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# Distance Education and e-Learning Metrics Survey 2010 June 23, 2010

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Executive Summary

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## About Wainhouse Research

Wainhouse Research, [www.wainhouse.com](http://www.wainhouse.com), is an independent market research firm that focuses on critical issues in the Unified Communications and rich media conferencing fields, including applications like distance education and e-Learning technologies. The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings. Wainhouse Research publishes a variety of reports that cover all aspects of rich media conferencing, and the free newsletter, The Wainhouse Research Bulletin.

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*This document is a special summary of a larger report, for the purposes of sharing survey results with respondents of a May 2010 survey.*

Executive Summary

# Executive Summary

## Methodology

Wainhouse Research fielded a survey from April 26 through May 27, 2010 to an audience consisting primarily of higher education and primary / secondary educators, as well as some educational service providers and content providers. Invitations were sent to a combination of Wainhouse Research databases and through informal networks of partner organizations, such as U.S. Distance Learning Association, Internet2 MegaConference and Center for Interactive Learning and Collaboration lists and newsletters. Because of this, the data contained herein can be considered a strong snapshot of a subset of the overall educational universe, one whose members use at least one or more of these examined technologies either “somewhat” or as a mainstreamed distance learning technology. The respondent base includes administrators, policymakers, educators, curriculum designers, and IT professionals.

A total of 315 validated responses were received. Except in a few cases, survey results are presented grouping the respondents in three major groups: higher education, primary / secondary, and service / content providers (SCP’s). Charts are sorted based on averages of Higher Education (HE) and Primary / Secondary (PS) responses. Because not all respondents utilize all technologies, they were branched through the survey based on their responses to question 3 and whether they are using particular technologies in “mainstreamed” fashion or through “some, informal use.”

***This executive summary comprises a subset of the full survey report and is designed to be shared with survey respondents as a means of thanking them for completing the survey. Additionally, five respondents won \$50 Amazon gift certificates as part of a random drawing.***

For a copy of the complete report and to learn about the Wainhouse Research Distance Education and e-Learning subscription service, please contact [sales@wainhouse.com](mailto:sales@wainhouse.com).

## Key Takeaways

This list consists of those items included in this executive summary, and is a subset of the full report key takeaways.

### General

- Ease of use is the number one factor cited by respondents across all distance learning technologies when selecting products and services.
- Of this respondent group, counting the higher education respondents only, LMS / CMS platforms are the most commonly used technologies (96% HE), followed by educational social networking (85% HE), web conferencing (84% HE), and group videoconferencing (82% HE). **Question 3**
- Budgets / funding and faculty resistance are the top two obstacles to growing distance education and e-Learning programs. Wainhouse Research believes that faculty resistance is a greater problem than is generally understood and will be publishing additional subscription analysis on this topic later in 2010.

### Group videoconferencing

- Accessing content from mobile devices is important across technologies, with half or more of all respondents citing the importance of mobile access. For group videoconferencing, responses to

this question are consistent across all 3 response groups: HE (55%), PS (52%), and SCP's (47%). **Question 9**

- High definition video appears to be making its way into the classrooms of a majority of this survey's respondents, if we combine the respondents using it today with those who plan to use it within the next 12 months: PS ( 45%), HE (71%) and SCP's (83%). **Question 10**

#### **Desktop videoconferencing**

- Audio / video quality is the main criterion used to select desktop video among all three response groups: SCP's (76%), HE (66%), and PS (50%). Because the most popular application selected by these groups is Skype, it is understandable that audio / video quality would be of major concern, given the audio and certainly the video on Skype is at the mercy of the public network. Of note, only 50% of PS respondents have strong opinions concerning audio / video quality. Less than 1/3 are concerned about interoperability with classroom systems (29%), Apple Mac compatibility (31%), or even matching their systems with vendor classroom systems (19%). Interoperability with classroom systems is important to two out of five (43% SCP's, 45% HE). These segments care about interoperability far more than PS because of a greater need to go outside of their networks. Similarly, H.239 content sharing, like interoperability, is more important to SCP's (41%) and HE (35%) than to PS (10%), just as management and reporting software is more important to SCP's (24%) and HE (16%) than to PS (2%). **Question 14**

#### **Lecture capture / recording / archiving / streaming**

- The particular pricing / licensing models are of utmost concern to buyers of all stripes (SCP's 47%, HE 45%, PS 39%), far exceeding any other criterion. **Question 25**

