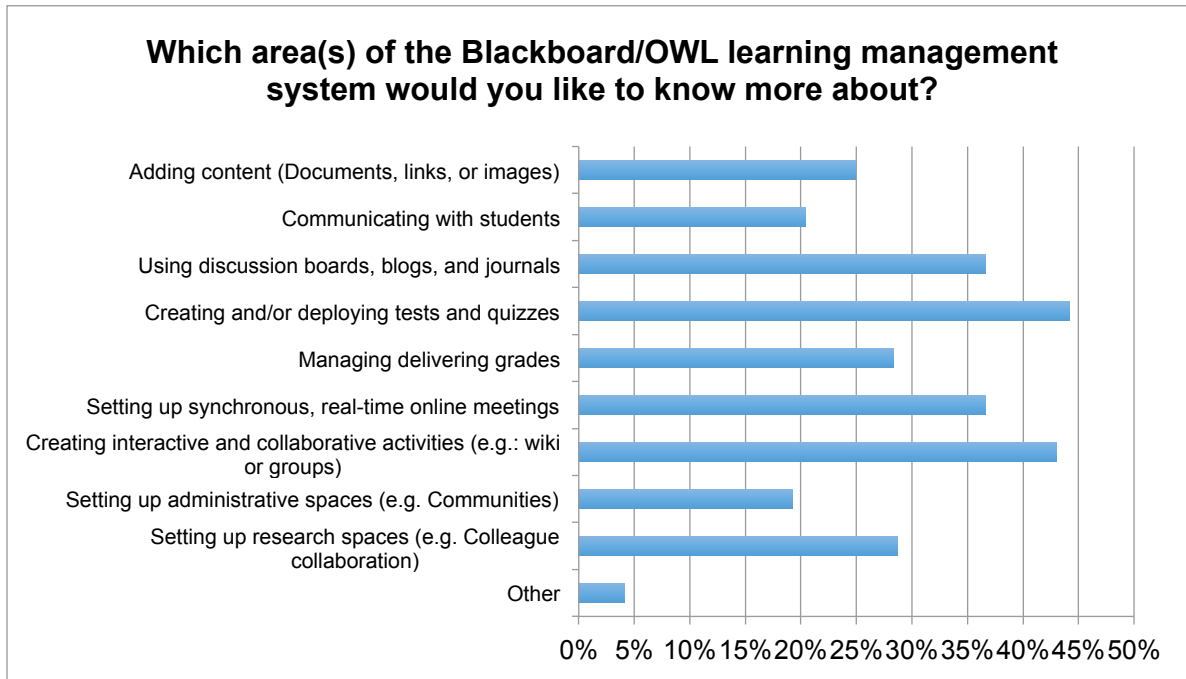


Choices	Total Response	Response Rate
Adding content (Documents, links, or images)	316	94.05%
Communicating with students	269	80.06%
Using discussion boards, blogs, and journals	163	48.51%
Creating and/or deploying tests and quizzes	102	30.36%
Managing and delivering grades	235	69.94%
Setting up synchronous, real-time online meetings	26	7.74%
Creating interactive and collaborative activities (e.g. wiki or groups)	52	15.48%
Setting up administrative spaces (e.g. Communities)	45	13.39%
Setting up research spaces (e.g. Colleague collaboration)	20	5.95%
Other	9	2.68%

Question 23

Which area(s) of the Blackboard/OWL learning management system would you like to know more about? Please check all that apply. (top four responses below):

1. 117 44.15% creating and/or deploying tests and quizzes
2. 114 43.02% creating interactive and collaborative activities (e.g. wikis & groups)
3. 97 36.6% using discussion boards, blogs and journals
4. 97 36.6% setting up synchronous, real-time online meetings

