President's Advisory Council

METROPOLITAN STATE UNIVERSITY OF DENVER

Reimagine possible

June 17, 2020

Built Environment and Infrastructure

Janelle Johnson, Metza Templeton, Louis Morphew, Carl Messe, Andras Greg, Amy Kern, Gabriel Christie, Jeno Balogh
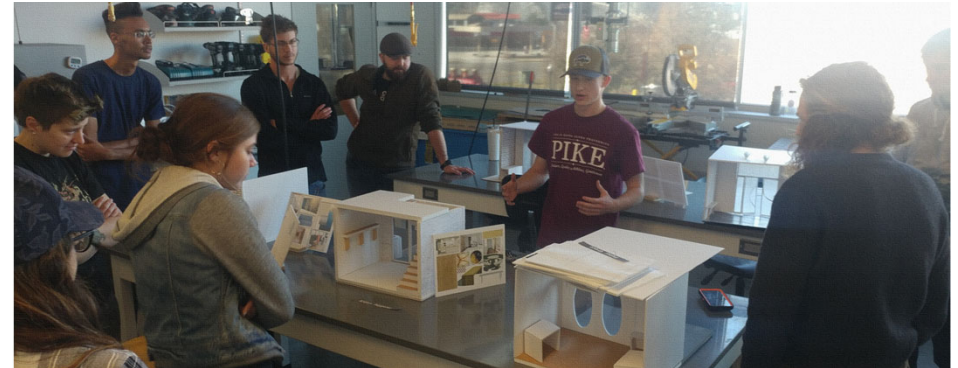
Recent Actions & Accomplishments

- Stakeholder Involvement Report ___(Janelle Johnson)
- Recommended Configurations ___(Jeno Balogh & Andras Greg)
- With a Post-Covid campus in mind ___(Amy Kern)
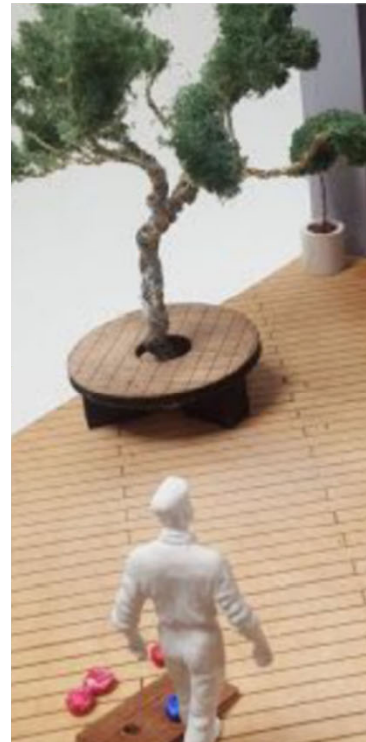- Signage___ (Louis Morphew)
- Accessibility___ (Metza Templeton)

MSU
DENVER

Industrial Design Model Making Students

Stakeholder Survey (n=85)

Student who attends classes in West Classroom — **Students w/ classes in WC**

Staff/faculty who works in West Classroom — **Staff/ faculty w/ work in WC**

Occasional visitor to West Classroom

Please rank the following aspects of the West Classroom Building in order. Ranking the item higher on the list means you feel it is more important and/or urgent to address.
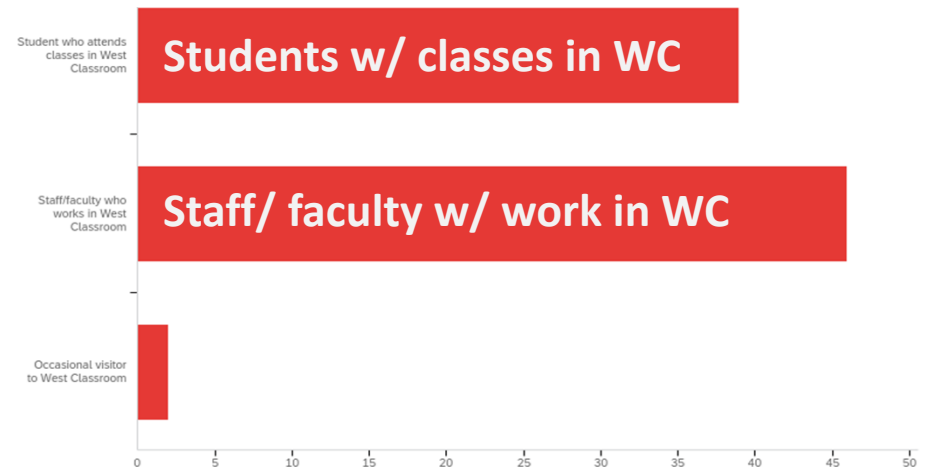
#	Field	Minimum	Maximum	Mean	Deviation	Variance	Count
1	Welcoming vibe	1.00	9.00	5.49	2.39	5.71	85
2	WiFi	1.00	9.00	3.39	2.28	5.20	85
3	Student work spaces	1.00	9.00	3.76	1.90	3.62	85
4	Classroom technology	1.00	9.00	4.33	2.32	5.40	85
5	Bathrooms	1.00	9.00	3.96	2.45	5.99	85
6	Signage/how to find rooms and offices	1.00	9.00	6.02	2.08	4.33	85
7	Accessbility for students with mobility/vision issues	1.00	9.00	4.69	2.31	5.34	85