#### **Interactive whiteboards**

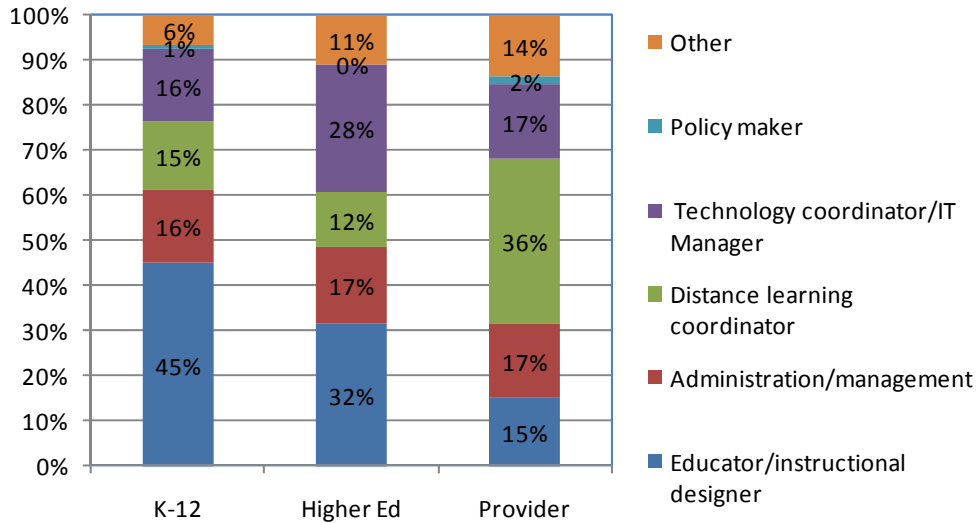
- Interactive whiteboards and student response systems (SRS's) are the "hot" technology in the primary / secondary group, and group / classroom videoconferencing is a close second. Only 8% of HE respondents do not use any type of interactive whiteboard.
- A whopping 92% of PS respondents cite that learners like or are more engaged by interactive whiteboards, in contrast to the 59% of SCP and 45% of HE respondents who cite this as a benefit. PS respondents also believe that their whiteboards help support their local learners (59%) and provide the best collaborative environment for teaching and learning (59%), far more than do the SCP's and HE respondents. **Question 34**

# Survey Results

## 1) Which best matches your job title or description?

- Educator/instructional designer
- Administration/management
- Distance learning coordinator
- Technology coordinator/IT Manager
- Policy maker
- Other (please specify)

N = 315. Of those 315, HE = 48%, PS = 30%, SCP = 22%.



Respondents vary based on market segments. In primary/secondary the bulk are educators and instructional designers (45%), whereas higher education includes a greater mix of technology coordinators and IT staff. About the same number of administrators (16% or 17%) is represented in each segment. IT and technology coordinators are represented about the same among primary / secondary (16%) and service providers (17%), but find higher representation in higher ed (28%). Service providers have the greatest number of distance learning coordinators (36%), followed by K-12 (15%) and higher ed (12%).

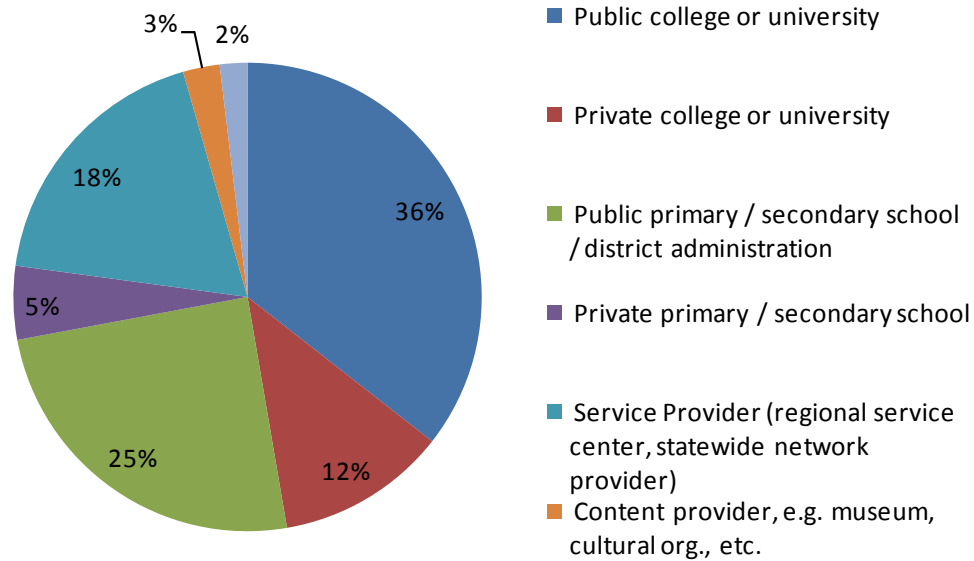
Some of the *other* titles offered include:

Administrative Assistant	Teacher-IT Dept.- Dist. Learning Bldg
Audio Visual Services Technician	Tech coordinator, Manager & researcher
Combination Methodology & Technology mgr	Technology Accessibility
Combination of first 3 above	Educator/instructional designer/Administration
consultant	Educator/Technology Coordinator

Data Collection & Program Mgmt	eHealth & eLearning lead
Director of Academic Technology	eLearning Technologies
Director of Communications	Engineer
Distance learning sub-coordinator	Instructional Consultant
Distance learning technician	Instructional technologist
District Supervisor of Tech support	IT senior engineer R&D
Education and Training Project Manager	IT Specialist
education consultant (2x)	Librarian (2x)
Education publisher of online content	marketing and communications
Educator, DL coord, & Tech integration	Media Support
Principal IVC coordinator & support engr	multi-campus technology coordinator
Professional Development Provider	Policy/Process/Procedure Trainer
Special Ed Teacher	program consultant

**2) Which category BEST describes your organization?**

- Post secondary college or university
- Primary/secondary school (K-12)
- District administration
- Service Provider (regional service center, statewide network provider)
- Content provider, e.g. museum, cultural org., etc.
- Vendor
- Other (please specify)



More than 1/3 of respondents (36%) represent public colleges or universities, while another 12% represent private colleges or universities, for a total of 48% representing higher education. One in four (25%) represent public primary / secondary education, and 5% represent private primary / secondary education, for a total of 30%. A total of 18% represent service providers, and 3% represent content providers. The remaining 2% indicate they are with organizations like state agencies, a senior living campus, consulting firms, educational films, or military / government.

**3) To what extent are the following distance education and on demand technologies in use at your institution for educational purposes?**

	Main-stream use	Some or informal use	Do not use, but may soon	Do not and will not use soon
Audio teleconferencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group / classroom videoconferencing e.g. Polycom, TANDBERG, LifeSize, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PC-based, video-centric collaboration e.g. Polycom CMA, TANDBERG Movi, Click2Meet, iChat AV, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PC-based, content-centric web conferencing e.g. WebEx, Adobe Connect, Wimba, Elluminate Live!	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lecture capture / recording / archiving / streaming e.g. Tegrity, Sonic Foundry, Echo360, TechSmith, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive whiteboard and student response	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

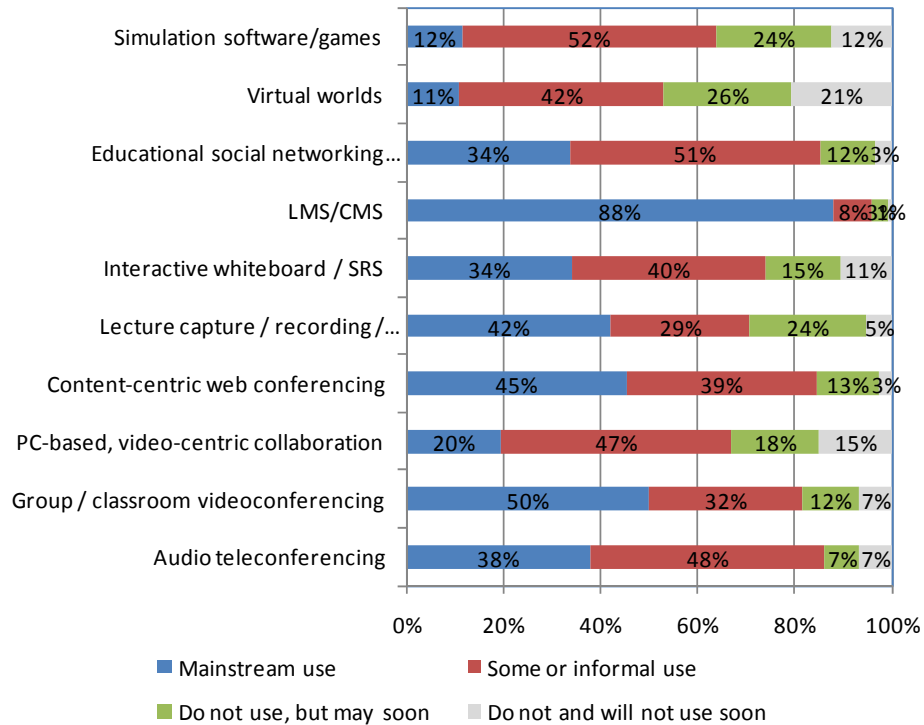
systems, e.g. SMART, Promethean, Polyvision, mimio whiteboards				
Content Management System (CMS) / Learning Management System (LMS) e.g. Blackboard, Moodle, etc.	○	○	○	○
Educational social networking tools/personal learning communities, e.g., Ning, Twitter, Facebook, Blogspot, etc.	○	○	○	○
Virtual worlds, e.g., Second Life, There, etc.	○	○	○	○
Simulation software/games	○	○	○	○

