
Architecture Faculty & Staff Survey Results 2017



The American
Institute
of Architects

Executive summary

“*...architecture offers one of the last Renaissance educations available. At its best, it strikes just the right balance between art and science, the creative and the pragmatic. I often tell people I learned everything from plumbing to poetry in architecture school, and I use every bit of that knowledge as president of Clemson University.*”

—James Barker, FAIA, President, Clemson University, *The Chronicle of Higher Education*, 2008

The survey

In mid-August 2017, on behalf of the American Institute of Architects (AIA), the Association of Collegiate Schools of Architecture (ACSA) sent a survey link to 16,000 ACSA members. The survey was designed to inform the AIA’s Higher Education program by taking a brief look at the present state of architectural education and research in colleges and universities, and how AIA might support that work.

Twenty-one survey questions were yes/no, multiple choice, or open-ended, addressing the respondent’s role, challenges, research, student support, membership, resources needed, and engagement with firms. Over a two-week period, 249 responses from 137 institutions were received. Some highlights from the survey include:

Top three trends and issues in architectural education or research:

- technology (AR/VR, biomimicry)
- 21st-century challenges (urban planning, density, inequities, culture)
- environment (climate, sustainability, resiliency)

Top three challenges facing higher education:

- rising cost of education
- academically unprepared students
- academic bureaucracy

AIA could help with these challenges through:

- increased funding
- research funding
- publication and dissemination opportunities

Schools excel in:

- communication/presentation skills
- community service/outreach
- collaboration skills
- integrated studio

Schools need improvement in:

- research skills
- project management
- careers/licensure prep
- communications/presentation skills

AIA can support academia by:

- advocating for the value of architecture
- promoting academia/practice collaboration
- promoting the value of research

Career services/licensure prep:

- Approx. 23 percent do not offer student/alumni internship or job placement assistance with architecture firms
- 53 percent do not offer licensure prep or AXP assistance

A more detailed summary of the survey results and associated charts follows below. As noted, due to the limited number of survey respondents and limited peer review, no generalizable findings can be made from these results. However, because most National Architectural Accrediting Board (NAAB) schools were represented, these results can provide some baseline information, inform future research, and edify the goals of the AIA’s Higher Education program, for which it was designed.

Acknowledgement and Disclaimer

This report provides the results of the 2017 Survey of Architecture Schools. It would not have been possible without the participation of the respondents and the staffs of the American Institute of Architects and Association of Collegiate Schools of Architecture, which assisted in this effort. These results are not generalizable due to the small response size and limited peer review. The statements, observations, analysis, conclusions, and recommendations are those of the author and are not intended to establish any obligation, standard, or procedure by or on behalf of the AIA. The information is provided solely as a service, and is believed to be accurate but is not guaranteed or warranted.

Introduction, background, and process

The purpose of this brief online survey was to collect information from faculty/staff at U.S. schools of architecture on the present state of architectural education and to explore how AIA might better support them in their work to educate future architects. The survey was created in Google Forms and sent on behalf of AIA by the ACSA to 16,000 architecture-school members in an email.

The development of the survey began with a literature review, interviews, discussions, and a few campus visits. It was developed by AIA Director of Higher Education Dr. Nissa Dahlin-Brown, Assoc. AIA, with input and review by research staff at AIA and ACSA. An online survey approach using yes/no/other, checklists, and open-ended questions was chosen to provide basic information and an opportunity for more detailed responses. The survey was available for two weeks in mid- to late August as faculty were returning or had returned to campus. Respondents were promised anonymity and given no incentives to complete the survey other than a PDF copy of the findings, if desired. Only the name of the school was required to complete the survey, but these names will remain confidential and used only for internal purposes. Of the 249 respondents, they represented:

- 99 (out of 124) U.S./Puerto Rico NAAB-accredited colleges
- 8 non-NAAB-accredited U.S. colleges
- 12 international schools
- 14 community colleges
- 4 nonprofits/small firms

The results in this report were derived from Google Form analytics with additional analysis and reviewed by the author, who has experience in qualitative survey analysis. Generally, results include only responses mentioned by 10 percent or more of the respondents. Because responses were not required for each question, the response rate varied by question (as noted in each chart). As per qualitative research guidelines, the “other” and open-ended responses were read and analyzed, assigned to appropriate categories or themes, and ranked.

The results of the survey are provided below, beginning with the question as stated in the survey or paraphrased, and followed by brief summaries and discussions. As stated above, the survey response rate was too small to make the findings generalizable to all schools.

“*...architecture education...is a model that holds valuable insights and lessons for all of higher education as a new century approaches. We agree with a faculty member at a southeastern campus who called architecture education “one of the best systems of learning and personal development that has been conceived.”*”

—Building Community: A New Future for Architecture Education and Practice, Boyer & Mitgang, 1996, p.5

Question 1

What is your role in preparing future architects?

(Select from list and check all that apply)

Response options

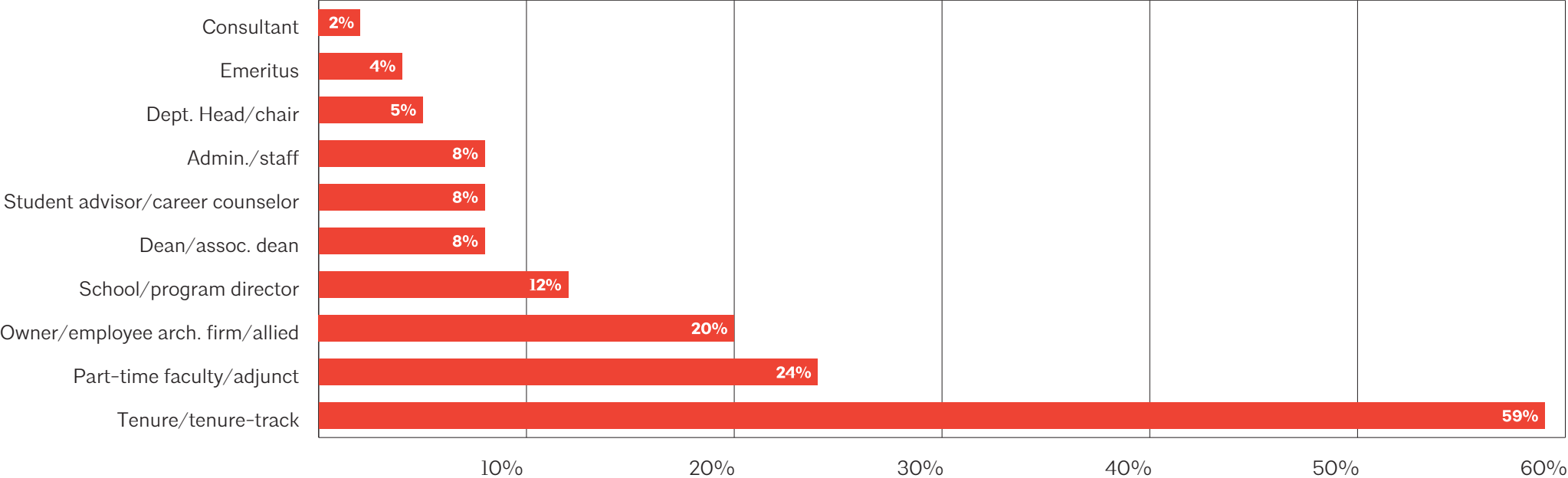
- Tenure/tenure-track faculty
- Emeritus faculty
- Part-time faculty/adjunct instructor
- Dean/associate dean
- Department head/chair
- School/program director
- Student advisor/career counselor
- Administrator/staff
- Owner/employee of architecture firm or allied practice
- Other

