

Emerging Technology and AI

A study by *Inside Higher Ed*
and Hanover Research





Digital transformation continues to evolve quickly, and no emerging technology has the potential to influence the future of higher education more than AI.

Huron and *Inside Higher Ed* surveyed higher education leaders across the country for insights to better understand the current and future states of AI at colleges and universities.

In this report, you will learn more about how institutions are considering AI opportunities, which areas they expect AI to impact the most, and current AI investment targets. Their responses highlight the uncertainty and caution that persist in light of the immaturity of emerging technologies such as AI — as well as the need for a strategic, collaborative approach to successful adoption.

Putting Possible Into Practice

Huron is at the forefront of digital transformation and partners with higher education institutions to use data and technology to enable innovation, growth, and stability.

Engage with a member of the Huron team to continue this dialogue and get insights on how your institution can best prepare and execute an AI strategy that puts the possibilities of AI into practice.

huronconsultinggroup.com



Table of Contents

- Introduction and Methodology4
- Key Findings.....5
- Artificial Intelligence Utilization8
- Artificial Intelligence in Administrative Capacities9
- AI-Generative Tools 10
- Steps to Manage AI-Usage on Campus 11
- Helpfulness of Future AI Advances12
- Department to Lead AI Planning and Implementation..... 14
- Impact of Recent AI Advancements15
- AI Effect on Higher Education Instruction..... 16
- Funding of AI Technology17
- Money Anticipated To Be Spent on AI in Next Two Years..... 18
- Concerns About AI 19
- Guidelines to Combat AI-Ingained Biases20
- Sources of AI Information21
- Frequency of Hearing About AI Advancements 22
- Administrative Applications and Providers.....23
- Instructional Applications and Providers.....24
- Relationship with Technology Vendors 25
- Utilizing Data Analytics26
- Effectiveness at Utilizing Data Analytics 27
- About *Inside Higher Ed* and Hanover Research28

Introduction and Methodology

Inside Higher Ed has partnered with Hanover Research, with sponsorship from Huron, to understand stakeholders’ current attitudes and thoughts about how artificial intelligence (AI) will impact higher education in this country. This survey was administered online in April and May of 2023 using the Qualtrics platform. Results include 224 respondents following data cleaning which removed 9 low-quality respondents. Written analysis about the results for the entire sample is found throughout the report, along with some analysis based on sector, AI utilization, and role.

- Hanover sent invitations via email to 2,639 stakeholders at different institutions. Hanover collected 213 fully or partially completed surveys, yielding an 8 percent response rate.
- After data collection, Hanover identified and removed low-quality respondents.
- Specialty colleges - namely, Bible colleges and seminaries with a Carnegie Classification of 24 - and institutions with an enrollment of fewer than 500 students were excluded from the sample.
- Sample sizes vary across questions as some questions only pertain to a subset of respondents.
- Conclusions drawn from a small sample size (n<20) should be interpreted with caution.
- “Don’t Know or Not Applicable” responses, and equivalent, are often excluded from the figures and analysis in order to focus on respondents who did express an opinion.
- Due to small sample sizes, some sectors have been excluded. The 2018 Carnegie Classification was used to determine sector classifications. Some schools lacked a classification and were excluded from those segmentations.

	All Institutions, by Sector				Public			Private Nonprofit	
	All	Public	Private Nonprofit	For-profit*	Doctoral	Master’s/ Bacc.	Associate	Doctoral/ Master’s	Bacc.
Total sample size	213	114	92	7	40	22	47	49	30

Note: An asterisk () indicates that data is not reported for these groups due to small sample size.*

Key Findings

- Respondents from public schools are more likely than those at private nonprofit schools to indicate that their institution is currently using AI. In fact, more than half of those from public schools report that their institution is currently utilizing any AI technology or software (55 percent), compared to just 36 percent of those from private nonprofit schools. Overall, respondents are generally split on whether their institution is currently using AI. Nearly half of respondents indicate that their institution is currently using AI technology or software (48 percent) and 41 percent indicate that their institution is not.
- Regarding steps taken to manage AI usage on campus, about half of respondents report that their institution has encouraged AI-related training among faculty/staff. Additionally, more than a third have provided workshops to teach university stakeholders how to best utilize AI (37 percent). However, a quarter of respondents report that their institution has not taken any steps to manage AI usage on campus (25 percent).
- Most respondents think future AI advances will be very helpful at making learning support (e.g., self-service chat bots, flagging at risk students) more efficient. Additionally, more than two-thirds of respondents think future AI advances will be very or extremely helpful at making administrative support (e.g., analyzing data on operational effectiveness, admission trends, student retention, financial management) more efficient (69 percent). However, respondents are slightly less likely to think that future AI advances will be at least very helpful at making research support more efficient (54 percent).
- Respondents believe that AI technology will be most impactful in answering student questions with chatbots and with analyzing data related to student retention. Further, more than a quarter of respondents think AI will be impactful in analyzing data related to student recruitment (28 percent). However, fewer believe that AI technology will help with assisting faculty with teaching (16 percent) and general administration support (15 percent).
- Respondents are split on whether the Office of Teaching and Learning or the Office of Information Technology should lead their institution's AI planning and implementation initiatives. Few believe that the President's Office should lead the AI planning and implementation initiatives (11 percent).
- Recent AI advancements have generally caused institutions to re-assess its instructional plans and goals more than its administrative plans and goals. Nearly two-thirds of respondents agree that AI advancements have caused their institution to re-assess its long-term instructional plans and goals (64 percent). Comparatively, fewer than half agree that AI advancements have caused their institution to re-assess its long-term administrative plans and goals (46 percent).

Key Findings (cont.)

- In regard to AI software and technology implementation, institutions are more focused on long-term goals (3 years or more in the future) than they are short-term goals (in the next 12 months). Respondents are more likely to agree that recent AI advancements have caused their institution to re-assess its long-term administrative (46 percent) and instructional (64 percent) plans and goals (3 years or more in the future) than their short-term administrative (25 percent) and instructional (52 percent) plans and goals.
- Most respondents believe that AI software will be a core skill institutions will need to teach, yet fewer believe that faculty will be able to successfully teach students how to use AI. Further, almost all respondents agree that working with AI software will become a core skill needed in the workforce (90 percent). However, fewer than half agree that faculty at their institution will be receptive to adjusting their curricula to include teaching students how to use AI (43 percent). Additionally, just 36 percent agree that their institution will have adequate resources to support faculty as they learn how to use new AI technology.
- Very few respondents agree that their institution has a good sense of how much it will cost to implement and deploy new AI technology in administrative and instructional areas. Although, more than three-quarters of respondents believe that investing in AI in administrative (77 percent) and instructional (76 percent) areas will ultimately lead to a positive return on investment at their institution. Most respondents anticipate their institution will spend less than 250,000 dollars on AI in the next two years (70 percent). Respondents from private nonprofit institutions (80 percent) are more likely than those from public institutions (64 percent) to anticipate their institution spending less than 250,000 dollars on AI in the next two years.
- Respondent' main concern about utilizing AI at their institution is students using it to cheat or plagiarize. Additionally, more than one third of respondents are very or extremely concerned about AI-ingrained biases that could negatively affect marginalized groups at their institution (40 percent) and prospective students using AI to write their application essays (38 percent). To combat AI-ingrained biases, more than half of respondents believe that implementing internal guidelines or procedures will be at least very important for their institution (58 percent).

Key Findings (cont.)

- More than a third of respondents are very or extremely concerned about their institution's ability to keep up with rapidly developing AI technology. Further, 38 percent are moderately concerned. Those who are not currently utilizing AI at their institution (49 percent) are more concerned about their institution's ability to keep up than those who are utilizing AI at their institution (33 percent). Very few respondents feel very or extremely knowledgeable about the rapidly changing developments in AI (11 percent). Although, nearly half indicate that they feel moderately knowledgeable (46 percent).
- Fewer than a quarter of senior officers report that their institution has room in the budget for new AI software. Further, fewer than one third agree that their institution is prepared to efficiently make decisions to implement new AI software when it comes out (29 percent).
- More than half of respondents indicate that utilizing data analytics has been very or extremely important to their institution, yet few report that their institution highly effectively uses data to inform decisions. In fact, just 24 percent report that their institution is very or extremely effective at using data to aid and inform campus decision-making.

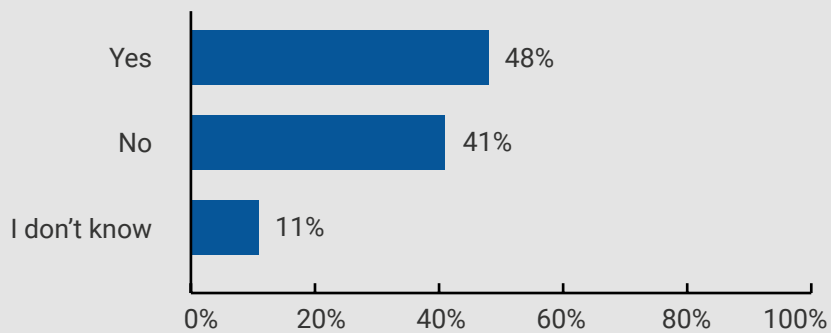


Artificial Intelligence Utilization

Respondents are split on whether their institution is currently utilizing any AI technology or software. Nearly half of respondents indicate that their institution is currently using AI technology or software (48 percent) and 41 percent indicate that their institution is not.

Respondents at public schools (55 percent) are more likely than those at private nonprofit schools (36 percent) to indicate that their institution is currently using AI.