Because of the number of technologies we explore in this survey, we provide here a breakdown of these technologies by major market segment: higher education (HE), Primary / Secondary (PS), and service providers / content providers (SCP's). This is the easiest way to enable readers to view each set of technologies within a particular market segment. We then branch the survey based on the total number of respondents who indicate their organizations utilize a particular technology either mainstream or some/informally, providing the total number of respondents in that particular branch.

**For survey respondents we share the higher education depth of deployment chart. The full report contains separate charts for PS and SCP respondents.**

For HE, N=149.

### Higher Ed



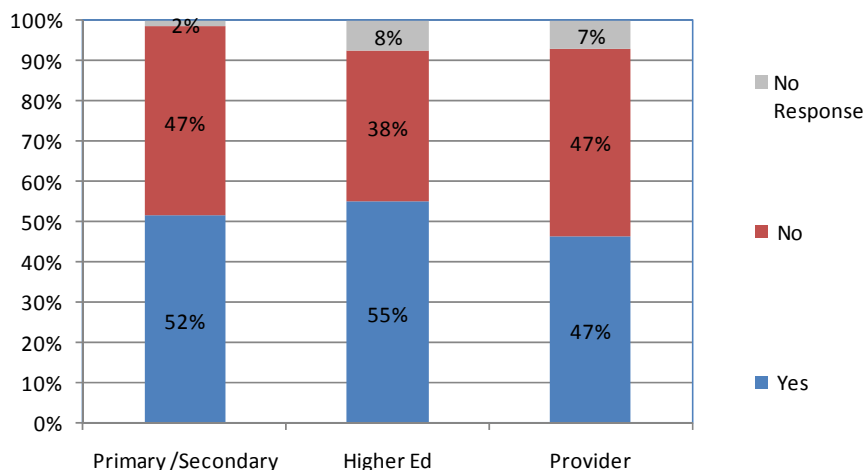
Not surprisingly, LMS/CMS platforms are used the most, by 96% of respondents in HE. Group / classroom videoconferencing is used by 50% “mainstream” and 32% “some,” (82% total). Web conferencing is also used by 84%, and educational social networking by 85%. Lecture capture, currently the hottest new technology in HE, is used some or mainstream by 71% of respondent organizations. Note the amount of informal use of a number of these technologies, from simulation software and social networking, as well as PC-based video-centric collaboration (desktop video) and interactive whiteboards. The amount of mainstream use of interactive whiteboards (34%) shows that the market for these devices may be larger than what has become a general “assumption” that higher education is not interested in interactive whiteboards.

BRANCH: IF THEY USE GROUP VC IN Q 3

N =242 77% of Total Survey Group. Of this 242, 50% HE, 26% PS, 24% SCP.

