

INSIDE
HIGHER ED

2018 Survey of
**Faculty Attitudes
on Technology**

A STUDY BY INSIDE HIGHER ED AND GALLUP

SCOTT JASCHIK & DOUG LEDERMAN
EDITORS, INSIDE HIGHER ED

THE 2018 *INSIDE HIGHER ED* SURVEY OF FACULTY ATTITUDES ON TECHNOLOGY

A study by Gallup and *Inside Higher Ed*



Inside Higher Ed

1150 Connecticut Avenue NW,
Suite 400
Washington, DC 20036
t 202.659.9208

GALLUP®

Gallup

901 F Street, NW
Washington, DC 20004
t 202.715.3030

COPYRIGHT

This document contains proprietary research, copyrighted materials, and literary property of Gallup, Inc. No changes may be made to this document without the express written permission of Gallup, Inc. Gallup® and Gallup University® are trademarks of Gallup, Inc. All other trademarks are property of their respective owners.



Dare to learn. Dare to change.

Learning and change are inseparable. To truly experience either, we have to adjust our attitudes, reframe the way we think, and accept that we might not have all the answers.

Digital learning gives us the freedom to provide meaningful experiences anytime and anywhere, opening doors that were once available to just a few. Behind each, we find the knowledge to overcome our most difficult challenges.

Learn more at [pearson.com/faculty-edtech](https://www.pearson.com/faculty-edtech)

Copyright © 2018 Pearson Education, Inc. or its affiliate(s). All rights reserved. PSONA9292-13172 KT0918



TABLE OF CONTENTS

| | |
|--|----|
| Foreword..... | 5 |
| Snapshot of Findings..... | 6 |
| Methodology..... | 8 |
| Detailed Findings | 9 |
| Online Teaching Experience..... | 9 |
| Course Design and Use of Instructional Designers | 14 |
| Faculty Use of Technology..... | 19 |
| Attitudes About Online Education | 27 |
| Institutional Support for Online Learning | 38 |
| Online Program Management Companies | 45 |
| Textbooks and Inclusive Access..... | 47 |
| Assessment Efforts | 52 |
| Accessibility for Students With Disabilities..... | 56 |
| Institution and Personal Demographics | 57 |
| About <i>Inside Higher Ed</i> | 59 |
| About Gallup | 59 |

FOREWORD

Inside Higher Ed's seventh annual Survey of Faculty Attitudes on Technology aims to understand how professors and digital learning leaders view online learning and other aspects of academic technology.

Questions explored in the survey include:

- To what extent have faculty taught online, face-to-face and hybrid courses?
- Are faculty members involved in the design of online courses they teach?
- Do faculty members and digital learning leaders believe online courses can achieve learning outcomes that are equivalent to those of in-person courses?
- have faculty members' experiences with online teaching helped them improve their teaching skills in the classroom?
- What have been faculty members' experiences with instructional designers?
- What proportion of faculty members consider themselves "early adopters" of new educational technologies?
- How do professors use learning management systems?
- How concerned are faculty members about the cost of textbooks?
- What do faculty members think about inclusive access platforms being used at some colleges?
- How do instructors evaluate and choose digital courseware offerings?
- Has technology-enabled instruction fulfilled its promise of lowering per-student cost without diminishing quality?
- In what ways do faculty members and digital learning leaders perceive their institution to be most supportive, and least supportive, of online learning?
- Do instructors and digital learning leaders think colleges should use online program management companies?
- What impact have college assessment and accountability efforts had on teaching and degree completion?
- Are online instructional materials compliant with the Americans with Disabilities Act (ADA)?

SNAPSHOT OF FINDINGS

- The proportion of faculty members who have taught online courses continues to increase. Currently, 44 percent report having taught an online course, up from 30 percent in 2013. Meanwhile, 38 percent have taught a hybrid or blended course that has elements of face-to-face and online teaching.
- The vast majority of instructors who have taught online courses, 89 percent, say they have been involved in the design of those courses.
- A minority of faculty members have used an instructional designer to help create or revise an online or blended course (25 percent) or to create or revise a face-to-face course (22 percent).
- Professors who have worked with instructional designers have had good experiences with them: 93 percent say their experience was positive, and 37 percent say it was very positive. At least 7 in 10 say the instructional designers improved the quality of their courses, helped them to understand the available technology and how to integrate it into their classes, and helped them in areas in which they personally lacked expertise.
- More than 7 in 10 faculty members who have taught online courses say the experience has taught them skills that have improved their teaching. Most commonly, they say their online teaching has caused them to think more critically about how to engage students with course content and to make better use of multimedia content.
- Seventy-three percent of digital learning leaders and 33 percent of faculty members describe themselves as “early adopters” of new educational technologies. Most of the rest of both groups say they adopt new technologies after seeing peers use them effectively.
- Three-quarters of faculty members, and nearly all digital learning leaders, say they fully or somewhat support the expanded use of educational technologies. They primarily cite three factors for their support – their own enjoyment of trying new technologies, past success using educational technology, and a belief that students learn better when engaged with effective technology tools.
- Since 2013, increasing numbers of faculty members report they “always” use their institution’s learning management system (LMS) to share syllabus information (now 85 percent), record grades (70 percent), provide e-textbooks and other course materials (42 percent) and track student attendance (32 percent).
- One in three faculty members say they use digital courseware offerings. While 63 percent of these instructors are involved in selecting software when creating an online course, about half directly interact with the software vendors and 26 percent say their institution has a formal process for evaluating digital courseware.
- Digital learning leaders believe far more than faculty members do that online courses can achieve learning outcomes that are equivalent to in-person courses at higher education institutions. Instructors with online experience, however, are more likely to agree than disagree that online courses are equivalent to in-person courses at their institution, in their department or discipline and in the courses they teach.
- Faculty members tend to believe in-person instruction is more effective than online teaching at meeting a variety of course objectives, with the exceptions of grading and communicating about grading and communicating with the college about technical or other issues. On these, they perceive online and in-person methods to be equally effective.

SNAPSHOT OF FINDINGS (cont.)

- Faculty members, including those with online teaching experience, are more likely to disagree than to agree that using digital educational tools can lower per-student cost of instruction without hurting quality. Half of digital learning leaders agree that digital tools can lower costs without harming quality; 21 percent disagree.
- Majorities of faculty members (65 percent) and digital learning leaders (51 percent) agree that administrators and vendors who promote the use of technology in education exaggerate the potential financial benefits. Respondents in both groups also believe that advocates of technology do not fully appreciate the up-front costs needed to develop quality digital learning tools.
- Digital learning leaders tend to hold a positive view of their institution's support for online learning programs. Faculty members are more skeptical, only believing their institution provides adequate technical support for creating and teaching online courses. Both groups are disinclined to believe their college rewards teaching with technology in tenure and promotion decisions.
- Just over half of faculty members (56 percent) say they are very or somewhat confident in the methods their institution uses to verify the identity of online students. Nearly 9 in 10 digital learning leaders, 89 percent, are confident.
- Both faculty members and digital learning leaders tend to favor a limited role for online program management companies in higher education. Roughly 6 in 10 say these companies should be hired by institutions to help colleges in areas in which they lack in-house expertise. Relatively few faculty members, and no digital learning leaders, believe colleges should hire online program management companies to handle all aspects of online programs at higher education institutions.
- Faculty members and digital learning leaders widely believe that textbooks cost too much (83 percent and 92 percent, respectively) and that colleges should embrace the use of free open educational resources (70 percent and 89 percent, respectively). But a majority of instructors reject the idea that the need to save students money justifies the loss of some faculty control over course material selection. They are also more likely to disagree (49 percent) than to agree (32 percent) that saving students money would justify changing course materials to potentially lower-quality options.
- Half of digital learning leaders and 40 percent of faculty members say inclusive access platforms are achieving their two primary goals of reducing course material costs for students and improving education outcomes. About one in five in each group say the platforms are not achieving either goal.
- Faculty members tend to hold more negative than positive attitudes about assessment efforts designed to measure student learning and outcomes. More disagree than agree that such efforts have led to improved quality of teaching and learning and increased degree completion rates at their institution. Digital learning leaders have more positive opinions about assessment efforts.
- Sixty-nine percent of faculty members say their institution provides training on how to make course materials compliant with the Americans with Disabilities Act, up slightly from 64 percent a year ago.

METHODOLOGY

The following report presents findings from a quantitative survey research study that Gallup conducted on behalf of *Inside Higher Ed*. The study is designed to understand the views of college and university faculty members and the administrators who oversee their institutions' online learning or instructional technology efforts.

Gallup sent invitations via email to 22,978 faculty members and 1,338 digital learning leaders, with regular reminders sent throughout the Aug. 22-Sept. 23, 2018, field period. Gallup collected 2,129 completed or partially completed web surveys from faculty members and 206 from digital learning leaders, yielding a 10 percent combined response rate.

Most faculty respondents (75 percent) report they work full time for their institutions; 25 percent report they are employed part time. Among the faculty interviewed, 47 percent are tenured, 13 percent are tenure track but not tenured and 41 percent are nontenure track. Of the instructors who responded, 44 percent have taught an online course and 56 percent have never done so.

Gallup education consultants developed the questionnaire in collaboration with Scott Jaschik and Doug Lederman from *Inside Higher Ed*. Specialty colleges, namely Bible colleges and seminaries with a Carnegie Classification of 24, and institutions with enrollment fewer than 500 students, were excluded from the sample.

The survey is an attempted census of digital learning leaders and a random sample of faculty members across private, public and for-profit institutions, including two-year and four-year colleges, using the most comprehensive sample information available. The margin of sampling error for the faculty sample is ± 3 percentage points.

Gallup statistically weighted the faculty data to correct for nonresponse, to ensure appropriate representation of faculty members on a number of institutional characteristics, including institutional control (public or private nonprofit), four-year or two-year degree offerings, institution size (based on student enrollment) and geographical region. The obtained sample of faculty was also similar to the national distribution of faculty members on age and gender. The obtained sample of digital learning leaders is not weighted but respondent characteristics are similar to those of the entire sample of digital learning leaders on institutional control and four-year or two-year offerings. The results can be considered representative of the views of faculty members and digital learning leaders at colleges nationwide.

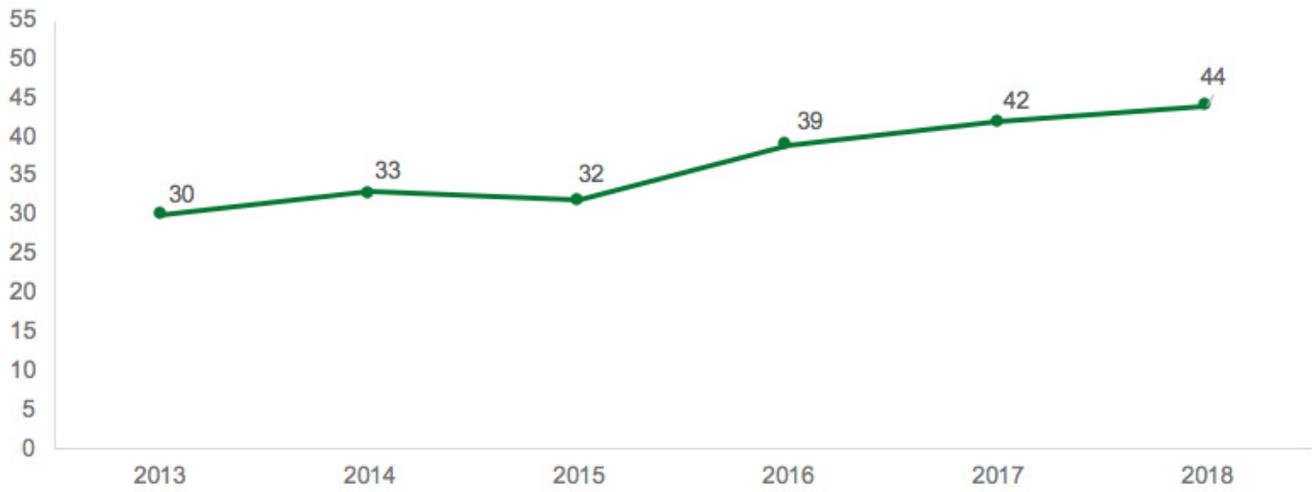
The following sections present the findings of the survey. In some cases, reported frequencies may not add up to 100 percent due to rounding. "Don't know" and "Refused" responses are excluded from the results.

Also, in some tables, percentages for subgroups (such as full time or part time) may appear inconsistent with the total for the entire group (all faculty). That can occur because of missing responses on the survey items used to identify respondents as members of a subgroup.

ONLINE TEACHING EXPERIENCE

While nearly all college instructors, 98 percent, report having taught a face-to-face course, less than half, 44 percent, have taught an online course. But that proportion has grown over time, from 30 percent in 2013.

Percentage of U.S. College Faculty Members Who Have Taught an Online Course



Half of full-time faculty members and 39 percent of part-time instructors have taught an online course. Forty-seven percent of instructors at public institutions have taught an online course, compared with 29 percent of private institution faculty members.

Faculty members who have taught online courses say they have been teaching online for an average of 6.8 years.

Online courses at U.S. colleges and universities tend to be asynchronous, meaning students complete their coursework and interact with instructors and other students on their own schedule. Seventy-one percent of online instructors say their courses are asynchronous, while 4 percent indicate their online courses are synchronous, with class meetings occurring at a scheduled time when everyone is online. One in four online instructors say their courses have both synchronous and asynchronous elements.

The vast majority of faculty members who have taught online courses, 89 percent, say they were involved in the design of their course. Three-quarters report they have converted a face-to-face course to an online course. Eighty-seven percent of tenured faculty who have taught online say they have transformed an in-person course to an online one.

A substantial minority of faculty members, 31 percent, have taken an online course for credit as a student. This percentage has been similar in prior years' surveys, averaging 32 percent.

Nearly twice as many digital learning leaders, 61 percent, say they have taken an online course for credit.