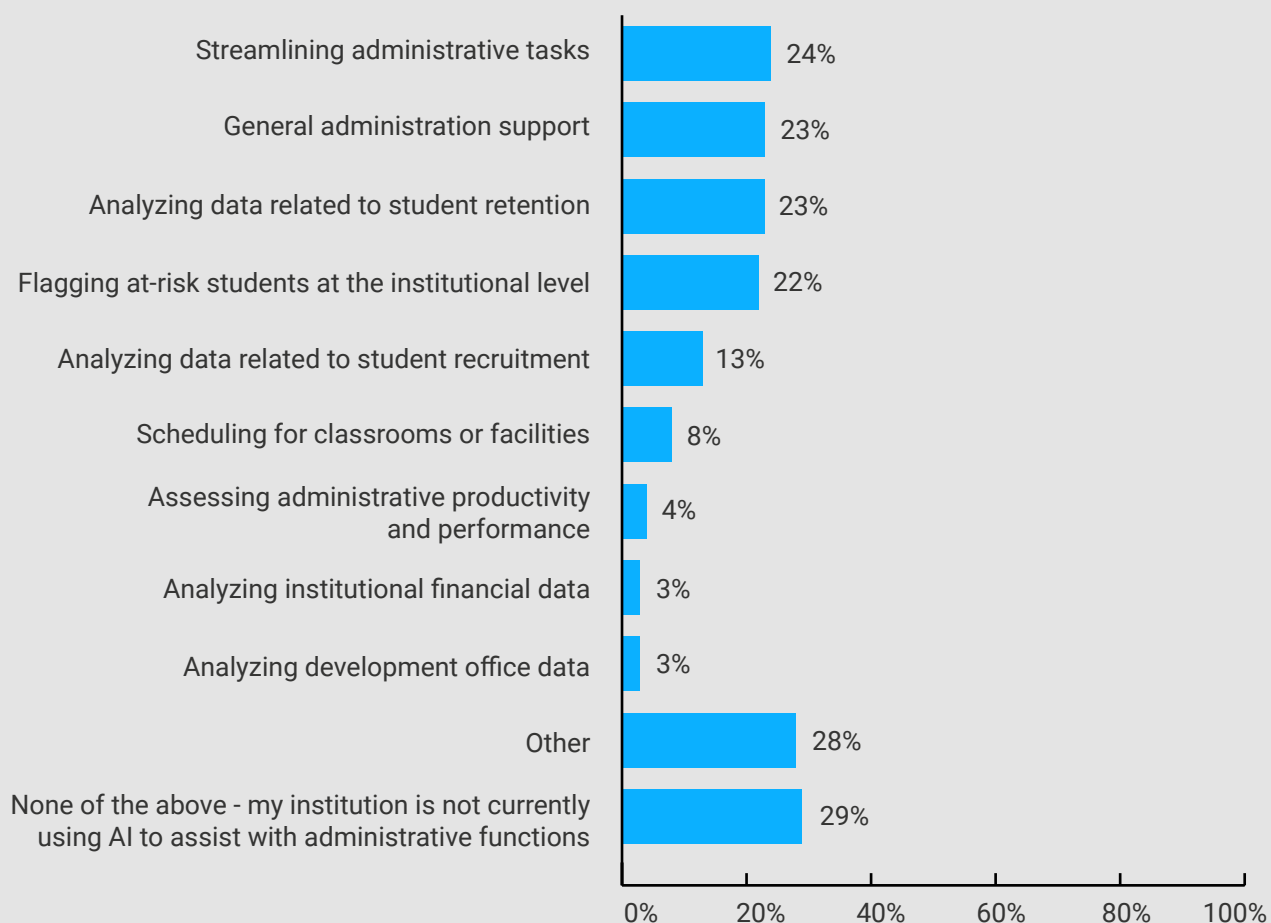
Is your institution currently utilizing any Artificial Intelligence (AI) technology or software? (n=213)



Artificial Intelligence in Administrative Capacities

Nearly a third of respondents indicate that their institution is not currently using AI to assist with administrative functions. However, about a quarter report that their institution uses AI to streamline administrative tasks (24 percent), for general administration support (23 percent), and for analyzing data related to student retention (23 percent).

Does your institution currently use AI in any of the following administrative capacities? Please select all that apply. (n=102)



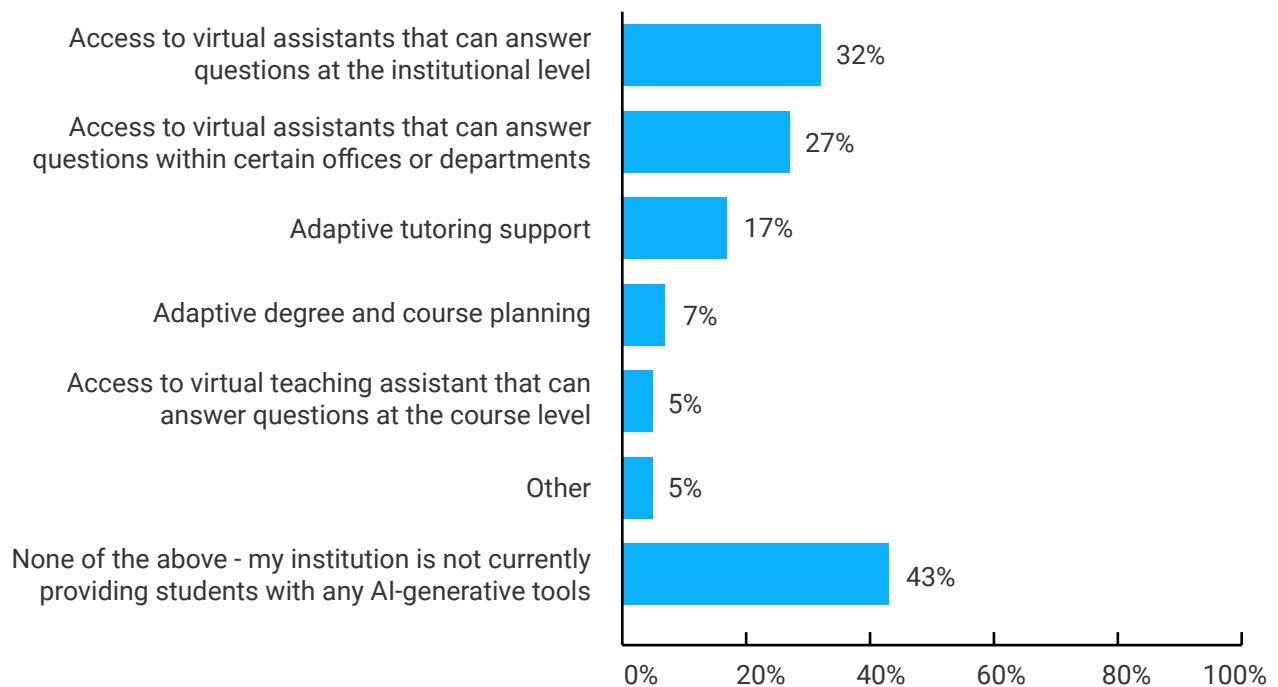
Note: This question was displayed to respondents whose institution is currently utilizing AI technology or software.

AI-Generative Tools

The top AI-generative tools that institutions currently provides students with are access to virtual assistants that can answer questions at the institutional level and within certain offices or departments. However, 43 percent of respondents indicate that their institution is not currently providing students with any AI-generative tools.

More respondents from public schools (40 percent) than those from private nonprofit schools (15 percent) report that their institution provides their students with access to virtual assistants that can answer questions at the institutional level.

Does your institution currently provide students with any of the following types of AI-generative tools? Please select all that apply. (n=102)



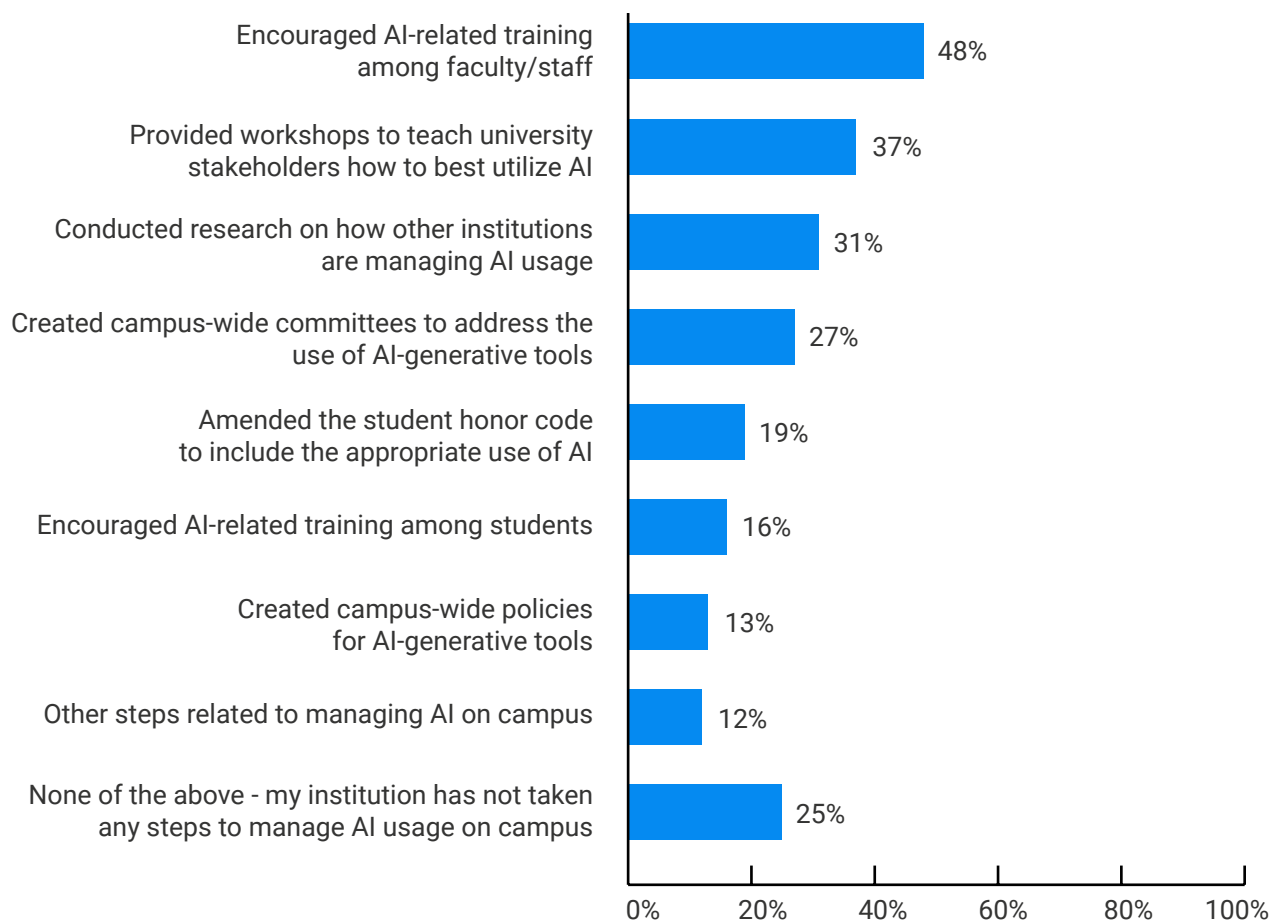
Note: This question was displayed to respondents whose institution is currently utilizing AI technology or software.