Summary

In many cases, respondents have more than one role in academia, such as “tenured faculty and owner of practice” or “part-time faculty and firm employee.” The majority of respondents (59 percent or 145) were full-time “tenure/tenure-track faculty” followed by 24 percent who were “part-time faculty, adjunct instructor or visiting faculty.”

Role(s) in academia

Number of responses 248



Question 2

What are one to three challenges you face related to your work in higher education?

(open-ended)

Respondent comment

“Financial pressures impinging on learning...students face enormous pressure to work while in school...Increased pressure for “skills” over critical thinking. Convincing professionals, parents and students that an education in architecture is a marathon endeavor for those who intend to be design leaders and thought leaders in the field. There are many, many ways to contribute to an architecture project, and the desire for a quick degree and to know the software-du-jour is no substitute for developing a broad base of knowledge and critical thinking skills...”

—Tenure-track faculty at a midwestern university

Summary

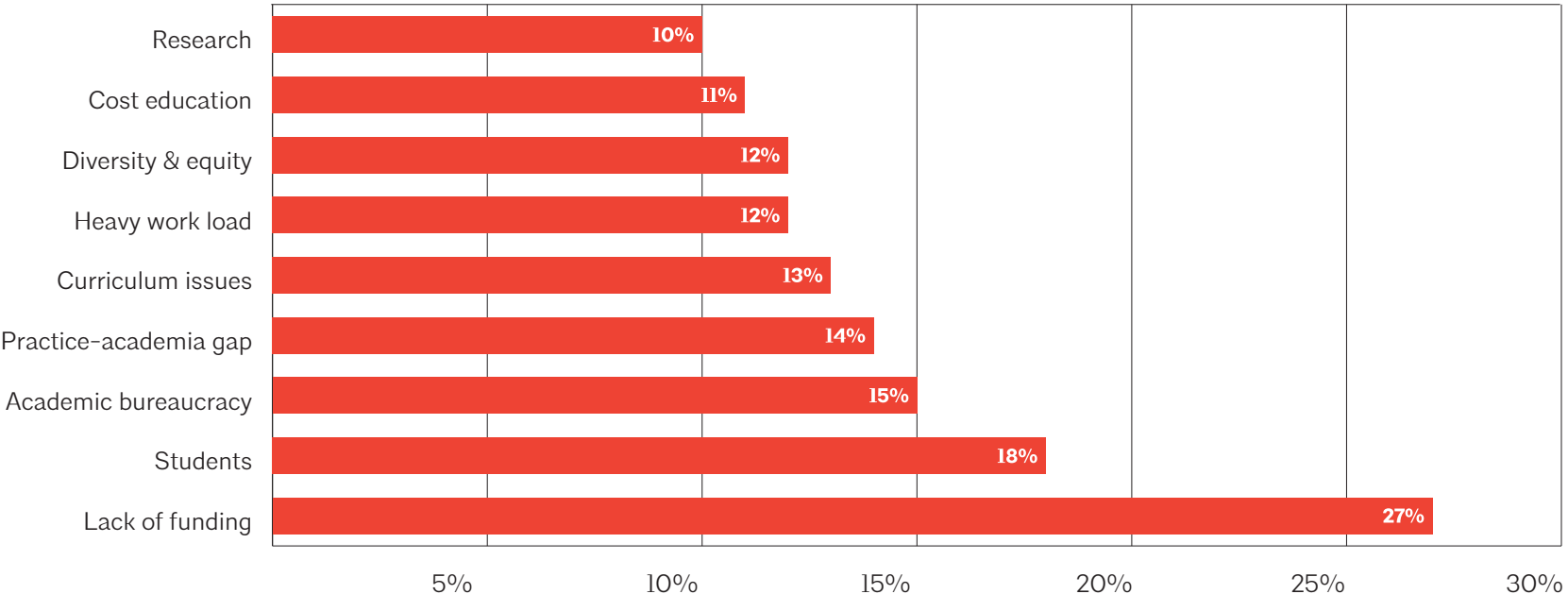
Funding remains at the top of list of the challenges facing higher education, as it did in the 1996 Boyer Report (p.11) and in a confidential 2013 AIA survey of academia. The rising cost of tuition and student debt is a major concern across all higher education. With decades of state funding cuts in public higher education—along with the impact and expense of rapidly changing technology and fabrication labs plus academic, parental, and legislative pressures—schools are in need of financial support. Almost one in three noted the lack of funding for general support that covers research, students, technology, studios, travel, conferences, etc. Academically unprepared students, the pressure for quick results, and academic bureaucracy were the other top challenges.

Top challenges facing architecture higher education

Number of responses 233

Categories

- Research: Dissemination, res. into practice, cost, interdisciplinary
- Cost education/financial aid
- Diversity & equity: More inclusive profession, global culture, more diverse faculty, racism, politics
- Heavy work load: Lack time, low faculty compensation
- Curriculum issues: Narrow focus, realities of construction mgmt., studio focus overwhelming other areas (construct, sustainability, energy, etc.), assessment, credit hours
- Practice-academia gap: Engaging studios, review, mentoring
- Academic bureaucracy: Unilateral decisions by admin./bureaucracy/policy of academia/assessments
- Students: Lacking basic knowledge, communication skills, critical thinking, research skills, unprepared for college; jobs outside school; mobile distractions
- Lack of funding: General support, research, conferences, student support, tech., studio, travel, adjuncts



Question 3

Can you suggest any way(s) AIA might help (with these challenges)?