ONLINE TEACHING EXPERIENCE (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| As you know, face-to-face courses have only in-person meetings. These courses may use a learning management system or host web pages for posting course information and assignments, but instruction is delivered entirely in person. Have you ever taught a face-to-face course?* | | | | | | | |
| % Yes | 98 | 99 | 96 | 99 | 98 | 97 | n/a |
| % No | 2 | 1 | 4 | 1 | 2 | 3 | n/a |
| As you know, an online course has virtually all of the course content delivered online via the web. There are typically no in-person meetings. Have you ever taught an online course for credit?* | | | | | | | |
| % Yes | 44 | 50 | 39 | 46 | 55 | 45 | n/a |
| % No | 56 | 50 | 61 | 54 | 45 | 55 | n/a |
| For how many academic years have you been teaching online courses?*** | | | | | | | |
| % One-three years | 36 | 33 | 41 | 25 | 50 | 41 | n/a |
| % Four-five years | 19 | 18 | 22 | 15 | 19 | 22 | n/a |
| % Six-nine years | 17 | 17 | 17 | 17 | 25 | 15 | n/a |
| % 10 years or more | 29 | 32 | 19 | 43 | 6 | 21 | n/a |
| Average number of years | 6.8 | 7.2 | 5.7 | 8.5 | 4.2 | 5.9 | n/a |
| Are the online courses you teach: synchronous, in which lectures and discussions occur at specific times and require instructors and students to be online at the same time; asynchronous, in which students complete their coursework and interact with instructors and peers on their own schedules; or a blend of the two, in which there are some synchronous elements and some asynchronous elements?*** | | | | | | | |
| % Synchronous | 4 | 3 | 2 | 4 | 4 | 3 | n/a |
| % Asynchronous | 71 | 72 | 72 | 71 | 78 | 70 | n/a |
| % A blend of the two | 25 | 25 | 27 | 25 | 19 | 28 | n/a |
| Were you involved in designing online courses you taught?*** | | | | | | | |
| % Yes | 89 | 92 | 80 | 96 | 91 | 84 | n/a |
| % No | 11 | 8 | 20 | 4 | 9 | 16 | n/a |
| Have you ever converted a face-to-face course to an online course?*** | | | | | | | |
| % Yes | 76 | 81 | 58 | 87 | 71 | 67 | n/a |
| % No | 24 | 19 | 42 | 13 | 29 | 33 | n/a |
| Have you ever taken any online course as a student for credit? | | | | | | | |
| % Yes | 31 | 28 | 36 | 19 | 39 | 39 | 61 |
| % No | 69 | 72 | 64 | 81 | 61 | 61 | 39 |

* Asked only of faculty members

** Asked only of those who have taught an online course (n=820)

ONLINE TEACHING EXPERIENCE (cont.)

Thirty-eight percent of faculty members say they have taught a blended or hybrid course that combines elements of in-person and online instruction. Since 2013, an average of 41 percent of faculty members have reported teaching a blended or hybrid course.

Similar to the pattern among online instructors, those with hybrid course teaching experience are very likely to say they were involved in designing the hybrid courses they taught (87 percent) and to have converted a face-to-face course to a hybrid course (78 percent).

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| As you may know, a blended or hybrid course has a significant amount of content delivered online, sometimes resulting in a reduction of the number of in-person meetings. Have you ever taught a blended or hybrid course?* | | | | | | | |
| % Yes | 38 | 41 | 34 | 40 | 43 | 37 | n/a |
| % No | 62 | 59 | 66 | 60 | 57 | 63 | n/a |
| Have you ever converted a face-to-face course to a blended or hybrid course?* | | | | | | | |
| % Yes | 78 | 86 | 64 | 88 | 89 | 71 | n/a |
| % No | 22 | 14 | 36 | 12 | 11 | 29 | n/a |
| Were you involved in designing the blended courses you taught?* | | | | | | | |
| % Yes | 87 | 94 | 72 | 97 | 90 | 82 | n/a |
| % No | 13 | 6 | 28 | 3 | 10 | 18 | n/a |

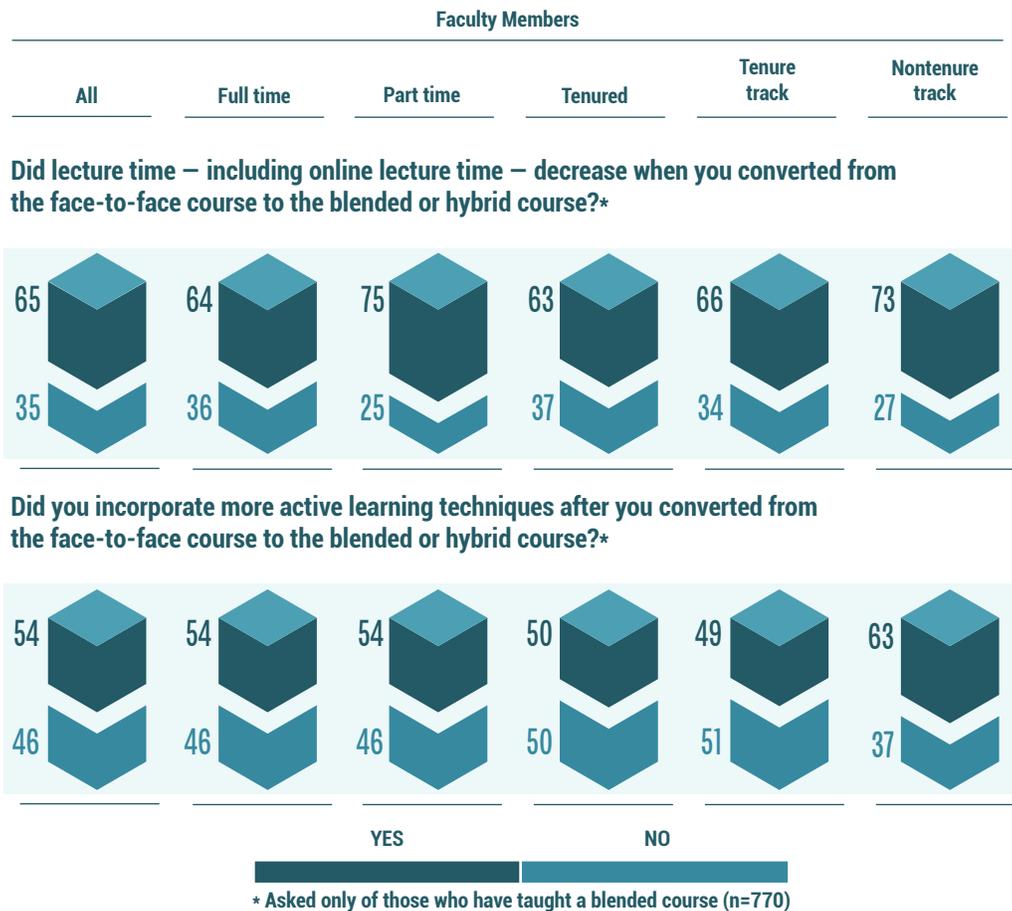
* Asked only of faculty members

** Asked only of those who have taught a blended course (n=712)

ONLINE TEACHING EXPERIENCE (cont.)

Close to two-thirds of instructors who have transformed a face-to-face course into a blended or hybrid course say lecture time decreased when they converted the class. A slim majority, 54 percent, say they incorporated more active learning techniques in the converted course.

Thinking again about your experiences teaching or transforming a blended or hybrid course.



ONLINE TEACHING EXPERIENCE (cont.)

Nearly three-quarters of faculty members who have taught online courses, 74 percent, say the experience has taught them skills that have improved their teaching, both online and in the classroom. Similar percentages of online instructors have said the same in prior surveys.

| | Faculty Members | | | | | |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track |
| Has your experience teaching online courses helped you develop pedagogical skills and practices that have improved your teaching, both online and in the classroom?* | | | | | | |
| % Yes | 74 | 75 | 75 | 71 | 74 | 79 |
| % No | 26 | 25 | 25 | 29 | 26 | 21 |

* Asked only of those who have taught an online course (n=820)

Asked to indicate how their teaching has improved, 68 percent say they now think more critically about how to engage students with content, 65 percent say they make better use of multimedia content, and 60 percent say they are more likely to experiment and make changes to try to improve the learning experience.

| | Faculty Members | | | | | |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track |
| In which ways have your online teaching experiences helped you improve your teaching? Please select all that apply.* | | | | | | |
| % I think more critically about ways to engage students with content. | 68 | 69 | 68 | 67 | 73 | 72 |
| % I make better use of multimedia content. | 65 | 67 | 62 | 64 | 60 | 67 |
| % I make better use of my institution's learning management system. | 61 | 63 | 58 | 58 | 65 | 64 |
| % I am more likely to experiment and make changes to try to improve the learning experience. | 60 | 64 | 51 | 60 | 69 | 59 |
| % I align the content, activities and assessments in the course more closely with learning objectives. | 53 | 54 | 54 | 49 | 59 | 55 |
| % I am more comfortable using techniques like active learning or project-based learning. | 38 | 42 | 28 | 40 | 46 | 36 |
| % I am better at out-of-class communication with students. | 32 | 31 | 37 | 27 | 28 | 36 |
| % None of these | 1 | 1 | 3 | 1 | 0 | 0 |

* Asked only of faculty members whose online teaching experience has helped them develop their skills and practices (n=624)

COURSE DESIGN AND USE OF INSTRUCTIONAL DESIGNERS

As reported, the vast majority of faculty members say they were personally involved in designing their courses. Many indicate they received some type of help in doing so, including 45 percent who received professional development about designing an online or blended course, 25 percent who worked with an instructional designer to create or revise an online or blended course and 22 percent who worked with an instructional designer to create or revise a face-to-face course.

| Please indicate whether you have or have not done each of the following. | | | | | | | |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | Faculty Members | | | | | | Digital Learning Leaders |
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Worked with an instructional designer to create or revise an online or blended course* | | | | | | | |
| % Yes | 25 | 28 | 19 | 26 | 31 | 24 | n/a |
| % No | 75 | 72 | 81 | 74 | 69 | 76 | n/a |
| Worked with an instructional designer to create or revise a face-to-face course* | | | | | | | |
| % Yes | 22 | 24 | 18 | 23 | 23 | 22 | n/a |
| % No | 78 | 76 | 82 | 77 | 77 | 78 | n/a |
| Received professional development about designing an online or blended course* | | | | | | | |
| % Yes | 45 | 51 | 40 | 49 | 52 | 45 | n/a |
| % No | 55 | 49 | 60 | 51 | 48 | 55 | n/a |

* Asked only of faculty members

COURSE DESIGN AND USE OF INSTRUCTIONAL DESIGNERS (cont.)

Most faculty members who have taught online courses, 69 percent, say they received some professional development about how to design such courses. Nearly half, 44 percent, worked with an instructional designer to create or revise an online or blended course.

| Please indicate whether you have or have not done each of the following. | | | |
|--|-----------------|----------------------|----------------------------|
| | Faculty Members | | |
| | All | Taught online course | Never taught online course |
| Worked with an instructional designer to create or revise an online or blended course | | | |
| % Yes | 25 | 44 | 9 |
| % No | 75 | 56 | 91 |
| Worked with an instructional designer to create or revise a face-to-face course | | | |
| % Yes | 22 | 26 | 19 |
| % No | 78 | 74 | 81 |
| Received professional development about designing an online or blended course | | | |
| % Yes | 45 | 69 | 25 |
| % No | 55 | 31 | 75 |

Faculty members who worked with instructional designers have had good experiences. Ninety-three percent describe their experience as positive, including 37 percent who say it was very positive. Additionally, 70 percent of faculty members strongly agree or agree the instructional designers they worked with improved the quality of the courses they teach.

Asked about specific ways in which instructional designers helped, 75 percent strongly agree or agree the designers helped them in areas they lacked expertise. The same percentage say the designers helped them to understand the available educational technology tools and to integrate them into their courses. Sixty-five percent agree that the designers shared tips and effective practices to foster student engagement in their course.

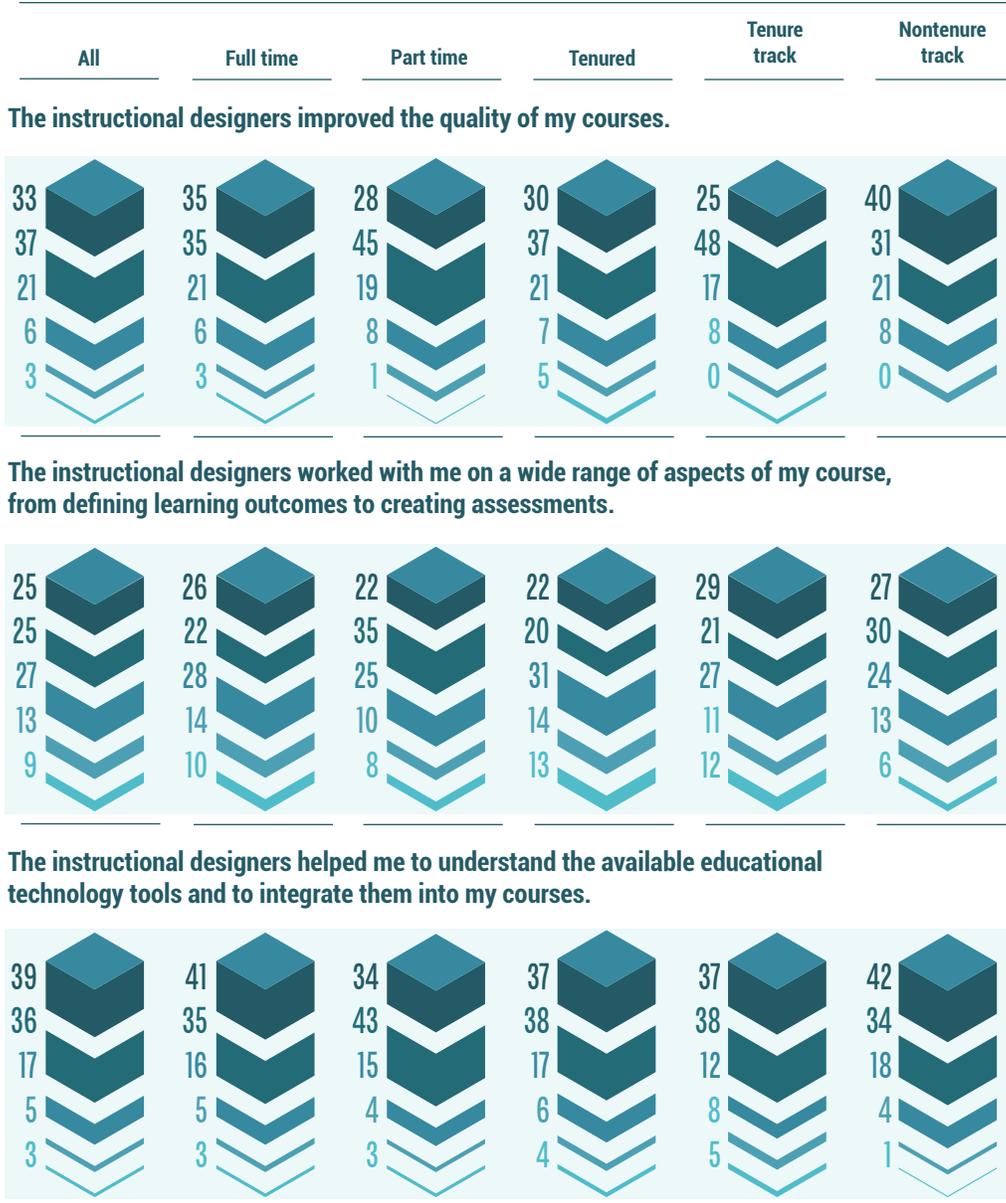
| How would you describe your experience working with instructional designers?* | | | | | | | |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | Faculty Members | | | | | | Digital Learning Leaders |
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| % Very positive | 37 | 39 | 34 | 34 | 38 | 41 | n/a |
| % Positive | 56 | 54 | 60 | 57 | 55 | 53 | n/a |
| % Negative | 6 | 6 | 5 | 7 | 6 | 6 | n/a |
| % Very negative | 1 | 1 | 1 | 2 | 2 | 0 | n/a |

* Asked of faculty members who have worked with instructional designers (n=645)

COURSE DESIGN AND USE OF INSTRUCTIONAL DESIGNERS (cont.)