Focus Group

Participants:

- Professor who's worked in West Classroom for many years

- Student who takes classes in WC and also works in Office of Orientation. They hold a lot of registration events and portions of orientation in West Classroom

- Student who takes classes in WC

- Associate Professor who's worked in WC for many years

Methodology:

- Introductions by the group; assurances that data would be anonymous; 30 minute time limit

- Shared online survey demographics (n=85; approximately half students and half staff/faculty) with the group

- Reviewed methodology of online survey, asking respondents to rank importance of issues in WC (top three responses were WiFi, student work spaces, and bathrooms) and open-ended response

- Shared survey data with focus group participants to generate examples and supporting evidence

Themes that emerged:

- Wifi and cell phone reception
- Student/staff/faculty spaces
- Classrooms (general)
- Bathrooms
- Technology
- Inclusivity and accessibility
- Signage and wayfinding

Student Lounge

"it's almost always full of students during the day who are up there actually studying. It's also really important because one of the things that we've talked about at MSU Denver is that our students sometimes don't have an identity with the university because they're all commuters- but that's one place where students do come together and they study together.

And I think it's really important to have appealing student workspaces where students can work together and just study."

Bathrooms

"I think the bathrooms are disgusting and we don't have hot and cold running water. They just put it in paper towels but there's no place, the towels are all over the floor because it wasn't really designed to have the towels in there but it gives students a message about what we think about them when we expect them to use wretched bathrooms."

Classrooms

"I think the classrooms that are located in the middle don't have windows or anything, they're very hard to be in. I have two 'back to back' three-hour classes in the same room, which has no windows. I don't know if there would be a way to redesign the building to make sure that each class has a window, maybe some way to open it up, brighten up the space would make it a lot more inviting to be in I guess."

Signage & Wayfinding

"From an orientation standpoint, I think West is one of our hardest buildings to kind of lead our students through. At the end of the orientation we typically take students to computer labs throughout campus. The biggest one is probably West and when students leave they don't really know how to exit the building because it's so confusing We have incoming students and that's one of their first kind of views of MSU, being in a really cramped computer lab."

Inclusivity & Accessibility

"I know that we've had a few incoming students ask for gender inclusive restrooms when we were in West and telling them that we don't really have any, it was kind of embarrassing. So I think that that comment on gender inclusive bathrooms is very, very important."

"I have a quadriplegic student in that building and this is just a maintenance thing that the handicap doors often do not work in that building ... I really feel for him. He has to travel around a lot trying to find a door that will actually open, I mean because being a quadriplegic, he can't really hit those things really hard. It's difficult sometimes for him to get into that building."