(open-ended)

Respondent comment

“Demonstrate that in becoming and being an architect, learning never ends. We do one-offs, every project, each client, each site is different, new contexts and constellations have to be met with new ideas. This is what makes this profession interesting...we need intellectual flexibility, curiosity, openness, and the art of listening (and not just ‘get things done’ attitude). Reestablish an understanding of architecture as a public art...as something beyond the ego of the (lead) architect and the client, but as a public practice that addresses and engages with the community and society at large...that is socially and politically relevant. Pay attention to current problems– inequality, housing crisis, access to public services, environmental crisis, aging society and develop architectural solutions and scenarios for a better society.”

–Tenure-track faculty at a northwestern university

Summary

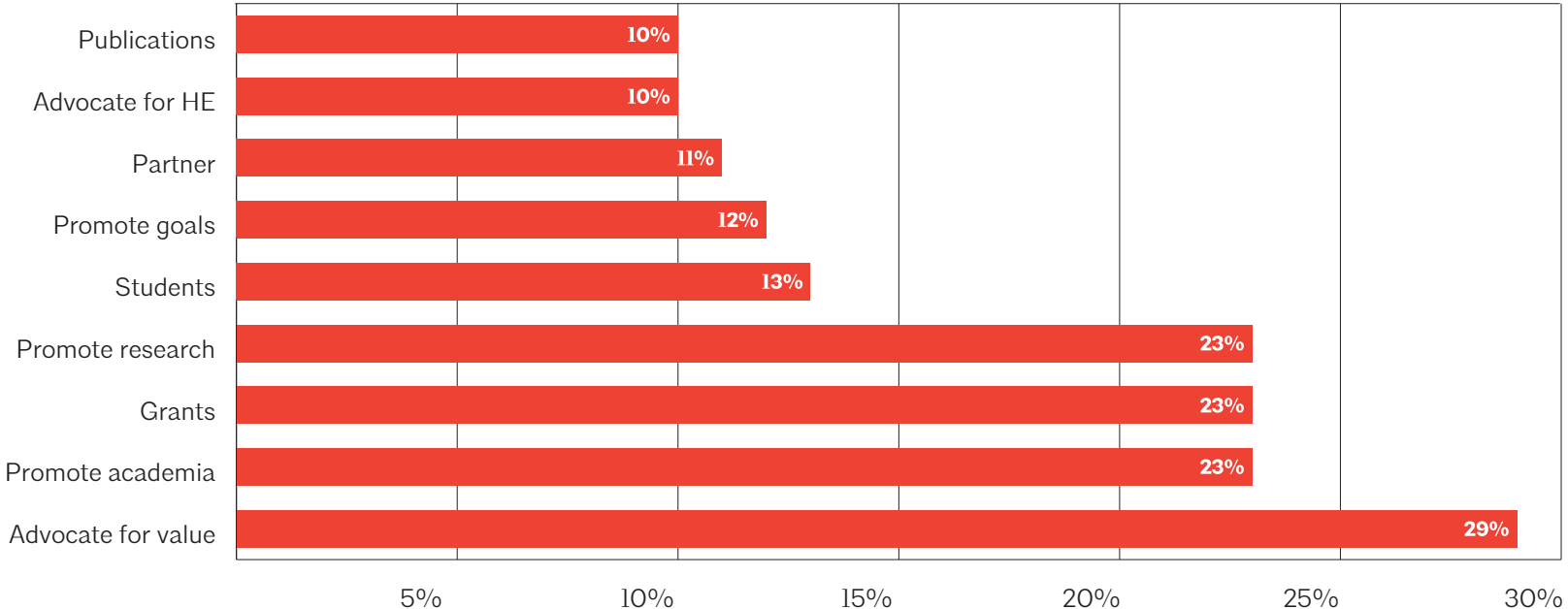
Academics responded that they would like to see AIA advocate more for the value of architecture and an architectural education. This was followed closely by promoting academia and practice collaboration, promotion and dissemination of research, and funding.

Ways AIA can support architecture higher education

Number of responses 199

Categories

- Publications/materials for classroom
- Advocate for higher ed at state leg.
- Partner w/ high schools–offer Des.Tkg. Campaign, recruit community college students
- Promote goals–better environment, society
- Students: mentor, internships, ARE Prep, IPAL support
- Promote research, culture, and disseminate results
- Grants, funding, resource development
- Promote academia & practice collaboration–engage with state chapters
- Advocate for value of architecture and design to public, academia, practice–Dev. speakers bureau



Question 4

Please select three to five areas of architectural education in which your school excels and (where it) needs improvement.

(Select from list and check all that apply)

Response options

- Communication/presentation skills
- Project management
- Construction and materials
- Technology
- Collaboration skills
- Site design
- Sustainability/resiliency
- Research skills
- Licensure prep/career assistance
- Integrated studio
- Design/build lab
- Community service outreach
- Other

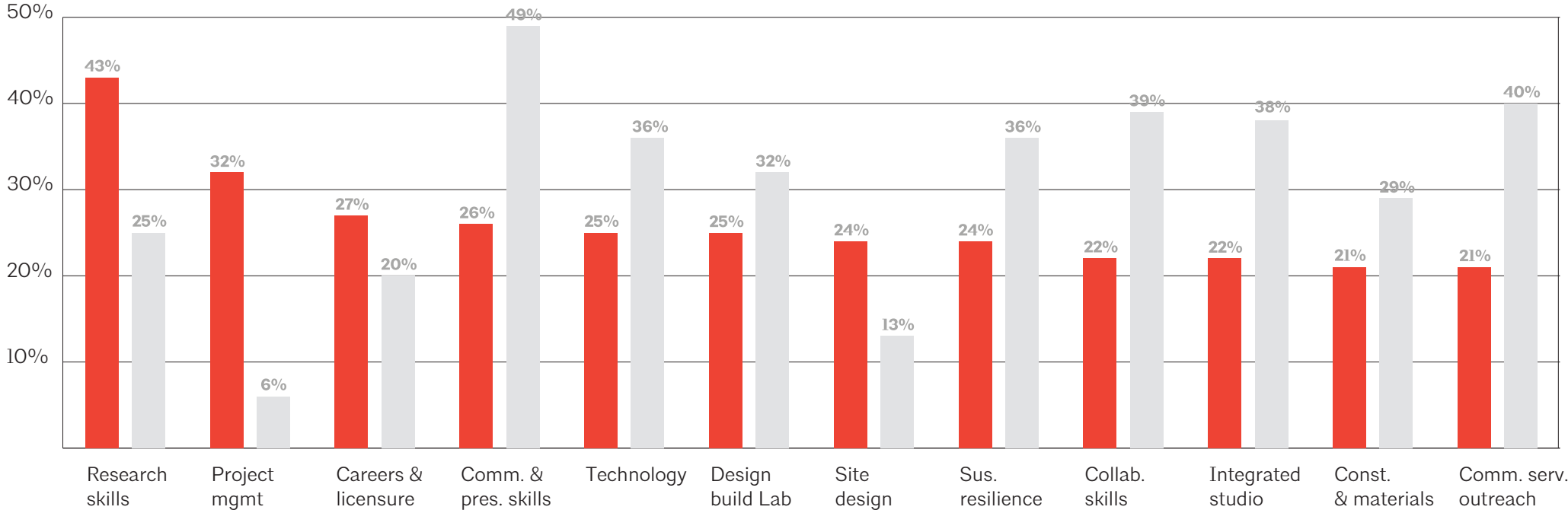
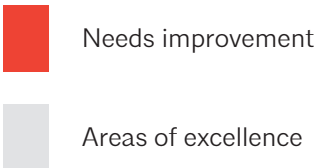
Summary