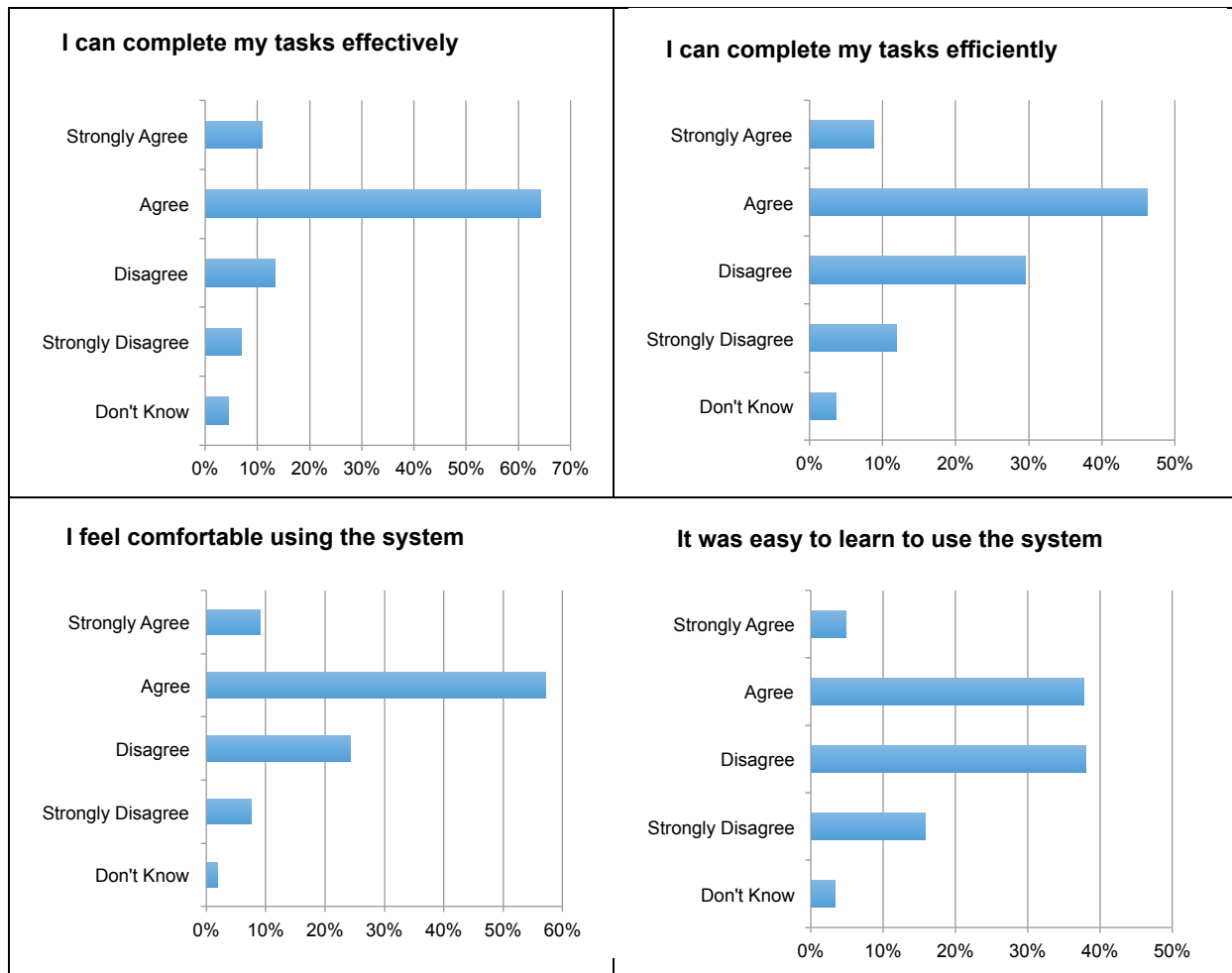


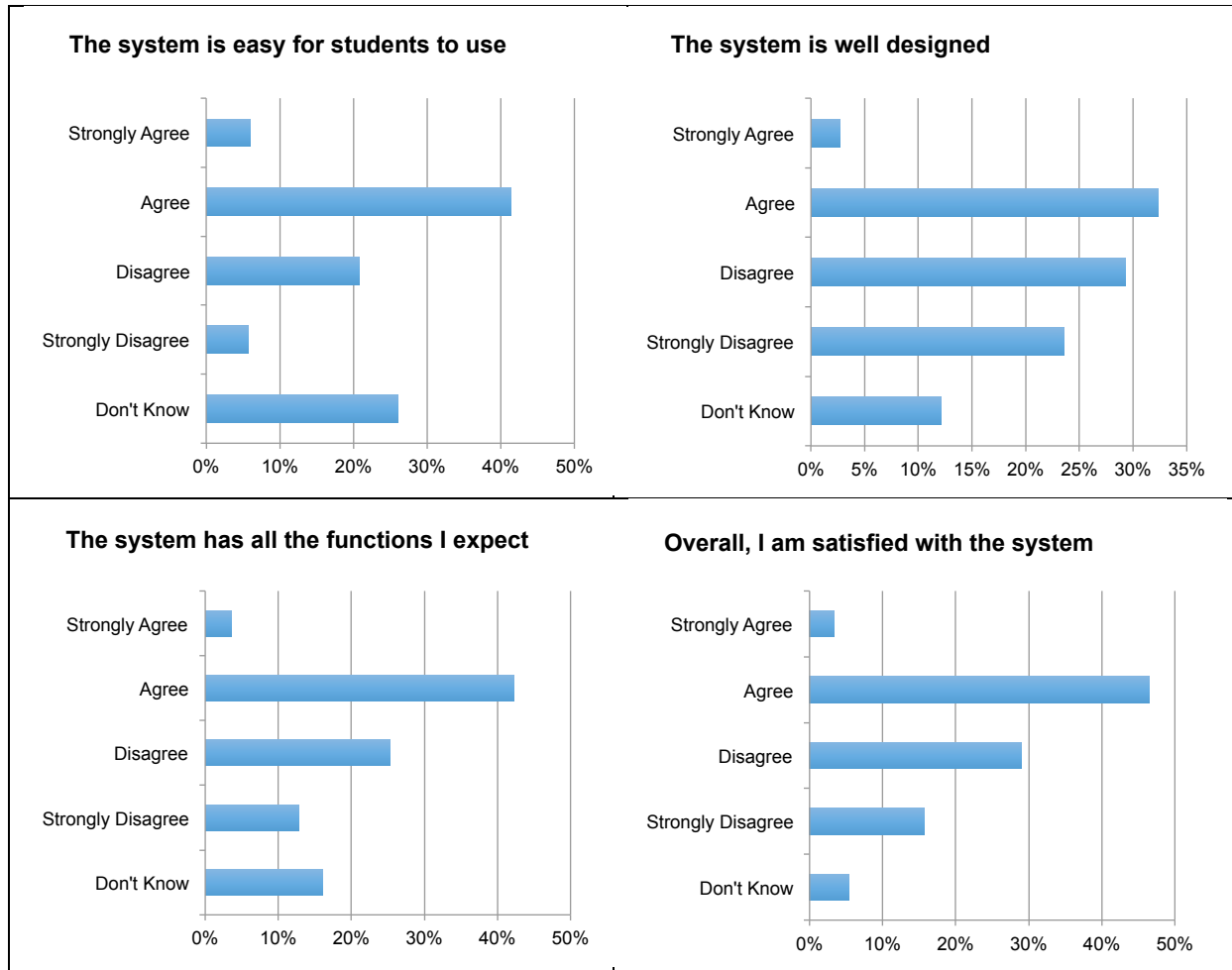
Choices	Total Response	Response Rate
Adding content (Documents, links, or images)	66	24.91%
Communicating with students	54	20.38%
Using discussion boards, blogs, and journals	97	36.60%
Creating and/or deploying tests and quizzes	117	44.15%
Managing delivering grades	75	28.30%
Setting up synchronous, real-time online meetings	97	36.60%
Creating interactive and collaborative activities (e.g.: wiki or groups)	114	43.02%
Setting up administrative spaces (e.g. Communities)	51	19.25%
Setting up research spaces (e.g. Colleague collaboration)	76	28.68%
Other	11	4.15%

Question 24

From your experience using Blackboard/OWL Learning Management System, please indicate whether you strongly agree, agree, disagree, strongly disagree or don't know to the sentences below.

- | | |
|---|-----------------------------|
| 1. I can complete my tasks effectively. | 75.23% agree/strongly agree |
| 2. I can complete my tasks efficiently. | 55.01% agree/strongly agree |
| 3. I feel comfortable using the system. | 66.26% agree/strongly agree |
| 4. It was easy to learn to use the system. | 42.68% agree/strongly agree |
| 5. The system is easy for students to use. | 47.43% agree/strongly agree |
| 6. The system is well designed. | 35.05% agree/strongly agree |
| 7. The system has all the functions I expect. | 45.90% agree/strongly agree |
| 8. Overall I am satisfied with the system. | 49.85% agree/strongly agree |





	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't know	Sum
I can complete my tasks effectively	36 10.88%	213 64.35%	44 13.29%	23 6.95%	15 4.53%	331 100%
I can complete my tasks efficiently	29 8.81%	152 46.2%	97 29.48%	39 11.8%	12 3.65%	329 100%
I feel comfortable using the system	30 9.12%	188 57.14%	80 24.32%	25 7.6%	6 1.82%	329 100%
It was easy to learn to use the system	16 4.88%	127 37.8%	125 38.11%	52 15.85%	11 3.35%	328 100%
My instructor used the system effectively	20 6.04%	137 41.39%	69 20.85%	19 5.74%	86 25.98%	331 100%
The system is well designed	9 2.72%	107 32.33%	97 29.31%	78 23.56%	40 12.08%	331 100%
The system has all the functions I expect	12 3.65%	139 42.25%	83 25.23%	42 12.77%	53 16.11%	329 100%
Overall, I am satisfied with the system	11 3.32%	154 46.53%	96 29.0%	52 15.71%	18 5.44%	331 100%

b. Moodle

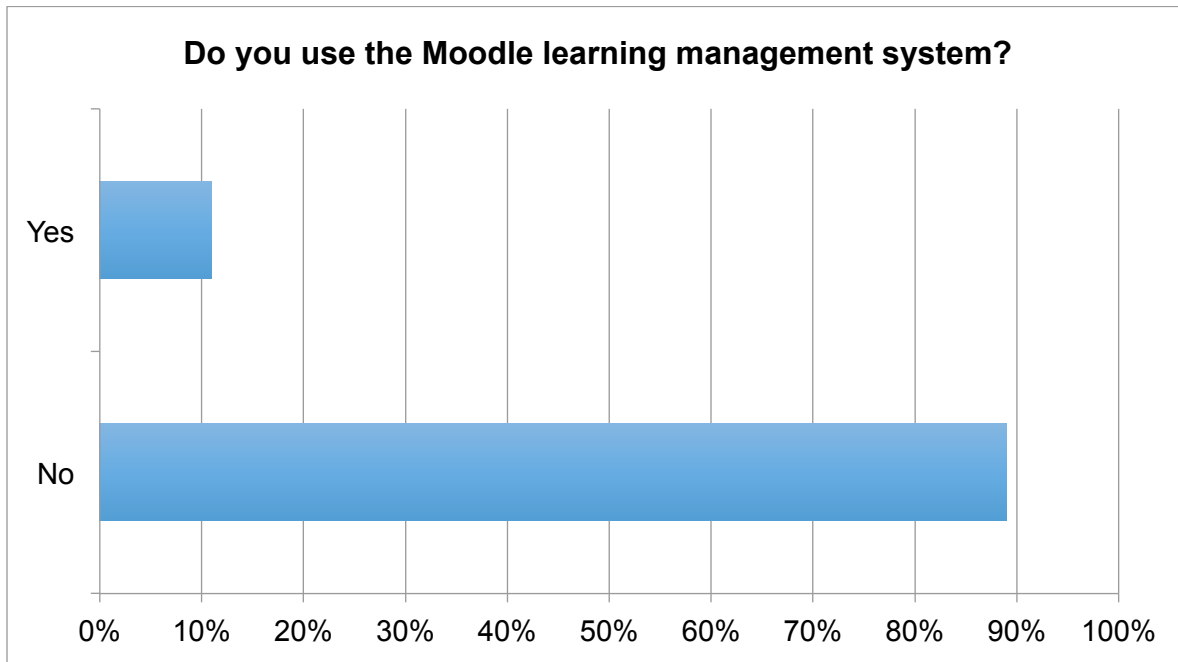
There were 42 teachers from the Agricultural campus who participated in the survey. 49 teachers said they use Moodle so this would include a few teachers using this LMS independently on the main Dalhousie campus. The primary ways the teachers used Moodle were to add content (93.62%), communicate with students (82.98%), and manage and deliver grades (61.70%). Teachers reported that they would like to know how to create and manage quizzes (55.26%), use communication tools (52.63%), and use collaborative tools (50.00%).

Teachers responded that they could complete their tasks effectively (91.49%), they could complete tasks efficiently (91.49%), they felt comfortable using the system (91.49%), it was easy to learn the system (82.98%), it is easy for students to use (76.60%), the system is well designed (72.34%), and the system had all the functions they needed (65.96%).

Overall satisfaction with the system was 85.11%.

I'm happy with what Moodle allows me to do now. I can add videos, links, comments, update reading assignments, send media links when breaking news is relevant to classroom discussion. It brings life to the course.
(teacher comment)

Questions 25-28
Question 25

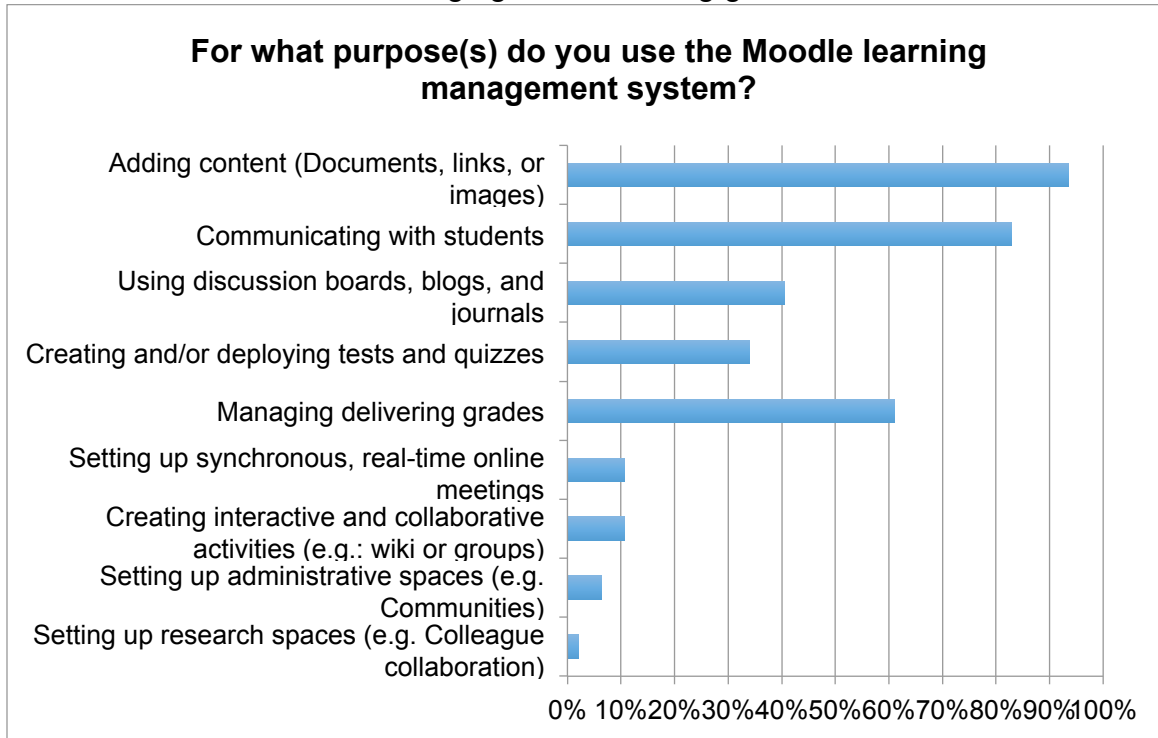


Choices	Total Response	Response Rate
Yes	49	11.01%
No	396	88.99%
Sum	445	100.00%

Question 26

For what purpose(s) do you use the Moodle learning management system? Please check all that apply. (top three choices below):

