Introduction to Human Experience
How can a building negatively impact the people inside it? Give at least two examples

How can a building positively impact the people inside it? Give at least two examples
Measuring Human Experience in Buildings

- Human perception and occupant satisfaction
  - Perceive/perception: an assessment or interpretation
  - A personal assessment or interpretation of the building’s conditions
- Measured indoor environmental conditions
  - Measure: to calculate or count
  - The calculations of the building’s conditions
Measuring Human Experience in Buildings

<table>
<thead>
<tr>
<th>Human perceptions and occupant satisfaction</th>
<th>Measured indoor environmental conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• How cold or hot occupants feel</td>
<td>• Temperature</td>
</tr>
<tr>
<td>• How stuffy the air seems</td>
<td>• Humidity Levels</td>
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<tr>
<td>• How loud or quiet the space is</td>
<td>• Lighting levels</td>
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<tr>
<td>• How clean the space is</td>
<td>• Air pollution/Air Quality</td>
</tr>
<tr>
<td>• How bright or dark the space is</td>
<td>• Ventilation levels</td>
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<td>• If the space smells bad</td>
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Guiding Questions

- How does school design and operation impact perceived experience and occupant satisfaction?

- How is occupant satisfaction measured?

- How does occupant satisfaction differ between conventional and green schools?
Occupant Satisfaction

- What is occupant satisfaction and how does it relate to a building being green?
  - A measurement of perceived conditions in a building by those who are in the space.
  - By definition, a green school reduces environmental impacts, and provides safe, comfortable, and productive places for students and teachers.
  - This is a qualitative measurement; relying on the occupant’s experiences in the building.
How do we measure occupant satisfaction?
Measuring Occupant Satisfaction

- How satisfied are you with the classroom conditions right now? What conditions make it good or bad?

- How satisfied are you with the conditions of the school over the last year? What conditions make it good or bad?
Measuring Occupant Satisfaction

What is the best way to measure how satisfied occupants are with the space?

- Surveys asking occupants their experience in a specific space over a certain period of time
  - Starts with questions on their experience (e.g. how happy are you with the space)
  - Follows with questions on the factors driving that perception (e.g. is it too cold/hot, etc.)
Taking an Occupant Survey for our School
How does occupant satisfaction compare between conventional and green schools?
In what ways do you think the two schools are going to differ in occupant satisfaction data?

What school will have a higher average occupant satisfaction?
Average High School Occupant Satisfaction Data

- Arc Digital Playground
- Navigate to the Average High School’s credits/actions, then data input

Survey Responses

Survey

Monthly Survey Responses

For your project, a response rate of 19.58% will generate a score.

Exploring School Building Data: Occupant Satisfaction

U.S. Green Building Council, 2020
Average High School Occupant Satisfaction Data

- What is the most common satisfaction rating reported?

- What is the most common reported complaint of the space? How could that negatively impact students learning?

- How could a facilities manager use this information to improve the space? If they fixed the most common complaint, how would you expect the data to change if the survey was taken again?
Green High School Occupant Satisfaction Data

- Arc Digital Playground
- Navigate to the Green High School’s credits/actions, then data input

Exploring School Building Data: Occupant Satisfaction
U.S. Green Building Council, 2020
Green High School Occupant Satisfaction Data

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What is the difference between an average school and a green school?

- What is similar about the two school’s occupant survey results? What is different?

- How are the range of responses different between the schools? Is one more narrow than the other or are they both equally distributed?

- What are some of the factors that architects and engineers need to consider when designing a safe, comfortable, and productive learning environment?

- Looking around your classroom, identify three features intended to enhance occupant satisfaction.

- Describe three conditions in your classroom that reduce your satisfaction or productivity. What causes these conditions?
Analyze your occupant survey responses

▶ Are you surprised by the results or do you generally agree with them?

▶ What is the most common complaint reported? How does that negatively impact your ability to learn?

▶ What strategies can our facilities manager use to improve our school’s occupant satisfaction?