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Choosing the Right Classroom Design Team (And 10 Key Questions to Ask)

Creating collaborative spaces for different grade levels depends on picking the right design team.

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Ed. note: This article originally appeared in T.H.E. Journal's ***February 2013 digital edition****. It is the second of a two-part series looking at how to design collaborative spaces for schools, written by an architect with extensive experience in the field. You can read the first part* ***here****.*

Given the differences in social, emotional, and physiological development among elementary, middle, and high school students, it should come as no surprise that collaborative spaces should be designed differently for each age group. The needs of younger students do not necessarily mirror those of their older peers.

Kindergarten through fourth grade, for example, is a formative period for learners. Generally, students in this age group are learning how to work cooperatively, share tools and resources, and take responsibility for their learning (i.e., reading independently). These environments should be structured so that learners can develop the ability to work in large groups, in small groups, and independently. The collaborative areas should be clearly defined to help create a culture of responsibility and trust. Activity settings should be organized to support independent study, 1-to-1 interactions, and groupings of three to four learners. Given the variety of work activities, instructional settings for this age group need more than one focal point.

Settings for grades 5 to 12 should reinforce learning from the previous years. While these settings have similar defined features as their K-4 counterparts, spaces for older learners generally have greater overlap with one another. These spaces still support independent and group work, but given the collaboration skills that learners have acquired from earlier experiences, spaces for fifth- to 12th-graders can be slightly larger to support bigger groupings. These spaces should be flexible

enough to accommodate a group of six to eight that contracts to three or four, and then to individuals working independently.

As they progress through grade levels, learners continue to distribute knowledge among themselves and advance their ability to shape their settings. They get comfortable expanding from smaller groups to larger groups and contracting from larger group areas to smaller work areas. Defined activity settings throughout the facility help them achieve this. These settings can be located within instructional spaces or serve as extensions of them.

Although the spaces should be planned differently, the learning areas should always be fluid, allowing learners to flow between and across settings. Features of collaborative spaces in both K-4 and 5 to 12 learning environments include the following:

- **Classrooms** are generally organized with a variety of activity settings to support formal, informal, and creative activity settings. These settings might include block corners, reading corners, and painting corners, as well as tables with chairs, rugs, soft seating, and a private reflective area.

- **Doors** connect classrooms directly to one another and to the learning areas beyond these rooms. Having doors instead of folding partitions allows movement between settings. Furthermore, when doors are opened or closed, corner areas can serve as quiet or private work spaces.

- **Corners** are the primary salient features within instructional spaces, allowing separation for groups of learners, while providing them with visual, auditory, and physical connections to one another.

- **Breakout areas**, while appearing more open, must be designed with clearly defined zones supporting a variety of social groupings. These areas (which include nodes, niches, hollows, and holes) should be programmed and planned to promote the activities that occur routinely. Breakout areas reinforce the learning that is occurring in the instructional spaces, so they must be recognized as attached to the instructional spaces. When the overall multipurpose space needs to accommodate large group meetings or serve as a classroom, the smaller spaces can be rearranged to support this. However, multifunctional spaces should not be viewed as "flex spaces" that support a variety of uses. Instead, they should have clearly defined areas that allow a variety of social groupings.

- **Technology** supports collaborative learning activities. In some breakout settings, there might be tables with chairs located in front of interactive LCD screens. In other breakout areas, there might be seating and/or countertops for laptops or tablets.

While elementary and secondary facilities may share these similar features, they have different cultures. Younger learners require greater assistance from facilitators in becoming fully engaged in tasks. Secondary students need less assistance, but facilitators must always be available to guide them when needed. Understanding the customs of the learning environment that is being programmed, planned, and designed is crucial to creating a successful place.

Choosing the Right Design Team

To create learning environments with collaborative spaces, the design professional must not only have a foundation in how people learn, but must also understand the culture of the place. So even if designers and educators agree on a general idea of what collaborative learning spaces are, finding the right match between designer and project is a high-stakes undertaking for boards of education, administrators, technology directors, and other educational leaders.

When hiring a design team, there are obvious upfront considerations involving timelines, budgets, sustainability, and energy savings. But it would be a mistake for schools to focus solely on these basic needs. Questions for your potential design team need to probe the team's understanding of the educational enterprise and the social ramifications of the spaces that are under consideration.