1. 44 93.62% Adding Content
2. 39 82.98% Communicating with students
3. 29 61.70% Managing and delivering grades

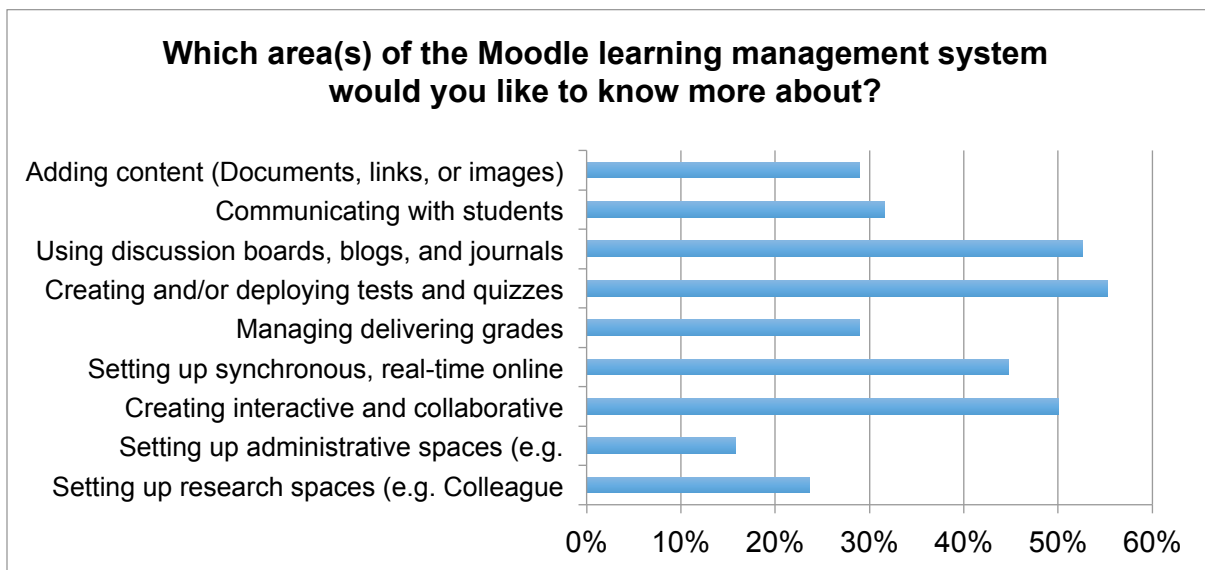


Choices	Total Response	Response Rate
Adding content (Documents, links, or images)	44	93.62%
Communicating with students	39	82.98%
Using discussion boards, blogs, and journals	19	40.43%
Creating and/or deploying tests and quizzes	16	34.04%
Managing delivering grades	29	61.70%
Setting up synchronous, real-time online meetings	5	10.64%
Creating interactive and collaborative activities (e.g.: wiki or groups)	5	10.64%
Setting up administrative spaces (e.g. Communities)	3	6.38%
Setting up research spaces (e.g. Colleague collaboration)	1	2.13%

Question 27

Which area(s) of the Moodle learning management system would you like to know more about? Please check all that apply. (top three responses below):

1. 21 55.26% Creating an/or deploying tests and quizzes
2. 20 52.63% Using discussion boards, blogs and journals
3. 19 50.00% Creating interactive and collaborative activities (e.g. wikis or groups)

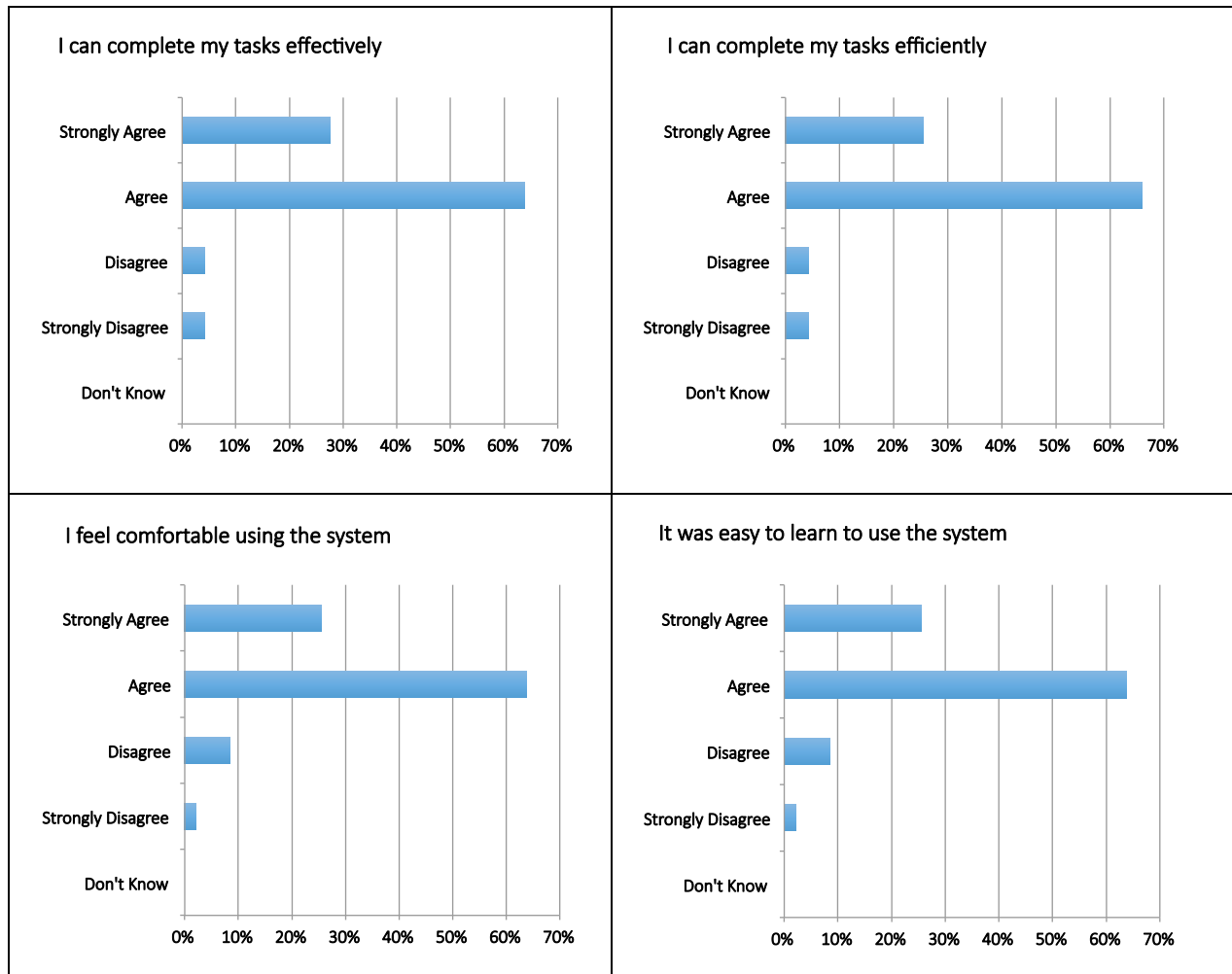


Choices	Total Response	Response Rate
Adding content (Documents, links, or images)	11	28.95%
Communicating with students	12	31.58%
Using discussion boards, blogs, and journals	20	52.63%
Creating and/or deploying tests and quizzes	21	55.26%
Managing and delivering grades	11	28.95%
Setting up synchronous, real-time online meetings	17	44.74%
Creating interactive and collaborative activities (e.g.: wiki or groups)	19	50.00%
Setting up administrative spaces (e.g. Communities)	6	15.79%
Setting up research spaces (e.g. Colleague collaboration)	9	23.68%
Sum	126	-

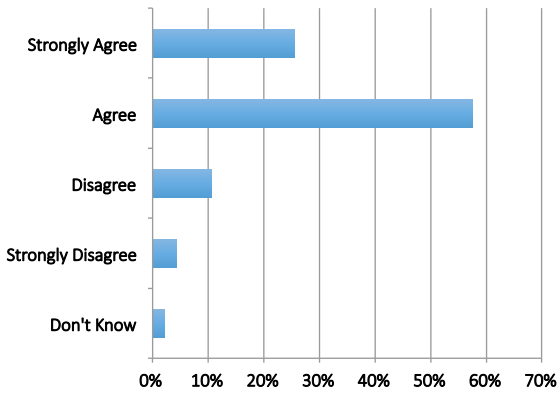
Question 28

From your experience using the Moodle learning management system, please respond to the sentences below.

