Baseline on Belonging: Equity, Diversity, and Inclusion in Architecture Licensing

Education Report: Executive Summary

©2022 National Council of Architectural Registration Boards (NCARB) and National Organization of Minority Architects (NOMA)
Baseline on Belonging: Education Report

Report Structure

NCARB and NOMA are releasing the full Baseline on Belonging report in phases. This phase features data related to the process of earning a degree in architecture. The final report on firm culture and career development is expected later this year, followed by a compiled report.

1. Overview
2. Experience
3. Examination
4. Education
5. Firm Culture and Career Development
6. Full Report

In This Summary

This summary report features an overview of the key findings and next steps from the Baseline on Belonging: Education Report. To explore in-depth survey findings related to earning a degree in architecture—including charts showing filtered responses to each education-related survey question—please visit ncarb.org/belong.

For more information about the study, read the Baseline on Belonging: Experience Report, which includes findings related to the experience program, and the Baseline on Belonging: Examination Report, which includes key findings related to the Architect Registration Examination®.

Engage

Sign up for email updates at ncarb.org/subscribe to be the first to hear about future Baseline on Belonging findings and participate in follow-up studies.
Executive Summary

Most of the 55 U.S. jurisdictions require that applicants for licensure earn a degree in architecture from a program accredited by the National Architectural Accrediting Board (NAAB). NAAB-accredited programs typically include an investment of time and tuition beyond that of a four-year undergraduate program. Most graduates complete either a five-year Bachelor of Architecture (B.Arch.) program, or a four-year Bachelor of Science in architecture plus a two- to three-year Master of Architecture (M.Arch.) program. Some U.S. jurisdictions allow individuals who don’t have a degree from an accredited program to earn a license by documenting additional professional experience. The Baseline on Belonging survey included a series of questions exploring how factors like cost, culture, and curriculum may create unintended impediments on the path to licensure.

Over 90 percent of survey respondents earned a degree in architecture, and 4 percent were in the process of earning a degree at the time of the survey. Of those who held a degree, 82 percent earned that degree from a NAAB-accredited program. This aligns with NCARB’s customer data, which shows that most individuals who achieve licensure (approximately 86 percent of new architects in 2019) hold a degree from a NAAB-accredited program.

Over half of all respondents indicated that the cost of earning a degree had a negative impact, on their educational experience with many also calling out additional costs like books, study materials, and studio class materials. Graduates of NAAB-accredited programs were 20 percent more likely to report that tuition costs impacted them negatively compared to graduates of non-accredited programs.

As with previous Baseline on Belonging reports, survey findings were filtered primarily by race, ethnicity, and gender, with additional factors such as firm size, citizenship, and degree type taken into consideration when possible. While age has been included in previous reports, it was not included in the Baseline on Belonging: Education Report as the survey did not determine respondents’ age at the time of earning a degree. Where appropriate, NCARB provided supplemental data from customer Records to offer additional insight and background information.

While previous reports often revealed a spread of disparities across underrepresented groups, key findings from the Baseline on Belonging: Education Report are more focused.

First, Black or African American women were more likely to face impediments while earning a degree, especially in two key areas: overall program culture and support from educators. African American women were more likely to report that lack of access to professors had a negative impact on their educational experience; and they were less likely to report that their professors encouraged them to pursue licensure compared to white men. They were also much more likely than their peers to indicate that their program’s culture had a negative impact, and that their school did not value diversity or inclusion.
While some disparities are apparent to a lesser degree when the responses are filtered solely by race and ethnicity, or solely by gender, responses by Black or African American women reported experiences that are notably more negative for nearly every question related to architectural education. As a result, over half of African American women considered leaving architecture while in college—the only demographic to exceed 50 percent.

Second, graduates of NAAB-accredited programs were more likely to report a variety of impediments related to culture and cost than graduates of non-accredited programs, especially in relation to future salaries and career preparedness. Graduates of NAAB-accredited programs were more likely to say that they considered not pursuing an architecture career while in school, and less likely to say that they felt their education prepared them for their career. Many graduates of NAAB-accredited programs indicated that they were unsure whether the additional cost of studying at an accredited program was worth the investment when considering future earning potential.

Finally, the report also highlighted differences in architecture programs in the United States versus abroad, with U.S. citizens more likely to say that their school culture had a negative impact on them, and more likely to consider not pursuing a career in architecture.

As with key findings related to experience and examination, additional study is needed to better understand how to address disparities related to program culture, educators, and cost. For more information about NCARB and NOMA’s planned follow-up surveys, research, and next steps, see page 10.
Women were less likely to report having professors who supported their educational and career goals—especially African American women.

Compared to white men, African American women were:

- 3% less likely to say their professors encouraged them to pursue licensure
- 10% less likely to say they had a professor who made them excited about learning
- 4% less likely to say they had an advisor who helped make the most of their academic experience
- 13% more likely to say lack of access to professors or mentors had a negative impact on their college experience

- Compared to white men, African American women were:
  - 3 percentage points less likely to report that professors encouraged them to pursue licensure
  - 10 percentage points less likely to say they had a professor who made them excited about learning
  - 13 percentage points more likely to say a lack of access to professors or mentors had a negative impact on their college experience
  - 4 percentage points less likely to say they had an advisor who helped make the most of their academic experience
Key Findings

African American Women and Program Culture

African American women were significantly more likely to report facing barriers related to their architecture school's culture. Compared to white men, African American women were:

- **12%** more likely to consider not pursuing a career in architecture while in school
- **14%** more likely to say their architecture school's culture had a negative impact on them
- **20%** less likely to feel like they belonged
- **25%** less likely to say their school valued diversity and inclusion

Compared to white men, African American women were:

- 12 percentage points more likely to consider not pursuing a career in architecture while in school
- 20 percentage points less likely to feel like they belonged
- 14 percentage points more likely to say their architecture school’s culture had a negative impact on them
- 25 percentage points less likely to say their school valued diversity and inclusion
Baseline on Belonging: Education Report

Key Findings

NABB-Accredited Program Culture

Graduates from NAAB-accredited programs reported issues related to program culture and career preparation at higher rates.