West-Classroom Building 3D Model
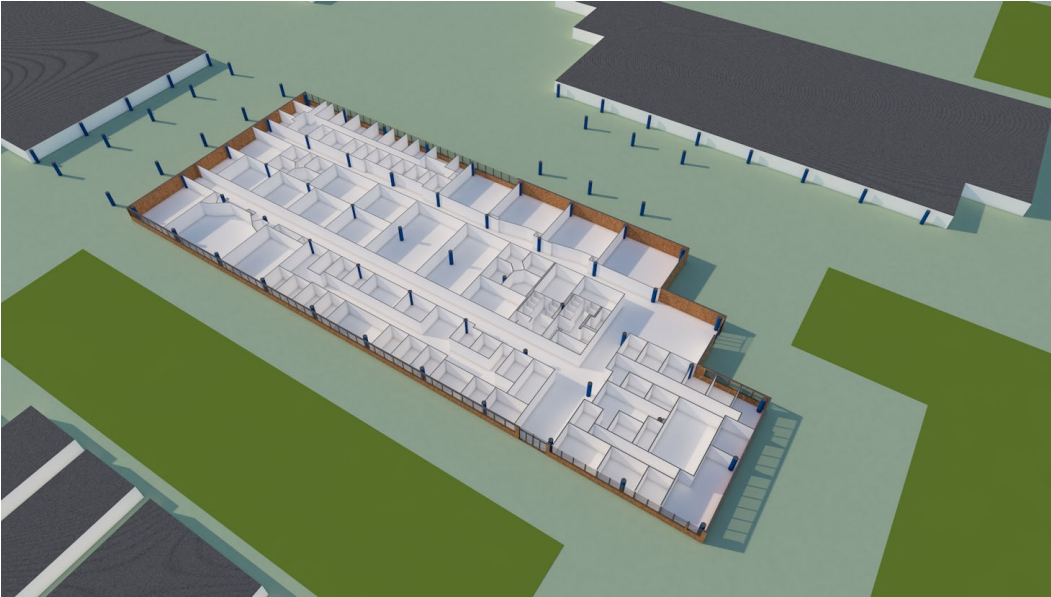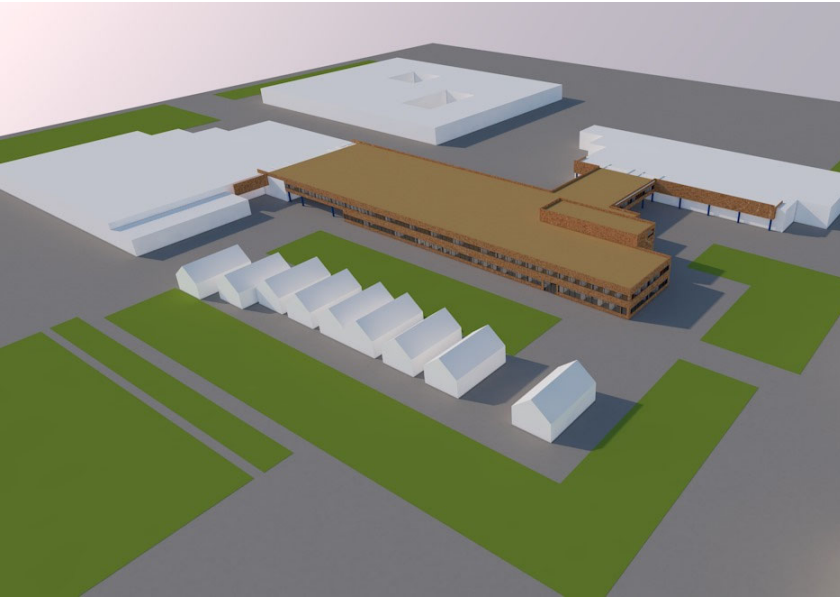
West-Classroom: Recommendations
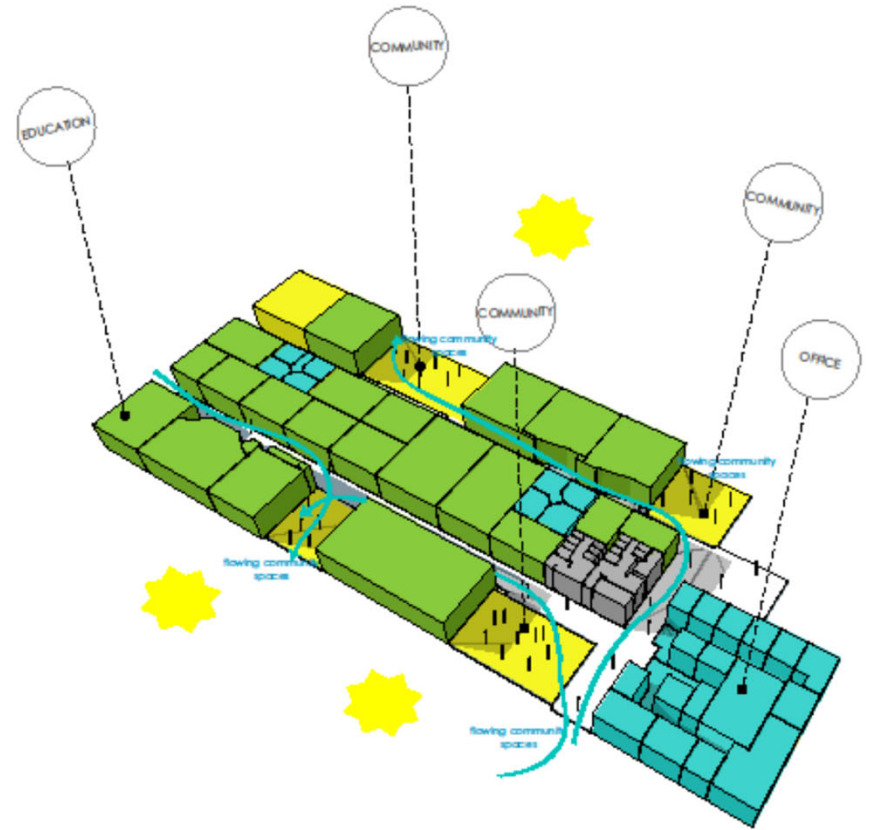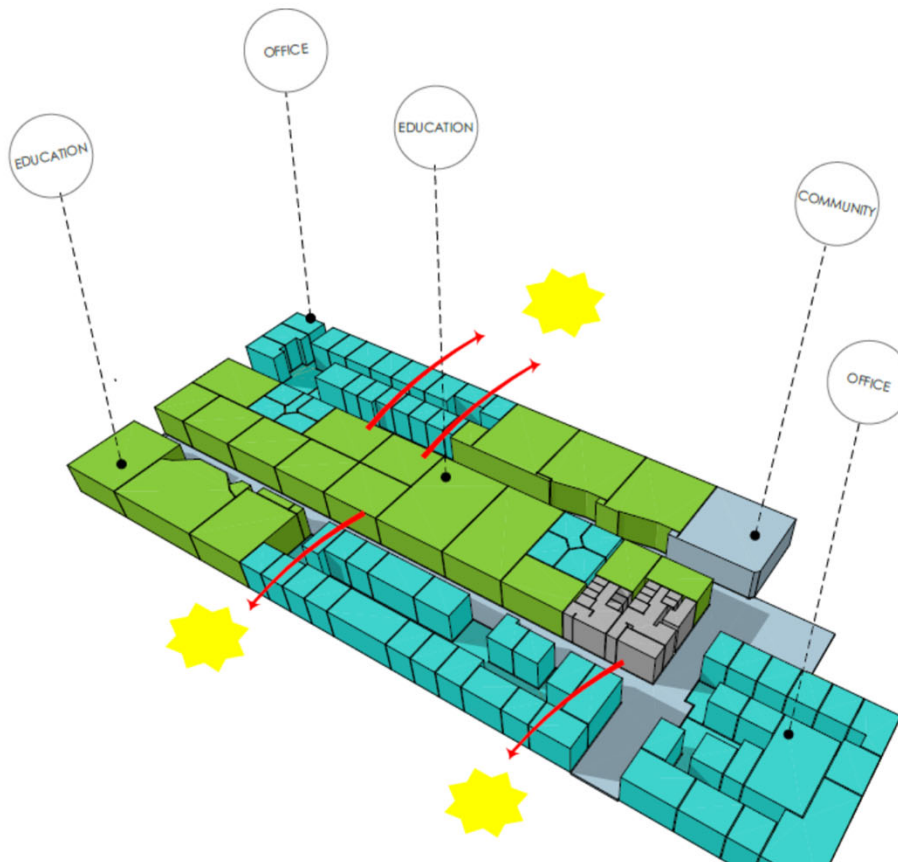
PROGRAM
- Expanding the small number of community spaces
- Opening dark corridors to natural light
- By removing just a few partition walls
- By rethinking interior design

