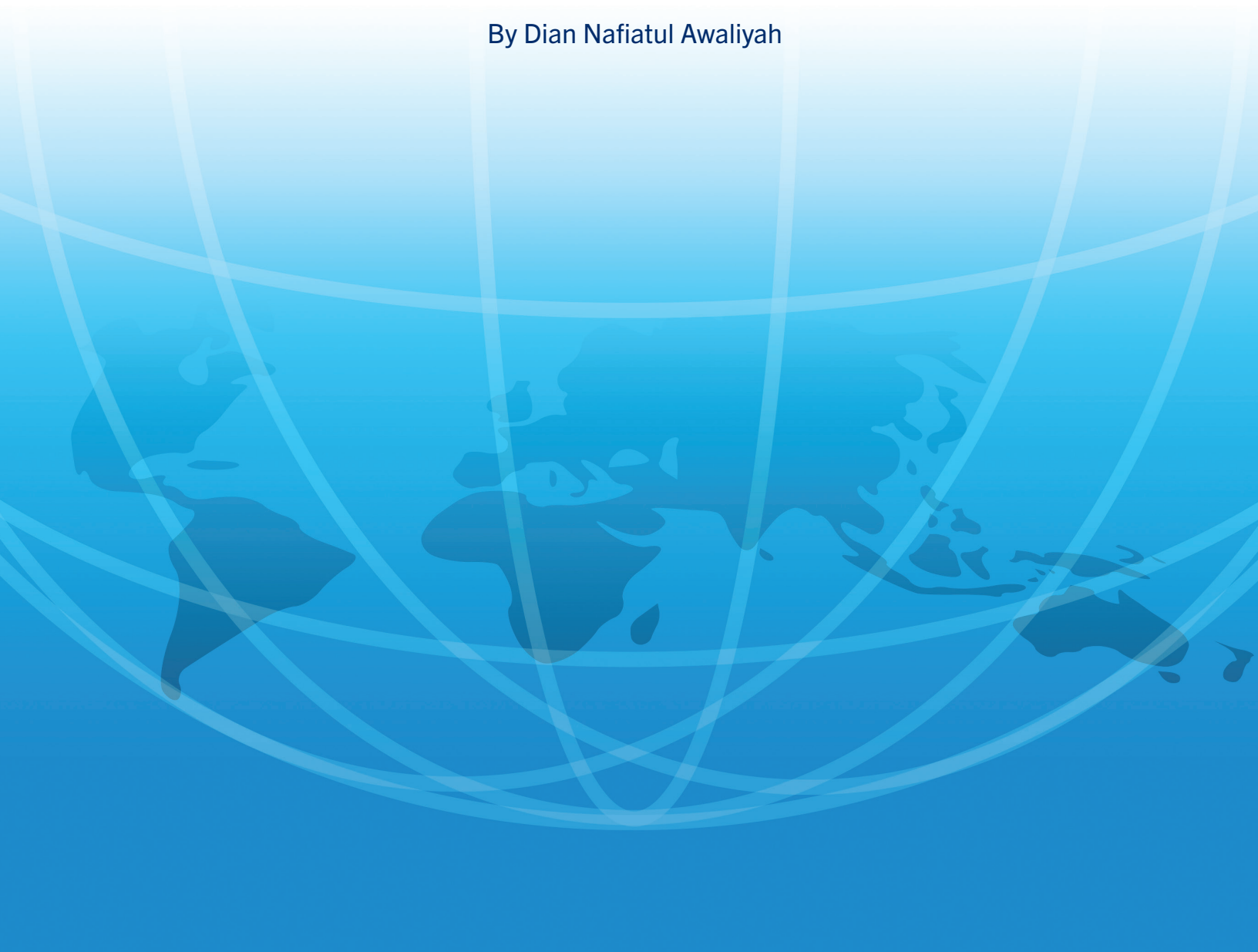


# COMMUNITY COLLEGE ARCHITECTURE AND DESIGN

The author of this excerpt from the second volume of ACCT's new *Mapping Community Colleges Around the World* series profiles the role institutional architecture plays in facilitating global collaboration, learning, and engagement.



By Dian Nafiatul Awaliyah



ACCT is excited to introduce a new series of briefs that highlights effective policies and programs that strengthen U.S. community colleges and their global counterparts; identifies models for the development of these institutions in other geographic contexts; investigates challenges and solutions; explores synergies for mutually beneficial partnerships; and celebrates the success and contributions of this unique educational sector.

The second installment, *Preparing a Global Workforce: Curriculum Design and Learning Outcomes: Issue 2*, features perspectives from India, Indonesia, Japan, Kenya, the United Kingdom, and community and tribal colleges within the United States. Visit [www.acct.org](http://www.acct.org) for the full report.

COMMUNITY COLLEGES PLAY A PIVOTAL ROLE IN THE global education landscape, providing accessible and affordable pathways for a diverse range of learners. These institutions are not only centers of academic learning but also spaces that foster collaboration, innovation, and cultural exchange. The architectural design of community colleges is a crucial factor that shapes the learning environment, influencing how students, faculty, and staff interact, collaborate, and engage with their surroundings.

As education systems evolve to meet the needs of an increasingly interconnected world, understanding how the built environment supports these educational goals becomes essential. In order to explore this relationship, our research team (composed of Indonesian researchers in the fields of architecture, environmental literacy, and culture) conducted a descriptive design-based study examining the architectural diversity of community colleges across different countries and how these spaces facilitate collaborative learning and cross-cultural exchange.