**9) Do your learners wish to access classroom-based video content from their mobile devices?**

- Yes
- No



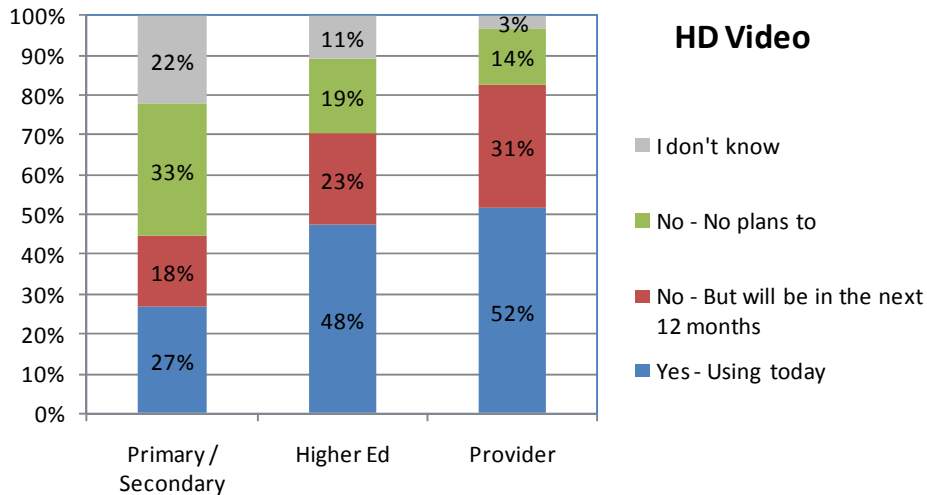
Responses to this question are consistent across all 3 response groups: HE (55%), PS (52%), and SCP's (47%). Roughly half of all respondents indicate that learners wish to access classroom-based video content from their mobile devices. The number of PS respondents indicating their learners wish to access content via mobile devices is somewhat surprising since in most primary / secondary schools mobile devices are considered “off-limits” during school hours.

**10) Are you using High Definition video or Telepresence in your organization?**

**High Definition video** refers to any video system of higher resolution than standard-definition (SD) video, and most commonly involves display resolutions of 1280x720 pixels (720p) or 1920x1080 pixels (1080i/1080p). **Telepresence** refers to a set of technologies, using HD video, large amounts of bandwidth, large screens, and other capabilities that together allow those within a telepresence session to

feel as if they were present, to give the appearance that they were present at a location other than their true location.

	Yes- Using today	No – But will in next 12 months	No – No plans	I don't know
HD Video				
Telepresence				



High definition video appears to be making its way into the classrooms of a majority of this survey's respondents, if we combine the respondents using it today with those who plan to use it within the next 12 months: PS ( 45%), HE (71%) and SCP's (83%). Higher penetration in the HE and SCP respondent groups is likely due to their access to higher bandwidth compared to many of the primary / secondary schools. Bandwidth is a very low ranking challenge for the HE group (see [question 51](#)). The PS group is less likely to know if they have high definition video capabilities. The fact that 55% of the PS group does not know or has no plans to move to HD video is consistent with the earlier response ([Question 7](#)) in which the PS group ranks audio and video quality lower than do HE and SCP's. We predict that the PS group will soon show more rapid adoption of HD video based on the implementation of the present U.S. administration's Broadband Technology Opportunities Program (BTOP) funding, which is intended to bring equitable bandwidth to under-served rural schools.