RESULTS
- Re-arranged floor plan
- Student-friendly community spaces
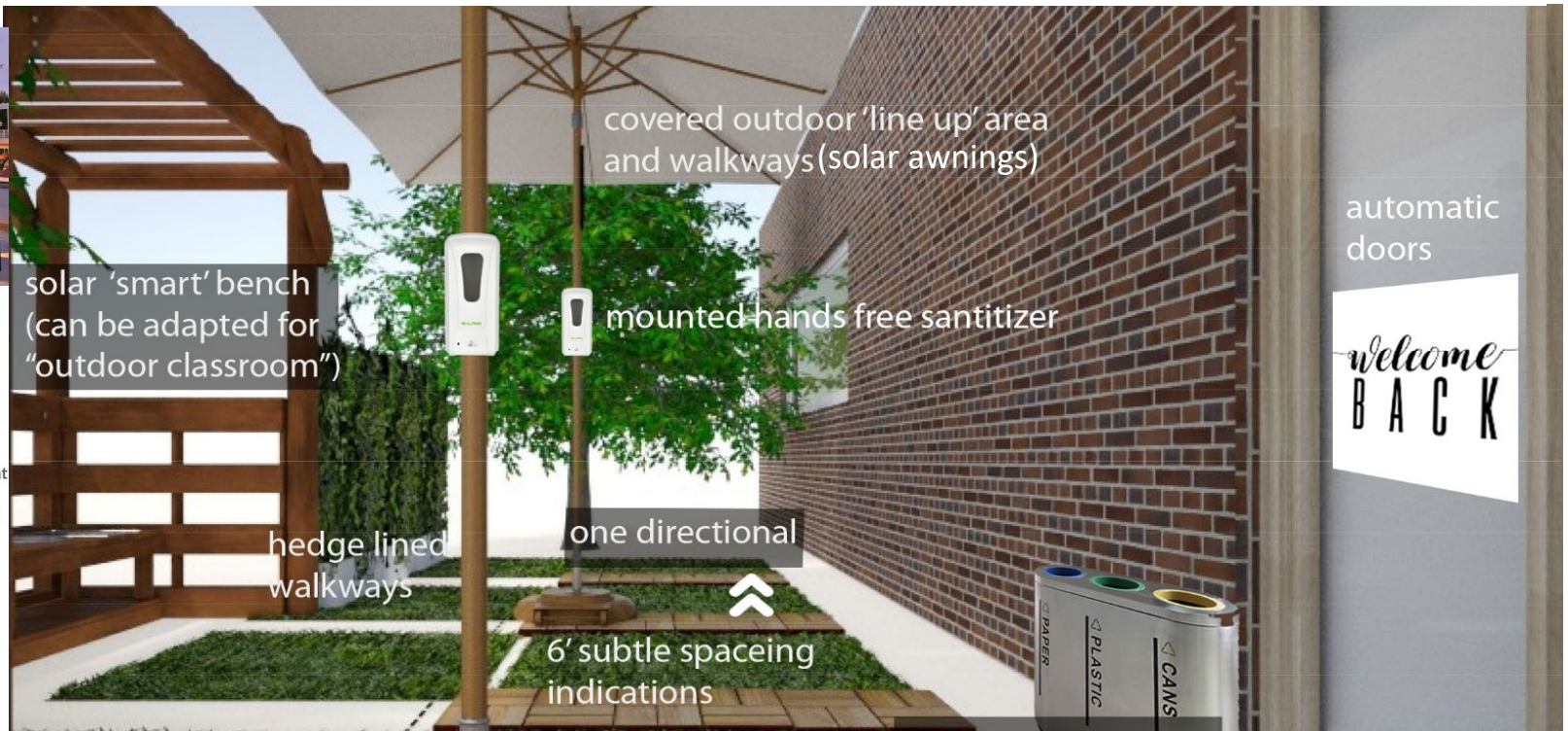- Natural light in public spaces