The survey asked for respondents to select from a list three to five areas where their school excelled and three to five areas where it needed improvement. As the chart below indicates, one school’s strength might be another’s weakness. For example, “Communication/Presentation skills” was picked as best by 49 percent, but as weak by 26 percent. “Community service outreach” excelled for 40 percent, but needed improvement for 21 percent. “Research skills” were lacking at 43 percent, but excelled at 25 percent. The largest difference—and an area where AIA and practice can help—was in “project management.” Only 6 percent claimed excellence and 32 percent needed improvement.

Comparison of areas of excellence and needs improvement in architecture schools

Number of responses for areas of excellence 241

Number of responses for areas in need of improvement 245



Question 5

Research is one way to bridge the gap between academia and practice. What areas in architectural research and education would you like AIA to further support/promote?

(Select from list and check all that apply)

Response options

- More funding for research
- Opportunities to publish
- Scholarships/grants for faculty and students
- Research-focused sessions at ACSA and AIA conferences
- Podcasts, webinars, video programs promoting research findings, Research IOI, collaborations, etc.
- Research competitions for faculty
- Research competitions for faculty-led student groups/courses
- Virtual platform for connecting with other researchers (e.g., ResearchGate)
- Feature firm research and opportunities to connect
- Articles highlighting value of research, innovations, trends, etc.
- Other

Summary

Research is critical to the future of the profession and is widely advocated in our “big data” world with increasing attention on evidence and accountability. It is particularly true in architecture, with the advances in technology and fabrication, and demands for answers related to societal and environmental issues. Boyer and Mitgang (pp. 56–61) supported a broader definition of research as scholarship in discovery, integration, application, and teaching. With more firms entering the research world, and more students graduating with research skills, we need to take advantage of this knowledge and skills. For academics it is also critical to their career advancement and an area where they can take the lead and work in collaboration with practice.

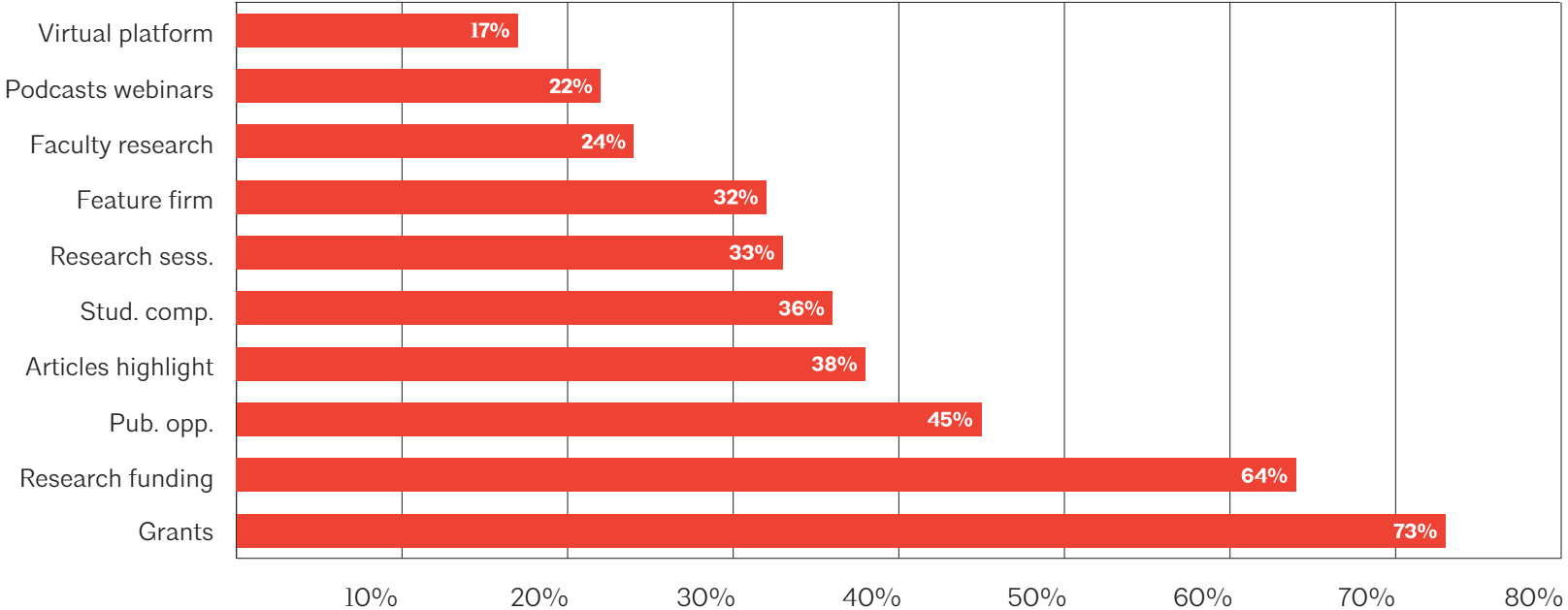
AIA presently supports research in a variety of ways, through publications such as the *Foresight Report and Technology / Architecture + Design (TAD)*, the *Intersections Symposium* at the AIA Conference, Collaborative Research Summit, Design & Health Research Consortium, Upjohn Grant, Latrobe Prize, and student competitions like the Committee on the Environment (COTE). However, academia would like to see more. Funding of research topped the list of ways to bridge the gap, with grants/scholarships for faculty and students and increased general research funding at 73 percent and 64 percent respectively.

