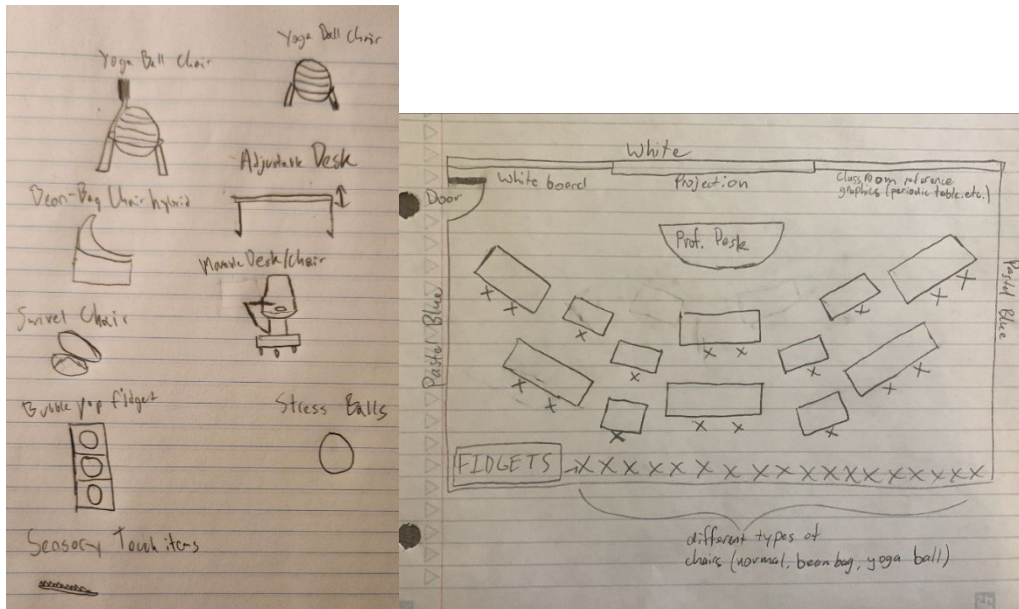


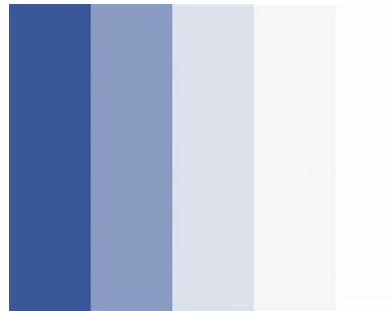
Designing a Classroom for Students with ADHD

Sketches:

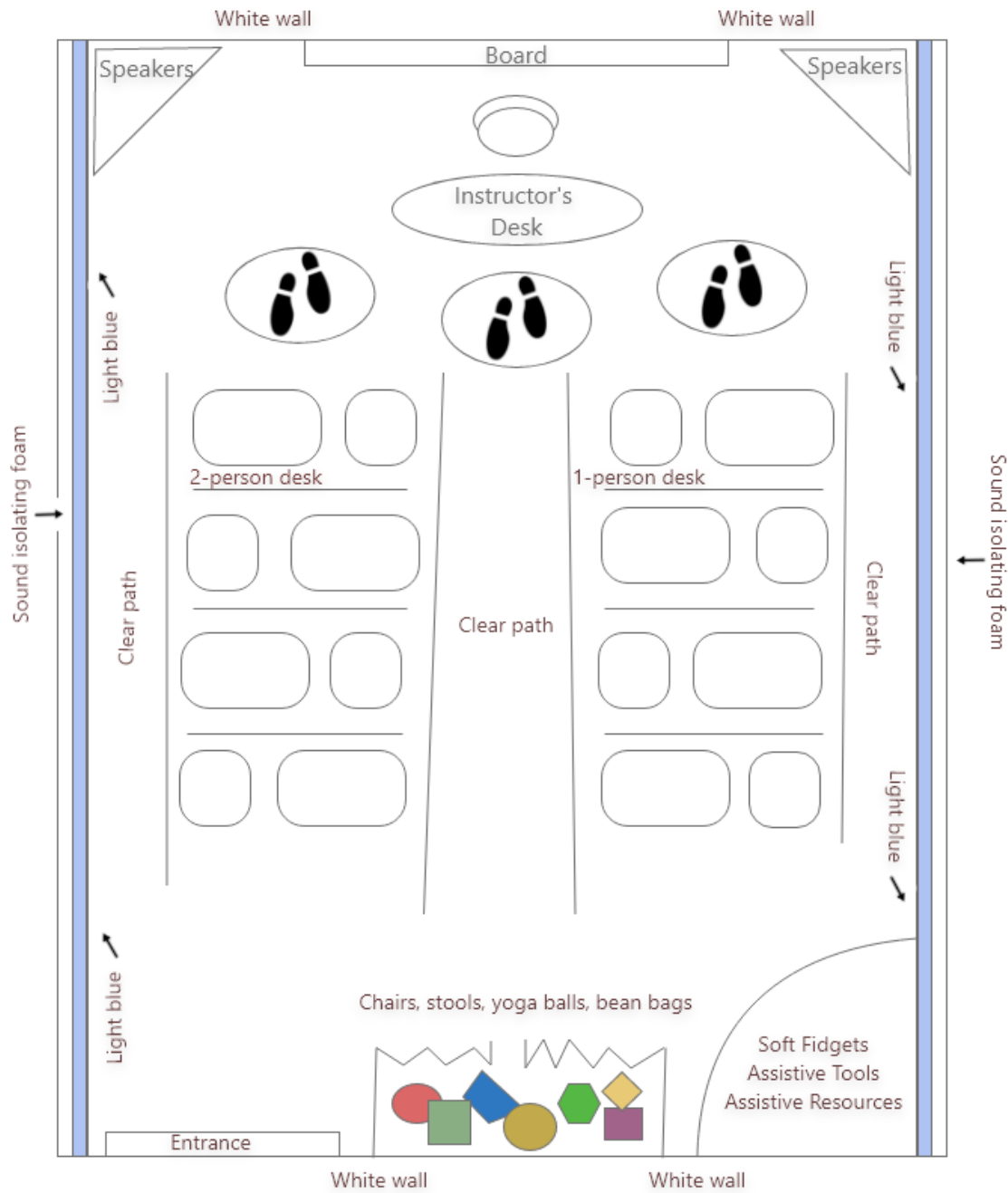


Group Design Project
UXD 2010 001, Inclusive Design
Dr. Katherine Panciera
Team Bluejay: Jack Sutrick | Yulia Vineman | Astin Pollack

Mood Board:



Floor Plan:



Project Rationale:

Decision motivators

Because ADHD is a widely familiar experience for many students, we've decided to pay special attention to their experience during lecture times, as this is the environment to which they are exposed on a regular basis during an academic year.

It was important for us to consider the classroom design in a sense of how easily it is navigated, its ability to create a focusable and non-distracting environment, and assistive tools and resources that this classroom could be equipped with to ease their experience and help to reach the students' learning objectives.

Project elements and highlights

We've taken into consideration cognitive, physical and emotional aspects of the students' experience because collective history shows that both physical and emotional experiences have direct and indirect impacts on one's intellectual performance.

The physical layout of the classroom with how the desks are positioned and their distance from one another, as well as how instructor's space faces students' seating area, are all aimed to provide physical coherence, comfort and an overall space that is free of any visual obstructions. The gradual descending order of the desks, resembling the auditorium floor but with gentler descent, ensures that students who sit in front of other students would not obstruct the view of the front of the classroom.

The decision to have different seating options for students to take advantage of continues toward our goal of designing a classroom where students feel comfortable and focused. Some students like to have straight-backed, rigid seating, but others may focus better when sitting on a softer surface, such as a bean bag or yoga ball.

We also wanted to focus on giving the classroom a narrower viewing field. It can be hard to focus on a wide classroom where you have to lean over towards the center of the room to see the screen if you are seated on the edge. Also, it creates tension in the neck and puts a lot of pressure on one's vision. With our design, that is no longer an issue. We also took into consideration that students with more serious vision issues might have a problem seeing the board from a distance in a longer classroom such as this. A possible way to address that problem is to have tablets at the back desks that are in the classroom, as a way for students sitting in the back to view the notes on the board easily, without special seating adjustments. This would be available through Bluetooth connection to the front board.

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Another important aspect of our classroom is the color psychology of the room to create a more productive classroom environment. Utilizing pastel blues to captivate the audience, as well as white walls on opposing walls. Ideally, the white wall would be where the entrance and board would be, and the two-color walls would be on the sides of the room. This effect will splash color to the front and back of the room and allow color to be present in the room without the suffocating feeling of the 4 colored walls.

In order to create more engaging lectures, we decided to create markings on the floor at the front to raise the “skill floor” of engaging the room in lectures. Creating spots in each third of the front to encourage presenters and lecturers to work the room more effectively and not simply stand behind a desk or be extremely static. This can also ease cultural questions an international student might have regarding where to stand during a presentation.

The decision to offer 1-person and 2-persons desks is based on the unique preferences and comfort levels to share the space with another person. It considers student’s unique comfort levels of interaction with environment, as well as cultural background that, in some cases, dictates their social habits and unique needs for autonomy and privacy.

In addition, the desks lack any sharp edges to minimize any risk of injuries in cases when students are in a hurry and do not pay attention to where they walk.

The speakers that are installed in the front of the classroom on both of the upper corners give the option to set up a seamless binaural vibration on a background that would stimulate students’ alpha waves, which might help with concentration.

All the tools and design elements discussed strengthen the power of concentration and improve the overall learning experience in a classroom. Because these decisions were based on different human aspects, such as interaction with physical space, as well as the cognitive perception of events and information that is processed in that physical space, the benefit of it is shared with other students who aren’t necessarily included on the ADHD spectrum, or who are included, but due to cultural stigma are not comfortable recognizing or admitting it openly. The value of these design decisions lies in a simple principle of inclusivity: if someone on the ADHD spectrum could benefit from it, then sure enough, the others will enjoy and reap the benefits of it as well.