

Classroom Design

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Every elementary classroom has the same basic things; desks, lights, displays of children's work, etc., but nobody ever thinks about how important these items really are. The layout of a classroom can be determined by numerous things and it is important to consider all of them. Whether there are physical perimeters such as the room size or uncontrollable factors like how many kids are placed in the room, there is always a solution to make the room work in the teachers favor. In an article by Black, Lambert and Rosenfield, they state a few factors that determine classroom design, such as because of "teachers' conceptions of their role, the conditions for learning, and the appropriate means for maintaining classroom control" (Black et al, 1985). There are a lot of factors that can be controlled by the classroom that an elementary school teacher might not even realize, such as behavior and studiousness.

The first important aspect of classroom design is the physical design of the room. The carpet, walls, and windows are all extremely influential, even though a teacher might not realize it. Barrett, Kobbacy, Moffat, and Zhang studied all of these things. They found that the most important things for the room were "naturalness," "individualization," and "appropriate level of stimulation" (Barrett et al, 2013). The light is a very important factor. It doesn't matter if it is natural light or artificial light; the more light there is the better. If there are windows in the classroom, they should be free of obstruction. The individualization pertains to how interesting the furniture is and what the zones of the classroom are. Students learned better in a classroom that was interesting yet simple and had very distinct areas where they knew exactly what would happen there and what was expected of them. The furniture should be comfortable and have interesting color and design. The carpet and wall color should also be thought about. According to Blades and Spencer, two editors of the book "Children & Their Environment: Learning, Using, and Designing

Spaces", "it is the room color (wall and floor) that plays the most important role" (Blades & Spencer, 2006). Natural colors create a relaxed atmosphere. Warm colors can make blood pressure and muscle activity higher, while cool colors do the opposite.

Another important element is the arrangement of the desks. This has been the most studied factor of classroom design. In a study by Black, Lambert and Rosenfield they determined that the different arrangements encourage different things. If you want a social classroom and for your students to interact more with each other, have the desks in a circle. If you want more "active involvement" in the classroom as a whole, put your desks into clusters. They also determined that placing the desks in rows, made the children more off task and distracted. They always had the teacher stationed at the front of the room, which helped the students to remember who the authority figure was.

In a study done by Kerschner and Pointon, they interviewed teachers and students and asked their opinions about their classrooms. Every teacher had their pupils arranged in some kind of grouping. Desk arrangement all depends on what attitude the teacher wants the classroom to have and the pedagogy of the teacher. The designer of the classroom, most likely the teacher, needs to keep in mind that the classroom should flow and not have any obvious restraints. The traffic should be able to move freely throughout the desks and the space of learning should be well defined. The blackboard, or other main teaching tool, should remain in the front of the desks and be able to be seen by all. A teacher always has the freedom to move the furniture and they should take advantage of it.

A final important aspect of classroom design is taking the kids into consideration. One teacher in the Kerschner and Pointon study said that her main goal of her classroom was to make the kids happy and comfortable. She let each child have their own things and they took pride in managing their belongings. Another teacher in that study gave the kids the say in what they wanted their room to look

like and pointed out that the kid's notice things a teacher might not. It is also a benefit to display kids' work and their progress. By implementing bulletin boards into a classroom and giving the students pride in their craftsmanship, it helps to build self-esteem and makes them work hard. In older classrooms, you can even have them help design and make the bulletin boards/displays.

In multiple studies it has been shown that classroom design influences the students. One study by Rivlin and Weinstein proved it. Students who were placed in an intentionally thought out and organized classroom "engaged in more manipulative activities and they also produced more complex work" (Blades & Spencer, 2006). It can also "communicate expectations for behavior" (Blades & Spencer, 2006) and if the students are acting up, the teacher might not realize that it could be because of the room arrangement. Teachers should keep in mind that there is no one right way, to organize a classroom. There are multiple ways to have a layout; it all depends on what the teacher wants the classroom to convey and their pedagogy.

References

- Black, A., Lambert, N. A., Rosenfield, P. (1985) Desk arrangement effects on pupil classroom behavior. *Journal of Educational Psychology*, 77 (1), 101-108.
- Barrett, P., Kobbacy, K., Moffat, J., Zhang, Y.F. (2013). A holistic, multi-level analysis identifying the impact of classroom design on pupils' learning. *Building and Environment*, 59, 678-689.
- Blades, M. & Spencer, C. (Eds.). (2006). *Children and their environments: Learning, using, and designing spaces*. Cambridge University Press (92-94, 97-101)
- Kerschner, R., Pointon, P. (2000). Making decisions about organizing the primary classroom environment as a context for learning: the views of three experienced teachers and their pupils. *Teaching and Teacher Education*, 16 (1), 117-127.