Areas for AIA support in research or education

Number of responses 247

Categories

- Grants/scholarships for students and faculty
- More research funding
- Publication opportunities for faculty
- Articles highlighting research discoveries, trends, innovations
- Student competitions for faculty-led courses
- Research sessions at ACSA and AIA conferences
- Feature firm research/networking opportunities
- Faculty research competitions
- Podcasts, webinars, research IOI, promotion of findings, collaborations, etc.
- Virtual platform for research connections



Question 6

What are three to five important emerging trends or issues in architecture education or research?

(Open-ended question)

Summary

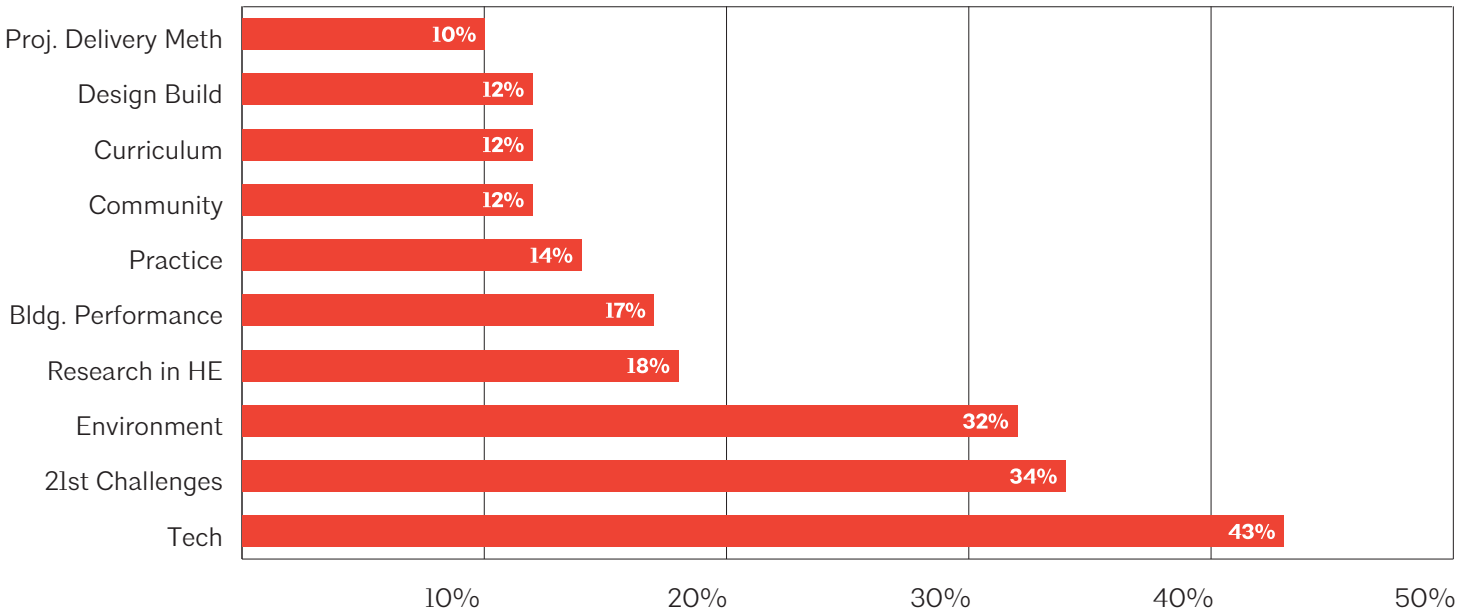
As expected, technology topped the list of trends, followed by 21st-century challenges (densities, inequities, global culture, innovation, etc.) and the environment. Other topics mentioned included research, building performance, practice ethics, and others.

Top issues/trends in architectural education or research

Number of responses 205

Category notes

- Tech: AI.VR.AR, biomicry, 3D-prtg, visualization, GIS, robotics, big data, materials
- 21st challenges: Urban planning, inequities, density, pub. space, preservation,tech impact, global culture, transport/mobility, codes, innovation
- Environment: resiliency, sustainability, carbon neutral, climate change
- Research in HE: Practice, human factors, faculty/UG/interdis/design
- Bldg. performance: design, life.cyc.costs, energy eff., SMART bldg., Flex/adapt., green bldg., societal needs changing
- Practice: ethics, innovation, leadership, redefining practice, contract docs, risk, large firm dominance, mentoring interns
- Design build, fabrication experiments
- Curriculum: Materials, research methods, prep for practice, low enrollments, lacking construc. materials knowledge, design thinking, pedagogies, broader focus (arch. eng./law/film, etc)
- Community: Service learning/community engagement, design ctr., social equity
- Proj. delivery methods: design build, integrated deliv., complexity of bldg. systems, integrated design



Question 7

Do you currently or plan to conduct research in architecture? If yes, who have you/would you like to partner with?

Response options

- Architecture firms
- Other departments or colleges within or outside my institution
- Think tanks, public policy centers, NGOs, etc.
- Governmental agencies, national laboratories
- Foundations
- Corporations
- International organizations
- Other

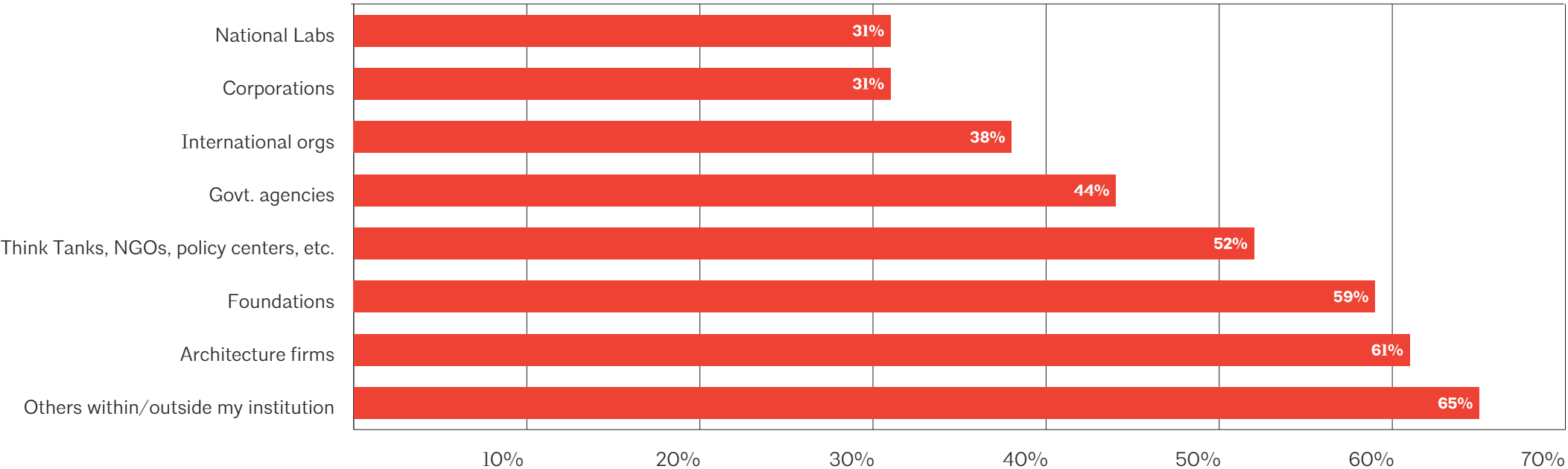
Summary

Not surprisingly, 85 percent of the respondents said that they were presently or planning to conduct research and 9 percent did not.