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements about your work with instructional designers at your institution.*

Faculty Members



Strongly agree

Strongly disagree

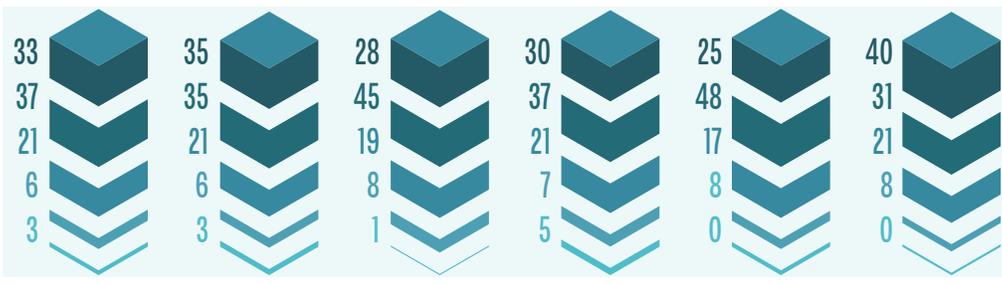
* Asked of faculty members who have worked with instructional designers (n=645)

COURSE DESIGN AND USE OF INSTRUCTIONAL DESIGNERS (cont.)

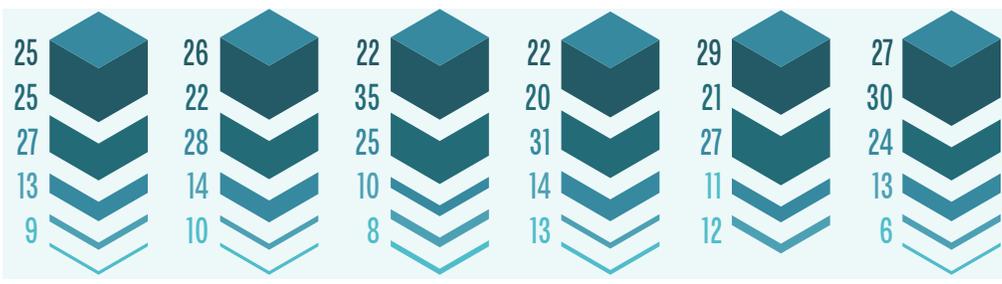
Faculty Members

| All | Full time | Part time | Tenured | Tenure track | Nontenure track |
|-----|-----------|-----------|---------|--------------|-----------------|
|-----|-----------|-----------|---------|--------------|-----------------|

The instructional designers shared helpful tips and effective practices for fostering student engagement in my course.



The instructional designer helped me with specific areas in which I lacked expertise.



Strongly agree

Strongly disagree

* Asked of faculty members who have worked with instructional designers (n=645)

COURSE DESIGN AND USE OF INSTRUCTIONAL DESIGNERS (cont.)

Faculty members who have not worked with instructional designers were asked why. The responses vary, with the most common being that their college has not shared information about the availability of instructional designers and how to work with them (29 percent), they do not think they need an instructional designer's help (26 percent) and they are not familiar with what instructional designers do (25 percent). Twenty percent indicate their college does not have enough, or any, instructional designers, and 16 percent state they had no interest in working with a designer. Relatively few, just 4 percent, say poor reports from colleagues who had worked with instructional designers was a reason they have not personally done so.

| Please indicate which of the following are reasons why you have not worked with an instructional designer. Please select all that apply.* | | | | | | | |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | Faculty Members | | | | | | Digital Learning Leaders |
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| % My college has not shared information about the availability of instructional designers and how to go about working with them. | 29 | 27 | 36 | 23 | 28 | 36 | n/a |
| % I don't think I need an instructional designer's help. | 26 | 27 | 25 | 30 | 24 | 23 | n/a |
| % I am not familiar what instructional designers do. | 25 | 23 | 31 | 21 | 26 | 31 | n/a |
| % My college does not have any, or enough, instructional designers. | 20 | 23 | 13 | 24 | 24 | 17 | n/a |
| % I have no interest in working with an instructional designer. | 16 | 16 | 16 | 20 | 12 | 13 | n/a |
| % Colleagues who have used instructional designers have not had good experiences. | 4 | 5 | 2 | 6 | 4 | 3 | n/a |
| % None of these | 30 | 28 | 31 | 27 | 31 | 30 | n/a |

* Asked of faculty members who have not worked with instructional designers (n=1,735)

FACULTY USE OF TECHNOLOGY

Faculty members appear to be open to using new educational technologies, but are more cautious in their approach to adopting them than digital learning leaders are. Asked to describe their orientation to educational technologies, 33 percent of faculty members say they are “early adopters,” 55 percent say they typically adopt such technologies after seeing peers use them effectively and 12 percent say they are disinclined to use educational technology. Nearly three-quarters of digital learning leaders, 73 percent, say they are early adopters of new technology offerings.

The proportion of early adopters among faculty members is similar by their age, gender and discipline of study.

Asked more broadly about their comfort level in the increased use of educational technologies, 32 percent of faculty members say they fully support their expanded use, with 43 percent saying they somewhat support it. Just 11 percent of instructors indicate opposition to increased use of educational technologies. Digital learning leaders overwhelmingly support increased use of educational technologies, with 85 percent saying they fully support the trend.

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Which of the following statements best describes you? | | | | | | | |
| % An early adopter of new educational technologies. | 33 | 36 | 28 | 34 | 34 | 33 | 73 |
| % Someone who typically adopts new technologies after seeing peers use them effectively. | 55 | 54 | 57 | 54 | 56 | 54 | 26 |
| % Someone who is disinclined to use educational technologies. | 12 | 11 | 15 | 12 | 10 | 13 | 1 |
| Please indicate your level of comfort with the increased use of educational technologies On the following five-point scale. | | | | | | | |
| % I fully support the increased use of educational technologies. | 32 | 32 | 33 | 29 | 34 | 33 | 85 |
| % I somewhat support the increased use of educational technologies. | 43 | 44 | 36 | 45 | 46 | 41 | 13 |
| % Neutral | 15 | 14 | 18 | 15 | 13 | 16 | 1 |
| % I somewhat do not support the increased use of educational technologies. | 9 | 7 | 11 | 9 | 4 | 9 | 0 |
| % I do not support the increased use of educational technologies at all. | 2 | 2 | 3 | 2 | 2 | 2 | 0 |

FACULTY USE OF TECHNOLOGY (cont.)

Professors and digital learning leaders who support the increased use of educational technologies primarily cite three factors as underlying their support – their desire to experiment with new instructional methods and tools, past success with using it, and a belief that students learn better when they are engaged with effective technology tools. Also, close to half of digital learning leaders say their institution’s rewarding people who adopt new technologies is a reason for their support; 27 percent of faculty members say institutional rewards are a factor in their support.

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Please indicate which of the following are reasons why you support the increased use of educational technologies? Please select all that apply.* | | | | | | | |
| % I like experimenting with new instructional methods and tools. | 60 | 61 | 56 | 58 | 64 | 59 | 72 |
| % I believe my students learn better when I engage them with effective technology tools. | 58 | 58 | 58 | 52 | 69 | 63 | 86 |
| % I have had success with education technology in the past. | 57 | 59 | 57 | 60 | 68 | 54 | 82 |
| % My institution rewards people who adopt new technologies. | 27 | 27 | 31 | 28 | 26 | 29 | 49 |
| % My institution provides adequate training on how to use new technologies. | 9 | 11 | 6 | 10 | 15 | 8 | 14 |
| % None of these | 7 | 7 | 8 | 8 | 4 | 8 | 2 |

* Asked only of those who support the increased use of technology (n=1,577)

FACULTY USE OF TECHNOLOGY (cont.)

Among faculty members who do not support the increased use of educational technologies, their primary reason for not doing so (67 percent) is that they believe instruction delivered without technology serves their students most effectively. About 4 in 10 also cite too much corporate influence, excessive costs for the expected benefit and faculty loss of control as reasons they do not support increased use of technology.

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Please indicate which of the following are reasons why you do not support the increased use of educational technologies? Please select all that apply.* | | | | | | | |
| % I am confident that instruction delivered without using technology most effectively serves my students. | 67 | 69 | 67 | 73 | n/a | 67 | n/a |
| % There is too much corporate influence. | 44 | 46 | 48 | 48 | n/a | 46 | n/a |
| % I don't believe the benefits to students justify the costs associated with adoption. | 41 | 45 | 41 | 43 | n/a | 45 | n/a |
| % Faculty lose too much control over the course when they use technology. | 40 | 38 | 44 | 40 | n/a | 38 | n/a |
| % My institution does not provide adequate training on how to use the technology. | 15 | 16 | 17 | 11 | n/a | 20 | n/a |
| % Available technologies at my institution are poor quality. | 12 | 15 | 7 | 17 | n/a | 8 | n/a |
| % The materials are too expensive. | 11 | 9 | 19 | 7 | n/a | 16 | n/a |
| % None of these | 11 | 11 | 11 | 10 | n/a | 10 | n/a |

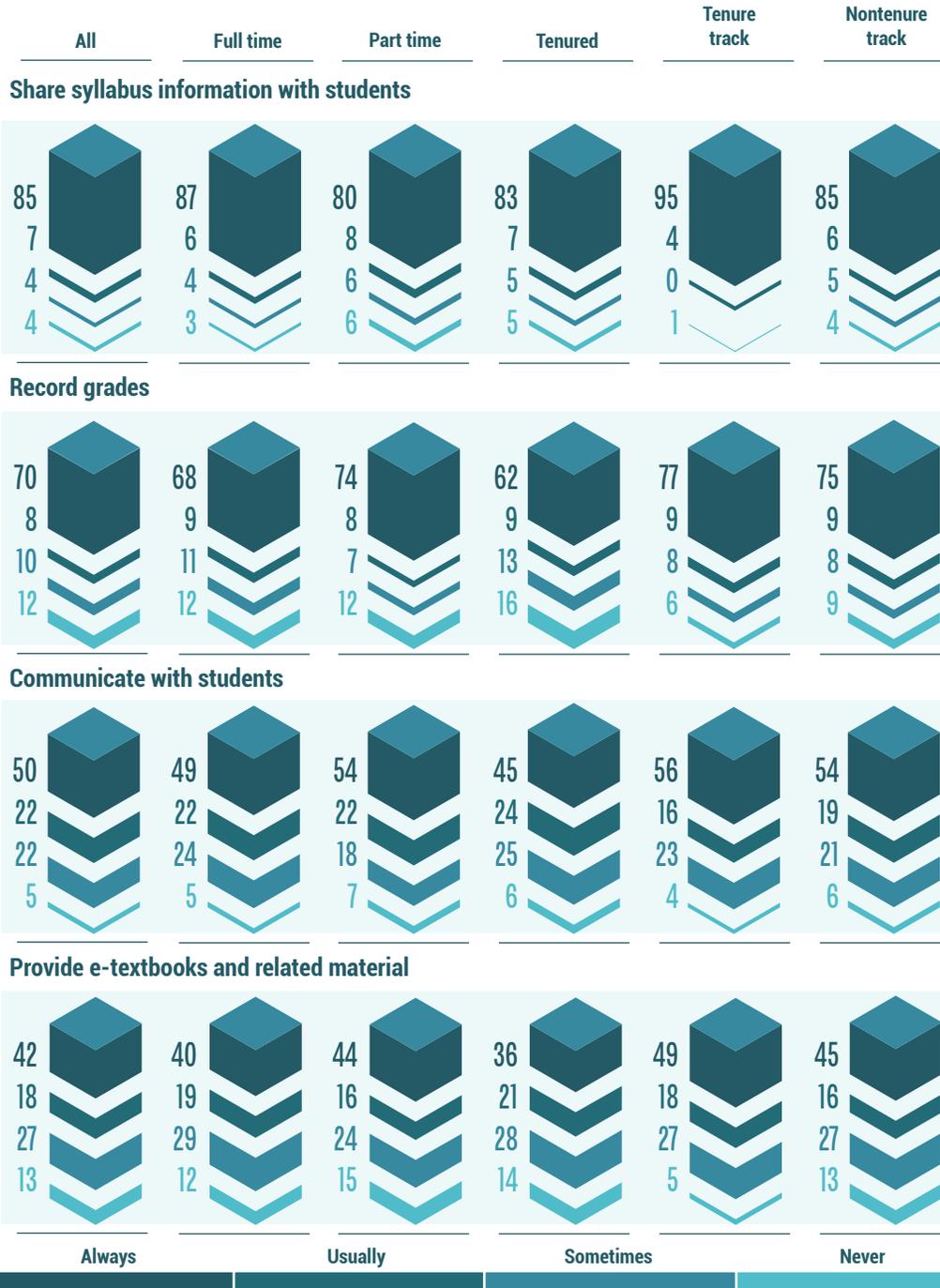
* Asked only of those who do not support the increased use of technology (n=193)
n/a = Not reported due to small sample size

As seen on the next page, faculty members asked about their usage of their college's learning management system (LMS) say they are most likely to use it to share syllabus information with students (85 percent say they always use it for this purpose), record grades (70 percent) and communicate with students (50 percent). Four in 10 use the LMS to provide e-textbooks and related material. Faculty members are less likely to use LMS to track student attendance, identify students who need extra help and integrate lecture capture.