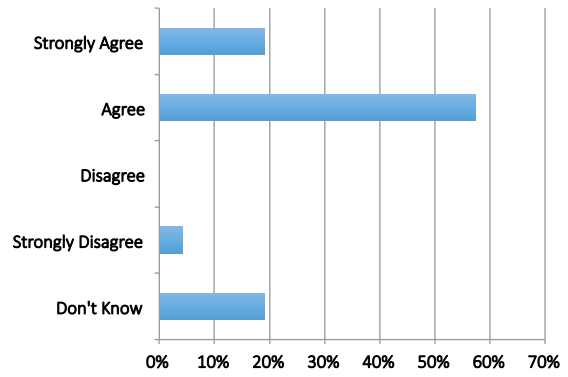
1. 91.49% I can complete my tasks effectively agree/strongly agree
2. 91.49% I can complete my tasks efficiently agree/strongly agree
3. 89.36% I feel comfortable using the system agree/strongly agree
4. 82.98% It was easy to learn to use the system
5. 76.60% The system is easy for students to use
6. 72.34% The system is well designed
7. 65.96% The system has all the functions I expect
8. 85.11% Overall, I am satisfied with the system



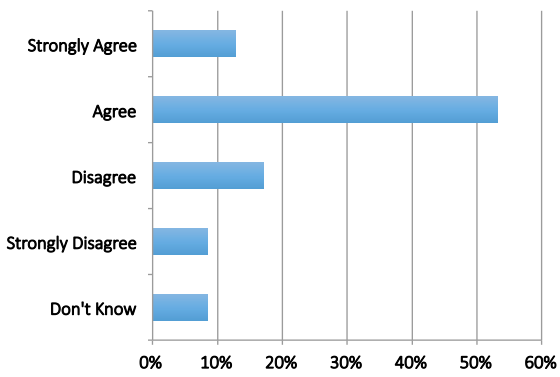
The system is easy for students to use



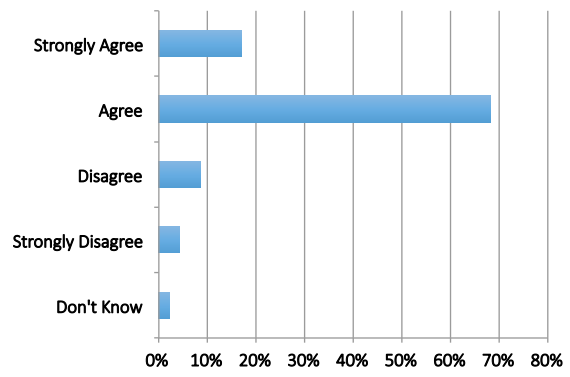
The system is well designed



The system has all the functions I expect



Overall, I am satisfied with the system



	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't know	Sum
I can complete my tasks effectively	13 27.66%	30 63.83%	2 4.28%	2 4.26%	0%	47 100%
I can complete my tasks efficiently	12 25.53%	31 65.96%	2 4.28%	2 4.26%	0%	47 100%
I feel comfortable using the system	12 25.53%	30 63.83%	4 8.51%	1 2.13%	0%	47 100%
It was easy to learn to use the system	12 25.53%	27 57.45%	5 10.64%	2 4.26%	1 2.13%	47 100%
The system is easy for students to use	9 19.15%	27 57.45%	0.00%	2 4.26%	9 19.15%	47 100%
The system is well designed	5 10.64%	29 61.7%	7 14.89%	2 4.26%	4 8.51%	47 100%
The system has all the functions I expect	6 12.77%	25 53.19%	8 17.02%	4 8.51%	4 8.51%	47 100%
Overall, I am satisfied with the system	8 17.02%	32 68.09%	4 8.51%	2 4.26%	1 2.13%	47 100%

Findings

5. Classroom Technology

The primary classroom technologies that teachers reported using were PowerPoint (94.99%), Whiteboard (22.57%), and video-conferencing (10.02%). Teachers indicated that they would like to be more familiar with Smartboard (52.66%), lecture capture (44.08%), and video-conferencing (33.73%).

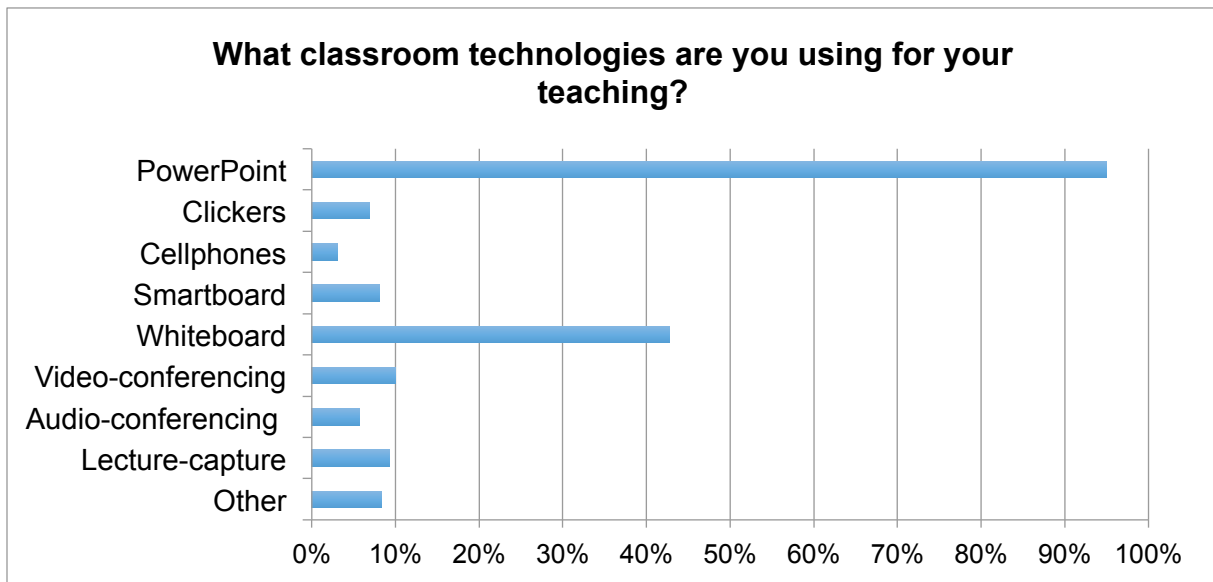
I teach a lot of contemporary cultural materials, so it is important for me to be able to have easy access to fully smart classrooms, with decent audio and video projection, and to have them available at decent times. This has proven difficult. (teacher comment)

Questions 29-30

Question 29

What classroom technologies are you using for your teaching? Check all that apply:

- 1. 398 94.99% PowerPoint
- 2. 179 42.72% Whiteboard
- 3. 42 10.02% Video-conferencing

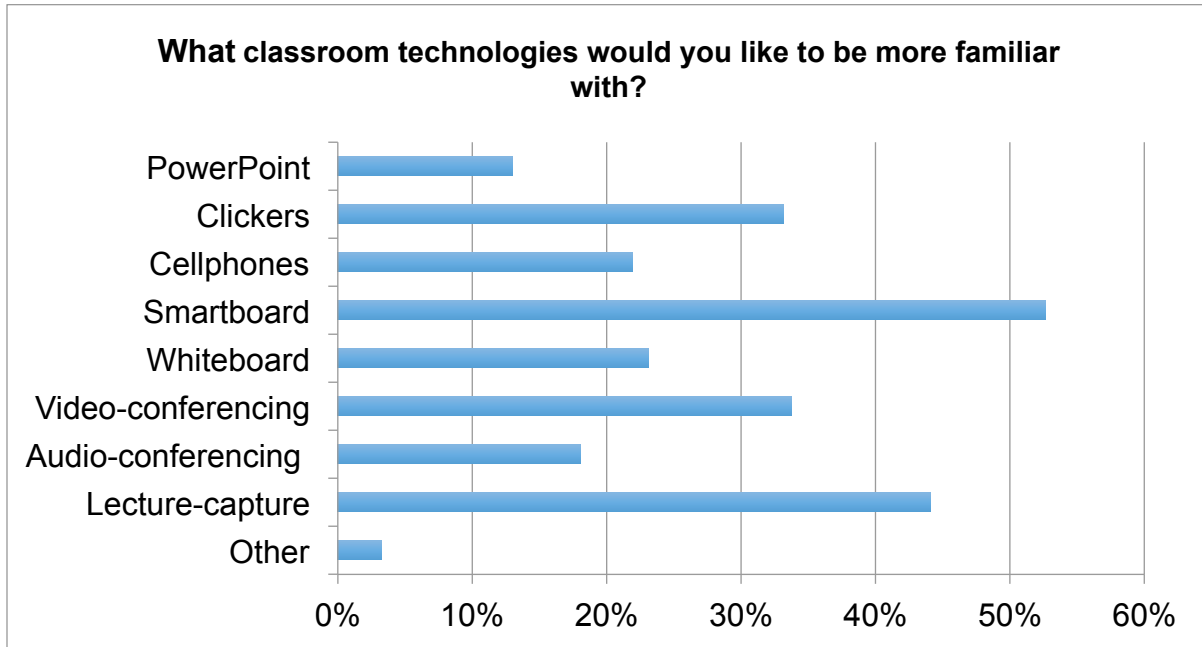


Choices	Total Response	Response Rate
PowerPoint	398	94.99%
Clickers	29	6.92%
Cellphones	13	3.10%
Smartboard	34	8.11%
Whiteboard	179	42.72%
Video-conferencing	42	10.02%
Audio-conferencing	24	5.73%
Lecture-capture	39	9.31%
Other	35	8.35%

Question 30

What classroom technologies would you like to be more familiar with? Check all that apply:

1. 178 52.66% Smartboard
2. 149 44.08% Lecture capture
3. 114 33.73% video-conferencing