Respondents partnered within and across institutions (65 percent), closely followed by architecture firms (61 percent), and foundations (59 percent). More growth in research productivity in architecture could be attained by increased outreach to other professions, industry/business research and development, and national laboratories.

Present/preferred research partners

Number of responses 226



Question 8

Do you/your institution engage with local, national, or international architects/firms? If yes, how?

Response options

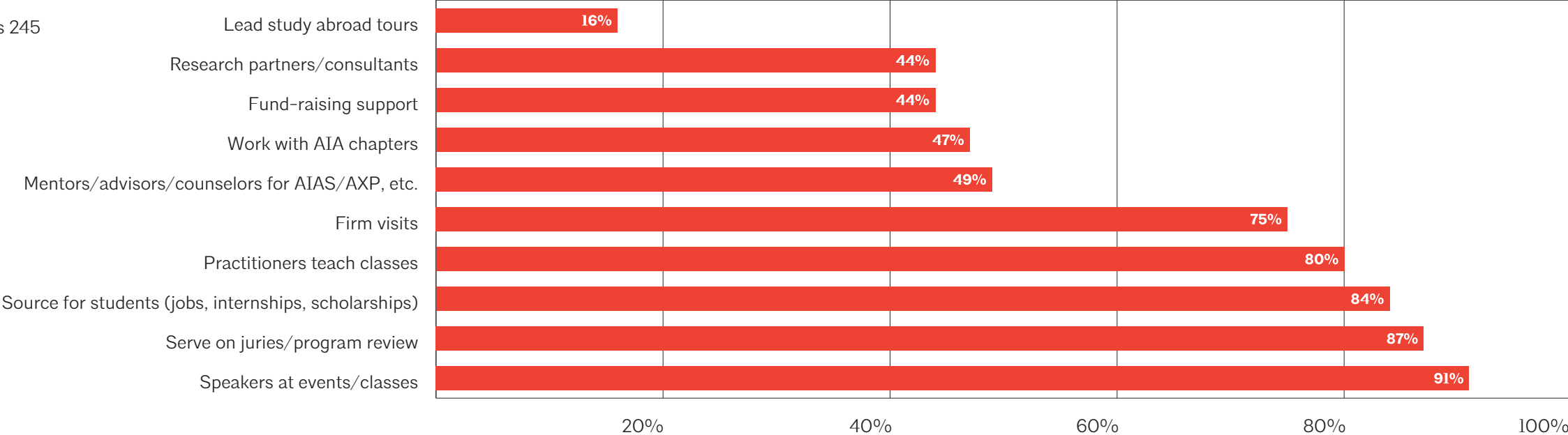
- If yes select all that apply:
- Speakers at events/classes
 - Serve on juries/program review
 - Source for students (jobs, internships, scholarships)
 - Practitioners teach classes
 - Firm visits
 - Mentors/advisors/counselors for AIAS/AXP, etc.
 - Work with AIA chapters
 - Research partners/consultants
 - Fund-raising support
 - Lead study abroad tours
 - Other

Summary

Almost 94 percent of 247 respondents said they engage local, national, or international architects in their institution. The most common ways were as speakers, on juries, with students for jobs and internships, as adjunct teachers, and for firm visits. Schools in areas without a large number of architects or an AIA chapter face the biggest challenge in finding these resources. AIA component support is vital to this effort.

Engaging practice with academia

Number of responses 245



Question 9

Does your school offer any student internship and/or graduate placement services with architecture firms?

(Yes/No/Other. If yes, what do you offer?)

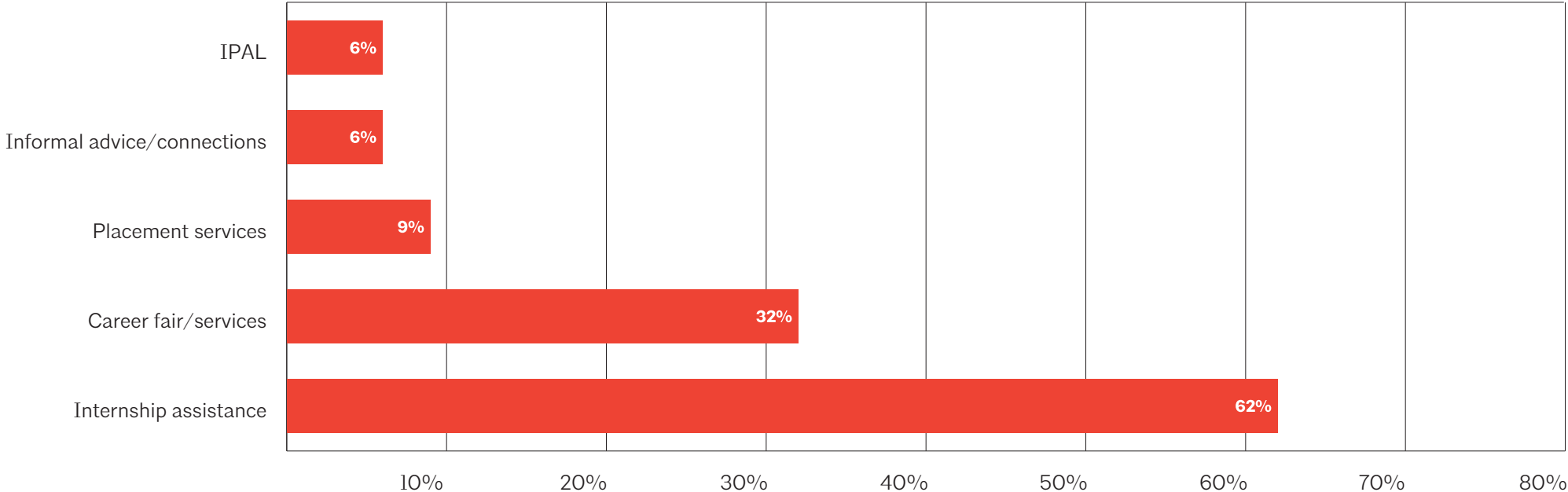
Summary

While firms are visiting campus, students still need on-campus career help. The majority of schools (74 percent) offer some sort of career services for their students, but 23 percent of respondents said they did not, though this view may be limited by their role/position.