FACULTY USE OF TECHNOLOGY (cont.)

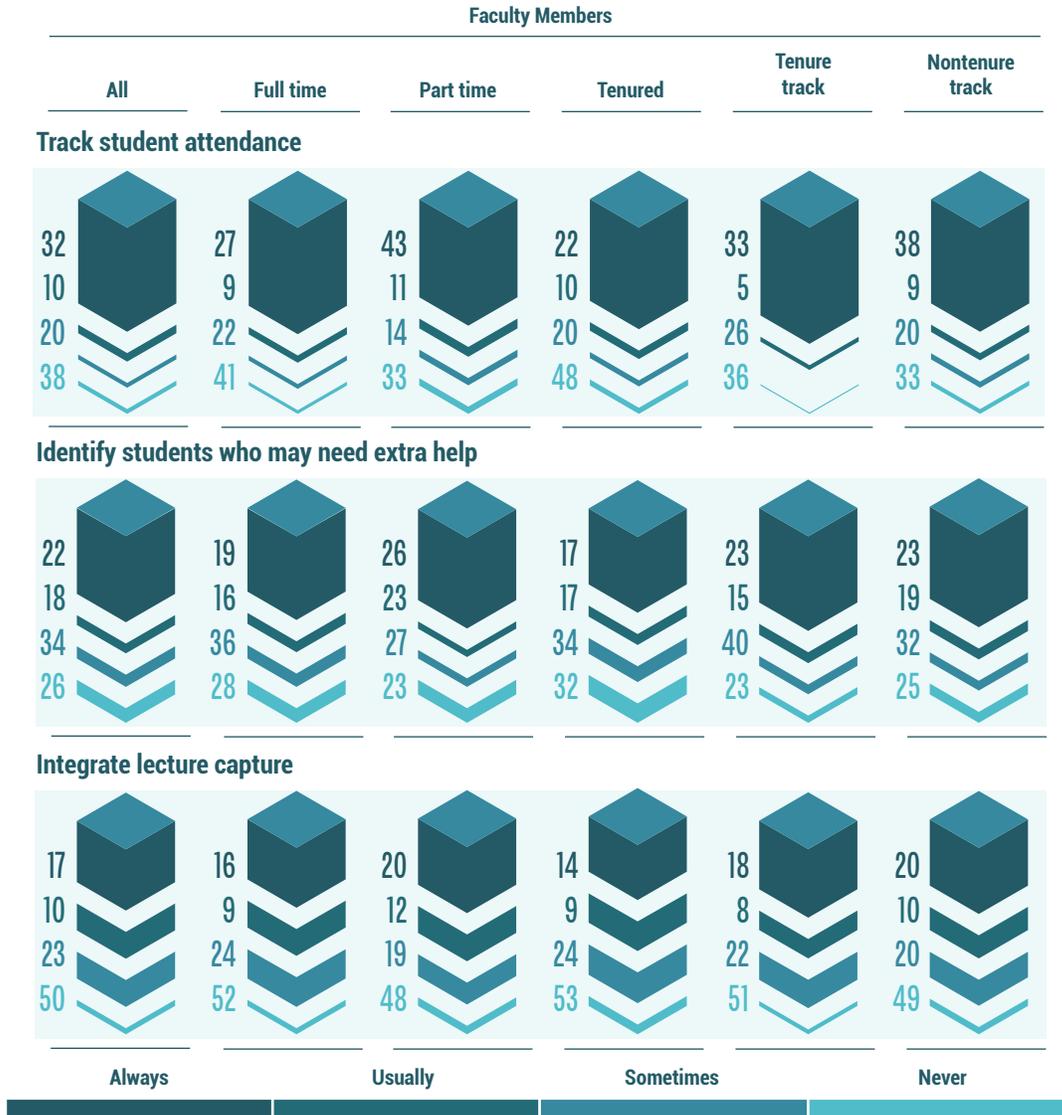
How often have you used your institution's learning management system (e.g., Blackboard, Moodle, Canvas, Desire2Learn, etc.) to engage in the following activities?*

Faculty Members



* Asked only of faculty members

FACULTY USE OF TECHNOLOGY (cont.)



* Asked only of faculty members

FACULTY USE OF TECHNOLOGY (cont.)

Instructors who have taught online are more likely than those who have never taught online to use their college's LMS to perform various tasks. The largest gaps between the two groups are 22 percentage points for recording grades (82 percent of those with online experience always use the LMS to record grades, compared with 60 percent who have never taught online), 15 points for tracking student attendance (40 percent versus 25 percent) and 14 points for communicating with students (58 percent versus 44 percent).

| How often have you used your institution's learning management system (e.g., Blackboard, Moodle, Canvas, Desire2Learn, etc.) to engage in the following activities? | | | |
|--|-----------------|----------------------|----------------------------|
| | Faculty Members | | |
| | All | Taught online course | Never taught online course |
| Share syllabus information with students | | | |
| % Always | 85 | 92 | 80 |
| % Usually | 7 | 5 | 8 |
| % Sometimes | 4 | 2 | 6 |
| % Never | 4 | 2 | 6 |
| Record grades | | | |
| % Always | 70 | 82 | 60 |
| % Usually | 8 | 7 | 10 |
| % Sometimes | 10 | 7 | 12 |
| % Never | 12 | 5 | 18 |
| Communicate with students | | | |
| % Always | 50 | 58 | 44 |
| % Usually | 22 | 23 | 20 |
| % Sometimes | 22 | 16 | 28 |
| % Never | 5 | 3 | 8 |
| Provide e-textbooks and related material | | | |
| % Always | 42 | 46 | 38 |
| % Usually | 18 | 20 | 16 |
| % Sometimes | 27 | 25 | 29 |
| % Never | 13 | 9 | 16 |

FACULTY USE OF TECHNOLOGY (cont.)

| | Faculty Members | | |
|--|-----------------|----------------------|----------------------------|
| | All | Taught online course | Never taught online course |
| Track student attendance | | | |
| % Always | 32 | 40 | 25 |
| % Usually | 10 | 13 | 8 |
| % Sometimes | 20 | 22 | 17 |
| % Never | 38 | 26 | 50 |
| Identify students who may need extra help | | | |
| % Always | 22 | 27 | 16 |
| % Usually | 18 | 22 | 14 |
| % Sometimes | 34 | 35 | 33 |
| % Never | 26 | 16 | 36 |
| Integrate lecture capture | | | |
| % Always | 17 | 22 | 13 |
| % Usually | 10 | 11 | 8 |
| % Sometimes | 23 | 28 | 18 |
| % Never | 50 | 39 | 61 |

FACULTY USE OF TECHNOLOGY (cont.)

Another technology option available to college instructors is digital courseware — software that can be customized to courses and adapted to work across different types of institutions and learning environments. One in three faculty members say they use digital courseware. Among these faculty members, 71 percent say their courses use digital courseware with adaptive or personalized learning tools or functionalities.

While most digital courseware users, 63 percent, say they are involved in the selection of digital courseware when creating an online or blended course, about half say they interact directly with vendors to select products for their courses and 26 percent say their institution has a formalized process to evaluate digital courseware.

| Digital courseware is software that delivers instructional content that can be customized to courses and adapted to work across different types of institutions and learning environments. | | | | | | | |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | Faculty Members | | | | | | Digital Learning Leaders |
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Do your courses use digital courseware?* | | | | | | | |
| % Yes | 33 | 30 | 37 | 27 | 30 | 36 | n/a |
| % No | 67 | 70 | 63 | 73 | 70 | 64 | n/a |
| Do your courses include courseware with adaptive or personalized learning tools or functionalities?* | | | | | | | |
| % Yes | 71 | 72 | 72 | 71 | 83 | 68 | n/a |
| % No | 29 | 28 | 28 | 29 | 17 | 32 | n/a |
| When creating an online or blended course, are you involved in the selection of digital courseware?* | | | | | | | |
| % Yes | 63 | 67 | 52 | 72 | 72 | 52 | n/a |
| % No | 37 | 33 | 48 | 28 | 28 | 48 | n/a |
| Does your institution have a formalized process to evaluate digital courseware?* | | | | | | | |
| % Yes | 26 | 18 | 57 | 18 | 25 | 36 | n/a |
| % No | 74 | 82 | 43 | 82 | 75 | 64 | n/a |
| Do you interact directly with digital courseware vendors to select products for your courses?* | | | | | | | |
| % Yes | 48 | 53 | 35 | 54 | 66 | 38 | n/a |
| % No | 52 | 47 | 65 | 46 | 34 | 62 | n/a |

* Asked only of faculty members

** Asked only of faculty members who use digital courseware (n=356)

ATTITUDES ABOUT ONLINE EDUCATION

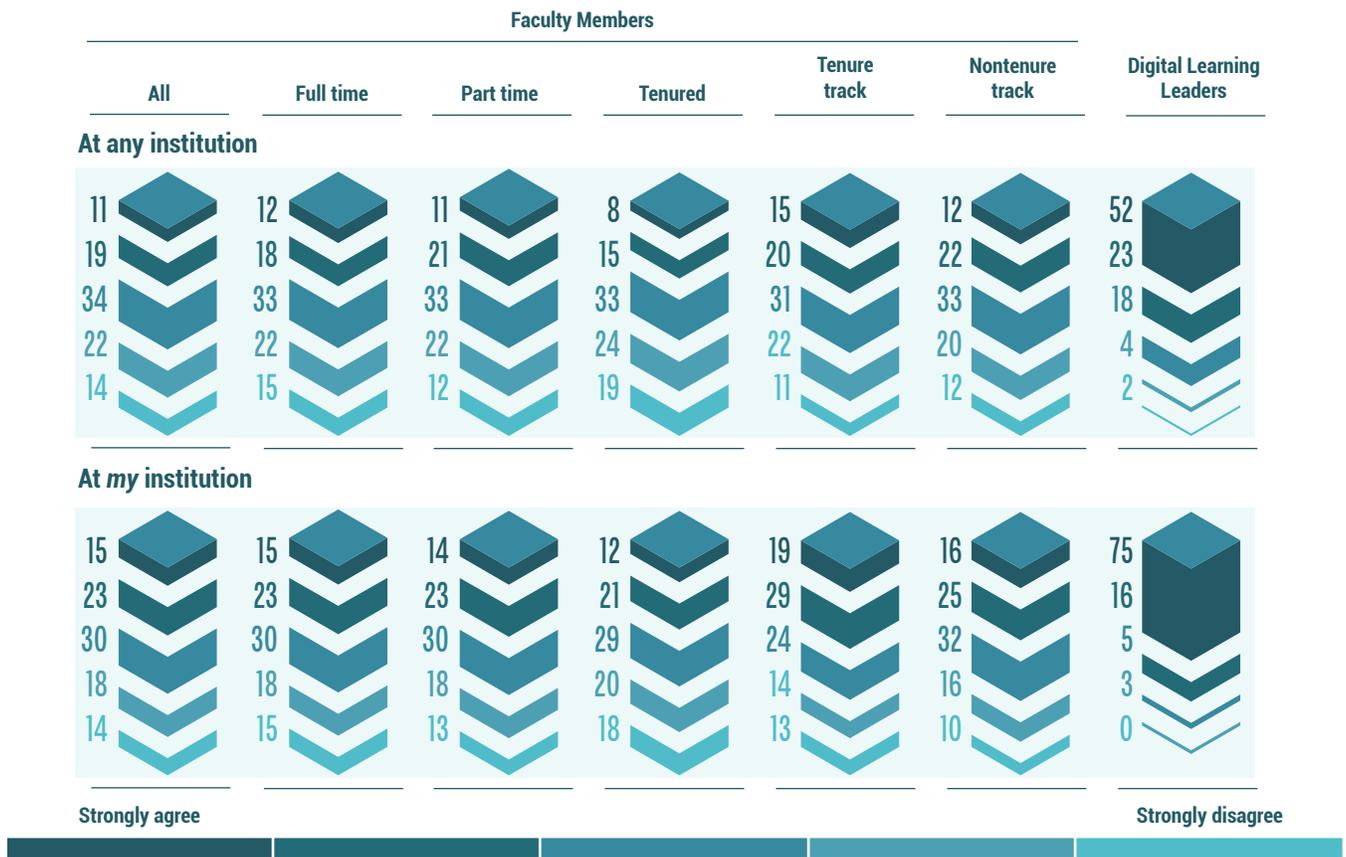
Digital learning leaders and professors have divergent attitudes about the ability of online courses to achieve the same learning outcomes as in-person instruction. Seventy-five percent of digital learning leaders strongly agree or agree that online courses can achieve equivalent outcomes to in-person courses at any higher education institution, and 91 percent agree (including 75 percent strongly) with respect to online courses at their own institution.

In contrast, faculty members are mostly divided as to whether online courses can produce the same learning outcomes at any institution (30 percent agree and 36 percent disagree they can) or at the faculty member's own institution (38 percent agree and 32 percent disagree).