The goal of the interview process is threefold:

- To find out if there is congruence between what the candidates say is their philosophy of designing for learning and what they have actually done
- To discern if the design team has been responsive to the needs of its clients
- To know if the team has a deep understanding of how people learn and how spaces support teaching and learning

Usually, most districts want an innovative, state-of-the-art facility that is distinct from all others. And while that is a perfectly good goal, fundamentally you want to choose the group who convinces you that they can create spaces where innovation can take place. The following are questions that, in my experience, will help you find the right team to design spaces that support, reinforce, and extend your district's vision of collaborative, 21st century learning.

10 Questions for Design Team Candidates

1) Why do you design schools?

This question will uncover the candidates' motivation for working in the educational space. Because you run schools--and not banks or supermarkets or office buildings--you are looking for people who have a passion for learning environments, a strong investment in the future of learning, and a desire to contribute to the social good.

2) How long have you been designing and constructing schools?

You want someone who has had some solid experience in building 21st century learning environments, but do not limit yourself to only hiring a team with a long résumé of school construction, because they might be stuck in old design models. Follow-up questions to probe their experience might include, "What lessons have you learned?" and "How has your approach to designing schools evolved?"

3)What does the term "21st century learning" mean to you? Why should we be designing environments for 21st century learning?

Probe to see if the design team's educational vision is congruent with your own and if they have a deep or superficial understanding of the elements of successful teaching and learning in today's

ever-changing world. In addition, candidates' responses should help you see how they connect the concept of 21st century learning to the physical environment.

4)Describe your design approach and philosophy. What educational theory or theories guide your design approach? What projects have you done that show your theory reflected in the design?
This question builds on the previous one. The goal here is to know whether or not the designers have more than a cursory knowledge about learning theory. More important, these secondary questions encourage candidates to reflect on how they transfer their knowledge from theory into concrete form.

5)What is a collaborative space? How do you imagine various constituencies using these spaces?
Review the concept of collaboration to determine how your design team understands it, both in theory and in action. The designers' responses will help you see if the team has a deep understanding of collaborative structures, as well as the actions and engagements that might occur within these specialized areas.

6)How do collaborative places support constructivist learning?
If your district values a constructivist approach to education, the spaces that students work in must support this hands-on approach to learning--and you want a designer that understands that intersection.

7)What is a flexible learning environment? How does flexibility support collaboration? Are collaborative spaces differentiated? Why? Are these spaces integrated? Why?
Make sure your candidates elaborate on the concept of flexibility, because their understanding could be different from what it means to your district stakeholders.

8)How has information technology influenced the learning environment, both positively and negatively?
Your design team needs to know something about the history of technology use in schools: how it has been successful--and how it has not. In addition, you can gauge if your designers are aware of how information technologies and the socio-physical environment affect each other.

9)What technologies would you recommend for the learning environment and why? How does spatial design support the technology within an active learning environment? And vice versa?
The interview process should uncover how the design team understands technology's role in learning and how it may be integrated thoughtfully and seamlessly into the environment. Because one can't anticipate all technological advancements, the candidates' penchant for flexibility is key here. Candidates should be able to communicate a sense of how the design of the space supports the use of technology, and how technology can enhance the learning space in return.

10)Tell us about a special feature or features of the learning environments that you have created to support teaching and learning.
You want to hire a team whose designs have assisted, mediated, and promoted opportunities for learners and learning. A follow-up question might be: Have they integrated these features in other

settings, and how have those features worked elsewhere? The response to this question will highlight whether the designers' unique ideas can be transferred to another setting; if the idea was even appropriate to this new setting; and how the transfer of innovation worked from one setting to the next.

These questions are by no means the only ones you should ask, but they provide a foundation for finding the right collaborator for designing your collaborative learning environments.

About the Author

Peter C. Lippman, Associate AIA, REFP, has worked throughout the US as an educational and resource planner. Currently, Peter is an associate director at EIW Architects in Perth, Australia. He has published and presented worldwide on how learning influences and shapes the learning environment. He is the author of ***Evidence-Based Design of Elementary and Secondary Schools: A Responsive Approach to Creating Learning Environments***.