One of these things is not like the others

WALTER CRONKITE SCHOOL OF JURNALISM & MASS COMMUNICATIONS may_22_2010

GREEN TEAM

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hypothesis

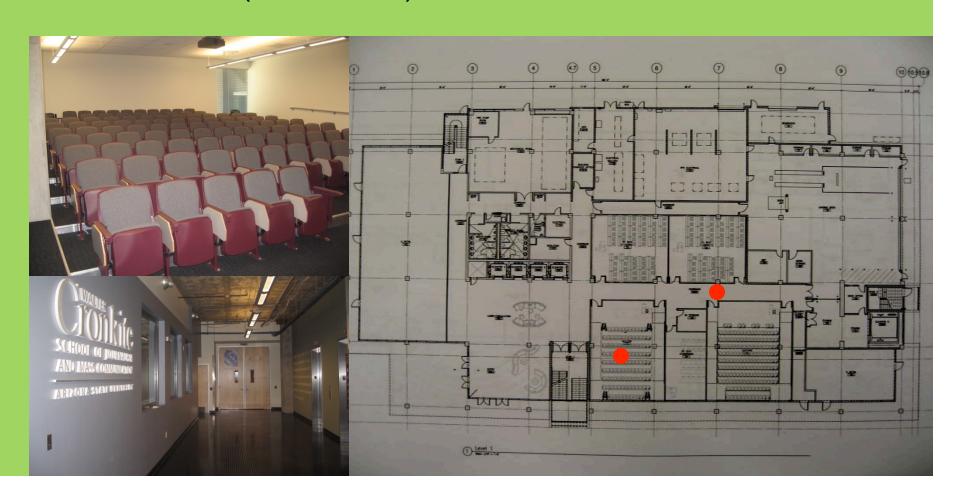
- Multiple spaces within the building will have same average temperature during a weekend day.
- Multiple spaces within the building will have same relative humidity during a weekend day.

methodology

- Selection of seven different spaces in the building for the measurement of temperature and relative
- 1 humidity.
- 2 Use of HOBO U12 to collect data, setting collection data intervals of 5 minutes for a period of 1hr.
- 3 Comparison of collected data.