Steps to Manage AI-Usage on Campus

Approximately half of respondents have encouraged AI-related training among faculty/staff. Additionally, more than a third have provided workshops to teach university stakeholders how to best utilize AI (37 percent). However, a quarter of respondents report that their institution has not taken any steps to manage AI usage on campus (25 percent).

Interestingly, respondents from private nonprofit institutions (57 percent, 39 percent) are more likely than those from public institutions (40 percent, 24 percent) to report that their institution has encouraged AI-related training among faculty and staff and conducted research on how other institutions are managing AI usage.

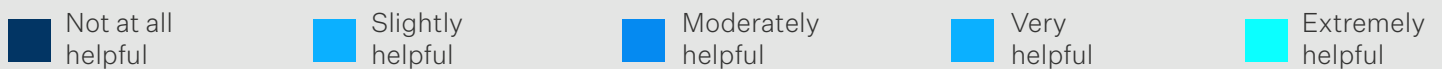
Has your institution taken any of the following steps to manage AI usage on campus? Please select all that apply. (n=213)



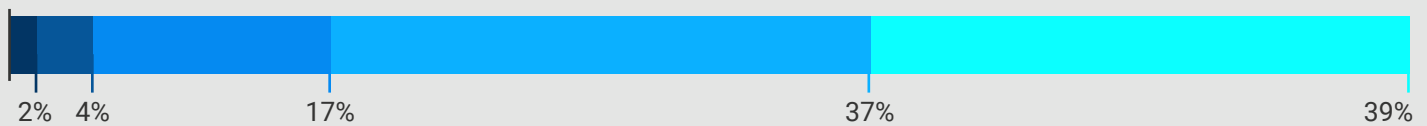
Helpfulness of Future AI Advances

Most respondents think future AI advances will be at least very helpful at making learning support (e.g., self-service chat bots, flagging at risk students) more efficient (76 percent). Additionally, more than two-thirds of respondents think future AI advances will be very or extremely helpful at making administrative support (e.g., analyzing data on operational effectiveness, admission trends, student retention, financial management) more efficient (69 percent). However, respondents are less likely to think that future AI advances will be at least very helpful at making research support more efficient (54 percent).

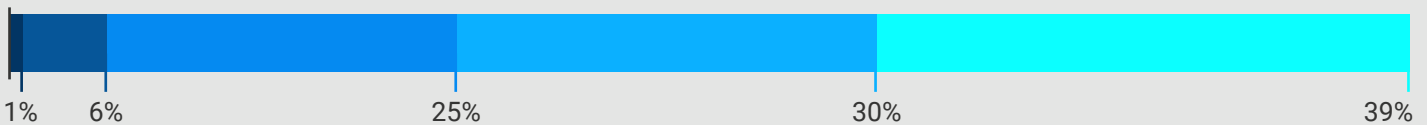
How helpful do you think future AI advances will be at making the following areas of your institution more efficient?



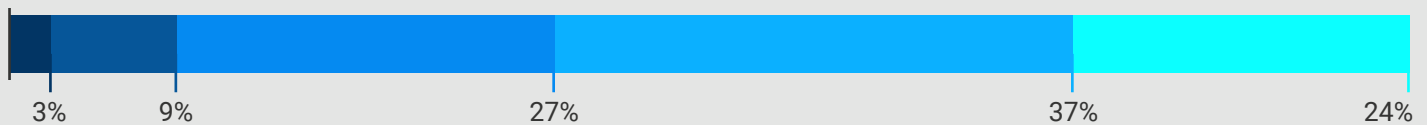
Learning support (e.g., self-service chat bots, flagging at risk students) (n=202)



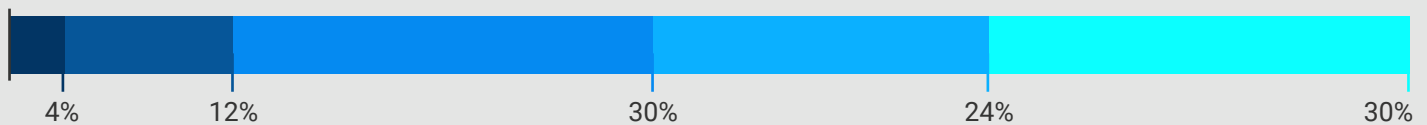
Administrative support (e.g., analyzing data on operational effectiveness, admission trends, student retention, financial management) (n=195)



Teaching support (e.g., providing adaptive and automated assessments) (n=198)



Research support (e.g., assisting faculty with their research) (n=178)

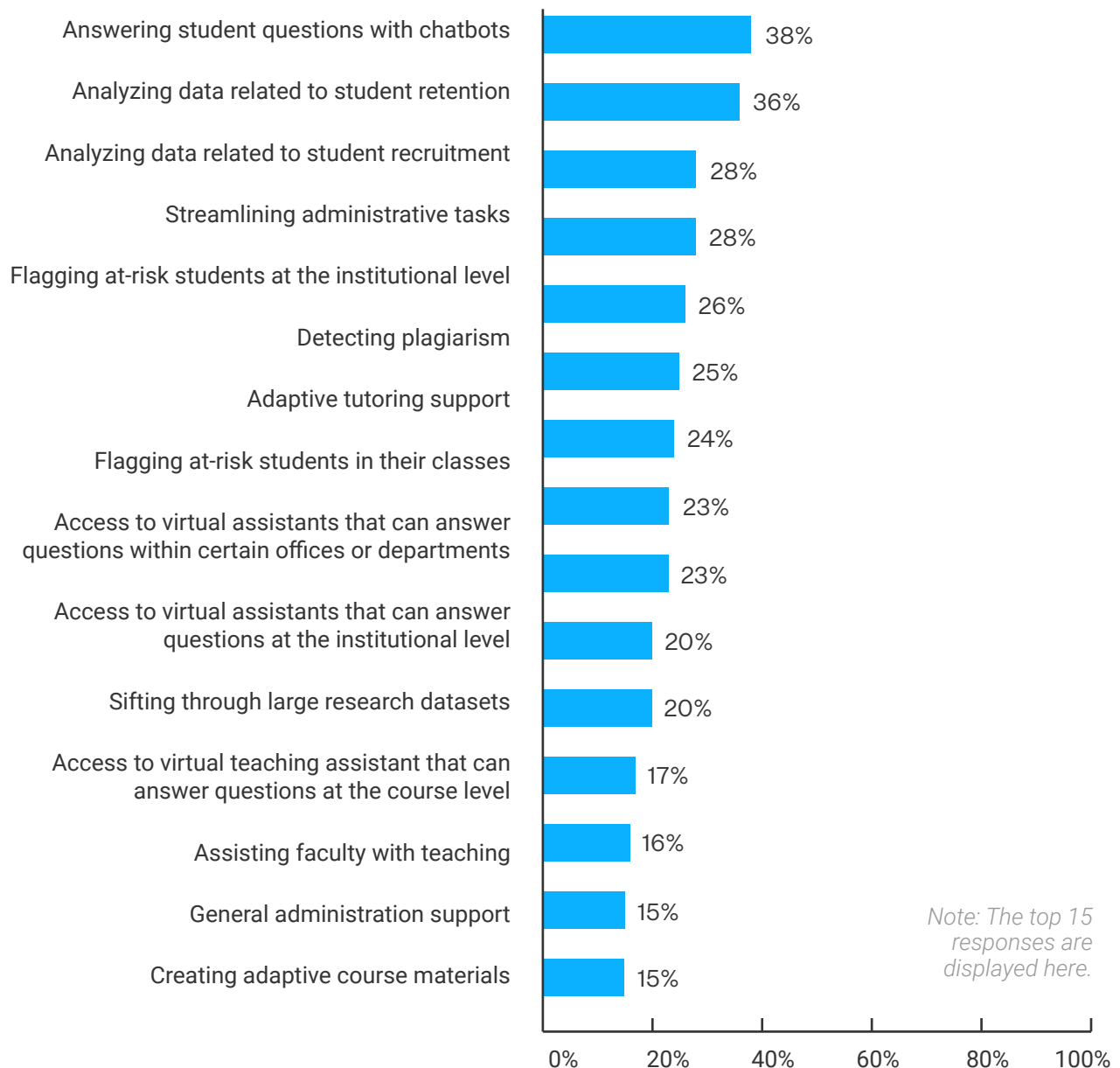


Helpfulness of Future AI Advances (cont.)