West-Classroom: Reconfigured

Current Interior

West-Classroom Post Covid
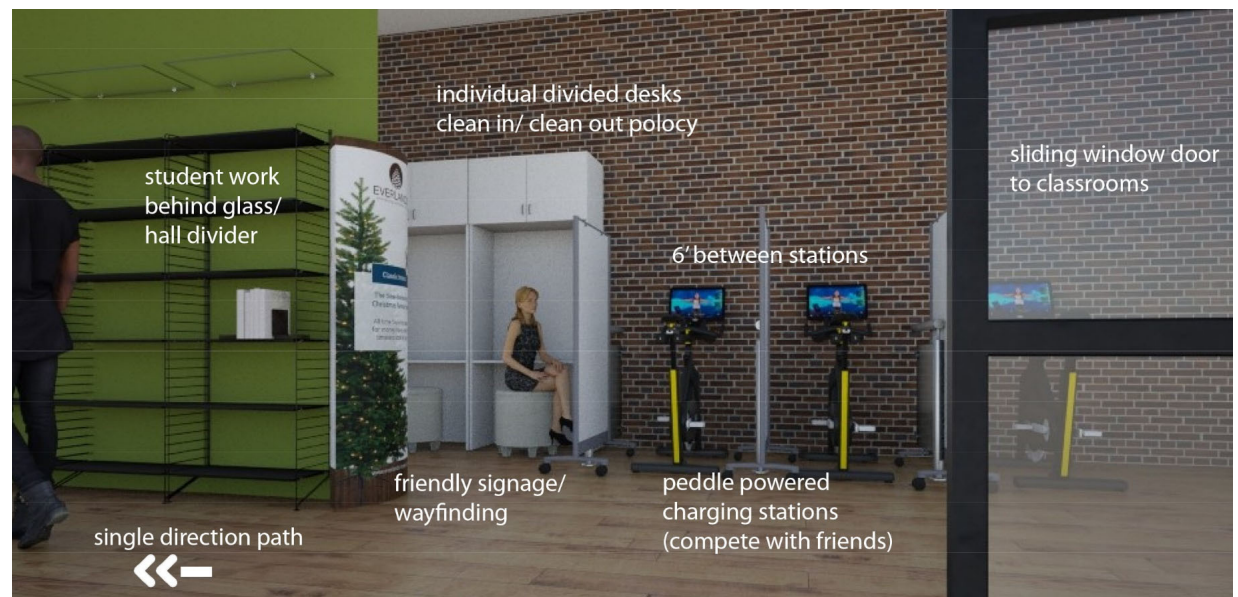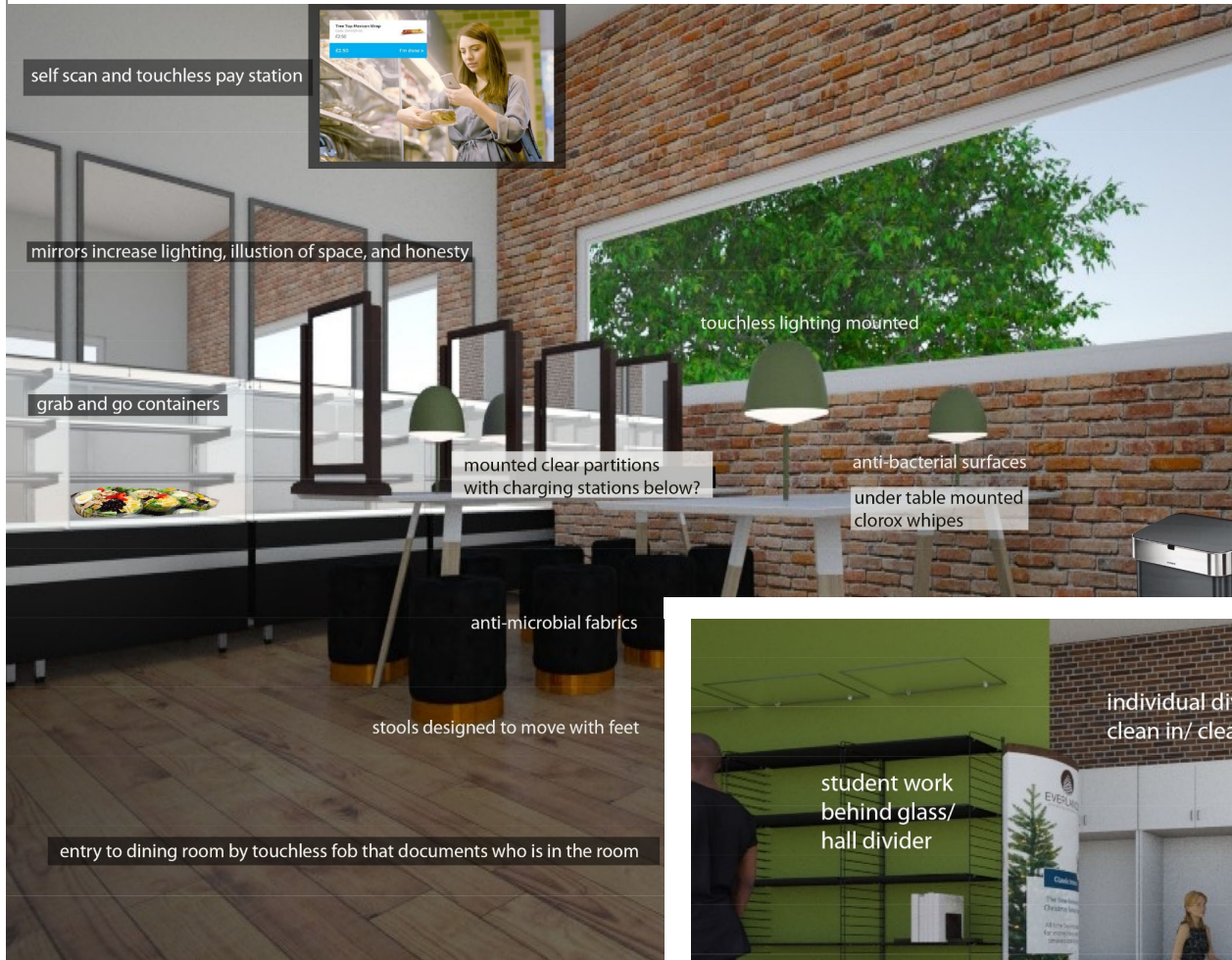
key considerations

- **Design for adaptability and flexibility as circumstances change**
- **Add division with screens, panels or multipurpose barriers**
- **Reduce barriers to use independent tech (improve wifi / add charging stations)**
- **Provide friendly, consistent visual cues for safety and clarity**
- **Design for disinfecting & for hands free scenarios**
- **Design for Hybrid Community interactions**
- **Inclusivity- everyone has equal levels of safe participation**

Powered by solar energy

Storing energy for days when there is no Sunshine and during night

Sensors for CO_2, noise, temperature humidity and air pressure

Wi-Fi spot

USB charging ports, charging cards, wireless charging

Place to rest and socialise

covered outdoor 'line up' area and walkways (solar awnings)

automatic doors

welcome BACK

solar 'smart' bench (can be adapted for "outdoor classroom")

mounted hands free santitizer

hedge lined walkways

one directional

6' subtle spaceing indications

PAPER PLASTIC CANS

West-Classroom Post Covid

self scan and touchless pay station

mirrors increase lighting, illustion of space, and honesty

touchless lighting mounted

grab and go containers

mounted clear partitions with charging stations below?