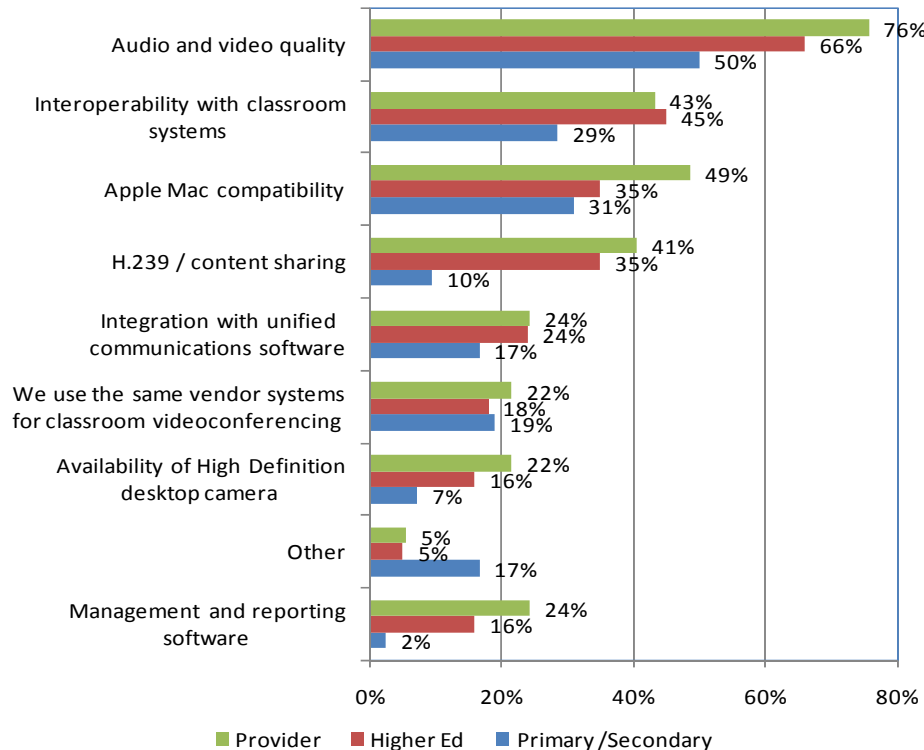
BRANCH: IF THEY USE VIDEO-CENTRIC PC / WEB-BASED PLATFORMS IN Q 3

N=179 57% of Total Survey Group. Of this 179, 56% HE, 23% PS, 21% SCP.

**14) What factors unique to video-centric PC / web-based videoconferencing were important in choosing the primary desktop videoconferencing vendor you use? (Select all that apply)**

- Apple Mac compatibility

- Audio and video quality
- Availability of High Definition desktop camera
- Web 2.0 social networking features
- Interoperability with classroom systems
- H.239 / content sharing
- Integration with unified communications software
- Management and reporting software
- We use the same vendor systems for classroom videoconferencing
- Other, please specify: \_\_\_\_\_



Audio / video quality is the main factor selected by all three response groups: SCP's (76%), HE (66%), and PS (50%). Because the most popular application selected by these groups is Skype, it is understandable that audio / video quality would be of major concern, given the audio and certainly the video on Skype is at the mercy of the public network. Of note, only 50% of PS respondents have strong opinions concerning audio / video quality. Less than 1/3 are concerned about interoperability with classroom systems (29%), Apple Mac compatibility (31%), or even matching their systems with vendor classroom systems (19%). Interoperability with classroom systems is important to two out of five (43% SCP's, 45% HE). These segments care about interoperability far more than PS because of a greater need to go outside of their networks. Similarly, H.239 content sharing, like interoperability, is more important to SCP's (41%) and HE (35%) than to PS (10%), just as management and reporting software is more important to SCP's (24%) and HE (16%) than to PS (2%).

Some of the other criteria include:

- Price
- PC Mac cross platform requirement

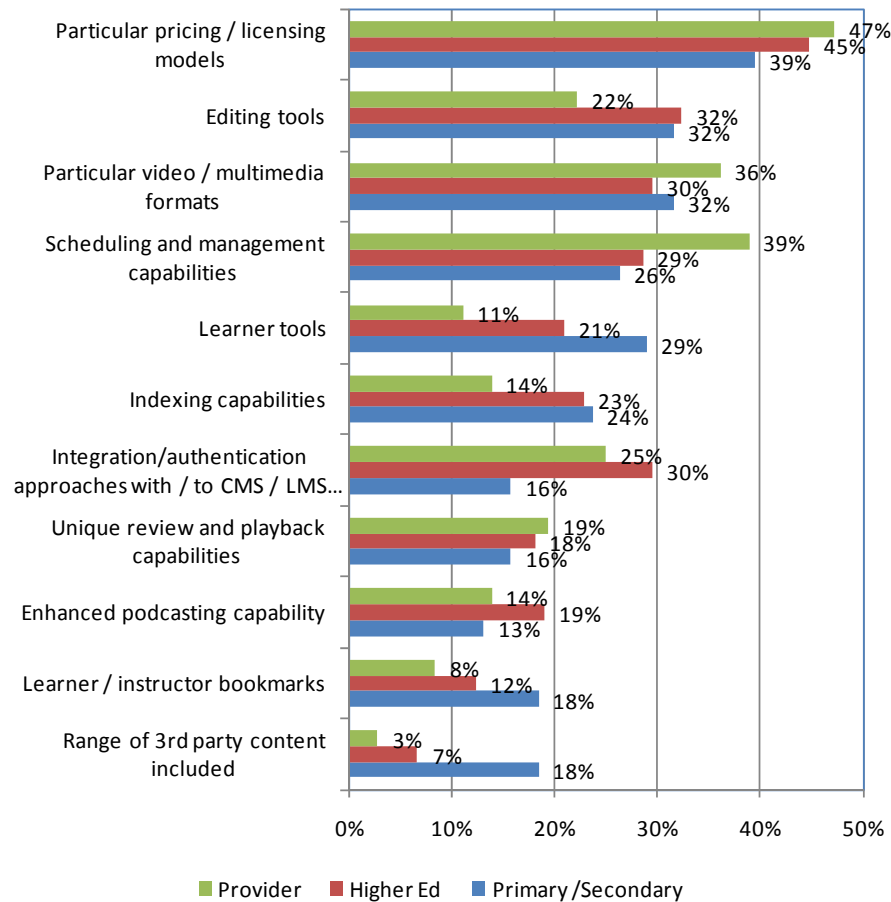
- Free
- Availability throughout (rest of our) university system
- Security and bandwidth alteration capable
- Need to integrate with My eCoach