Respondents believe that AI technology will be most impactful in answering student questions with chatbots and with analyzing data related to student retention. Further, more than a quarter of respondents think AI will be impactful in analyzing data related to student recruitment (28 percent).

However, fewer believe that AI technology will help with assisting faculty with teaching (16 percent).

In which of the following areas do you believe that AI technology will be most impactful at your institution? Please select up to five options. (n=200)

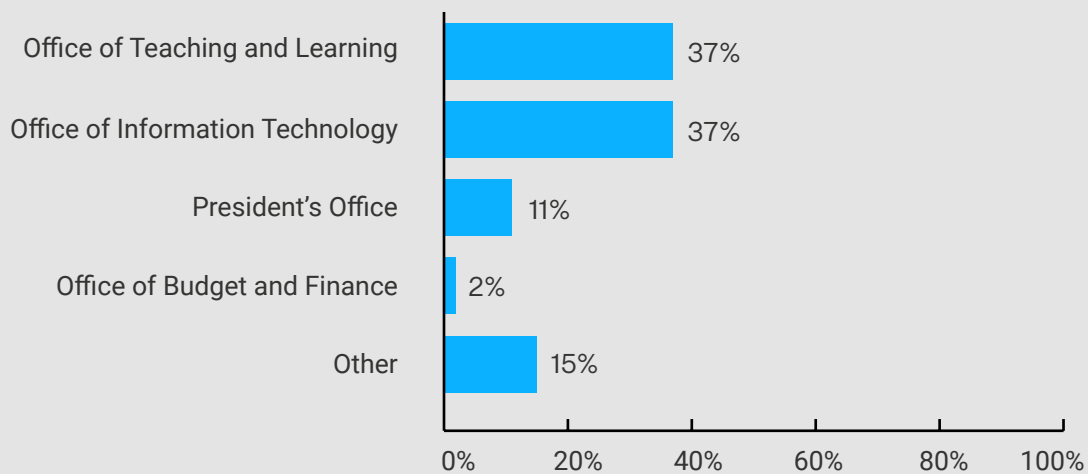


Department to Lead AI Planning and Implementation

Respondents believe that the Office of Teaching and Learning or the Office of Information Technology should lead their institution's AI planning and implementation initiatives. Few believe that the President's Office should lead the AI planning and implementation initiatives (11 percent).

Chief information officers (60 percent) are more likely than chief financial officers (45 percent) and those in academic leadership (24 percent) to indicate that the Office of Information Technology should leader their institution's AI planning and implementation initiatives.

Which department or unit at your institution do you believe should lead your institution's AI planning and implementation initiatives? (n=200)



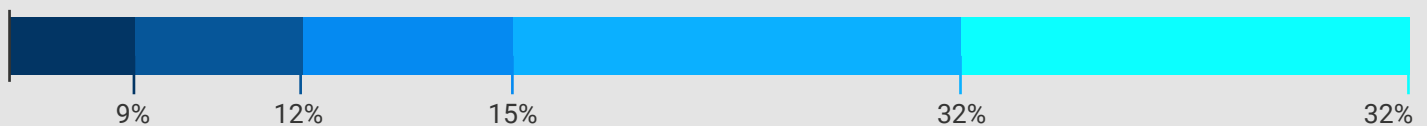
Impact of Recent AI Advancements

Generally, recent AI advancements have caused institutions to re-assess their instructional plans and goals more than their administrative plans and goals. Nearly two-thirds of respondents agree that AI advancements have caused their institution to re-assess its long-term instructional plans and goals (64 percent). However, fewer than half agree that AI advancements have caused their institution to re-assess its long-term administrative plans and goals (46 percent).

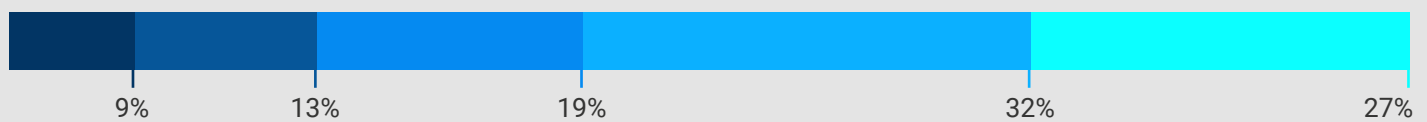
Additionally, institutions are more focused on long-term goals (3 years or more in the future) (64 percent, 46 percent) than they are short-term goals (in the next 12 months) (52 percent, 25 percent).

To what extent do you agree or disagree with the following statements? Recent AI advancements have caused my institution to re-assess its...

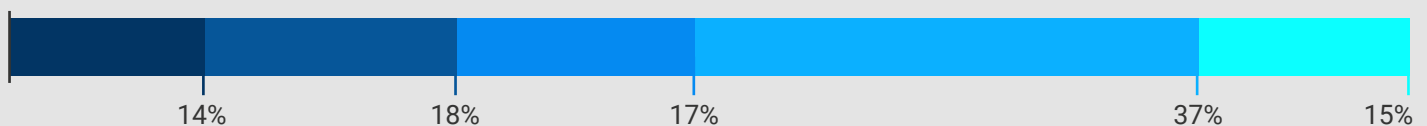
...long-term instructional plans and goals (3 years or more in the future). (n=181)



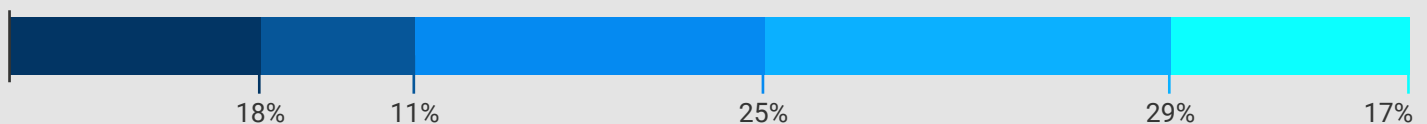
...medium term instructional plans and goals (in the next 1-2 years). (n=181)



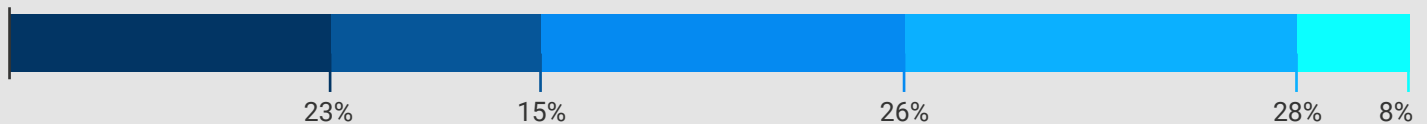
...short term instructional plans and goals (in the next 12 months). (n=181)



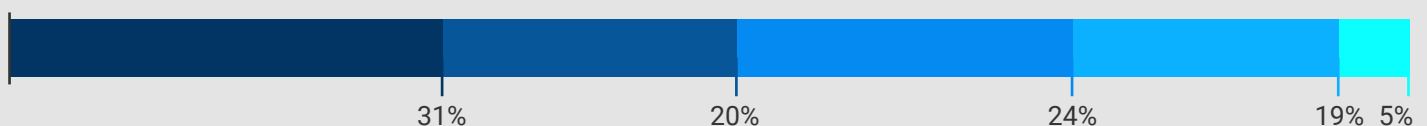
...long-term administrative plans and goals (3 years or more in the future). (n=183)



...medium term administrative plans and goals (in the next 1-2 years). (n=185)



...short term administrative plans and goals (in the next 12 months). (n=185)



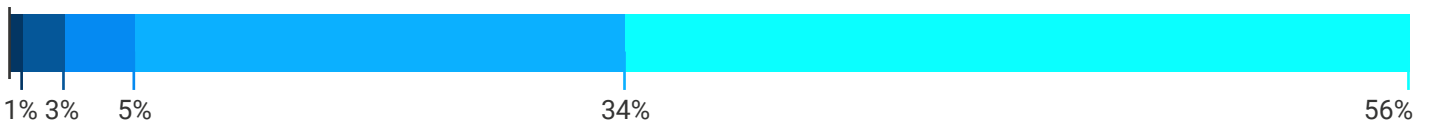
AI Effect on Higher Education Instruction

Most respondents believe that AI software will be a core skill institutions will need to teach, yet fewer believe that faculty will be able to successfully teach students how to use AI. Further, almost all respondents agree that working with AI software will become a core skill needed in the workforce (90 percent). However, fewer than half agree that faculty at their institution will be receptive to adjusting their curricula to include teaching students how to use AI (43 percent). Additionally, just 36 percent agree that their institution will have adequate resources to support faculty as they learn how to use new AI technology.

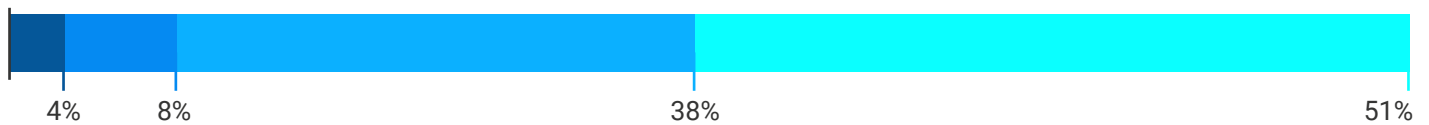
To what extent do you agree or disagree with the following statements regarding how AI may affect higher education instruction?