anti-bacterial surfaces

under table mounted clorox whipes

anti-microbial fabrics

stools designed to move with feet

entry to dining room by touchless fob that documents who is in the room

individual divided desks clean in/ clean out polocy

sliding window door to classrooms

student work behind glass/ hall divider

6' between stations

friendly signage/ wayfinding

peddle powered charging stations (compete with friends)

single direction path
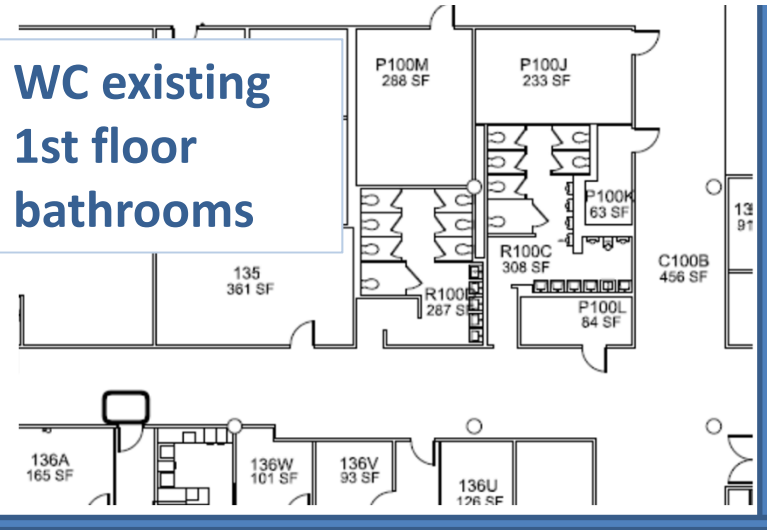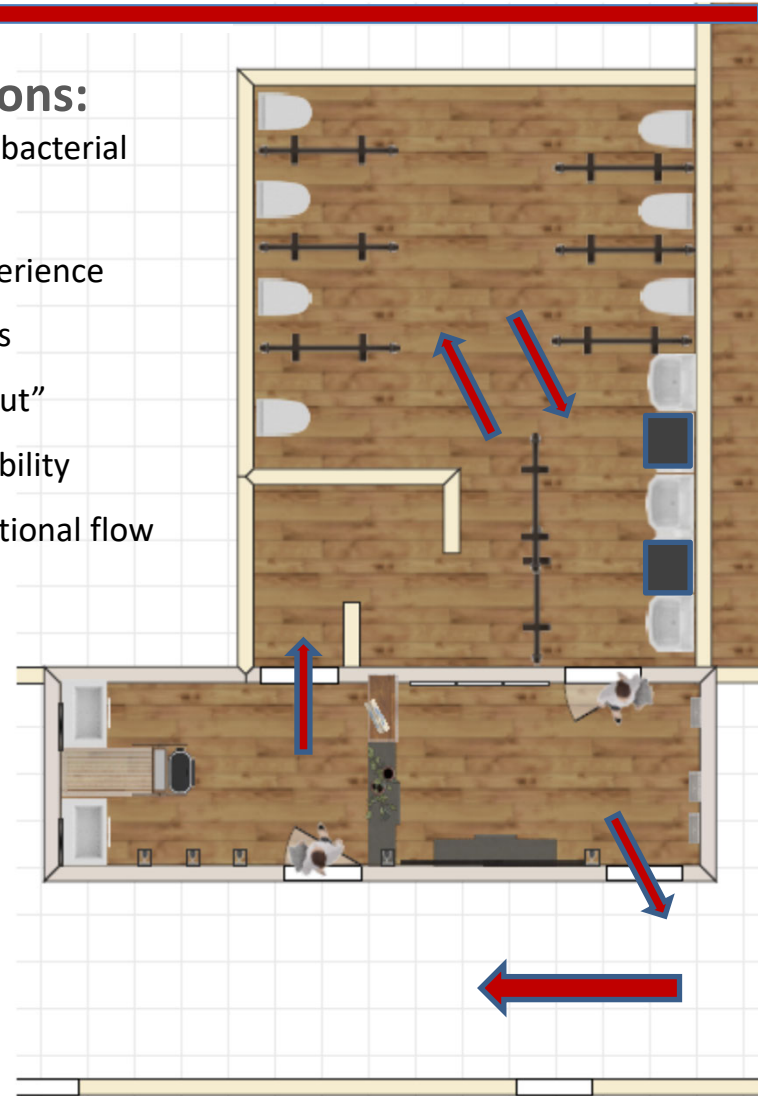
West-Classroom Post Covid Bathroom

WC existing 1st floor bathrooms

Key considerations:

- Antimicrobial & Antibacterial wallpaper
- "Powder-room" experience
- Swing Doors on stalls
- "Clean-In"/"Clean-Out"
- Mirrors increase visibility
- Area to wait & Directional flow


Proposed NEW Addition and Exit

Outdoor Digital Signage

- Replace printed outdoor maps with digital signs. Repurpose metal canopy stand if possible.