Choices	Total Response	Response Rate
PowerPoint	44	13.02%
Clickers	112	33.14%
Cellphones	74	21.89%
Smartboard	178	52.66%
Whiteboard	78	23.08%
Video-conferencing	114	33.73%
Audio-conferencing	61	18.05%
Lecture-capture	149	44.08%
Other	11	3.25%

Findings

6. Device Ownership & Use

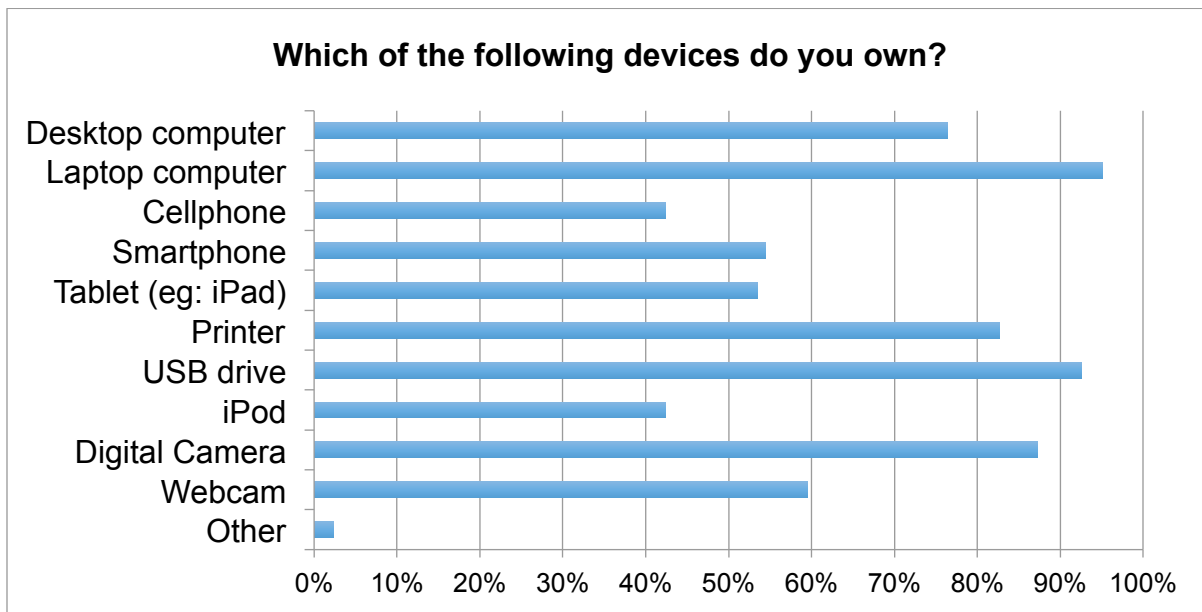
The majority of teachers owned laptop computers (95.14%), followed closely by USB drives (92.59%) and digital cameras (87.27%). Teachers reported that the laptop computer (89.44%), USB drive (57.98) and desktop computer (51.41%) were the most important devices for their teaching success.

Question 31, 32

Question 31

Which of the following devices do you own? Check all that apply. (top three below):

1. 411 95.14% laptop computer
2. 400 92.59% USB drive
3. 377 87.27% digital camera

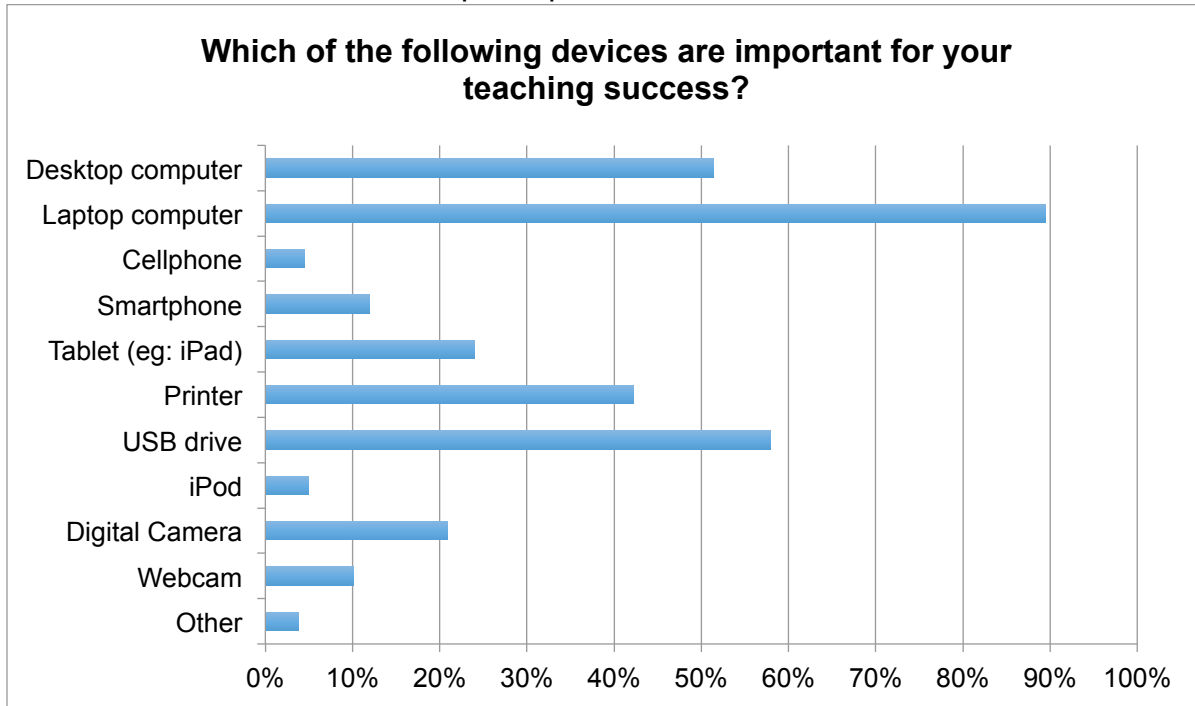


Choices	Total Response	Response Rate
Desktop computer	330	76.39%
Laptop computer	411	95.14%
Cellphone	183	42.36%
Smartphone	235	54.40%
Tablet (eg: iPad)	231	53.47%
Printer	357	82.64%
USB drive	400	92.59%
iPod	183	42.36%
Digital Camera	377	87.27%
Webcam	257	59.49%
Other	10	2.31%

Question 32

Which of the following devices are important for your teaching success? Check all that apply. (top three below):

1. 381 89.44% laptop computer
2. 247 57.98% USB drive
3. 219 51.41% desktop computer



Choices	Total Response	Response Rate
Desktop computer	219	51.41%
Laptop computer	381	89.44%
Cellphone	19	4.46%
Smartphone	51	11.97%
Tablet (eg: iPad)	102	23.94%
Printer	180	42.25%
USB drive	247	57.98%
iPod	21	4.93%
Digital Camera	89	20.89%
Webcam	43	10.09%
Other	16	3.76%

Findings

7. Teacher Training & Support

Teachers agree (50.00%) that they receive sufficient support for online initiatives. However, they reported that they would welcome more workshops on online learning topics (61.11%). Topics of interest included: hands-on training with the LMS (74.87%); online tutorials and videos (74.12%); strategies for online course design (74.87%); strategies for engaging students online (74.87%); and, strategies for managing discussions online (67.43%). Teachers also reported that a better LMS was important to support their use of the technology.

We need more IT 'coaches' to help faculty deal with real teaching-learning issues and to help faculty to feel part of the online learning community. It is discouraging when faculty end-up just fitting our needs around the platform selected by Dalhousie. (Teacher comment)

Some courses can be taught quite well completely online, however we still need support to do the best job possible for our students. The staff at Dal that helps us teach online is excellent. However, they are not given enough resources to provide the level of support needed by faculty and students. In order for us to teach effectively online we need more than technology, we need support to do it well. (Teacher comment)

Teachers reported that they receive sufficient support (59.76%) in their use of audio and video technologies in the classroom. However, 56.48% of teachers said they would find more workshops useful. Improvements would include better equipment in the classroom, workshops on use and how to incorporate, and better-maintained equipment.

We also need better, easy to access instruction in the classroom to use the technologies that are available there E.g. I had never before used a document reader and a colleague giving a guest lecture wanted to use overheads--no overhead projector, so I looked around for info on how to use the document reader--figured it out but no instructions anywhere. Most of us are more technophobic than I am--we are subject matter experts in our disciplines and keeping up with that is hard enough. (Teacher comment)

That really depends on what system the university decides to adopt, and how well the environment is supported in the classrooms. For example, there are numerous classrooms that still require I bring a computer and other equipment to class if I want to use them. As well, especially in the afternoon, the wireless connection is either very slow or non-functional. As well, the best use of technology from my perspective is to free up class time that we might otherwise use to "lecture". We need classrooms that support other kinds of teaching, if we are to maximize this aspect. All of these inhibit the adoption of technologies in