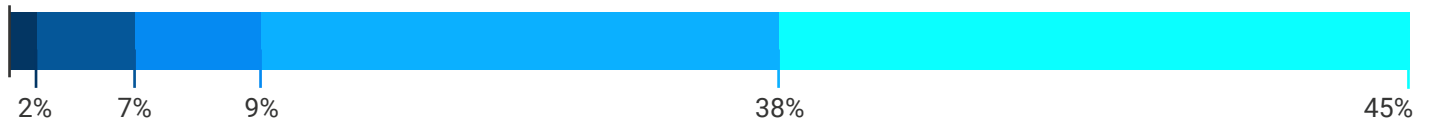
Working with AI software will become a core skill needed in the workforce. (n=185)



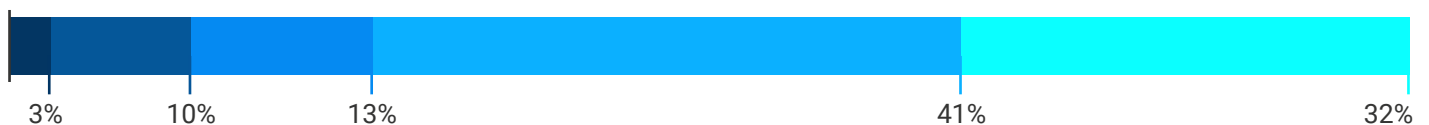
Working with AI software will become a core skill institutions will need to teach. (n=184)



In the next five years, the implementation of AI software will dramatically change higher education instructional practices. (n=183)



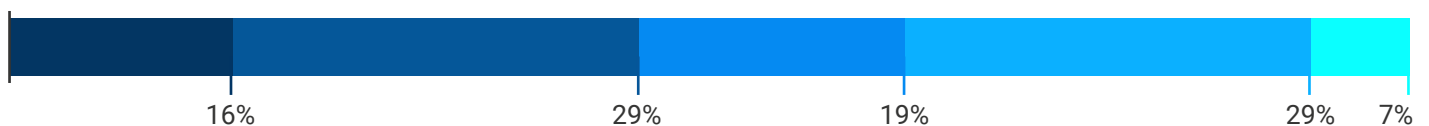
In the next five years, the implementation of AI software will dramatically change the type of material taught in the classroom. (n=185)



Faculty at my institution will be receptive to adjusting their curricula to include teaching students how to use AI. (n=184)



My institution will have adequate resources to support faculty as they learn how to use new AI technology. (n=186)



Funding of AI Technology

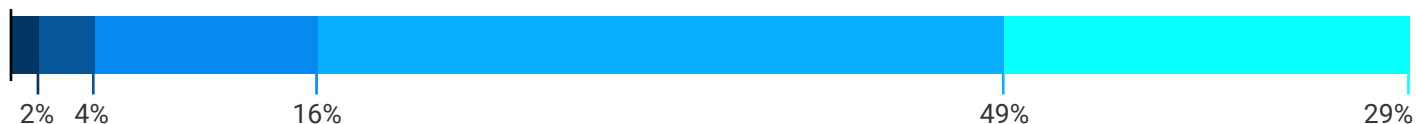
Very few respondents agree that their institution has a good sense of how much it will cost to implement and deploy new AI technology in administrative (10 percent) and instructional (9 percent) areas. However, more than three-quarters of respondents believe that investing in AI in administrative (77 percent) and instructional (76 percent) areas will ultimately lead to a positive return on investment at their institution.

More respondents from public institutions (83 percent, 81 percent) than those from private nonprofit institutions (69 percent, 68 percent) believe that investing in AI in administrative and instructional areas will ultimately lead to a positive return on investment at their institution.

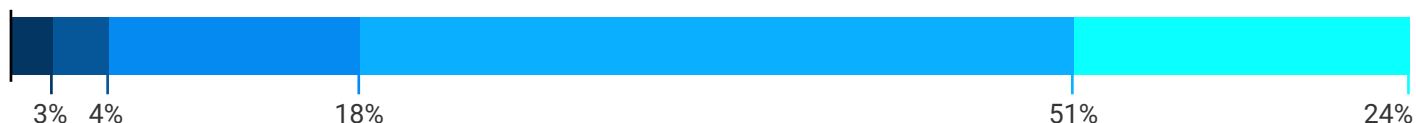
To what extent do you agree or disagree with the following statements regarding the funding of AI technology at your institution?



I believe that investing in AI in administrative areas will ultimately lead to a positive return on investment at my institution. (n=182)



I believe that investing in AI in instructional areas will ultimately lead to a positive return on investment at my institution. (n=180)



In general, I am concerned about my institution being able to afford the costs of implementing and deploying new AI technology. (n=184)



My institution has a good sense of how much it will cost to implement and deploy new AI technology in administrative areas. (n=183)



My institution has a good sense of how much it will cost to implement and deploy new AI technology in instructional areas. (n=181)

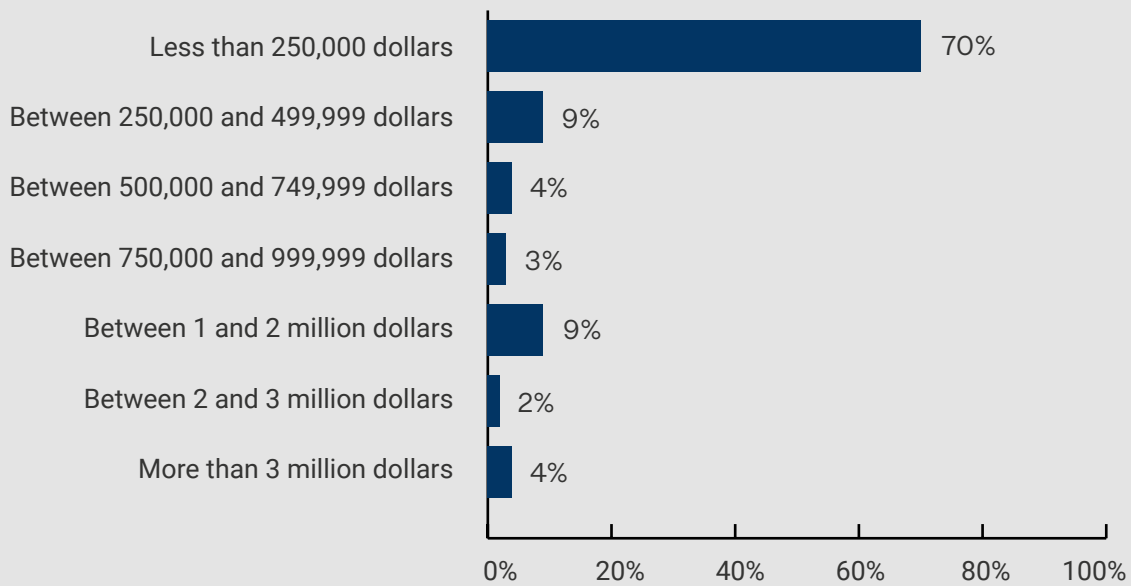


Money Anticipated to be Spent on AI in Next Two Years

Most respondents anticipate their institution will spend less than 250,000 dollars on AI in the next two years. About 9 percent of respondents anticipate their institution will spend between 250,000 and 499,999 or between 1 and 2 million dollars.

Respondents from private nonprofit institutions (80 percent) are more likely than those from public institutions (64 percent) to anticipate their institution spending less than 250,000 dollars on AI in the next two years.

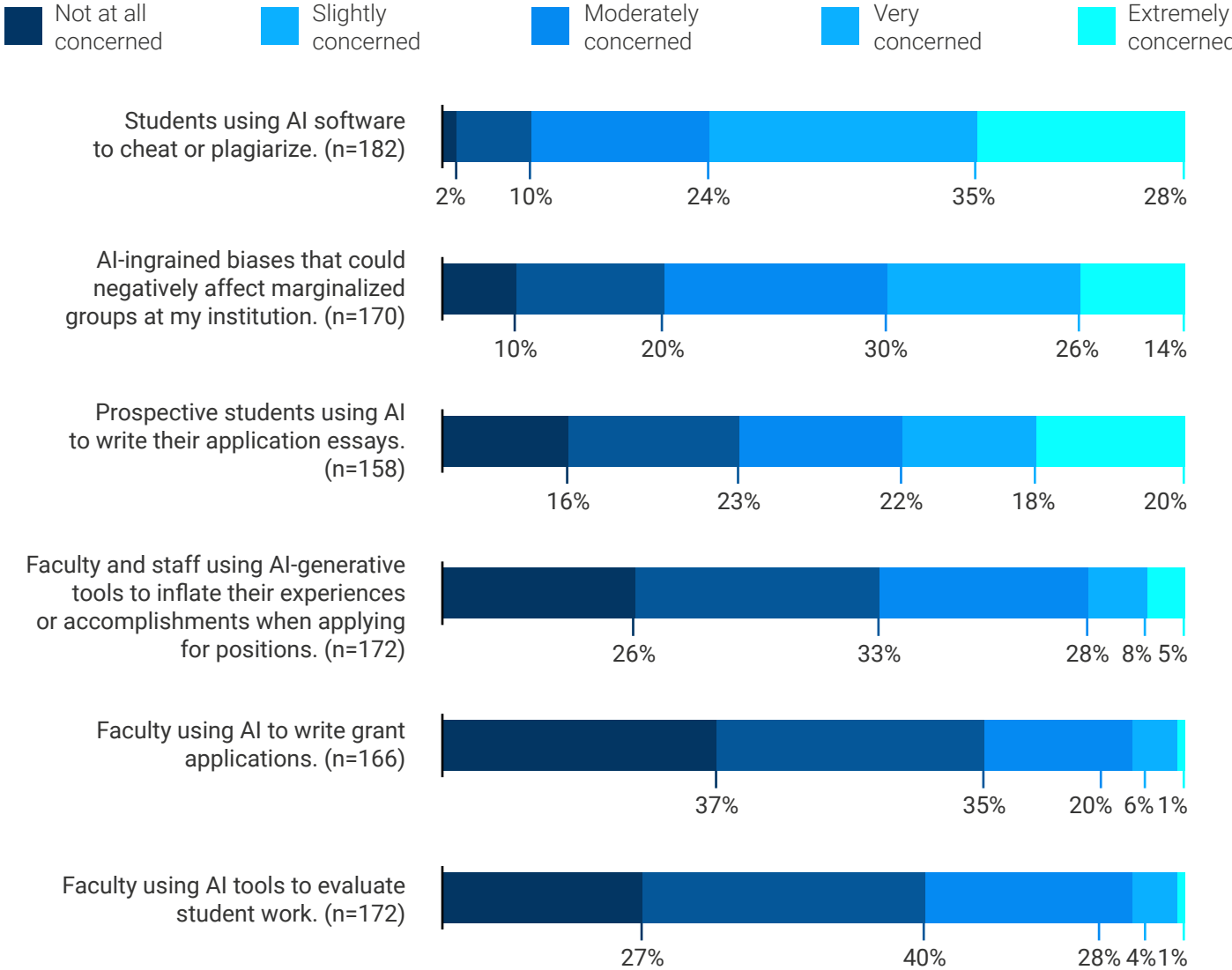
How much money do you anticipate your institution spending on AI in the next two years? (n=187)