- Prominently and boldly display the building name and address. Show West Classroom specific content. Optional touchscreen or voice-activated content control to view campus info, wayfinding map, etc.

- Quantity = 2, one at each entrance

- Budgetary Price = $50,000 & Timeline: 3 months

Indoor Digital Signage

- Replace/supplement printed indoor signs in the two student lounges.

- Wall mounted and/or floor stands. Show West Classroom specific content – event schedules, calendars, class changes and cancellations, etc. Show campus messages, health and safety info. Optional voice-activated content control.

- Quantity = 8, four in each lounge

- Budgetary Price = $40,000 & Timeline: 2 mo.
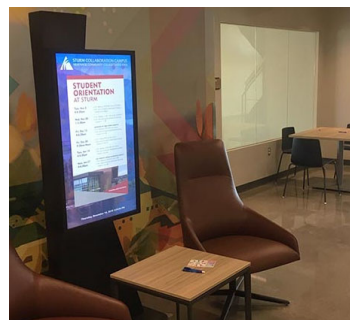
Room Digital Signage

- Replace paper room signs with electronic paper (e-ink) on all classrooms and meeting rooms.

- Wireless, battery powered electronic room signs display the upcoming class/meeting schedule or in progress.

- Quantity = 40, one outside each room

- Budgetary Price = $25,000

- Timeline = 2 months
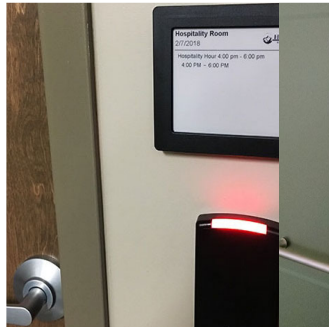
Wayfinding Digital Signage

- Replace printed maps with interactive wayfinding displays.

- Touchscreen and voice-activated content control to navigate the West Classroom and quickly find a destination. Select a directory and see your destination highlighted on floor maps. Get turn by turn directions sent to your mobile phone and/or audibly announced for ADA compliance.

- Quantity = 2, one for each entrance

- Budgetary Price = $60,000 & Timeline = 6 months
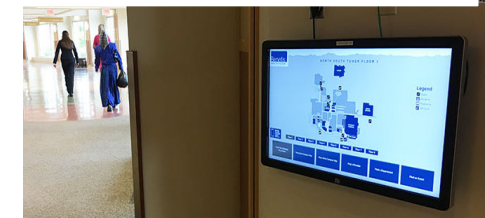
West Classroom Digital Signage Summary

- Total Budgetary Cost = $175,000

- Prices include displays, touchscreens, mounts, enclosures, software, content development, training, support and installation. Power and data cabling are additional.

- 8 months for project completion.

- 100% turnkey deployment by Visix

METROPOLITAN STATE UNIVERSITY OF DENVER

Accessibility Considerations

- Prepare all students with new protocol information that is accessible

- Remove all barriers to technology (signage, language, visual impairment, etc.)

- Cleaning wipes and sanitizers accessible to everyone

- Make sure faculty are also accommodated (chairs, mobile screens, etc.)

- Modify existing chairs
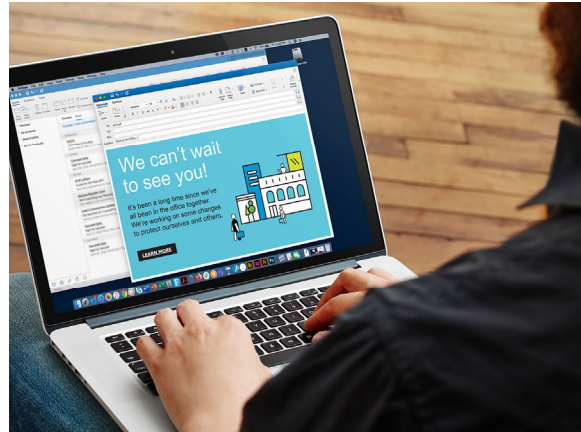
Q&A

Thank you from Built Environment & Infrastructure

Janelle Johnson, Metza Templeton, Louis Morphew, Carl Messe, Andras Greg, Amy Kern, Gabriel Christie, Jeno Balogh

METROPOLITAN STATE UNIVERSITY
OF DENVER