Of those 139 responding affirmatively, the majority (62 percent) offer/require internships for students and another 32 percent offer career fairs/services and more, as shown below.

Type of student internship/ placement services offered

Number of responses 139



Question 10

Does your school offer any assistance with licensure prep or Architectural Experience Program (AXP) for students and/or alumni?

(Yes/No/Other. If yes, what do you offer?)

Summary

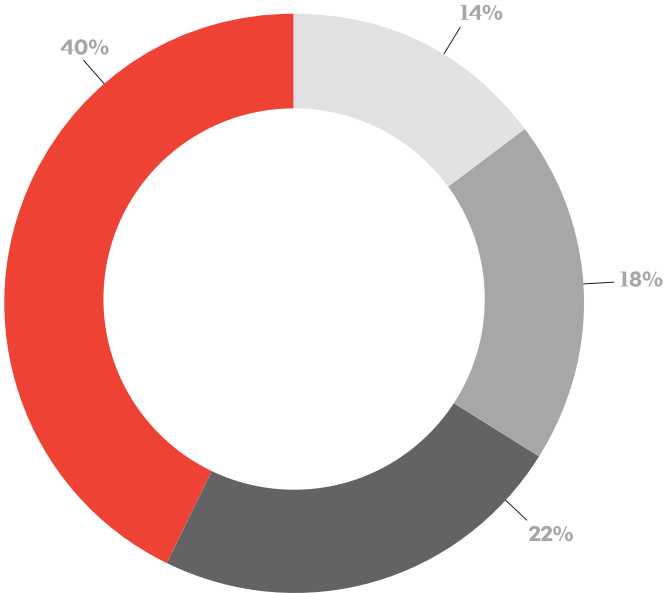
Schools appear to offer limited support for AXP or licensure prep for students and/or alumni. From 231 responses, approximately 44 percent responded “Yes” and 53 percent “No” to this question.

Of those responding in the affirmative, schools offer advising, NCARB presentations, the Integrated Path to Architectural Licensure (IPAL) option, and professional practice courses. Less common responses included online lectures/courses, AXP fees/AIA mentors paid by the local AIA chapter, and Architect Registration Exam (ARE) prep/exam simulation; two institutions pay some or all AXP enrollment fees.

Ways schools assist with licensure prep/AXP

Number of responses 90

- AXP/ARE advising, mentoring, advocate - 40%
- NCARB/licensing advisors, career Services/Info sessions - 22%
- IPAL option - 18%
- Prof. practices courses - 14%



Question 11

What website resources would you value?

(Select from list and check all that apply)

Response options

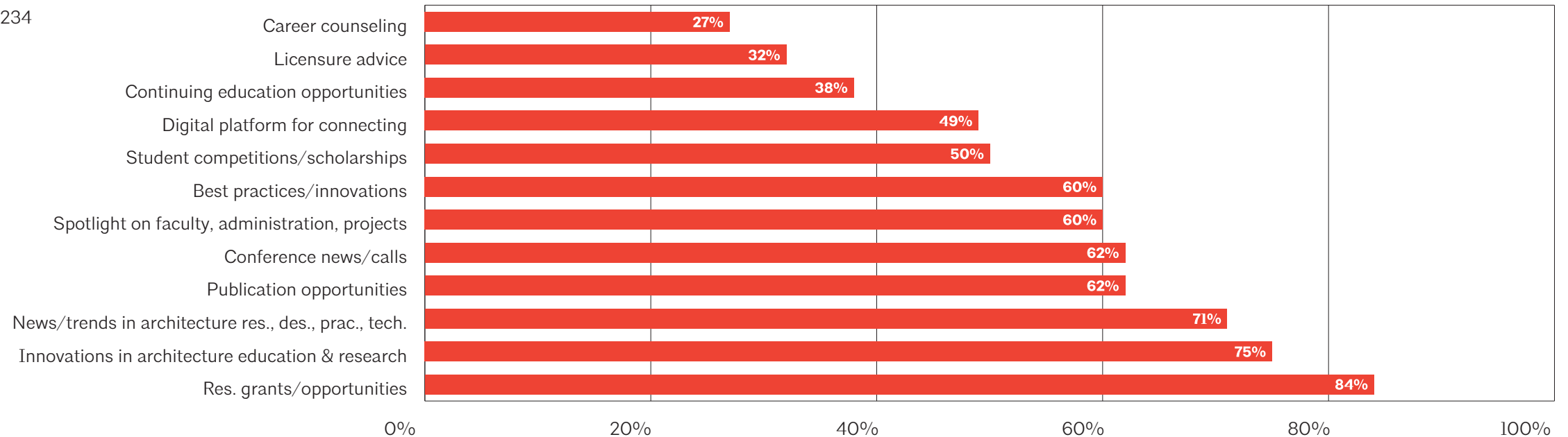
- News and trends in architecture research, design, practice, technology, etc.
- Spotlight on faculty, administrators, unique projects at institutions
- Innovations in architecture education and research
- Research grants/opportunities
- Publication opportunities
- Upcoming conferences/call for papers/competitions
- Platform for connecting with other researchers/faculty/practitioners
- Links to student competitions/scholarships/internships
- Links to career counseling information for faculty, administrators, and/or students
- Licensure advice for faculty and students
- Continuing education opportunities
- Best practices/innovations (teaching, research, and service, and links to practice)
- Other

Summary

AIA's Higher Education program works to find resources to support academia's teaching and research efforts via the web. Respondents suggested posting research grant opportunities (84 percent), articles on innovations in architectural education and research (75 percent), and news and trends in research, design, etc. (71 percent). Rounding out the bottom of the list was licensure advice (32 percent) and links to career counseling for faculty/staff and students (27 percent). Several recommended more connection to ACSA to strengthen its Index in Scholarship and other resources, but did not recommend creating new ones.