A diverse sample of five community colleges from various regions, including both large and small institutions with unique or modern designs, were chosen for inclusion in the study. Data were collected from a variety of sources, including 1) a literature review to explore existing research on the relationship between architecture and learning, with a particular focus on how the design of community colleges influences collaboration, 2) online surveys sent to students, teachers, and administrators at the selected community colleges, asking them about their perceptions of how their college's architecture supports teamwork, learning, and cultural exchange, 3) photos and virtual tours of selected colleges gathered from online resources, and 4) short interviews with faculty members and students to provide further insights into how architecture impacts their learning environment. Data analysis included qualitative coding of survey responses and interviews to identify common themes, as well as basic statistical analysis of survey data.

The results of our study indicate that institutional architecture plays a critical role in both shaping the overall educational experience at

community colleges, and specifically in facilitating global collaboration, learning, and engagement.

## Shaping the Educational Experience

**Collaborative spaces foster inclusion and belonging.** Our research found that community colleges are increasingly creating flexible and open spaces that encourage informal, outside-of-class interactions between students and faculty. Examples include open lounges, study areas, and technology hubs where students can interact freely, share ideas, and collaborate on projects, both academically and socially. Feedback gathered in our research indicates that such interactions in turn contribute substantively to an inclusive learning environment where students from diverse backgrounds feel a sense of belonging.

**Integration of academic and student affairs offices helps create a holistic educational environment.** Research indicates that for institutions serving diverse, often commuter-based populations, a connection between the academic and student affairs domains is crucial for student success (Ozaki & Hornak, 2014). A notable finding of our study is that the physical integration/co-location of academic and student affairs offices on campus positively impacts the overall student experience. Strategic placement of shared spaces such as lounges, study areas, and technology hubs in close proximity to these offices further contributes to an educational environment in which resources to support academic learning and student development are easily accessible and interconnected. Our data indicate that this approach enhances the overall sense of a campus community, which is essential for the social and emotional well-being of students — particularly those from underrepresented or marginalized groups.

**Classroom design facilitates learning communities and intercultural competence.** Recognizing that coursework is at the core of student learning, it is not surprising that the design of classrooms, in particular, plays a key role in shaping the overall learning experience. Our data indicate that the concept of learning communities is gaining traction in community colleges, and that architectural features that

support such communities — such as group work friendly classrooms and communal discussion areas — are vital for student engagement and success. Such spaces not only enhance academic collaboration but also create opportunities for intercultural exchanges through which students from various backgrounds can engage with one another, share experiences, and develop an appreciation for the value of diverse perspectives.

**Dedicated spaces enable community engagement and real-world learning.** In addition to fostering collaboration within the academic realm, community colleges also engage in partnerships with local businesses, organizations, and global entities to provide real-world learning opportunities. The architectural design of the institutions we studied reflects this focus on community engagement, with spaces such as conference rooms and event venues that invite industry and community partners onto campus to network and build relationships that lead to internships, shared projects, and other opportunities for students to apply their knowledge in real-world settings. The intentional interconnection between education and the broader community not only enhances the learning experience but also promotes community engagement and development by encouraging students to participate in initiatives that have a broader social impact (Devereux & Glenn, 2022; Watla-iad & Hartwell, 2022).

## Facilitating Global Learning and Engagement

**Integrating key technology into infrastructure enables global collaboration.** The integration of digital platforms and social networking sites into the physical infrastructure of campuses has proven to be an effective tool for fostering global connections among students and faculty (Ahmed, 2023). Virtual campuses and online platforms allow institutions to expand their educational offerings beyond geographical constraints, enabling students and faculty to collaborate across borders and engage in real-time discussions. These technologies create an interconnected ecosystem that facilitates the exchange of knowledge and resources between institutions in different parts of the world. The blending of physical spaces with digital technology thus creates a hybrid learning environment that transcends traditional campus boundaries.

Sustainability in campus design contributes to global environmental efforts. Our findings indicate an increasing focus on sustainability by community colleges. By incorporating sustainable elements into campus design — such as energy-efficient buildings, green spaces, and renewable energy sources — colleges send a strong message about their commitment to environmental stewardship. Moreover, sustainability-focused spaces provide a tangible example for students, inspiring them to think critically about climate change, resource management, and other global sustainability challenges and their role in creating solutions. This approach not only enhances students' educational experiences but also prepares them to engage in global initiatives that require international cooperation and cultural sensitivity (Gupta & Singhal, 2017).

**Experiential learning spaces equip students to solve global**

**challenges.** Our study findings underscored the importance of innovative educational models and experiential learning environments in fostering critical thinking and collaboration among students. Examples such as “escape rooms” were highlighted as spaces that encourage students to collaborate, problem-solve, and think creatively. These environments challenge students to engage with one another, work across disciplines and cultural backgrounds, and apply their knowledge in practical, real-world, solution-focused scenarios — skills that are crucial for students to become global citizens who can navigate the interconnected world in which they live (Hamilton et al., 2021).

## Conclusion

Given its impact on the educational experience, community college architecture is much more than just an aesthetic or functional consideration. The design of these institutions, particularly through open and flexible spaces that encourage interaction, plays a vital role in fostering collaborative learning and holistic development. Spaces that support both formal and informal learning create environments that engage students, enhance academic success, and promote inclusivity. The physical design of campuses is also instrumental in advancing international partnerships and bridging cultural divides. By incorporating spaces that encourage intercultural communication, integrating technology to connect students and faculty across borders, prioritizing sustainability, and supporting innovative educational models, community colleges enable global engagement and prepare students to work effectively with counterparts from an array of geographic and cultural backgrounds. The design and use of physical spaces in higher education is evolving to meet the demands of an interconnected world, fostering collaboration, innovation, and the sharing of diverse perspectives that enrich the learning process and contribute to a more inclusive and globally aware society. Our hope is that this research will provide insights that can inform future architectural designs in community colleges, ensuring that these institutions continue to serve as hubs of learning, innovation, and cultural exchange in an increasingly globalized world.



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