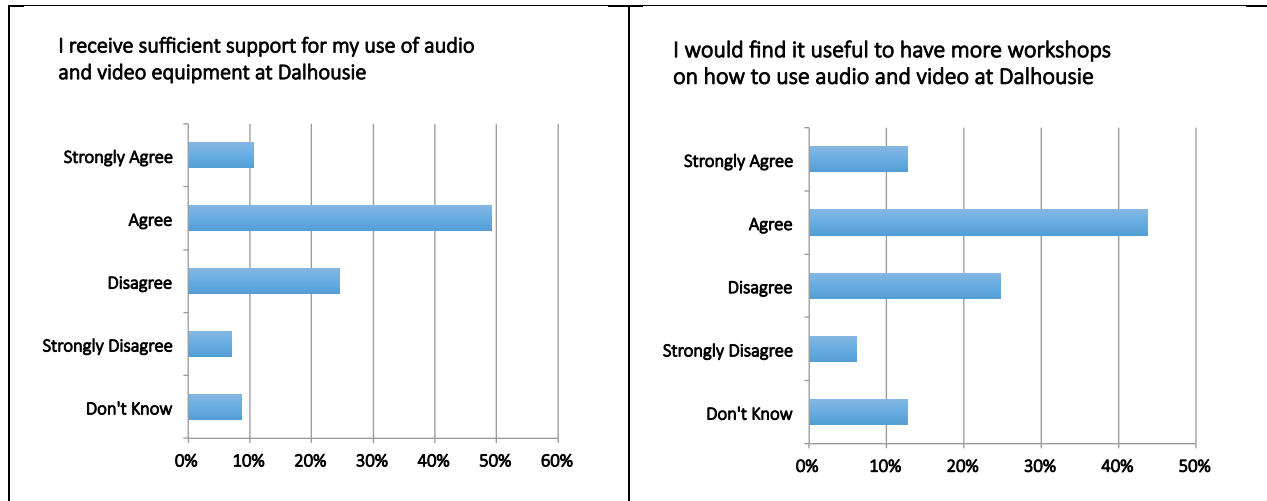
and outside the classroom. The message is mixed, but there is much potential, IF it is done right. (Teacher comment)

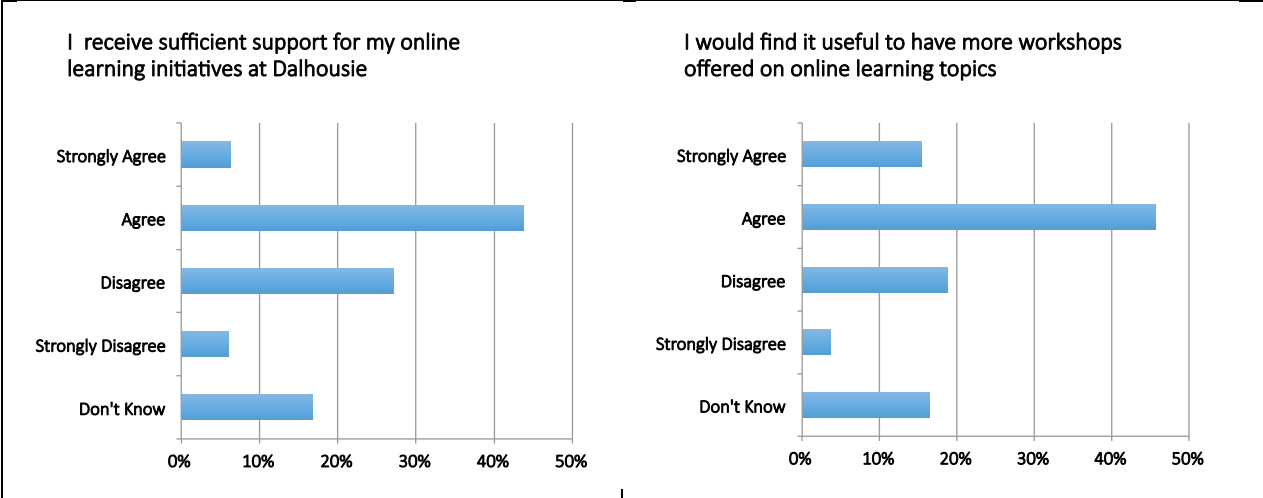
Questions 36-39

Question 36

Indicate your level of agreement with the following statements below.

- 248 59.76% I receive sufficient support for my use of audio and video equipment at Dalhousie (agree/strongly agree).
- 231 56.48% I would find it useful to have more workshops on how to use audio and video at Dalhousie.(agree/strongly agree)
- 206 50.00% I receive sufficient support for my online learning initiatives at Dalhousie (agree/strongly agree).
- 253 61.11% I would find it useful to have more workshops offered on online learning topics (agree/strongly agree)





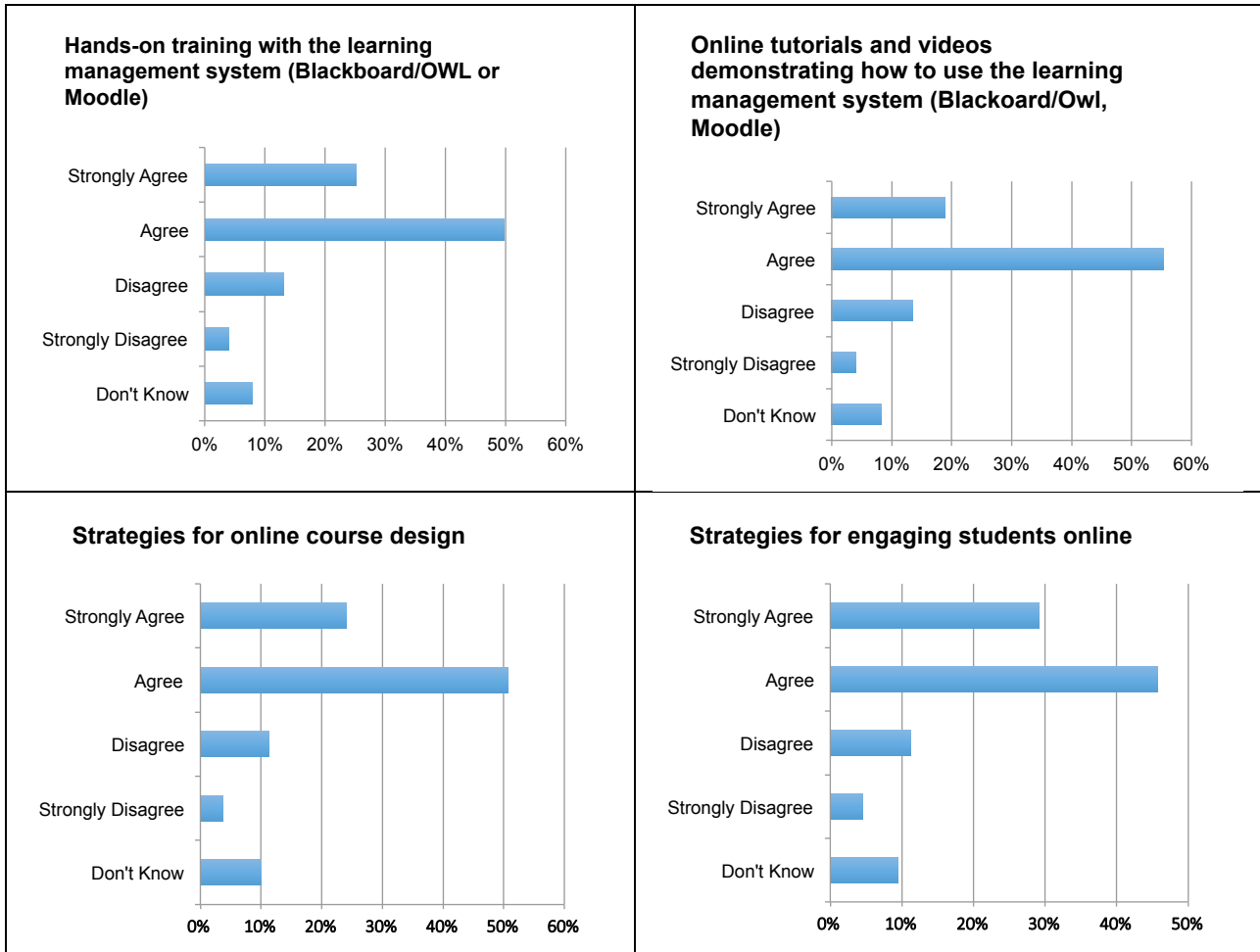
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't know	Sum
I receive sufficient support for my use of audio and video equipment at Dalhousie	44 10.6%	204 48.16%	29 6.99%	102 24.58%	36 8.67%	415 100%
I would find it useful to have more workshops on how to use audio and video at Dalhousie	52 12.71%	179 43.77%	25 6.11%	101 24.69%	52 12.71%	409 100%
I receive sufficient support for my online learning initiatives at Dalhousie	26 6.31%	18 43.69%	25 6.07%	112 27.18%	69 16.75%	412 100%
I would find it useful to have more workshops offered on online learning topics	64 15.46%	189 45.65%	15 3.62%	78 18.84%	68 16.43%	414 100%

Question 37

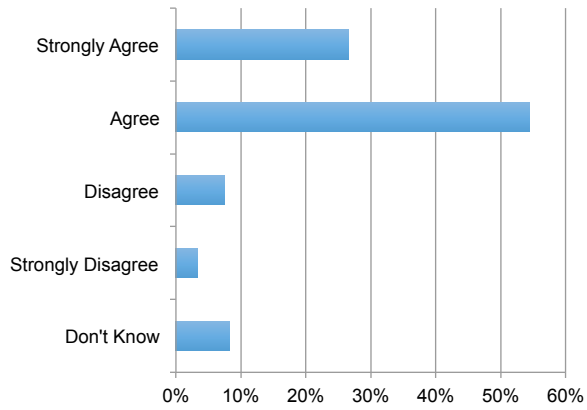
These training topics are important to support your use of online learning in your courses

- 301 74.87% agree/strongly agree
 - 295 74.12% agree/strongly agree
 - 298 74.87% agree/strongly agree
 - 301 74.87% agree/strongly agree
 - 265 76.43% agree/strongly agree
- 294 75.00% agree/strongly agree
 - 317 81.08% agree/strongly agree