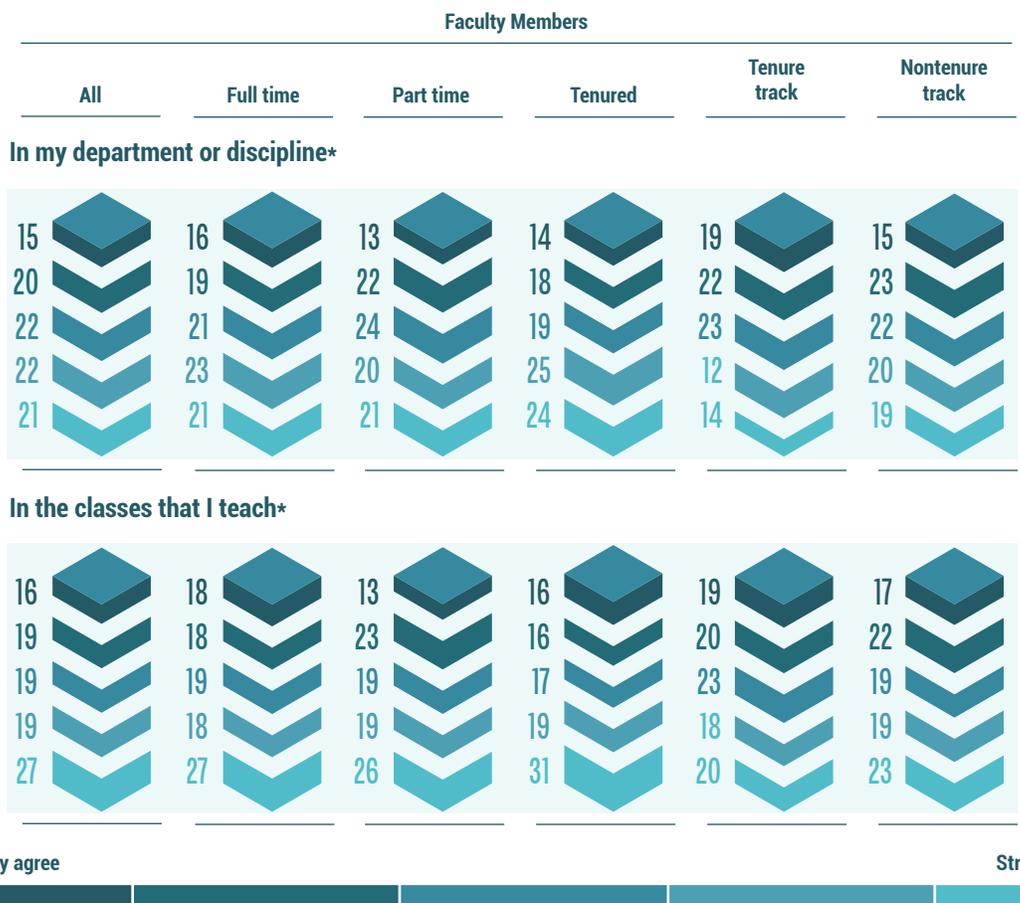
Faculty members are also skeptical that online instruction can be as good as in-person instruction in their department or discipline (35 percent agree and 43 percent disagree) or in the classes they teach (35 percent agree and 46 percent disagree).

Tenured professors tend to be least positive about what online instruction can accomplish.

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements. For-credit online courses can achieve student learning outcomes that are at least equivalent to those of in-person courses in the following settings:



ATTITUDES ABOUT ONLINE EDUCATION (cont.)



* Asked only of faculty members

As might be expected, faculty members with online teaching experience are more positive than those without such experience about online courses' potential. As seen on the next page, majorities of those who have taught online courses agree that online instruction can be just as good as in-person instruction at their own institution (52 percent), in their department or discipline (54 percent) and in the courses they teach (58 percent). They are less inclined to think online instruction can achieve the same learning as in-person instruction at any institution, but still more agree (39 percent) than disagree (26 percent) that it can do so.

Meanwhile, instructors who have never taught online courses are more likely to disagree than agree that online courses can achieve the same outcomes as in-person instruction. Six in 10 professors with no online teaching experience disagree that online instruction can achieve equivalent outcomes in their department or discipline, and nearly 7 in 10 disagree it can do so in the courses they teach.

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements.

For-credit online courses can achieve student learning outcomes that are at least equivalent to those of in-person courses in the following settings:

| | Faculty Members | | |
|---------------------------------------|-----------------|----------------------|----------------------------|
| | All | Taught online course | Never taught online course |
| At any institution | | | |
| % 5 Strongly agree | 11 | 18 | 6 |
| % 4 | 19 | 21 | 18 |
| % 3 | 34 | 35 | 32 |
| % 2 | 22 | 17 | 25 |
| % 1 Strongly disagree | 14 | 9 | 18 |
| At my institution | | | |
| % 5 Strongly agree | 15 | 23 | 8 |
| % 4 | 23 | 29 | 18 |
| % 3 | 30 | 30 | 29 |
| % 2 | 18 | 12 | 23 |
| % 1 Strongly disagree | 14 | 6 | 22 |
| In my department or discipline | | | |
| % 5 Strongly agree | 15 | 26 | 6 |
| % 4 | 20 | 28 | 14 |
| % 3 | 22 | 24 | 20 |
| % 2 | 22 | 15 | 27 |
| % 1 Strongly disagree | 21 | 7 | 33 |
| In the classes that I teach | | | |
| % 5 Strongly agree | 16 | 29 | 5 |
| % 4 | 19 | 29 | 10 |
| % 3 | 19 | 21 | 16 |
| % 2 | 19 | 12 | 25 |

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

Faculty members also believe online instruction is less effective than in-person instruction in meeting a variety of classroom objectives. In particular, 87 percent say online instruction is less effective than in-person instruction in interacting with students in class and 80 percent say it is less effective in reaching at-risk students. At least 6 in 10 faculty members believe online courses are less successful than in-person courses at being able to rigorously engage students in course material (65 percent), at answering student questions (63 percent) and maintaining academic integrity (60 percent). Majorities of college faculty also view online instruction as inferior to in-person instruction in delivering the necessary content to meet learning objectives (54 percent), interacting with students outside of class (54 percent) and reaching historically underserved students (51 percent).

In none of the 11 course objectives do faculty see online instruction as being more effective than in-person instruction. Majorities of faculty members do see online instruction as being equally effective to in-person instruction in grading and communicating about grading (66 percent) and communication with the college about logistical and other issues (60 percent).

Roughly half of digital learning leaders believe online instruction is more effective than in-person instruction in grading and communicating about grading (51 percent) and in interacting with students outside of class (50 percent). For other course goals, they believe online instruction is as effective as in-person instruction, if not more effective. At most, only 30 percent of digital learning leaders say online courses are less effective than in-person courses at being able to reach at-risk students.

Please indicate whether you think online courses for credit are generally more effective than, as effective as, or are generally less effective than most in-person courses in the following ways.

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Ability to deliver the necessary content to meet learning objectives | | | | | | | |
| % More effective than in-person course | 3 | 3 | 4 | 3 | 1 | 4 | 24 |
| % As effective as in-person course | 43 | 45 | 42 | 38 | 54 | 47 | 74 |
| % Less effective than in-person course | 54 | 53 | 55 | 59 | 45 | 49 | 2 |
| Ability to answer student questions | | | | | | | |
| % More effective than in-person course | 4 | 4 | 6 | 4 | 6 | 5 | 27 |
| % As effective as in-person course | 33 | 34 | 31 | 31 | 38 | 33 | 64 |
| % Less effective than in-person course | 63 | 62 | 63 | 65 | 56 | 62 | 9 |

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Interaction with students during class | | | | | | | |
| % More effective than in-person course | 2 | 2 | 4 | 1 | 3 | 3 | 15 |
| % As effective as in-person course | 11 | 11 | 11 | 11 | 13 | 12 | 57 |
| % Less effective than in-person course | 87 | 87 | 85 | 88 | 84 | 85 | 27 |
| Interaction with students outside of class | | | | | | | |
| % More effective than in-person course | 11 | 11 | 14 | 10 | 12 | 14 | 50 |
| % As effective as in-person course | 35 | 33 | 38 | 32 | 31 | 37 | 34 |
| % Less effective than in-person course | 54 | 56 | 47 | 57 | 57 | 49 | 17 |
| Grading and communicating about grading | | | | | | | |
| % More effective than in-person course | 9 | 8 | 12 | 7 | 9 | 12 | 51 |
| % As effective as in-person course | 66 | 68 | 63 | 64 | 77 | 66 | 47 |
| % Less effective than in-person course | 25 | 24 | 25 | 29 | 15 | 22 | 2 |
| Communication with the college about logistical and other issues | | | | | | | |
| % More effective than in-person course | 6 | 6 | 6 | 5 | 7 | 6 | 18 |
| % As effective as in-person course | 60 | 61 | 57 | 59 | 66 | 61 | 70 |
| % Less effective than in-person course | 34 | 33 | 36 | 37 | 28 | 33 | 11 |
| Ability to reach "at-risk" students | | | | | | | |
| % More effective than in-person course | 5 | 4 | 5 | 4 | 3 | 4 | 23 |
| % As effective as in-person course | 15 | 16 | 16 | 16 | 18 | 16 | 47 |
| % Less effective than in-person course | 80 | 80 | 79 | 80 | 79 | 80 | 30 |

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Ability to reach "exceptional" students | | | | | | | |
| % More effective than in-person course | 7 | 7 | 8 | 7 | 6 | 9 | 33 |
| % As effective as in-person course | 44 | 44 | 47 | 44 | 45 | 45 | 59 |
| % Less effective than in-person course | 49 | 48 | 45 | 50 | 49 | 45 | 8 |
| Ability to rigorously engage students in course material | | | | | | | |
| % More effective than in-person course | 3 | 3 | 4 | 2 | 3 | 3 | 27 |
| % As effective as in-person course | 32 | 34 | 29 | 32 | 36 | 31 | 69 |
| % Less effective than in-person course | 65 | 63 | 67 | 65 | 61 | 66 | 3 |
| Ability to maintain academic integrity | | | | | | | |
| % More effective than in-person course | 2 | 2 | 3 | 1 | 2 | 3 | 11 |
| % As effective as in-person course | 38 | 38 | 43 | 34 | 48 | 41 | 79 |
| % Less effective than in-person course | 60 | 61 | 54 | 65 | 50 | 55 | 11 |
| Ability to reach historically underserved students | | | | | | | |
| % More effective than in-person course | 24 | 23 | 28 | 20 | 18 | 31 | 40 |
| % As effective as in-person course | 24 | 25 | 22 | 27 | 28 | 23 | 42 |
| % Less effective than in-person course | 51 | 52 | 50 | 53 | 54 | 46 | 18 |

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

Faculty members who have taught online courses are more positive than faculty who have not taught online about the relative effectiveness of online courses and in-person courses. However, instructors with online teaching experience still view in-person courses as better for interacting with students during class (79 percent), being able to reach at-risk students (73 percent), being able to rigorously engage students in course material (51 percent) and being able to maintain academic integrity (51 percent). They do not believe online courses are more effective than in-person courses in any area, with a high of 27 percent saying online is better with regard to reaching historically underserved students.

| Please indicate whether you think online courses for credit are generally more effective than, as effective as, or are generally less effective than most in-person courses in the following ways. | | | |
|---|-----------------|----------------------|----------------------------|
| | Faculty Members | | |
| | All | Taught online course | Never taught online course |
| Ability to deliver the necessary content to meet learning objectives | | | |
| % More effective than in-person course | 3 | 4 | 2 |
| % As effective as in-person course | 43 | 53 | 34 |
| % Less effective than in-person course | 54 | 43 | 64 |
| Ability to answer student questions | | | |
| % More effective than in-person course | 4 | 6 | 3 |
| % As effective as in-person course | 33 | 44 | 23 |
| % Less effective than in-person course | 63 | 50 | 74 |
| Interaction with students during class | | | |
| % More effective than in-person course | 2 | 3 | 1 |
| % As effective as in-person course | 11 | 18 | 6 |
| % Less effective than in-person course | 87 | 79 | 93 |
| Interaction with students outside of class | | | |
| % More effective than in-person course | 11 | 14 | 9 |
| % As effective as in-person course | 35 | 37 | 33 |
| % Less effective than in-person course | 54 | 49 | 58 |
| Grading and communicating about grading | | | |
| % More effective than in-person course | 9 | 10 | 7 |
| % As effective as in-person course | 66 | 70 | 62 |

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

| | Faculty Members | | |
|--|-----------------|----------------------|----------------------------|
| | All | Taught online course | Never taught online course |
| Communication with the college about logistical and other issues | | | |
| % More effective than in-person course | 6 | 6 | 6 |
| % As effective as in-person course | 60 | 66 | 55 |
| % Less effective than in-person course | 34 | 29 | 39 |
| Ability to reach "at-risk" students | | | |
| % More effective than in-person course | 5 | 6 | 3 |
| % As effective as in-person course | 15 | 21 | 10 |
| % Less effective than in-person course | 80 | 73 | 86 |
| Ability to reach "exceptional" students | | | |
| % More effective than in-person course | 7 | 10 | 5 |
| % As effective as in-person course | 44 | 52 | 36 |
| % Less effective than in-person course | 49 | 38 | 59 |
| Ability to rigorously engage students in course material | | | |
| % More effective than in-person course | 3 | 5 | 1 |
| % As effective as in-person course | 32 | 44 | 21 |
| % Less effective than in-person course | 65 | 51 | 77 |
| Ability to maintain academic integrity | | | |
| % More effective than in-person course | 2 | 3 | 1 |
| % As effective as in-person course | 38 | 46 | 31 |
| % Less effective than in-person course | 60 | 51 | 68 |
| Ability to reach historically underserved students | | | |
| % More effective than in-person course | 24 | 27 | 22 |
| % As effective as in-person course | 24 | 28 | 21 |
| % Less effective than in-person course | 51 | 45 | 57 |

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

Arguably the greatest potential benefit of online education is its ability to lower the per-student cost of higher education. The key challenge has been whether it can do so without diminishing quality. Again, faculty members and digital learning leaders are at odds – 51 percent of faculty members disagree it can reduce costs without hurting quality (24 percent agree) while 50 percent of digital learning leaders agree it can (21 percent disagree).