Suggested website resources

Number of responses 234



Question 12

Membership in AIA

(Multiple choice)

Response options

- AIA, Associate AIA, FAIA
- Non-member
- Other

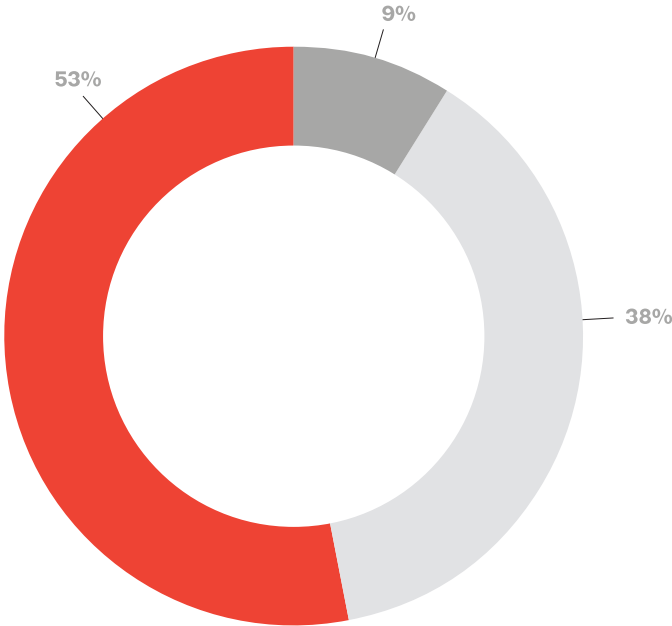
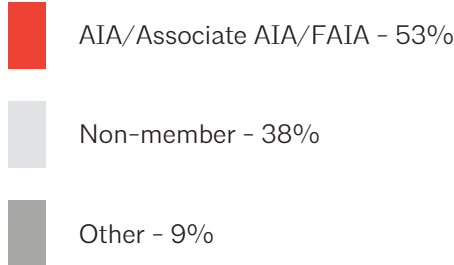
Summary

Membership in AIA among academia is assumed to be low. In 2017, of the approximately 90,000 AIA members, 73 percent self-identified as “employed by an architecture firm.” The next largest category was “unknown” at 11 percent, with “university/college” at 2 percent followed closely by “government agency,” “consulting firm,” and “design and construction services,” each at under 2 percent (2017 AIA internal membership report).

Surprisingly, the majority (53 percent) of these survey respondents were AIA members (39 percent AIA, 12 percent Associate AIA, 2 percent FAIA).

AIA Membership

Number of responses 241



Question 13

If you're not an AIA member, what would increase the value of an AIA membership?

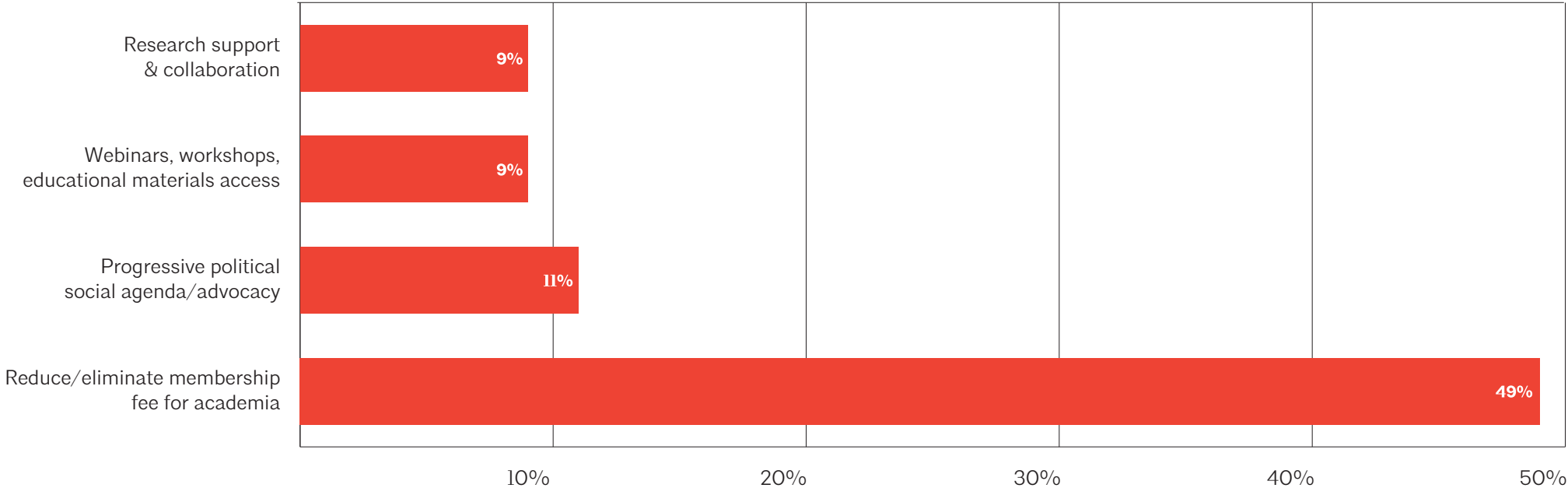
(Open-ended question)

Summary

For non-members, cost is the primary barrier to joining AIA. The cost of membership may be two-tier or three-tier, depending on location. For an Associate AIA, it may be \$200-\$500 annually. For AIA, it may be \$500-\$800 annually—close to the annual cost of a gym membership in some areas. However, many faculty say that since they are not in practice, they do not benefit from being an AIA member as they use fewer of the services, such as contract documents. Therefore limited membership benefits accruing to full-time faculty and staff may be an area for further investigation.

Suggestions to increase AIA membership in academia

Number of responses 82



Acknowledgements & references

Questions or comments

Dr. Nissa Dahlin-Brown,
Director, AIA Higher Education,
nissadahlinbrown@aia.org

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About the author

Dr. Nissa Dahlin-Brown, Assoc. AIA, has a Bachelor of Architecture, Master's in Adult and Technological Education, and Doctorate in Higher Education Administration and Policy Studies from the University of Tennessee, Knoxville. Prior to joining AIA, she worked in continuing education, professional studies, conferences, public policy, and civic education and engagement. Her doctoral dissertation, on the perceived impact of *U.S. News & World Report* rankings of public MBA schools, won a Council for Advancement and Support of Education (CASE) Alice L. Beeman Research Award for Outstanding Research in Communications and Marketing for Educational Advancement in 2005.

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Barker, James F., The Architect as University President, *The Chronicle of Higher Education*, 2008.
Boyer, Ernest L. and Lee D. Mitgang, *Building Community: A New Future for Architecture Education and Practice*, 1996.
Membership Internal Report, 2017
AIA Academy Survey, 2013 – Confidential – Rickinson Group

“ *The larger purpose of architects is not necessarily to become a practitioner and just build but to become part of the community that enriches society.* ”

—Student, Southern California Institute of Architecture
(Boyer and Mitgang, 1996, p. 150)