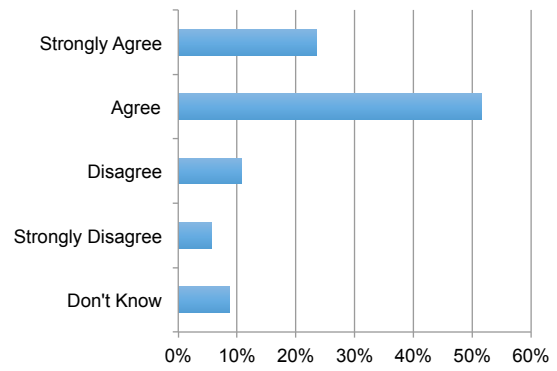
hands-on training with LMS
 online tutorials and videos for the LMS
 strategies for online course design
 strategies for engaging students online
 strategies for managing discussions online
 online assessment tools & techniques
 integrating library resources online



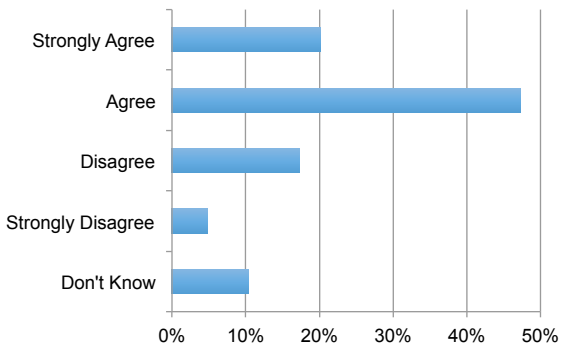
Integrating library resources online



Online assessment tools and techniques



Strategies for managing discussions online



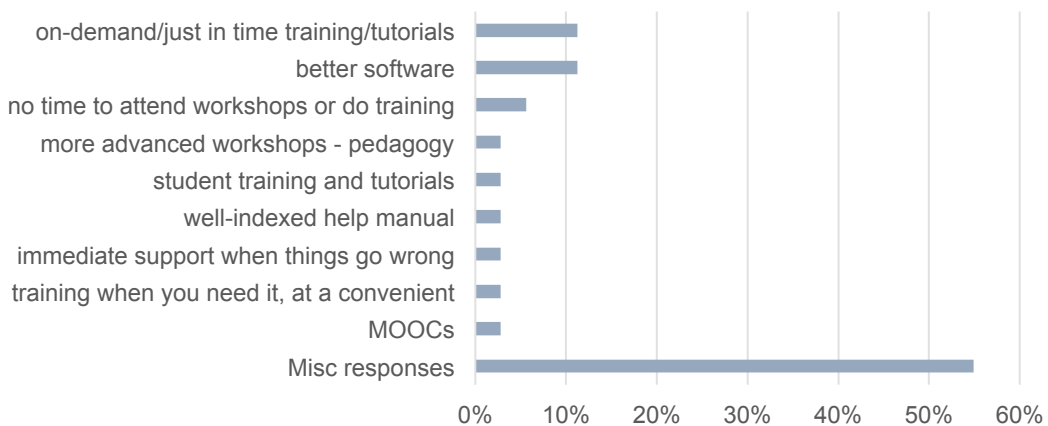
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't know	Sum
Hands-on training with the learning management system (Blackboard/OWL or Moodle)	101 25.12%	200 49.75%	53 13.18%	16 3.98%	32 7.96%	402 100%
Online tutorials and videos demonstrating how to use the learning management system (Blackboard/OWL, Moodle)	75 18.84%	220 55.28%	54 13.57%	16 4.02%	33 8.29%	398 100%
Strategies for online course design	96 24.12%	202 50.75%	45 11.31%	15 0.77%	40 10.05%	398 100%
Strategies for engaging students online	117 29.1%	184 45.77%	45 11.19%	18 4.48%	38 9.45%	402 100%
Strategies for managing discussions online	79 29.1%	186 47.33%	68 17.3%	19 4.83%	41 10.43%	393 100%
Online assessment tools and techniques	92 23.47%	202 51.53%	42 10.71%	22 5.61%	34 8.67%	392 100%
Integrating library resources online	104 26.6%	213 54.48%	29 7.42%	13 3.32%	32 8.18%	391 100%

Question 37 qualitative, open-ended responses

These training topics are important to support your use of online learning in your course:

- 8 11.27% on-demand/just-in-time training/tutorials
- 8 11.27% better software
- 4 5.63% no time to attend workshops or do training

These training topics are important to support your use of online learning in your course

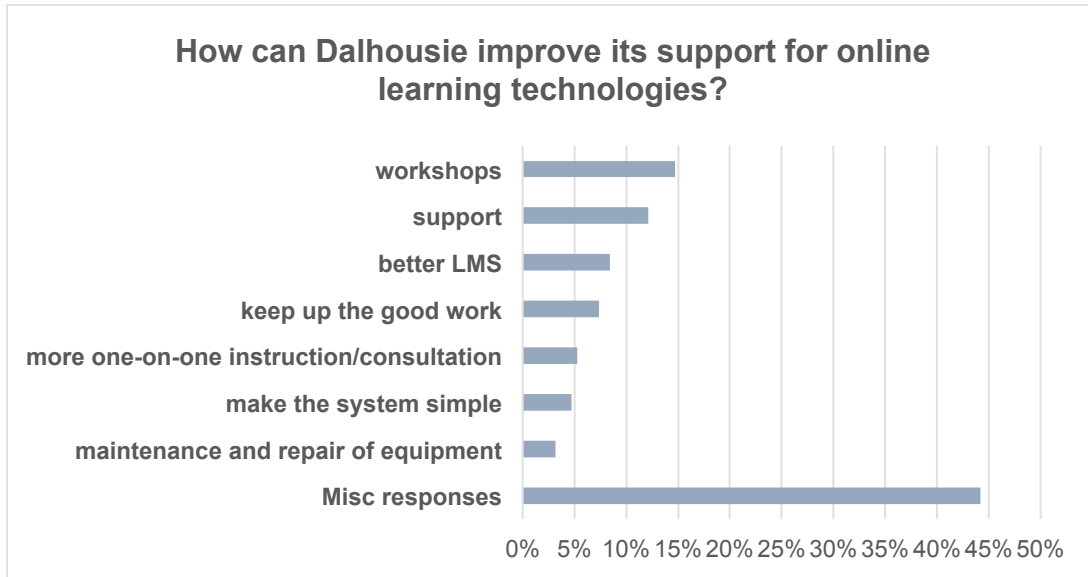


Choice	Total Response	Response Rate
On demand/just in time training/ tutorials	8	11.27%
Better software	8	11.27%
No time to attend workshops or do training	4	5.63%
More advance workshops - pedagogy	2	2.82%
Student training and tutorials	2	2.82%
Well-indexed help manual	2	2.82%
Immediate support when things go wrong	2	2.82%
Training when you need it, at a convenient time	2	2.82%
MOOCs	2	2.82%
Misc. responses	39	54.93%

Question 38 qualitative, open-ended responses

How can Dalhousie improve its support for online learning technologies?

- 1. 28 14.74% workshops
- 2. 23 12.11% support
- 3. 16 8.42% better LMS

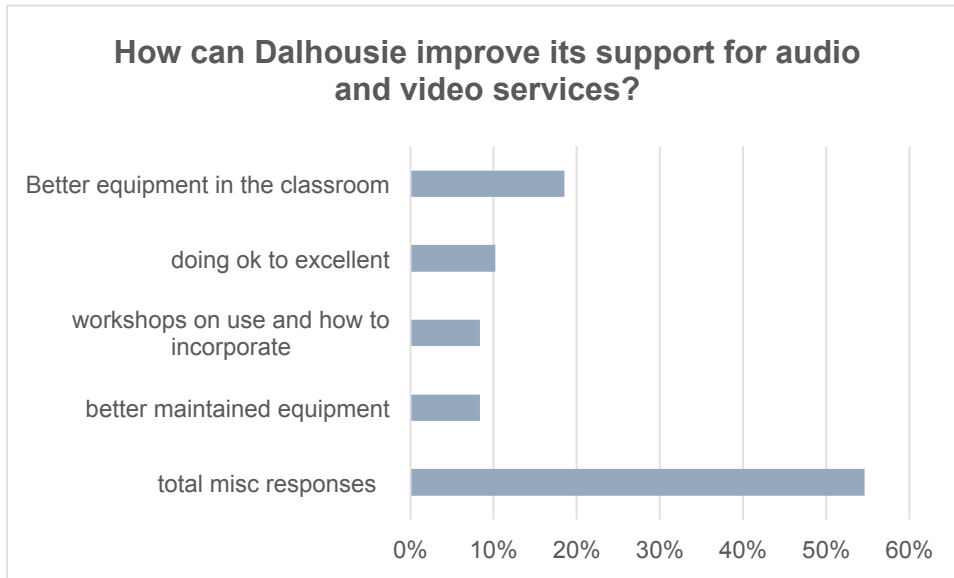


Choice	Total Response	Response Rate
Workshops	28	14.74%
Support	23	12.11%
Better LMS	16	8.42%
Keep up the good work	14	7.37%
More one-on-one instruction/consultation	10	5.26%
Make the system simple	9	4.74%
Maintenance and repair of equipment	6	3.16%
Misc. responses	84	44.21%

Question 39 qualitative, open-ended responses

How can Dalhousie improve its support for audio and video services?