Seven in 10 faculty members strongly agree or agree that administrators and vendors who promote the use of technology in delivering instruction play down the risks to quality. Digital learning leaders are also more likely to disagree (41 percent) than to agree (28 percent) that those advocating the use of technology play down quality risks.

Faculty members and digital learning leaders are in accord as to whether educational technology advocates exaggerate the potential financial benefits it can bring, with majorities of both groups agreeing with that statement. However, more faculty members (65 percent) than digital learning leaders (51 percent) do so. Similarly, both faculty members (70 percent) and digital learning leaders (61 percent) agree that advocates of technology do not appreciate the up-front costs required to develop high-quality online or blended offerings

Some advocates for the use of technology-enabled instruction argue that using digital tools can lower the per-student cost of higher education without diminishing quality.

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements.

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Using digital tools can lower the per-student cost of instruction without hurting quality. | | | | | | | |
| % 5 Strongly agree | 7 | 9 | 4 | 4 | 5 | 9 | 20 |
| % 4 | 17 | 23 | 12 | 12 | 26 | 19 | 30 |
| % 3 | 26 | 28 | 24 | 23 | 25 | 29 | 29 |
| % 2 | 29 | 24 | 33 | 33 | 27 | 24 | 16 |
| % 1 Strongly disagree | 22 | 17 | 26 | 27 | 17 | 18 | 5 |
| Administrators and vendors who promote the use of technology in delivering instruction exaggerate the potential financial benefits. | | | | | | | |
| % 5 Strongly agree | 32 | 31 | 33 | 39 | 29 | 28 | 19 |
| % 4 | 33 | 30 | 36 | 34 | 29 | 30 | 32 |
| % 3 | 24 | 26 | 22 | 20 | 25 | 28 | 25 |
| % 2 | 9 | 10 | 7 | 5 | 15 | 11 | 16 |
| % 1 Strongly disagree | 3 | 3 | 2 | 2 | 2 | 4 | 8 |

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Administrators and vendors who promote the use of technology in delivering instruction play down the risks to quality. | | | | | | | |
| % 5 Strongly agree | 38 | 40 | 33 | 47 | 32 | 32 | 5 |
| % 4 | 32 | 32 | 34 | 32 | 30 | 33 | 23 |
| % 3 | 20 | 19 | 21 | 14 | 25 | 23 | 31 |
| % 2 | 7 | 6 | 9 | 5 | 10 | 9 | 22 |
| % 1 Strongly disagree | 3 | 3 | 3 | 2 | 3 | 4 | 19 |
| Administrators who promote the use of technology do not fully appreciate the upfront costs required to develop high-quality online or blended offerings. | | | | | | | |
| % 5 Strongly agree | 38 | 42 | 28 | 44 | 36 | 33 | 31 |
| % 4 | 32 | 31 | 32 | 33 | 28 | 31 | 30 |
| % 3 | 21 | 19 | 28 | 16 | 24 | 25 | 16 |
| % 2 | 7 | 6 | 11 | 4 | 11 | 10 | 15 |
| % 1 Strongly disagree | 2 | 2 | 1 | 2 | 1 | 1 | 8 |

As seen on the following page, more faculty members who have taught online courses disagree (41 percent) than agree (32 percent) that digital instruction can lower the per-student cost of instruction without hurting quality. However, they are less likely to disagree than faculty members who have never taught online (59 percent), with only 16 percent agreeing.

Faculty members with and without online teaching experience hold broadly similar views as to whether advocates of technology exaggerate the potential financial benefits, play down the risks to quality and fail to appreciate the costs of developing high-quality offerings.

ATTITUDES ABOUT ONLINE EDUCATION (cont.)

Some advocates for the use of technology-enabled instruction argue that using digital tools can lower the per-student cost of higher education without diminishing quality.

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements.

| | Faculty Members | | |
|--|-----------------|----------------------|----------------------------|
| | All | Taught online course | Never taught online course |
| Using digital tools can lower the per-student cost of instruction without hurting quality. | | | |
| % 5 Strongly agree | 7 | 9 | 4 |
| % 4 | 17 | 23 | 12 |
| % 3 | 26 | 28 | 24 |
| % 2 | 29 | 24 | 33 |
| % 1 Strongly disagree | 22 | 17 | 26 |
| Administrators and vendors who promote the use of technology in delivering instruction exaggerate the potential financial benefits. | | | |
| % 5 Strongly agree | 32 | 31 | 33 |
| % 4 | 33 | 30 | 36 |
| % 3 | 24 | 26 | 22 |
| % 2 | 9 | 10 | 7 |
| % 1 Strongly disagree | 3 | 3 | 2 |
| Administrators and vendors who promote the use of technology in delivering instruction play down the risks to quality. | | | |
| % 5 Strongly agree | 38 | 34 | 42 |
| % 4 | 32 | 31 | 33 |
| % 3 | 20 | 22 | 19 |
| % 2 | 7 | 9 | 5 |
| % 1 Strongly disagree | 3 | 4 | 2 |
| Administrators who promote the use of technology do not fully appreciate the upfront costs required to develop high-quality online or blended offerings. | | | |
| % 5 Strongly agree | 38 | 39 | 37 |
| % 4 | 32 | 30 | 34 |
| % 3 | 21 | 21 | 21 |
| % 2 | 7 | 8 | 7 |
| % 1 Strongly disagree | 2 | 1 | 2 |

INSTITUTIONAL SUPPORT FOR ONLINE LEARNING

For the most part, faculty members see their institution as not being supportive of online learning, apart from providing adequate technical support for online courses. Fifty-three percent of faculty members agree their college provides adequate technical support for teaching an online course and 50 percent say it provides adequate technical support for creating an online course. Faculty members divide evenly between agreement (34 percent) and disagreement (37 percent) as to whether their college compensates fairly for online instruction.

Significantly more faculty members disagree than agree their institution supports online education in other respects, particularly with regard to providing monetary or other incentives for teaching online (19 percent agree, 62 percent disagree), compensating fairly for developing an online course (20 percent agree, 57 percent disagree) and acknowledging time demands for online course workload (22 percent agree, 53 percent disagree).

Digital learning leaders see their institution as being supportive of online learning in a number of these areas, especially in providing technical support for teaching (81 percent agree) and creating (78 percent) online courses. Nearly 6 in 10 digital learning leaders agree their institution has policies that protect faculty members' intellectual property rights for digital work (59 percent) and that it compensates fairly for online instruction (58 percent). Half also agree their college compensates fairly for the development of an online course; 32 percent disagree.

Digital learning leaders are divided as to whether their college appropriately rewards contributions made to digital pedagogy (32 percent agree it does and 35 percent disagree).

Two areas in which digital learning leaders see their institution as not being supportive of online learning are providing monetary or other incentives for teaching online (32 percent agree, 43 percent disagree) and, especially, in rewarding teaching technology in tenure and promotion decisions (19 percent agree, 56 percent disagree).

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements about your institution's support for online learning.

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Provides adequate technical support for teaching online courses | | | | | | | |
| % 5 Strongly agree | 19 | 18 | 23 | 17 | 17 | 22 | 50 |
| % 4 | 34 | 34 | 34 | 35 | 36 | 34 | 31 |
| % 3 | 25 | 23 | 27 | 21 | 24 | 26 | 10 |
| % 2 | 14 | 15 | 9 | 17 | 12 | 10 | 5 |
| % 1 Strongly disagree | 9 | 10 | 6 | 10 | 10 | 8 | 4 |

INSTITUTIONAL SUPPORT FOR ONLINE LEARNING (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Provides adequate technical support for creating an online course | | | | | | | |
| % 5 Strongly agree | 19 | 18 | 21 | 17 | 16 | 21 | 52 |
| % 4 | 31 | 31 | 31 | 31 | 36 | 32 | 26 |
| % 3 | 25 | 25 | 27 | 24 | 23 | 24 | 11 |
| % 2 | 14 | 13 | 14 | 15 | 7 | 14 | 6 |
| % 1 Strongly disagree | 11 | 13 | 8 | 13 | 17 | 9 | 4 |
| Compensates fairly for online instruction | | | | | | | |
| % 5 Strongly agree | 13 | 12 | 16 | 12 | 11 | 15 | 22 |
| % 4 | 21 | 20 | 21 | 19 | 27 | 19 | 36 |
| % 3 | 29 | 29 | 30 | 30 | 31 | 29 | 18 |
| % 2 | 18 | 20 | 13 | 21 | 16 | 16 | 16 |
| % 1 Strongly disagree | 19 | 19 | 19 | 19 | 15 | 20 | 8 |
| Has policies that protect faculty members' intellectual property rights for digital work | | | | | | | |
| % 5 Strongly agree | 10 | 9 | 13 | 11 | 4 | 10 | 29 |
| % 4 | 20 | 19 | 26 | 18 | 26 | 23 | 30 |
| % 3 | 24 | 24 | 23 | 23 | 24 | 26 | 18 |
| % 2 | 20 | 22 | 17 | 22 | 19 | 21 | 14 |
| % 1 Strongly disagree | 25 | 26 | 21 | 27 | 28 | 21 | 9 |
| Appropriately rewards contributions made to digital pedagogy | | | | | | | |
| % 5 Strongly agree | 8 | 6 | 12 | 7 | 5 | 10 | 9 |
| % 4 | 22 | 21 | 24 | 21 | 28 | 22 | 23 |
| % 3 | 33 | 33 | 31 | 31 | 35 | 33 | 34 |
| % 2 | 19 | 20 | 16 | 21 | 16 | 19 | 22 |
| % 1 Strongly disagree | 19 | 19 | 18 | 20 | 16 | 16 | 13 |

INSTITUTIONAL SUPPORT FOR ONLINE LEARNING (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Acknowledges time demands for online courses for workload* | | | | | | | |
| % 5 Strongly agree | 7 | 6 | 9 | 7 | 5 | 8 | n/a |
| % 4 | 15 | 15 | 16 | 13 | 19 | 16 | n/a |
| % 3 | 24 | 22 | 26 | 20 | 30 | 25 | n/a |
| % 2 | 26 | 27 | 25 | 30 | 23 | 25 | n/a |
| % 1 Strongly disagree | 27 | 29 | 24 | 30 | 23 | 27 | n/a |
| Rewards teaching with technology (in-person or online) in tenure and promotion decisions | | | | | | | |
| % 5 Strongly agree | 6 | 6 | 5 | 7 | 6 | 4 | 5 |
| % 4 | 18 | 18 | 18 | 19 | 20 | 18 | 14 |
| % 3 | 30 | 29 | 32 | 28 | 35 | 30 | 25 |
| % 2 | 21 | 22 | 15 | 22 | 25 | 19 | 33 |
| % 1 Strongly disagree | 25 | 25 | 29 | 24 | 14 | 29 | 23 |
| Compensates fairly for the development of an online course | | | | | | | |
| % 5 Strongly agree | 6 | 6 | 9 | 5 | 4 | 9 | 23 |
| % 4 | 14 | 13 | 13 | 16 | 12 | 10 | 27 |
| % 3 | 23 | 23 | 23 | 21 | 19 | 26 | 17 |
| % 2 | 25 | 26 | 23 | 26 | 28 | 22 | 18 |
| % 1 Strongly disagree | 32 | 33 | 32 | 31 | 36 | 33 | 14 |
| Provides monetary or other incentives for teaching online | | | | | | | |
| % 5 Strongly agree | 6 | 6 | 7 | 6 | 3 | 6 | 13 |
| % 4 | 13 | 13 | 11 | 15 | 16 | 10 | 19 |
| % 3 | 20 | 20 | 20 | 20 | 18 | 20 | 25 |
| % 2 | 23 | 21 | 22 | 21 | 23 | 23 | 18 |
| % 1 Strongly disagree | 39 | 40 | 41 | 39 | 41 | 41 | 25 |

* Asked only of faculty

INSTITUTIONAL SUPPORT FOR ONLINE LEARNING (cont.)

There are no large differences in faculty members' views about their institution's support for online learning based on whether they have taught online courses. At most, there is a 10-point difference in agreement about whether the institution provides adequate technical support for teaching online courses – 57 percent of those with online teaching experience agree, compared with 47 percent of those who have never taught online.

| Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements about your institution's support for online learning. | | | |
|--|-----------------|----------------------|----------------------------|
| | Faculty Members | | |
| | All | Taught online course | Never taught online course |
| Provides adequate technical support for teaching online courses | | | |
| % 5 Strongly agree | 19 | 21 | 16 |
| % 4 | 34 | 36 | 31 |
| % 3 | 25 | 24 | 26 |
| % 2 | 14 | 11 | 17 |
| % 1 Strongly disagree | 9 | 8 | 10 |
| Provides adequate technical support for creating an online course | | | |
| % 5 Strongly agree | 19 | 21 | 16 |
| % 4 | 31 | 32 | 30 |
| % 3 | 25 | 26 | 25 |
| % 2 | 14 | 13 | 15 |
| % 1 Strongly disagree | 11 | 9 | 14 |
| Compensates fairly for online instruction | | | |
| % 5 Strongly agree | 13 | 15 | 9 |
| % 4 | 21 | 22 | 21 |
| % 3 | 29 | 28 | 31 |
| % 2 | 18 | 17 | 21 |
| % 1 Strongly disagree | 19 | 18 | 18 |

INSTITUTIONAL SUPPORT FOR ONLINE LEARNING (cont.)

| | Faculty Members | | |
|--|-----------------|----------------------|----------------------------|
| | All | Taught online course | Never taught online course |
| Appropriately rewards contributions made to digital pedagogy | | | |
| % 5 Strongly agree | 8 | 7 | 9 |
| % 4 | 22 | 23 | 20 |
| % 3 | 33 | 29 | 37 |
| % 2 | 19 | 19 | 19 |
| % 1 Strongly disagree | 19 | 21 | 16 |
| Has policies that protect faculty members' intellectual property rights for digital work | | | |
| % 5 Strongly agree | 10 | 9 | 12 |
| % 4 | 20 | 18 | 23 |
| % 3 | 24 | 24 | 25 |
| % 2 | 20 | 21 | 20 |
| % 1 Strongly disagree | 25 | 28 | 21 |
| Rewards teaching with technology (in-person or online) in tenure and promotion decisions | | | |
| % 5 Strongly agree | 6 | 5 | 7 |
| % 4 | 18 | 18 | 19 |
| % 3 | 30 | 29 | 31 |
| % 2 | 21 | 21 | 20 |
| % 1 Strongly disagree | 25 | 26 | 23 |
| Compensates fairly for the development of an online course | | | |
| % 5 Strongly agree | 6 | 6 | 7 |
| % 4 | 14 | 13 | 16 |
| % 3 | 23 | 22 | 25 |
| % 2 | 25 | 25 | 25 |
| % 1 Strongly disagree | 32 | 34 | 27 |

INSTITUTIONAL SUPPORT FOR ONLINE LEARNING (cont.)

| | Faculty Members | | |
|--|-----------------|----------------------|----------------------------|
| | All | Taught online course | Never taught online course |
| Acknowledges time demands for online courses for workload | | | |
| % 5 Strongly agree | 7 | 8 | 6 |
| % 4 | 15 | 16 | 15 |
| % 3 | 24 | 22 | 27 |
| % 2 | 26 | 25 | 28 |
| % 1 Strongly disagree | 27 | 29 | 24 |
| Provides monetary or other incentives for teaching online | | | |
| % 5 Strongly agree | 6 | 6 | 6 |
| % 4 | 13 | 11 | 14 |
| % 3 | 20 | 18 | 22 |
| % 2 | 23 | 20 | 26 |
| % 1 Strongly disagree | 39 | 45 | 32 |

INSTITUTIONAL SUPPORT FOR ONLINE LEARNING (cont.)