Concerns About AI

Respondents' main concern about utilizing AI at their institution is students using it to cheat or plagiarize (65 percent). Additionally, more than one third of respondents are very or extremely concerned about AI-ingrained biases that could negatively affect marginalized groups at their institution (40 percent) and prospective students using AI to write their application essays (38 percent).

How concerned is your institution about the following?

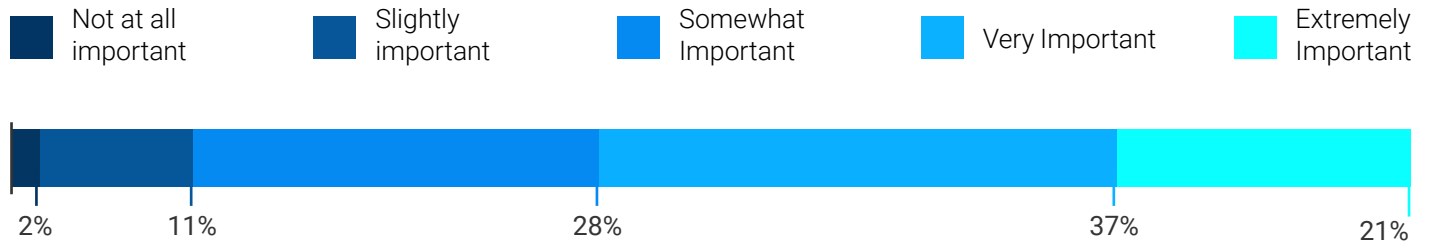


Guidelines to Combat AI-Ingained Biases

More than half of respondents believe that implementing internal guidelines or procedures to combat AI-ingained biases will be at least very important for their institution (58 percent).

No significant differences were found between respondents at the sector or role level.

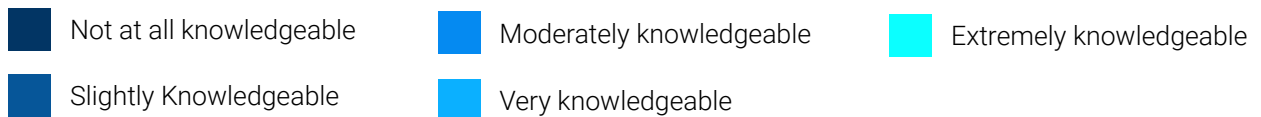
How important do you believe it will be for your institution to implement internal guidelines or procedures to combat AI-ingained biases? (n=185)



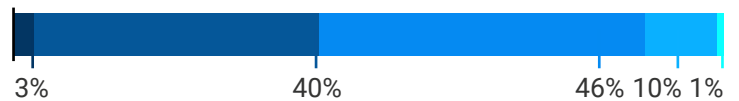
Knowledge in Rapidly Changing Developments in AI

Few respondents feel very or extremely knowledgeable about the rapidly changing developments in AI (11 percent). However, nearly half indicate that they feel moderately knowledgeable (46 percent). Additionally, almost half of respondents report that their immediate colleagues (48 percent) and campus leaders (49 percent) are just slightly knowledgeable about the rapidly changing developments in AI.

More respondents who are currently utilizing AI at their institution (19 percent) than those who are not currently utilizing AI at their institution (3 percent) feel at least very knowledgeable about the rapidly changing developments in AI.

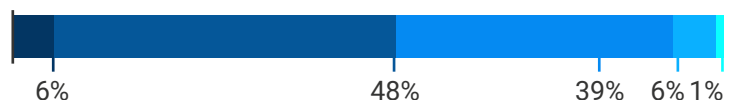


In general, how knowledgeable do you feel about the rapidly changing developments in AI? (n=184)



In general, how knowledgeable do you feel each of the following groups are about the rapidly changing developments in AI?

My immediate colleagues (n=181)



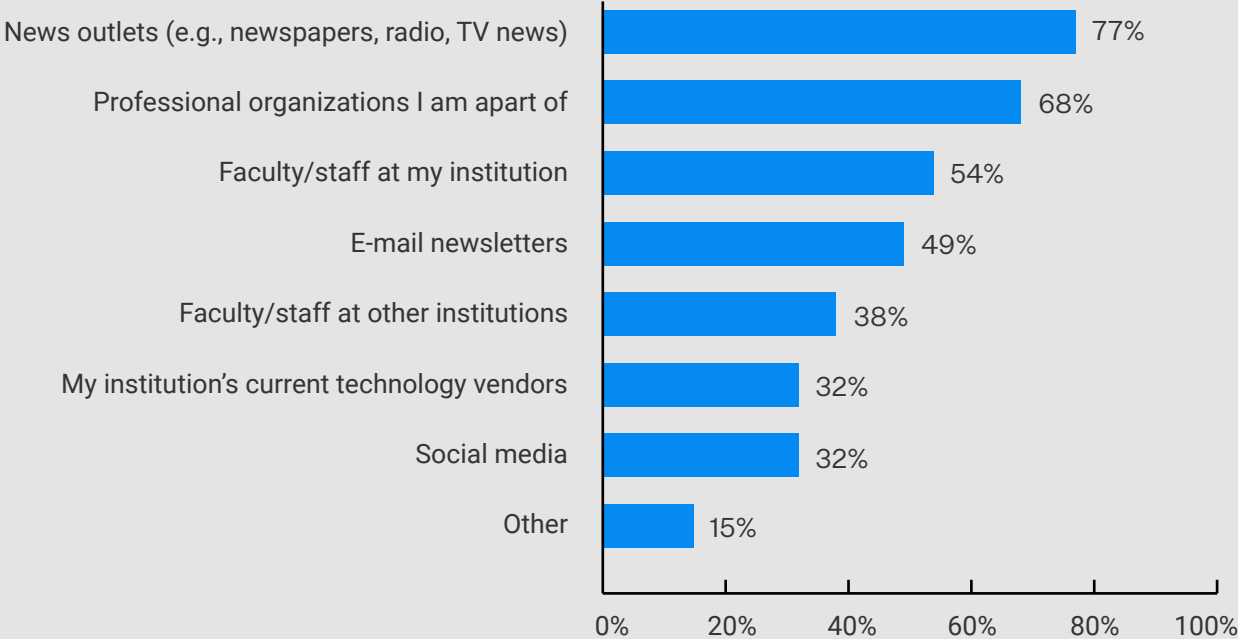
Campus leaders (n=180)



Sources of AI Information

Respondents mainly learn about AI advancements through news outlets (e.g., newspapers, radio, TV news) and professional organizations they are apart of. Additionally, about half of respondents learn about AI advancements through faculty/staff at their institution (54 percent) and e-mail newsletters (49 percent).

**From which of the following sources do you learn about AI advancements?
Please select all that apply. (n=177)**



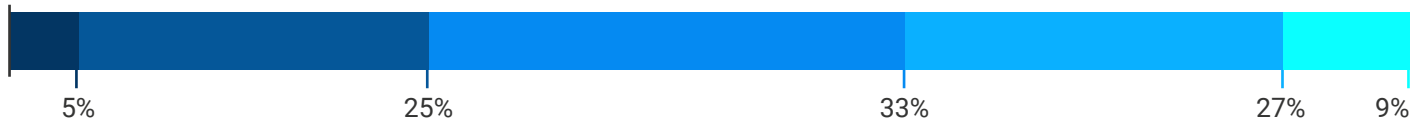
Frequency of Hearing about AI Advancements

Few report that they often hear about AI advances from their institution’s technology providers for administrative or operational applications (e.g., ERP applications) or instructional applications (e.g., LMS platforms). In fact, fewer than one third indicate that they hear about AI advancement relevant to their institution through their institution’s technology providers for instructional applications (e.g., LMS platforms) often or very often (27 percent).

How frequently do you hear about AI advancements relevant to your institution through the following sources? (n=55)

Never
 Rarely
 Sometimes
 Often
 Very Often

My institution’s technology providers for administrative or operational applications (e.g., ERP applications)



My institution’s technology providers for instructional applications (e.g., LMS platforms)



Note: Respondents who learn about AI advancements through their institution’s current technology vendors saw this question.

Concern about Ability to Keep Up with AI Technology

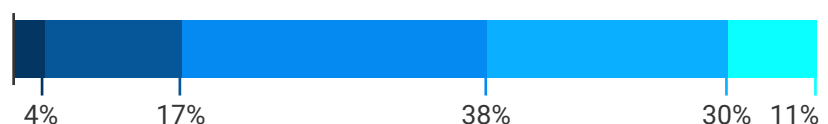
More than a third of respondents are very or extremely concerned about their institution’s ability to keep up with rapidly developing AI technology (41 percent). Further, 38 percent are moderately concerned.