- 1. 20 18.52% better equipment in the classroom
- 2. 11 10.19% doing ok to excellent
- 3. 9 8.33% workshops on use and how to incorporate
- 4. 9 8.33% better maintained equipment



Choice	Total Response	Response Rate
Better equipment in the classroom	20	18.52%
Doing ok to excellent	11	10.19%
Workshops on use and how to incorporate	9	8.33%
Better maintained equipment	9	8.33%
Total misc. responses	59	54.63%

Next Steps

In response to the feedback we received from the survey, CLT is undertaking a number of e-learning initiatives.

Pedagogical Support

1. **e-Learning Team:** The e-Learning Team will support faculty in their development of well-designed and pedagogically sound blended and online courses. Our consultation services can help you through the kind of challenge the teacher states below. The Team can provide comprehensive guidance as you develop and design your online course space.

I need someone to sit with me and work with my particular course content. I wish we could have someone work directly with us to design our courses and listen to our ideas of what we'd like to do in our courses and then they could suggest what might work best. (Teacher comment)

2. **Focus on Blended Learning:** CLT concluded its 2nd annual DalBlend workshop series for faculty to encourage best pedagogical approaches and guidelines for the development of integrated, blended courses. CLT has a website devoted to [Blended Learning](#) and the wealth of resources on this site can be used as a guide as you develop your online course.
3. **Professional Development Opportunities:**
 - a) The 2014 Dalhousie Conference on University Teaching and Learning was focused on “Fostering Deep Learning with Technology” and provided faculty an opportunity to share their experiences using teaching technologies.
 - b) The DalBlend workshop series is followed up with a half-day instructional design workshop, offered three times per year. The workshop is designed to provide a hands-on opportunity for faculty and course builders to meet with the e-Learning Team and have on-the-spot support for blended/online course development and design.
 - c) CLT offers regular [‘Lunch and Learn’](#) discussions/presentations through the fall and winter terms as a venue for faculty to showcase their approaches to teaching online and to stimulate conversations about the role of technology in teaching.
4. **Classroom Planning:** Moving forward, CLT will have a more central role in Dalhousie’s classroom planning, including classroom technologies. With support from the Office of the VP Academic and Provost, CLT’s Manager for Classroom Planning and Videography will be increasingly involved in the classroom planning

and design process. A key role will be to consult with faculty on a regular basis to determine classroom technology and furniture needs in specific teaching and learning contexts.

- 5. Development of Online Courses:** The Centre for Learning and Teaching, the Faculty of Science, and the Faculty of Arts and Social Sciences, received funds to create online versions of three already-established face-to-face courses and one new, elective course. The aim of this project is to provide the flexibility for students to take key disciplinary foundational/core courses at Dalhousie, rather than on letters of permission elsewhere and to ensure high academic standards for student completion of introductory and mandatory courses. Faculty involved in the creation of these online courses, have the on-going support of CLT's e-Learning Team, providing them with the opportunity to investigate the potential of online teaching and learning in their discipline with the necessary pedagogical and technological supports in place. These courses were initially offered in the summer and fall of 2014.
- 6. Graduate Student Online Teaching Development:** Future faculty will likely be called upon to teach blended or online courses during their academic career. Graduate students who are registered in the CLT's Certificate in University Teaching and Learning and take the course, CNLT5000 – Teaching and Learning in Higher Education, have the opportunity to experience a blended course and to design an online activity in Blackboard with instructional designer support.

Technology Support

1. Nova Scotia Universities LMS Review: CLT, along with Dalhousie Libraries and Information Technology Services, is working with other Nova Scotia universities to take part in a multi-institutional review of LMS systems with a view to a possible licensing partnership. This review will include a substantive consultation process with the Dalhousie community about the best LMS choice for faculty and students' future use.

“The programs that Dalhousie purchases should be tested rigorously before being used. There should be recognition by the university administration... that they should engage faculty in a consultation process when purchasing new “upgrades.” (Teacher comment)

In addition, licensing reviews for other technologies including classroom response systems, curriculum mapping, video streaming, and lecture capture will be conducted over the next year and will also seek community input.

2. **Technology Support for Classrooms:** A Room View Server will be installed in rooms that currently have Crestron systems, allowing CLT's technical team to monitor classroom technology usage and troubleshoot in advance possible equipment failures. Over the next two years, Dalhousie will make the transition to HDMI enabled projectors.
3. **Help-Desk LMS Support for Students:** Help desk staff are being trained to provide assistance to students throughout libraries across campus. Faculty support continues to be provided by the Libraries IT support – Instructional Technologies Team (previously ILO) - for BbLearn.
4. **e-Learning Portal:** In partnership with the Dalhousie Libraries IT Instructional Technologies Team, CLT will develop an e-Learning website portal to direct faculty and students to LMS and other educational technology support resources through CLT and the Libraries. From a student perspective

Make sure that several online services are accessible in one place – help for OWL, help with plagiarism and RefWorks, computer software help including help about which software might be best for which purpose, information about AV services, self-help tutorials dealing with “how to” and pitfalls of many online technologies. (Student comment)

Conclusion

Teachers see the future of e-learning at Dalhousie as one in which students have greater access to courses without the restrictions of time and place, emphasizing blended learning. While Dalhousie teachers are not interested in significantly increasing fully online courses and programs, in some Faculties, such as Health Professions and Management, teachers are particularly aware of the value of such resources to those who are working or who have families and need more flexible options for continuing their education.

Teachers commented that they see the use of technologies as a way to enhance the learning experience and recognize that training to use the technologies more effectively and more efficiently is an important aspect of this process.

But throughout the qualitative data there was the oft-voiced caution about maintaining a strong face-to-face learning environment. Dalhousie is a 'traditional' campus-based university where teachers are used to providing high-quality educational opportunities to students in the face-to-face classroom. There is no indication from these survey results that the preference for face-to-face learning should change any time soon, although teachers do express a keen interest in using the technologies to enhance the face-to-face learning experience for students.

The President's *100 Days of Listening Report* featured e-learning (blended and online course delivery) prominently. The results of the CLT online survey and CLTs ongoing support of e-learning are providing a foundation on which Dalhousie can begin to build strength in this area, while continuing to also support the development of face-to-face teaching. COHERE member universities do suggest, though, that if blended learning is to have a transformational impact on higher education, that it must be "integral to broad institutional goals" (p16). More specifically, the *COHERE Report on Blended Learning* (2011) cautions that to move blended learning from a grassroots approach, there needs to be an institutional strategy with "clear definitions, pedagogical and technological support and dedication of resources" (pii). In addition, Jones and Slate (2012) remind us of the significant cost of developing online courses under the current educational and funding models, demonstrating the need for adequate resources. Thus, the grassroots approach to e-Learning at Dalhousie will move forward more effectively in the long-term if the university has a strategic direction for it. CLT will be working in partnership with the VP Academic and Provost's Office to develop an e-learning plan for Dalhousie in line with the strategic vision and direction of the university.

Appendix

Faculty Survey – Questions

Question 1: Online technologies are important for my teaching today.

Question 2: Online technologies will be more important for my teaching in the future.

Question 3: Online technologies help me become more efficient with my time when I teach courses.

Question 4: Online technologies help me become more effective with my teaching.

Question 5: Online technologies help me enhance my students' learning

Question 6: I am interested in using more online technologies to teach in my courses.

Question 7: I would like to make more lectures available digitally for students to access online (e.g. video screen capture or audio recordings).

Question 8: I would like to be able to use more digital media such as videos and photos in my teaching.

Question 9: I would like to learn more about the proper use of copyright with digital media in my courses.

Question 10: I am using an online plagiarism detection service such as SafeAssign.

Question 11: I think that an online plagiarism detection service such as SafeAssign is a useful tool.

Question 12: I am interested in using more e-textbooks to teach students in my courses

Question 13: I am interested in using social media tools such as Facebook and Twitter for learning and teaching in my courses.

Question 14: I think that my department/faculty should offer more courses that can be taken completely online.

Question 15: I think my department/faculty should offer more programs that can be taken completely online.

Question 16: I am interested in teaching massive open online courses (MOOC's).

Question 17: In what type of environment have you mostly taught in the last five years?

Question 18: In what type of environment do you prefer to teach?

Question 19: What technologies are you using to teach online? Please check all that apply:

Question 20: What online technologies would you like to be more familiar with? Please check all that apply.

Question 21: Do you use the Blackboard/OWL learning management system?

Question 22: For what purpose(s) do you use the Blackboard/OWL learning management system? Please check all that apply.

Question 23: Which area(s) of the Blackboard/OWL learning management system would you like to know more about? Please check all that apply.

Question 24: From your experience using the Blackboard/OWL learning management system, please respond to the sentences below.

Question 25: Do you use the Moodle learning management system?

Question 26: For what purpose(s) do you use the Moodle learning management system? Please check all that apply.

Question 27: Which area(s) of the Moodle learning management system would you like to know more about? Please check all that apply.

Question 28: From your experience using the Moodle learning management system, please respond to the sentences below.

Question 29: What classroom technologies are you using for your teaching? Check all that apply.

Question 30: What classroom technologies would you like to be more familiar with? Check all that apply.

Question 31: Which of the following devices do you own? Check all that apply.

Question 32: Which of the following devices are important for your teaching success? Check all that apply.

Question 33: What would you like to be able to do with online technologies in your courses?

Question 34: What are your top three concerns about using online technologies in your courses?

Question 35: What do you believe can be the future role for online technologies with teaching and learning at Dalhousie?

Question 36: Indicate your level of agreement with the following statements below.

Question 37: These training topics are important to support your use of online learning in your courses.

Question 38: How can Dalhousie improve its support for online learning technologies?

Question 39: How can Dalhousie improve its support for audio and video services?

Question 40: What is your first language?

Question 41: Please provide your email address if you wish to enter a draw to win a restaurant gift certificate (winner will be drawn by Institutional Research and email will be provided to CLT).

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