When it comes to verifying online student identities, digital learning leaders are much more confident than faculty members in the methods their institution uses – 89 percent of digital learning leaders and 56 percent of faculty members are very or somewhat confident. Seventy-two percent of part-time faculty – versus 50 percent of full-time faculty – are confident in their institution’s method of verifying online students’ identities.

The vast majority of faculty members, 91 percent, report their college uses a log-in with username and password to verify student identities in online courses. No other method appears to be very common, but at least one in 10 professors say their institution uses live proctoring (14 percent), remote proctoring via webcam (13 percent) and photo identification (10 percent).

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| In which of the following ways does your institution verify the identity of students taking online courses? You may select as many as apply. | | | | | | | |
| % Log-in with username and password | 91 | 92 | 91 | 89 | 97 | 91 | n/a |
| % Live proctoring | 14 | 15 | 13 | 12 | 18 | 16 | n/a |
| % Remote proctoring via webcam | 13 | 14 | 11 | 12 | 14 | 15 | n/a |
| % Photo identification | 10 | 11 | 9 | 11 | 9 | 9 | n/a |
| % Keystroke analysis | 1 | 1 | 1 | 1 | 0 | 1 | n/a |
| % Fingerprint identification | <1 | <1 | <1 | <1 | 0 | 1 | n/a |
| % Voice recognition | <1 | <1 | <1 | 0 | 0 | 0 | n/a |
| % None of these | 8 | 7 | 7 | 9 | 3 | 7 | n/a |
| How confident are you that the methods your institution uses effectively verify online students' identities? | | | | | | | |
| % Very confident | 14 | 11 | 20 | 11 | 6 | 19 | 34 |
| % Somewhat confident | 42 | 39 | 52 | 38 | 51 | 43 | 55 |
| % Not too confident | 27 | 29 | 17 | 30 | 20 | 24 | 10 |
| % Not confident at all | 18 | 20 | 11 | 21 | 23 | 15 | 2 |

n/a=Question was not asked of digital learning leaders.

ONLINE PROGRAM MANAGEMENT COMPANIES

Colleges that have, or want to have, online programs have the option of hiring third-party companies to help with various aspects of those programs, from creation to implementation to day-to-day management. While substantial minorities of both faculty (39 percent) and digital learning leaders (39 percent) are opposed to using online program management companies at all, most seem open to colleges using them in a supplementary role.

Fifty-eight percent of faculty members and 61 percent of digital learning leaders say the ideal role for online program management companies is to help institutions with particular areas in which they lack in-house expertise. Just 3 percent of faculty members – and no digital learning leaders – think online program management companies should handle all aspects of an institution's online academic offerings.

Tenured faculty members are least receptive to using online program management companies – 48 percent say institutions should not hire them.

| Online program management companies (OPMs) work with colleges to develop, launch and manage online academic programs. In your opinion, what is the best approach for higher education institutions to take with online program management companies (OPMs) with respect to online degree programs? | | | | | | | |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | Faculty Members | | | | | | Digital Learning Leaders |
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| % Institutions should not hire online program management companies and should control all aspects of the process of developing, producing and managing their online academic programs. | 39 | 42 | 30 | 48 | 34 | 33 | 39 |
| % Institutions should hire online program management companies to help them with particular areas in which they do not have the in-house expertise. | 58 | 55 | 66 | 51 | 64 | 62 | 61 |
| % Institutions should hire online program management companies to develop, produce and manage their online degree programs. | 3 | 3 | 4 | 1 | 2 | 5 | 0 |

ONLINE PROGRAM MANAGEMENT COMPANIES

There are modest differences in attitudes about using online program management companies between those who have taught an online course and those who haven't. Faculty members with online teaching experience are slightly less inclined than those who have never taught online to believe institutions should hire online program management companies.

| Online program management companies (OPMs) work with colleges to develop, launch and manage online academic programs. In your opinion, what is the best approach for higher education institutions to take with online program management companies (OPMs) with respect to online degree programs? | | | |
|---|-----------------|----------------------|----------------------------|
| | Faculty Members | | |
| | All | Taught online course | Never taught online course |
| % Institutions should not hire online program management companies and should control all aspects of the process of developing, producing and managing their online academic programs. | 39 | 42 | 36 |
| % Institutions should hire online program management companies to help them with particular areas in which they do not have the in-house expertise. | 58 | 55 | 61 |
| % Institutions should hire online program management companies to develop, produce and manage their online degree programs. | 3 | 3 | 3 |

TEXTBOOKS AND INCLUSIVE ACCESS

In addition to high tuition costs, students are often faced with high prices for textbooks and other course materials. Eighty-three percent of faculty members agree, including 58 percent who agree strongly, that textbooks and course materials cost too much. An even larger percentage of digital learning leaders, 92 percent, strongly agree (72 percent) or agree (20 percent) textbook prices are too high.

Both faculty members and digital learning leaders endorse colleges using more free open educational resources. Seventy percent of faculty members and 89 percent of digital learning leaders strongly agree or agree that colleges should embrace the use of those free and openly licensed online educational materials.

Faculty members appear to have limits as to how far they are willing to go with textbook selection to save students money. Forty-nine percent strongly disagree or disagree and 32 percent strongly agree or agree that faculty members should be open to changing textbooks to save students money, even if the lower-cost options are of lesser quality. Also, 60 percent strongly disagree or disagree that cost considerations justify the loss of some faculty control in selecting materials for the courses they teach; 21 percent strongly agree or agree with this statement.

Digital learning leaders are more comfortable with faculty members losing some control of course material selection in an effort to save students money – 48 percent strongly agree or agree and 33 percent strongly disagree or disagree with that idea. Digital learning leaders are evenly divided (40 percent agree and 38 percent disagree) in believing that faculty members should be open to using lower-cost textbook options even if they are of lesser quality.

Many students, parents and politicians complain about textbook costs. Some colleges are experimenting with new ways to minimize those costs.

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements.

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Textbooks and course materials cost too much. | | | | | | | |
| % 5 Strongly agree | 58 | 58 | 57 | 56 | 60 | 57 | 72 |
| % 4 | 25 | 25 | 25 | 26 | 21 | 27 | 20 |
| % 3 | 13 | 13 | 14 | 13 | 16 | 13 | 7 |
| % 2 | 3 | 3 | 1 | 3 | 3 | 2 | 0 |
| % 1 Strongly disagree | 2 | 1 | 3 | 2 | 0 | 1 | 0 |

TEXTBOOKS AND INCLUSIVE ACCESS (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Faculty members and institutions should be open to changing textbooks or other materials to save students money, even if the lower cost options are of lesser quality. | | | | | | | |
| % 5 Strongly agree | 15 | 15 | 16 | 12 | 15 | 18 | 21 |
| % 4 | 17 | 15 | 20 | 16 | 20 | 17 | 19 |
| % 3 | 20 | 20 | 19 | 20 | 19 | 20 | 22 |
| % 2 | 21 | 22 | 18 | 23 | 20 | 19 | 24 |
| % 1 Strongly disagree | 28 | 28 | 27 | 29 | 27 | 26 | 14 |
| Colleges should embrace open educational resources, free and openly licensed online educational material. | | | | | | | |
| % 5 Strongly agree | 42 | 40 | 46 | 36 | 51 | 46 | 72 |
| % 4 | 28 | 28 | 27 | 31 | 21 | 28 | 17 |
| % 3 | 23 | 24 | 18 | 25 | 24 | 19 | 10 |
| % 2 | 5 | 5 | 5 | 6 | 3 | 4 | 0 |
| % 1 Strongly disagree | 3 | 3 | 3 | 3 | 1 | 2 | 0 |
| The need to help students save money on textbooks justifies some loss of faculty member control over selection of materials for the courses they teach. | | | | | | | |
| % 5 Strongly agree | 6 | 6 | 7 | 5 | 6 | 8 | 19 |
| % 4 | 15 | 13 | 19 | 12 | 12 | 17 | 29 |
| % 3 | 19 | 17 | 25 | 15 | 24 | 23 | 20 |
| % 2 | 18 | 20 | 14 | 20 | 15 | 18 | 15 |
| % 1 Strongly disagree | 42 | 44 | 35 | 48 | 43 | 34 | 18 |

TEXTBOOKS AND INCLUSIVE ACCESS (cont.)

Inside Higher Ed's recent surveys of college presidents and chief academic officers asked some of the same questions about textbooks. In general, faculty members are more opposed than other college officials to relinquishing some faculty control over course material selections. Whereas faculty are roughly three times as likely to disagree as to agree with this statement, chief academic officers are divided and presidents are more likely to agree than to disagree.

Presidents are more likely to agree or disagree that saving students money on textbooks should be a priority even if the lower-cost options are not the same quality. Provosts, like faculty, are more likely to disagree than to agree (42 percent to 35 percent), but by a lesser margin than faculty members do (49 percent to 32 percent).

While provosts, like faculty members, tend to disagree rather than to agree that faculty should be open to changing textbooks, even to lower-quality items, to save students money, faculty disagree by a wider margin (49 percent to 32 percent compared with 42 percent to 35 percent, respectively).

Faculty members' and presidents' attitudes about the cost of textbooks and the use of free educational resources are generally similar. Chief academic officers were not asked those two items.

| College Officials' Opinions About Textbooks | | | | |
|---|-----------------|--------------------------|-------------------------|------------|
| | Faculty Members | | | |
| | Faculty Members | Digital Learning Leaders | Chief Academic Officers | Presidents |
| Textbooks and course materials cost too much. | | | | |
| % Strongly agree/agree | 83 | 92 | n/a | 91 |
| % Strongly disagree/disagree | 5 | 0 | n/a | 2 |
| Colleges should embrace open educational resources, free and openly licensed online educational material. | | | | |
| % Strongly agree/agree | 70 | 89 | n/a | 85 |
| % Strongly disagree/disagree | 8 | 0 | n/a | 3 |
| Faculty members and institutions should be open to changing textbooks or other materials to save students money, even if the lower cost options are of lesser quality. | | | | |
| % Strongly agree/agree | 32 | 40 | 35 | 44 |
| % Strongly disagree/disagree | 49 | 38 | 42 | 34 |
| The need to help students save money on textbooks justifies some loss of faculty member control over selection of materials for the courses they teach. | | | | |
| % Strongly agree/agree | 21 | 48 | 38 | 50 |
| % Strongly disagree/disagree | 60 | 33 | 41 | 29 |

n/a: Not asked

TEXTBOOKS AND INCLUSIVE ACCESS (cont.)

One way colleges are attempting to address course material costs is to use inclusive access platforms. These platforms make digital course content available to students, the costs of which are often included in tuition. The survey asked faculty members and digital learning leaders whether inclusive access platforms are achieving their goals of reducing students' costs and improving education outcomes.

Forty percent of faculty members and 51 percent of digital learning leaders believe inclusive access platforms are achieving both of those goals. Roughly one in five in both groups believes the platforms are not achieving either goal. Among faculty members and digital learning leaders who think inclusive access platforms are only achieving one of those goals, most say it has been successful at reducing the costs of course materials but not at improving education outcomes.

Full-time and tenured faculty members are less positive about how successful inclusive access platforms have been.

In recent years, new “inclusive access” platforms have emerged that allow institutions and instructors to make digital course content available to all students on the first day of class at a discounted rate that is often included as part of tuition.

Two primary goals of inclusive access programs are reducing the costs of course materials to students, and improving education outcomes by making sure students have access to course materials at the start of the term.

Based on what you know about them, do you think inclusive access platforms are:

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| % Achieving both of those goals | 40 | 35 | 51 | 30 | 45 | 48 | 51 |
| % Only achieving the goal of reducing the costs of course materials to students | 31 | 33 | 28 | 32 | 23 | 30 | 24 |
| % Only achieving the goal of improving education outcomes | 6 | 6 | 6 | 9 | 4 | 6 | 6 |
| % Not achieving either of these goals | 23 | 26 | 16 | 30 | 28 | 16 | 19 |

TEXTBOOKS AND INCLUSIVE ACCESS (cont.)