Those who are not currently utilizing AI at their institution (49 percent) are more concerned about their institution’s ability to keep up than those who are utilizing AI at their institution (33 percent).

To what extent are you concerned about your institution’s ability to keep up with rapidly developing AI technology? (n=181)

Not at all concerned
 Slightly concerned
 Somewhat concerned

 Very concerned
 Extremely concerned

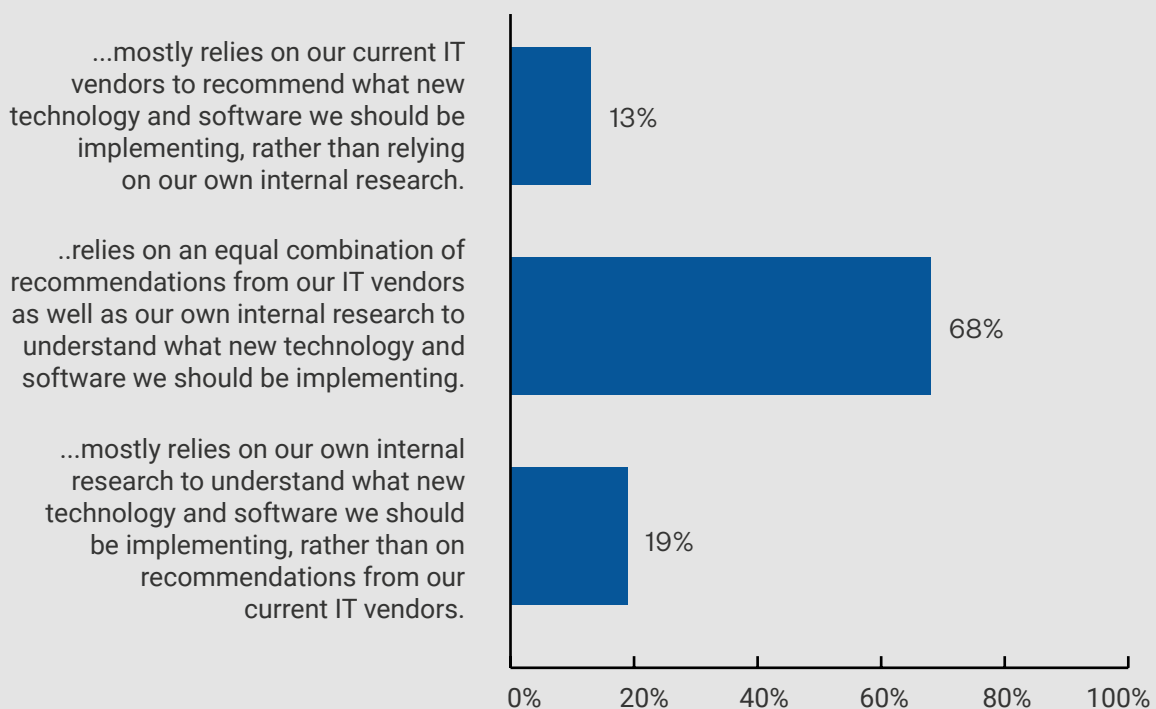


Administrative Applications and Providers

More than two-thirds of senior officers report that their institution relies on an equal combination of recommendations from IT vendors as well as their own internal research to stay informed about advances in technology in the higher education space, specifically around administrative applications and providers.

Senior officers from public institutions (79 percent) are more likely than those from private nonprofit institutions (50 percent) to rely on an equal combination of recommendations from their IT vendors and their own internal research to understand what new technology they should be implementing.

Which of the following best describes how your institution stays informed about advances in technology in the higher education space, specifically around administrative applications and providers? My institution... (n=47)



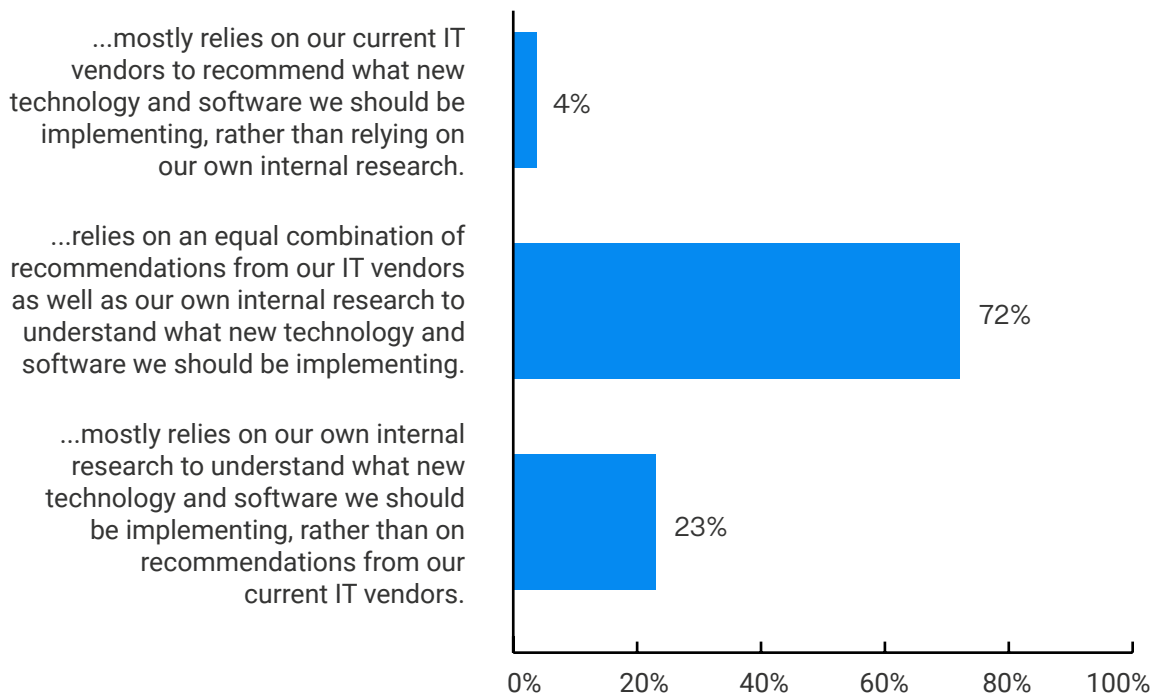
Note: Chief technology officers, chief information officers, chief digital officers, and other senior or informational officers saw this question.

Instructional Applications and Providers

Most senior officers report that their institution relies on an equal combination of recommendations from IT vendors as well as their own internal research to stay informed about advances in technology in the higher education space, specifically around instructional applications and providers. Nearly a quarter indicate that they mostly rely on their own internal research, rather than recommendations from their current IT vendors (23 percent).

Which of the following best describes how your institution stays informed about advances in technology in the higher education space, specifically around instructional applications and providers?

My institution... (n=47)

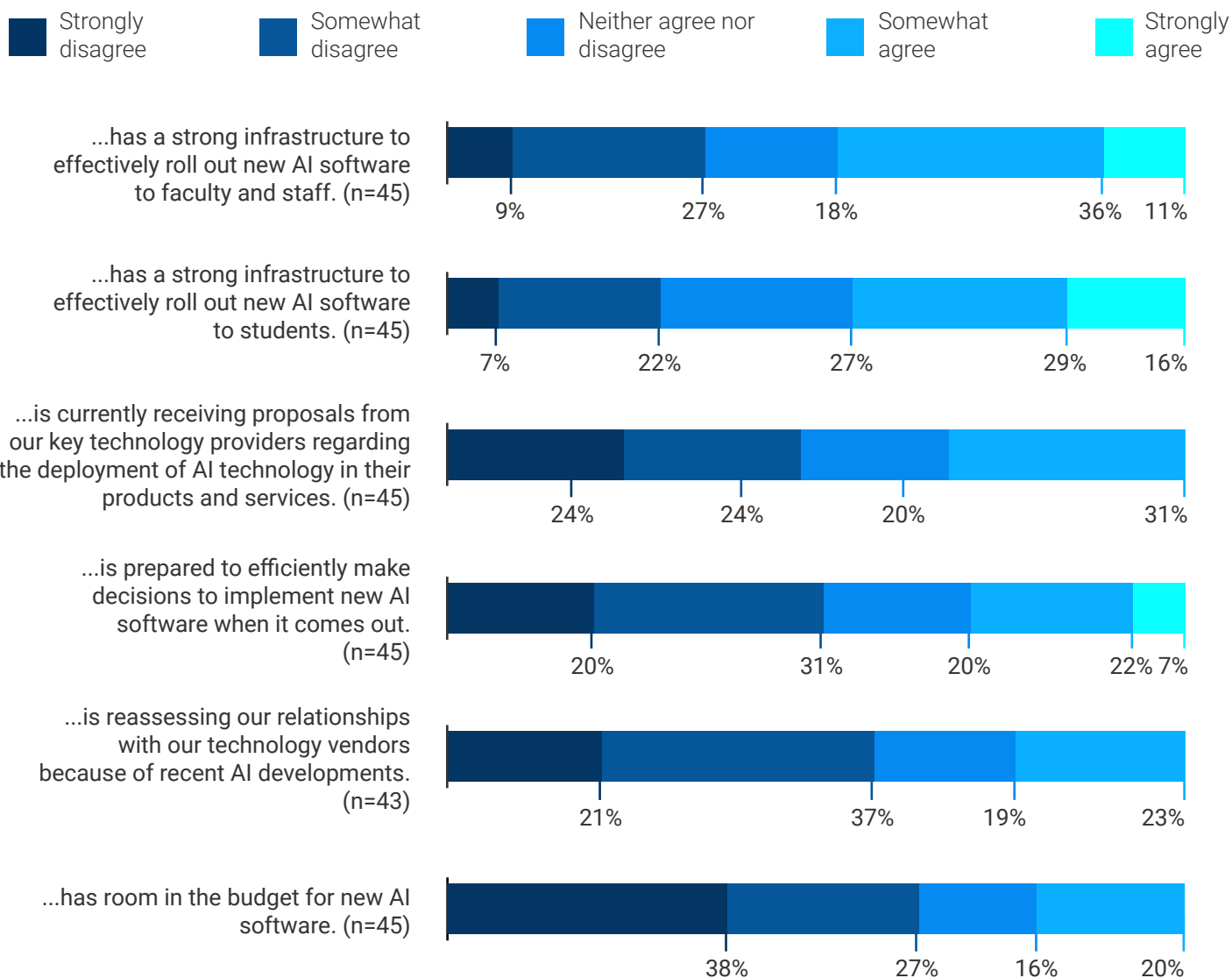


Note: Chief technology officers, chief information officers, chief digital officers, and other senior or informational officers saw this question.

