PREVENTIVE MEASURES CLASSROOM BLUEPRINTS

THE CHALLENGE
2020

TEAM ONYO

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THE CHALLENGE 2020

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Engineering

THE PROBLEM

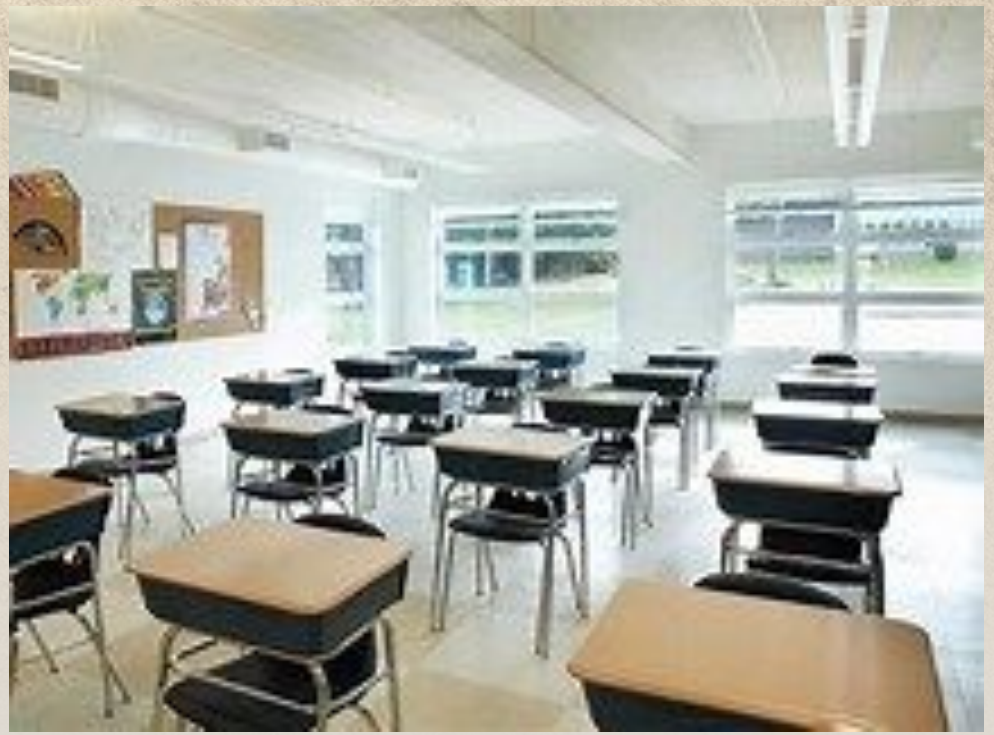
- “My experience during the COVID quarantine situation was lack of students wanting to talk during discussion time. Socratic Seminars are a very powerful way to learn. One huge reasons was the lack of technology on the student's part, example microphones” (History Teacher).
- Limited teacher-student interactions

THE PROBLEM

- “Person-to-person classes enable more engagement between the student and the teacher, thus increasing information retention, but online classes allow for the use of a variety of powerful online services. In my opinion, a mix of both, such as a person-to-person class that incorporates technology, would be the most effective” (Survey Response from a High School Junior).

LOCATION

- Classroom - Accessible to students/ staff
- Can fit ~20-30 students normally, teacher and class supplies
- Space too small to distance all students
- Space for teachers to instruct, walk around classroom



SOLUTION

- Technicians, electric engineers, architectural interior designers
- Let school define specific block for staff cleaning and UV use during vacancy
  - Install UV-Type C lights into classrooms
    - Connect secure controllers for routine use

SOLUTION

- Adjusting the classroom itself to accommodate for person to person teaching
  - Attach plexiglass on teachers desks for protection
- Use online learning where applicable
  - Built in online content to curriculums like homework assignments
  - Teachers given laptops dedicated for online meetings
  - Teacher can record the class for students to reference

BARRIERS TO DESIGN IMPLEMENTATION

- Cost?
  - $250 per sheet of plexiglass (total depends on # of teachers)
  - ~$50 UV-type c light (uvresources.com)
- Equipment?
  - Power tools for glass installation
- Size of space?
  - ~100 meters squared

HOW THIS WILL CHANGE THE SPACE

- Teachers and students will interact differently because some might prefer person-to-person, while others are learning online.
  - Positive
    - Decreased transmission rate
    - Students can verbally communicate with teachers/other students
  - Negative
    - It will be difficult to tell if the student is improving
- The function of the space will change because during quarantine, teachers did not have access to their resources which are in their classrooms.

APPENDICES

- Classroom Picture- th.bing.com/th/id/OIP.V17H0pYjKXLBt6a2-SOCoAHaE8?pid=Api&rs=1
- Plexiglass Retailer- https://www.dullesglassandmirror.com/covid-guard
- Survey Responses- docs.google.com/spreadsheets/d/1ZcB6gWwV4KvKSxxdX9IKQYj18uRSqhGvnaJhFEf3TEI/edit#gid=556523044
- Teacher Interview- docs.google.com/document/d/1sQJ-iipSctS1N-xT8mcqjRuOSwTEzMjnCRRoIckITNY/edit?usp=sharing
- UV-Type C lights- www.uvresources.com/products/rlm-xtreme/