BRANCH: IF THEY USE CONTENT / LECTURE CAPTURE / RECORDING / ARCHIVING PLATFORMS  
IN Q 3

N=179 57% of total survey group. Of this 179, 59% HE, 21% PS, 20% SCP.

**25) What unique factors were important in choosing the primary vendor you use for recording, archiving, and streaming? (Select all that apply)**

- Editing tools
- Indexing capabilities
- Integration/authentication approaches with / to CMS / LMS platforms
- Learner / instructor bookmarks
- Unique review and playback capabilities
- Range of 3<sup>rd</sup> party content included
- Scheduling and management capabilities
- Learner tools
- Particular pricing / licensing models
- Particular video / multimedia formats
- Enhanced podcasting capability



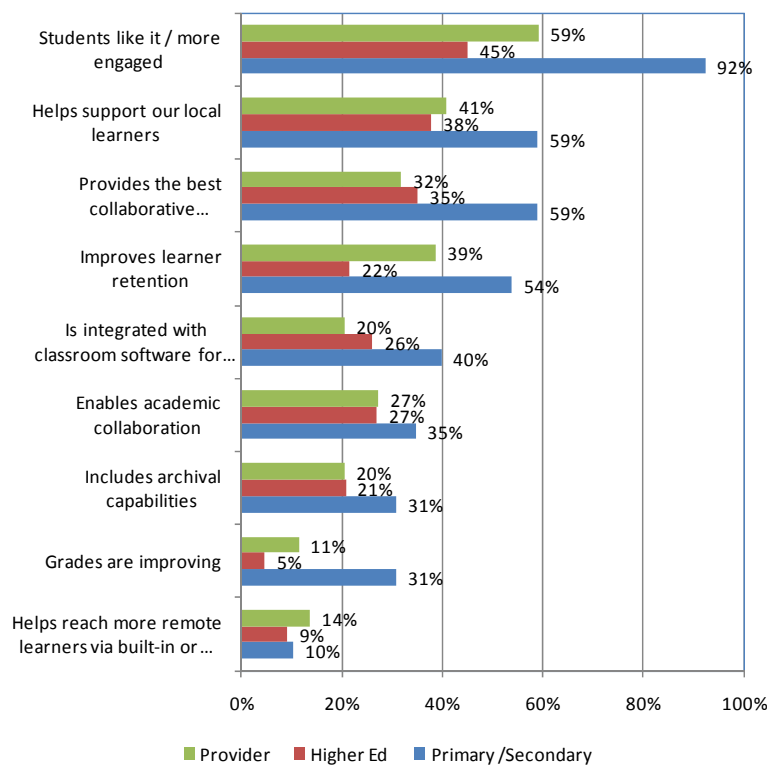
This question drills down into specific selection criteria for lecture capture. The particular pricing / licensing models are of utmost concern to buyers of all stripes (SCP's 47%, HE 45%, PS 39%), exceeding any other criterion. This is not surprising, as the vendor approaches to the market have ranged from campus-wide licensing to a wide range of other approaches. Editing tools are important to about 1/3 (32%) of the population of HE and PS respondents, respectively. Scheduling and management (39%) and particular video / multimedia formats (36%) are important to SCP's. Note the importance of learner tools to PS (29%), exceeding its importance to HE (21%). HE and PS feel similarly about indexing capabilities, with one out of four (23% / 24%) citing the importance of indexing. Integration / authentication approaches with / to LMS platforms – a subject of significant confusion among some end user organizations – is important to HE (30%) and SCP's (25%).