Compared to graduates of non-accredited programs, graduates from NAAB-accredited programs were:

- 5% more likely to say lack of diversity had a negative impact.
- 10% more likely to say they considered not pursuing a career in architecture while in school.
- 10% more likely to say their program’s culture had a negative impact.
- 9% less likely to say their education prepared them for a career in architecture.

- Graduates from accredited programs were:
  - 5 percentage points more likely to cite lack of diversity as a negative impact.
  - 9 percentage points less likely to say their education prepared them for a career in architecture.
  - 10 percentage points more likely to consider not pursuing a career in architecture while in school.
  - 10 percentage points more likely to cite their program’s culture as a negative impact.

- However, graduates from NAAB-accredited programs are 7 percentage points more likely to be employed within three months of graduation.

Data from the 2021 Baseline on Belonging Survey

© 2022 NCARB and NOMA
Many respondents reported that the cost of an architectural education had a negative impact on them.

56% of all respondents said tuition had a negative impact.

Graduates of NAAB-accredited programs more frequently reported the negative impact of cost barriers:
- Studio class materials: 7% more likely
- Books and other study materials: 9% more likely
- Tuition: 20% more likely

Compared to graduates of non-accredited programs.

- Over 50 percent of all respondents cited tuition as a negative impact
- Compared to graduates of non-accredited programs, graduates of NAAB-accredited programs were more likely to face cost barriers:
  - 7 percentage points more likely to cite the cost of studio class materials as a negative impact
  - 9 percentage points more likely to cite the cost of books and other study materials as a negative impact
  - 20 percentage points more likely to cite tuition as a negative impact
- Many respondents who indicated they’d considered not pursuing architecture cited poor return on investment when comparing tuition to salary ranges.
Baseline on Belonging: Education Report

Key Findings

Citizenship and School Experience

U.S. citizens were more likely to report negative experiences related to their college compared to lawful permanent residents.

- **U.S. citizens were:**
  - 9% more likely to say their program’s culture had a negative impact
  - 12% less likely to say their education prepared them for a career in architecture
  - 14% more likely to consider not pursuing a career in architecture while in school

• **U.S. citizens were:**
  - 9 percentage points more likely to cite their program’s culture as a negative impact
  - 12 percentage points less likely to say their education prepared them for a career in architecture
  - 14 percentage points more likely to consider not pursuing a career in architecture while in school

Data from the 2020 Baseline on Belonging Survey
Baseline on Belonging: 
Education Report

Next Steps

Findings from this initial Baseline on Belonging survey highlight the impact that program type, program culture, and professors can have on students pursuing an architecture license—especially for Black or African American women. The results underscore the need for additional study and align with existing discussions in the profession around the high cost and additional time burden of attending NAAB-accredited programs. Areas for ongoing research and discussion within the broader community of architectural education include:

• Do prospective students have the resources to choose a program that suits their long-term goals and minimizes barriers later in the licensure process?
  o What proportion of the licensure candidate population had to return for an additional degree/course load they weren’t expecting in order to earn a license?
    – Are candidates of color more likely to face this barrier?

• How is the “return on investment” of an architecture degree impacting the diversity of the candidate pool?
  o Are candidates of color more likely to fall off the path due to affordability?

• How does the student experience at U.S. architecture programs compare to the student experience at programs outside the U.S.?
  o Are culture issues like lack of diversity, high pressure/workload, etc., unique to U.S. programs?
  o Do U.S. architecture programs face higher levels of attrition than international programs?

• How does the culture of non-accredited architecture programs compare to the culture of accredited programs?
  o Are the disparities seen in the education report a result of the additional cost/curriculum requirements of NAAB-accredited programs, or are there additional causes?
  o Do NAAB-accredited programs face higher levels of attrition than non-accredited programs?
  o Why do graduates of non-accredited programs feel more prepared for their careers?
  o NAAB’s data suggests that NAAB-accredited programs are more diverse than non-accredited programs (at the same schools)—but graduates of NAAB programs selected “lack of diversity” as a negative impact more frequently. Why might this be the case?

• Do professors at architecture programs reflect the diversity of their student body?
  o Are there formal structures in place at architecture schools to help students progress, or is this responsibility placed on professors? Do schools with formal programs see less disparity by race and gender than schools without a formal structure?
Baseline on Belonging: Education Report

• How can the architecture community better support candidates of color, particularly Black or African American women, in school?
  o Do architecture programs require that their faculty complete DEI training?

Going forward, NCARB and NOMA will work with related organizations in architectural education to understand and address these disparities. Additionally, NCARB and NOMA will conduct focus groups to dig deeper into the underlying causes and propose solutions to help create a more equitable profession.
Baseline on Belonging: Examination Report