Roughly 6 in 10 faculty members and digital learning leaders agree it is too soon to say whether inclusive access is good for students. Both faculty members and digital learning leaders see inclusive access platforms as potentially limiting faculty members' ability to choose course materials they prefer. Sixty-seven percent of faculty members agree this could happen, as do 59 percent of digital learning leaders.

| Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements about inclusive access programs. | | | | | | | |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | Faculty Members | | | | | | Digital Learning Leaders |
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| The adoption of inclusive access platforms by institutions may limit the ability of faculty members to choose the course materials they prefer. | | | | | | | |
| % 5 Strongly agree | 28 | 29 | 26 | 30 | 29 | 25 | 15 |
| % 4 | 39 | 39 | 41 | 38 | 43 | 39 | 44 |
| % 3 | 24 | 24 | 23 | 22 | 24 | 26 | 22 |
| % 2 | 5 | 4 | 6 | 5 | 2 | 6 | 10 |
| % 1 Strongly disagree | 5 | 4 | 4 | 5 | 2 | 4 | 8 |
| It is too soon to say whether inclusive access is good for students. | | | | | | | |
| % 5 Strongly agree | 26 | 27 | 23 | 30 | 28 | 24 | 24 |
| % 4 | 34 | 33 | 37 | 33 | 24 | 38 | 35 |
| % 3 | 26 | 26 | 27 | 24 | 35 | 25 | 22 |
| % 2 | 9 | 8 | 8 | 8 | 12 | 9 | 13 |
| % 1 Strongly disagree | 5 | 5 | 4 | 6 | 1 | 5 | 6 |

ASSESSMENT EFFORTS

Faculty members tend to hold negative opinions about assessment efforts colleges are undertaking to measure student learning outcomes. For example, more faculty members strongly disagree or disagree than strongly agree or agree that assessment efforts have improved the quality of teaching and learning at their institution (38 percent to 25 percent) and have helped increase degree completion rates (36 percent to 27 percent).

A majority of faculty members, 59 percent, agree with the idea that assessment efforts are primarily focused on satisfying outside groups; just 19 percent disagree. Tenured faculty (65 percent agree) are more likely to hold this view than tenure track (54 percent) or nontenure track (53 percent) faculty members.

Faculty members point to a lack of data and lack of discussion about how to use assessment efforts as issues. Twice as many strongly disagree or disagree (52 percent) as strongly agree or agree (26 percent) they regularly receive data gathered through assessment efforts at their college. Also, 43 percent strongly disagree or disagree and 28 percent strongly agree or agree there is meaningful discussion at their college about how to use assessment information.

Perhaps as a result of insufficient data and communication, by 43 percent to 34 percent faculty members are more likely to disagree than to agree they have used assessment information to improve the quality of their teaching.

Faculty members are divided as to whether they play a meaningful role in planning for the use of assessment efforts – 34 percent strongly agree or agree they do and 37 percent strongly disagree or disagree.

Digital learning leaders evaluate assessment efforts more positively, with more agreeing than disagreeing they have increased degree completion rates (39 percent to 26 percent) and the quality of teaching and learning at their institution (39 percent to 21 percent). They are also more likely to agree than disagree that there is meaningful discussion about how to use assessment information at their institution and that faculty have a meaningful role in planning for the use of those tools.

ASSESSMENT EFFORTS (cont.)

Colleges use a variety of technology tools to assist with assessment and accountability efforts. These tools vary widely and include reports on the engagement and success of individual students, “early warning” systems, and the collection of data on cohorts of students (individual classes and institution-wide).

Using a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statements.

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| These assessment efforts seem primarily focused on satisfying outside groups such as accreditors or politicians. | | | | | | | |
| % 5 Strongly agree | 31 | 33 | 25 | 37 | 29 | 25 | 10 |
| % 4 | 28 | 28 | 29 | 28 | 25 | 28 | 22 |
| % 3 | 22 | 21 | 24 | 18 | 25 | 26 | 29 |
| % 2 | 11 | 12 | 9 | 11 | 13 | 11 | 26 |
| % 1 Strongly disagree | 8 | 6 | 13 | 6 | 8 | 10 | 12 |
| Faculty members at my institution play a meaningful role in planning for the use of these assessment tools. | | | | | | | |
| % 5 Strongly agree | 11 | 9 | 18 | 9 | 9 | 16 | 13 |
| % 4 | 23 | 23 | 23 | 22 | 30 | 21 | 26 |
| % 3 | 28 | 27 | 31 | 27 | 18 | 29 | 34 |
| % 2 | 19 | 21 | 14 | 21 | 26 | 17 | 21 |
| % 1 Strongly disagree | 18 | 20 | 13 | 20 | 17 | 17 | 8 |
| Faculty members at my institution play a central role in planning for the use of these assessment tools. | | | | | | | |
| % 5 Strongly agree | 11 | 9 | 18 | 9 | 9 | 16 | 13 |
| % 4 | 23 | 23 | 23 | 22 | 30 | 21 | 26 |
| % 3 | 28 | 27 | 31 | 27 | 18 | 29 | 34 |
| % 2 | 19 | 21 | 14 | 21 | 26 | 17 | 21 |
| % 1 Strongly disagree | 18 | 20 | 13 | 20 | 17 | 17 | 8 |

ASSESSMENT EFFORTS (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|--|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| I have used data from these assessments to improve my teaching.* | | | | | | | |
| % 5 Strongly agree | 8 | 8 | 7 | 6 | 7 | 10 | n/a |
| % 4 | 26 | 25 | 30 | 24 | 28 | 28 | n/a |
| % 3 | 23 | 22 | 23 | 24 | 20 | 20 | n/a |
| % 2 | 17 | 18 | 15 | 18 | 19 | 17 | n/a |
| % 1 Strongly disagree | 26 | 27 | 24 | 27 | 26 | 25 | n/a |
| There is meaningful discussion at my college about how to use the assessment information. | | | | | | | |
| % 5 Strongly agree | 8 | 7 | 12 | 6 | 10 | 11 | 18 |
| % 4 | 20 | 20 | 19 | 18 | 25 | 20 | 29 |
| % 3 | 29 | 28 | 32 | 28 | 25 | 29 | 22 |
| % 2 | 22 | 21 | 23 | 24 | 21 | 21 | 18 |
| % 1 Strongly disagree | 21 | 24 | 14 | 25 | 20 | 18 | 13 |
| These assessments have helped increase degree completion rates at my institution. | | | | | | | |
| % 5 Strongly agree | 6 | 4 | 12 | 4 | 5 | 8 | 4 |
| % 4 | 21 | 20 | 25 | 15 | 30 | 26 | 35 |
| % 3 | 37 | 36 | 41 | 35 | 36 | 42 | 35 |
| % 2 | 16 | 18 | 9 | 19 | 15 | 14 | 19 |
| % 1 Strongly disagree | 20 | 22 | 14 | 28 | 15 | 10 | 7 |

* Asked only of faculty members

ASSESSMENT EFFORTS (cont.)

| | Faculty Members | | | | | | Digital Learning Leaders |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| I regularly receive data gathered through these assessment efforts from my college. | | | | | | | |
| % 5 Strongly agree | 8 | 7 | 8 | 7 | 7 | 9 | 10 |
| % 4 | 18 | 18 | 18 | 20 | 19 | 15 | 19 |
| % 3 | 22 | 22 | 23 | 20 | 20 | 24 | 25 |
| % 2 | 21 | 22 | 19 | 22 | 27 | 20 | 25 |
| % 1 Strongly disagree | 31 | 30 | 32 | 31 | 27 | 32 | 20 |
| These assessments have improved the quality of teaching and learning at my institution. | | | | | | | |
| % 5 Strongly agree | 5 | 4 | 8 | 3 | 3 | 7 | 8 |
| % 4 | 20 | 19 | 26 | 16 | 27 | 23 | 31 |
| % 3 | 36 | 35 | 36 | 35 | 31 | 37 | 40 |
| % 2 | 20 | 23 | 14 | 23 | 24 | 18 | 13 |
| % 1 Strongly disagree | 18 | 19 | 17 | 23 | 14 | 16 | 8 |

ACCESSIBILITY FOR STUDENTS WITH DISABILITIES

Nearly all colleges are subject to the provisions of the Americans with Disabilities Act (ADA) and must make efforts to ensure those with disabilities have the same access to participate in higher education as other students. Most, but not all, college faculty members say their institution provides training on how to make course materials compliant with the ADA.

Sixty-nine percent indicate their college provides such training, but 31 percent say their institution does not. In the 2017 survey, 64 percent of faculty members said their institution provided training on making course materials ADA-compliant. Faculty employed by public institutions (72 percent) are much more likely than those working at private institutions (50 percent) to say their college provides ADA-compliance training.

Majorities of college faculty report the courses they teach accommodate those with disabilities in various ways, particularly those with for vision or hearing impairments. Specifically, 66 percent of faculty members say their courses offer screen reader compatibility, 64 percent say they provide alternative text to visual elements and 61% say the same about both making links descriptive and captioning video and transcribing audio.

Faculty members with online teaching experience are significantly more likely than those with no online teaching experience to say their courses offer those types of accommodations to students with disabilities.

| As you may know, the Americans With Disabilities Act (ADA) requires that colleges afford the full educational experience to those with disabilities as fully as possible.* | | | | | | | |
|---|-----------------|-----------|-----------|---------|--------------|-----------------|--------------------------|
| | Faculty Members | | | | | | Digital Learning Leaders |
| | All | Full time | Part time | Tenured | Tenure track | Nontenure track | |
| Do the courses you teach do each of the following? | | | | | | | |
| % Offer screen-reader compatibility | 66 | 66 | 69 | 63 | 62 | 70 | n/a |
| % Provide alternative text to visual elements | 64 | 62 | 68 | 60 | 61 | 66 | n/a |
| % Make links descriptive for people with visual disabilities | 61 | 60 | 64 | 54 | 65 | 64 | n/a |
| % Caption video and transcribe audio | 61 | 60 | 64 | 57 | 57 | 64 | n/a |
| Does your institution provide training on how to make course materials ADA-compliant? | | | | | | | |
| % Yes | 69 | 68 | 70 | 69 | 61 | 72 | n/a |
| % No | 31 | 32 | 30 | 31 | 39 | 28 | n/a |

* Asked only of faculty members

ACCESSIBILITY FOR STUDENTS WITH DISABILITIES (cont.)

| As you may know, the Americans With Disabilities Act (ADA) requires that colleges afford the full educational experience to those with disabilities as fully as possible.* | | | |
|--|-----------------|----------------------|----------------------------|
| | Faculty Members | | |
| | All | Taught online course | Never taught online course |
| Do the courses you teach do each of the following? | | | |
| % Offer screen-reader compatibility | 66 | 76 | 56 |
| % Provide alternative text to visual elements | 64 | 71 | 55 |
| % Make links descriptive for people with visual disabilities | 61 | 69 | 52 |
| % Caption video and transcribe audio | 61 | 69 | 53 |
| Does your institution provide training on how to make course materials ADA-compliant? | | | |
| % Yes | 69 | 71 | 65 |
| % No | 31 | 29 | 35 |

* Asked only of faculty

INSTITUTION AND PERSONAL DEMOGRAPHICS

| What is your age? | | |
|-------------------|-----------|----------------------------|
| | % Faculty | % Digital Learning Leaders |
| Under 30 | 2 | 1 |
| 30 to 39 | 14 | 9 |
| 40 to 49 | 25 | 33 |
| 50 to 59 | 29 | 34 |
| 60 to 69 | 23 | 20 |
| 70 and older | 7 | 2 |

| What is your gender? | | |
|----------------------|-----------|----------------------------|
| | % Faculty | % Digital Learning Leaders |
| Male | 50 | 51 |
| Female | 50 | 49 |

| How many years have you served as a faculty member at this institution?* | |
|--|-----------|
| | % Faculty |
| Less than 6 months | 1 |
| 6 months to less than 3 years | 12 |
| 3 years to less than 5 years | 13 |
| 5 years to less than 10 years | 19 |
| 10 years or more | 55 |

* Asked only of faculty members

| What is your current tenure status?* | |
|--------------------------------------|-----------|
| | % Faculty |
| Tenured | 47 |
| Tenure track but not tenured | 13 |
| Nontenure track | 41 |

* Asked only of faculty members

INSTITUTION AND PERSONAL DEMOGRAPHICS (cont.)

| Do you work part time or full time at your institution?* | |
|--|-----------|
| | % Faculty |
| Part time | 25 |
| Full time | 75 |

* Asked only of faculty members

| With which of the following disciplines do you associate yourself ?* | |
|--|-----------|
| | % Faculty |
| Humanities | 25 |
| Social sciences | 21 |
| Engineering | 4 |
| Computer and information sciences | 4 |
| Physical sciences | 7 |
| Biological sciences | 9 |
| Professional schools | 11 |
| Another field | 18 |

* Asked only of faculty members

| What type of online courses and degree programs does your institution offer? Select all that apply.* | |
|---|----------------------------|
| | % Digital Learning Leaders |
| Some online courses (no complete online degree programs) | 45 |
| Online degree programs | 89 |
| Some blended or hybrid courses | 82 |
| Degree programs consisting of all blended or hybrid courses | 53 |

* Asked only of digital learning leaders

| Do you consider your institution to be a liberal arts institution? | | |
|--|-----------|----------------------------|
| | % Faculty | % Digital Learning Leaders |
| Yes | 47 | 50 |
| No | 53 | 50 |

ABOUT INSIDE HIGHER ED

Founded in 2004, *Inside Higher Ed* is the online source for news, opinions and jobs for all of higher education. *Inside Higher Ed* provides what higher education professionals need to thrive in their jobs or to find better ones: breaking news and feature stories, provocative daily commentary, areas for comment on every article, practical career columns, and a powerful suite of tools that keep academic professionals well-informed about issues and employment opportunities and that help colleges identify and hire talented personnel.

For more information, visit www.insidehighered.com.

ABOUT GALLUP

Gallup delivers analytics and advice to help leaders and organizations solve their most pressing problems. Combining more than 80 years of experience with its global reach, Gallup knows more about the attitudes and behaviors of employees, customers, students and citizens than any other organization in the world. Gallup works with leaders and organizations to achieve breakthroughs in customer engagement, employee engagement, organizational culture and identity, leadership development, talent-based assessments, entrepreneurship and well-being. Gallup's 2,000 professionals include noted scientists, renowned subject-matter experts and bestselling authors who work in a range of industries, including banking, finance, healthcare, consumer goods, automotive, real estate, hospitality, education, government and business-to-business (B2B).

For more information, visit www.gallup.com nor www.gallup.com/services/170939/higher-education.aspx.