BRANCH: IF THEY USE INTERACTIVE WHITEBOARD/STUDENT RESPONSE SYSTEM PLATFORMS IN Q 3

N=233 74% of total survey group. Of this 233, 47% HE, 34% PS, 19% SCP.

**34) What are the unique benefits your organization is experiencing from deploying interactive whiteboards and / or student response systems? (Please select all that apply)**

- Students like it / more engaged
- Grades are improving
- Improves learner retention
- Provides the best collaborative environment for teaching and learning
- Enables academic collaboration
- Is integrated with classroom software for improved post-class work processes
- Includes archival capabilities
- Helps reach more remote learners via built-in or added web conferencing / virtual classroom technology
- Helps support our local learners



A whopping 92% of PS respondents cite that learners like or are more engaged by interactive whiteboards, in contrast to the 59% of SCP and 45% of HE respondents who cite this as a benefit. PS respondents also believe that their whiteboards help support their local learners (59%) and provide the best collaborative environment for teaching and learning (59%), far more than do the SCP's and HE respondents. More than half of all PS respondents with whiteboards (54%) also believe that they help improve learner retention. And one third (31%) believe that improving grades is a benefit.

**51) What has been your greatest challenge in growing your distance education and e-Learning programs and what steps have you taken to overcome this challenge?**

This verbatim question elicited a wide variety of responses, which we grouped together based on appropriate categories. The rankings below represent those challenges in rank order. When categories of responses are tied, we give them the same ranking and then jump the appropriate number(s) to the next category.

HE Ranking	PS Ranking	SCP Ranking
Budget / Funding - 1	Budget / Funding - 1	Budget / Funding - 1
Faculty Resistance - 1	Faculty Resistance - 2	Faculty Resistance - 2
Administrative Awareness / Support - 3	Time - 3	Administrative Awareness / Support - 3
Faculty / staff Training - 3	Administrative Awareness / Support - 4	Faculty / staff Training - 4
Time - 5	Faculty / staff Training - 5	Product integration / standards - 4
Product integration / standards - 6	Bandwidth- 6	Awareness - 6
Scale Issues - 6	IT Support - 7	Time - 7
Awareness - 8	Scale Issues - 8	Scale Issues - 8
Bandwidth - 9	Product integration / standards - 9	

If funding was not the greatest challenge for all education groups before the recession, it is now. Several participants remarked that they spend a lot of time seeking funding, primarily through grants. A typical SCP comment: "With budget cuts more districts are looking at distance learning as a way of staying open, but once again, need grant money to be able to afford the equipment." HE: "We have been looking into more Open Source and cost efficient means to provide students what they want." PS: "Reduced budgets because of the economy. We are looking for grants and will most likely change some of the vendors because of pricing."

The second most commonly-cited challenge is faculty resistance. Several noteworthy comments were offered about this concern. An SCP respondent summarizes this challenge: "After 16 years in this business the greatest challenges I've noted are related to changing the habits of users and resistance of anything new." And from a PS respondent: "My teachers are overwhelmed and surprisingly isolationist, resistant to change on the whole, and feel 'that's the way we've always done it' is a mantra." And a comment from HE: "Way too many tenured profs with no interest in change of any sort." For SCP and HE

respondents, administrative awareness is the third most cited challenge and for PS, it is the fourth top challenge, after time. One PS respondent states: “We need to overcome traditional ways of teaching, and getting administrators and faculty to embrace the benefits offered through the use of technology.”

There are a variety of ways that our respondents are overcoming the challenges they mention, including:

- Introduction of a mandatory policy
- Holding workshops and “lunch and learn” sessions
- Stipends
- Switching to Open Source technologies
- Making things as user friendly as possible
- Peer mentoring
- Online training, more campus visits, and planned video conferencing
- A blend of re-tasking people and redirecting funds
- Creating awareness of distance learning across the organization and community (x3)
- Leveraging grant opportunities to supplement funding for distance education improvements

<end of survey>

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