Relationship with Technology Vendors

Fewer than a quarter of senior officers report that their institution has room in the budget for new AI software (20 percent). Further, fewer than one third agree that their institution is prepared to efficiently make decisions to implement new AI software when it comes out (29 percent).

To what extent do you agree or disagree with the following statements regarding your institution's relationships with technology vendors? My institution...

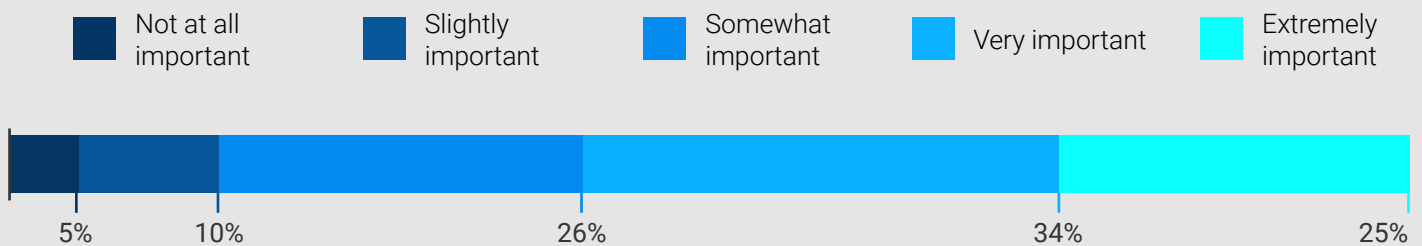


Note: Chief technology officers, chief information officers, chief digital officers, and other senior or informational officers saw this question.

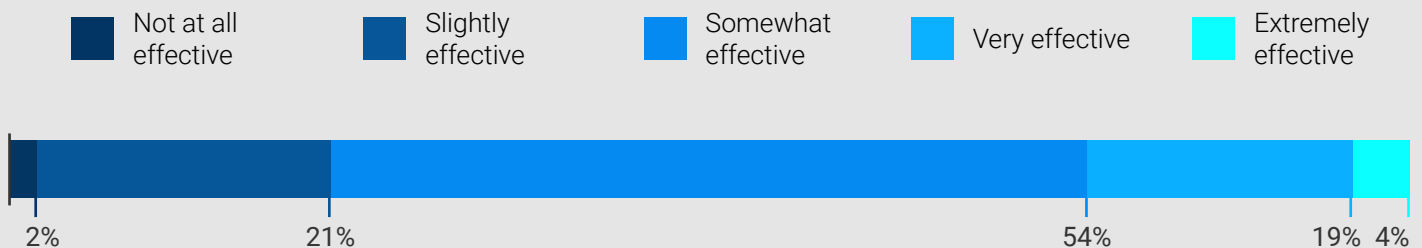
Utilizing Data Analytics

More than half of respondents indicate that utilizing data analytics has been very or extremely important to their institution (59 percent), yet few report that their institution highly effectively uses data to inform decisions. In fact, just 24 percent report that their institution is very or extremely effective at using data to aid and inform campus decision-making.

In the past five years, how important has utilizing data analytics been to your institution? (n=178)



In general, how effectively does your institution use data to aid and inform campus decision-making? (n=178)

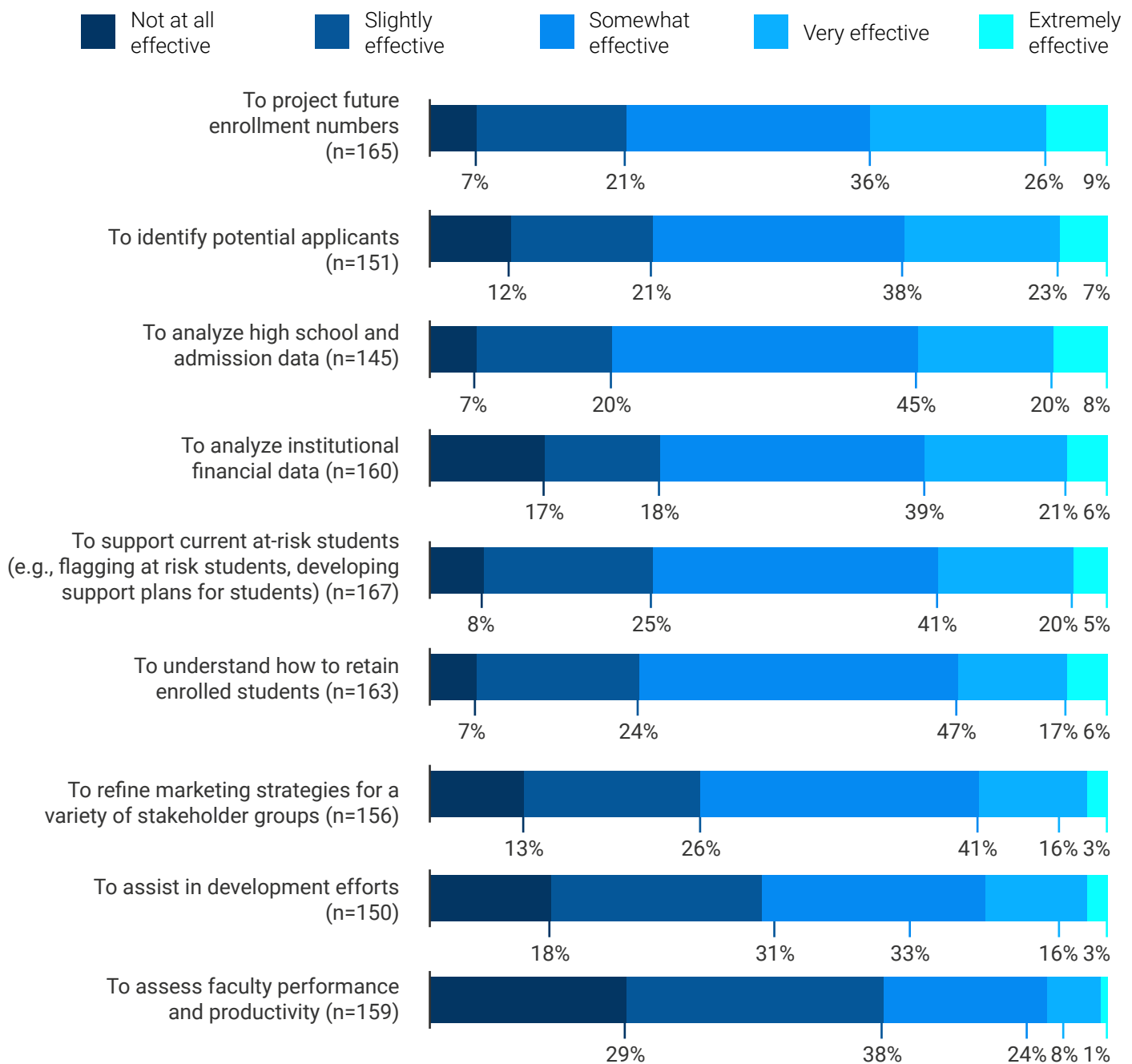


Effectiveness at Utilizing Data Analytics

Respondents generally think their institution is at least moderately effective at using data analytics in most surveyed areas, with the exception of assessing faculty performance and productivity (33 percent). Approximately one third of respondents think their institution is very or extremely effective at projecting future enrollment numbers (35 percent) and identifying potential applicants (30 percent).

No significant differences were found at the sector or AI utilization level.

How effective is your institution currently at using data analytics to do the following?



About *Inside Higher Ed*

Inside Higher Ed is the leading digital media company serving the higher education space. Since our founding in 2004, we have become the go-to online source for higher education news, analysis, resources and services. Our mission is to serve all of higher education - individuals, institutions, corporations and non-profits - so they can do their jobs better, transforming their lives and those of the students they serve. We are proud to have earned the trust and loyalty of our 3.2 million monthly readers by speaking as a fiercely independent voice, providing thoughtful, substantive analysis on the pressing issues facing higher education today.

Learn more about *Inside Higher Ed* at www.insidehighered.com.

About Hanover Research

Founded in 2003, Hanover Research is a global research and analytics firm that delivers market intelligence through a unique, fixed-fee model to more than 1,200 clients. Headquartered in Arlington, Virginia, Hanover employs high-caliber market researchers, analysts, and account executives to provide a service that is revolutionary in its combination of flexibility and affordability. Hanover was named a Top 50 Market Research Firm by the American Marketing Association in 2015, 2016, 2017, and 2018, and has also been twice named a Washington Business Journal Fastest Growing Company.

To learn more about Hanover Research, visit www.hanoverresearch.com.



**Inside
Higher
Ed**

Copyright © 2023. All rights reserved.