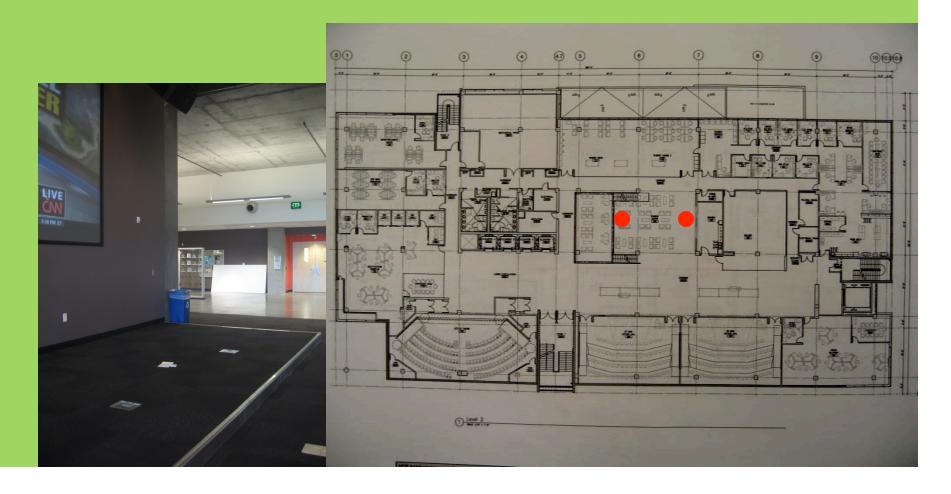
First Floor

1 Classroom (2 locations) + Corridor



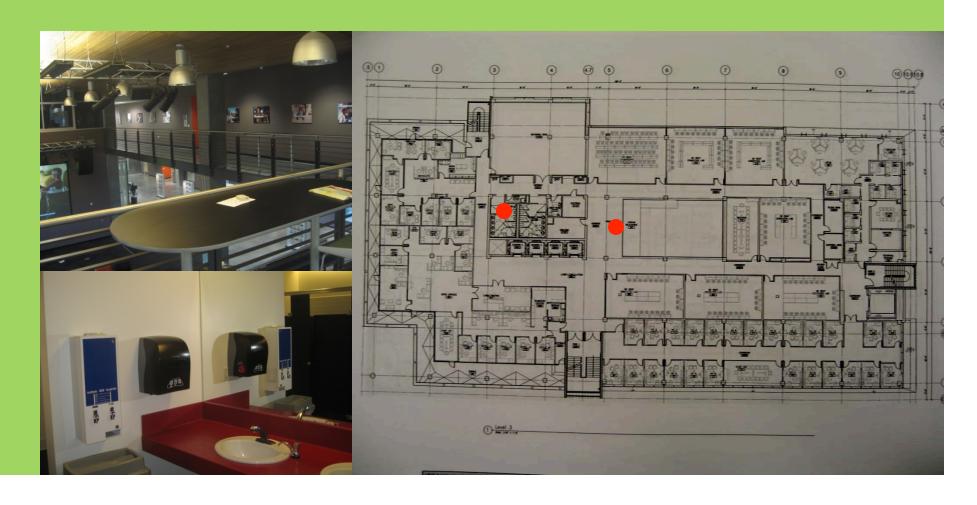
Second Floor

2 Student Center (2 locations)



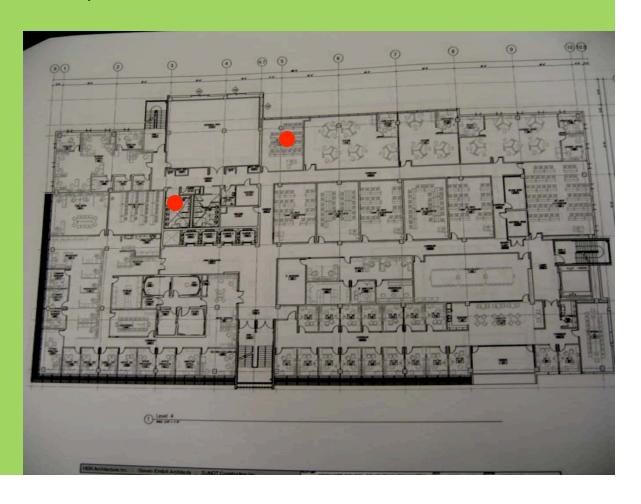
Third Floor

3 Mezzanine + Restrooms

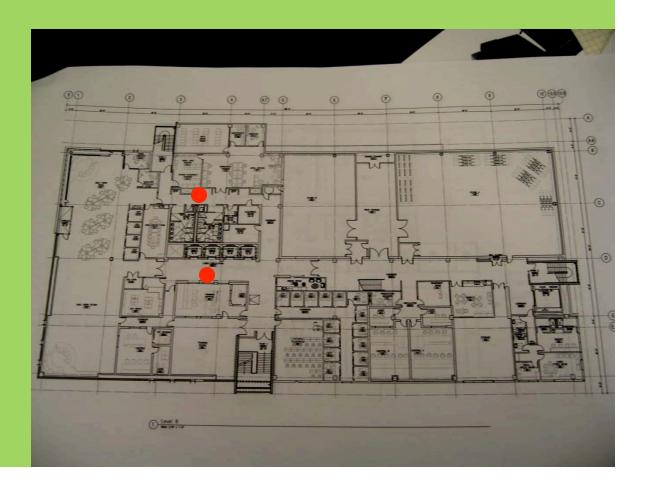


Forth Floor

4 Classroom (2 locations) + Restrooms



building locations Sixth Floor Restroom + Corridor

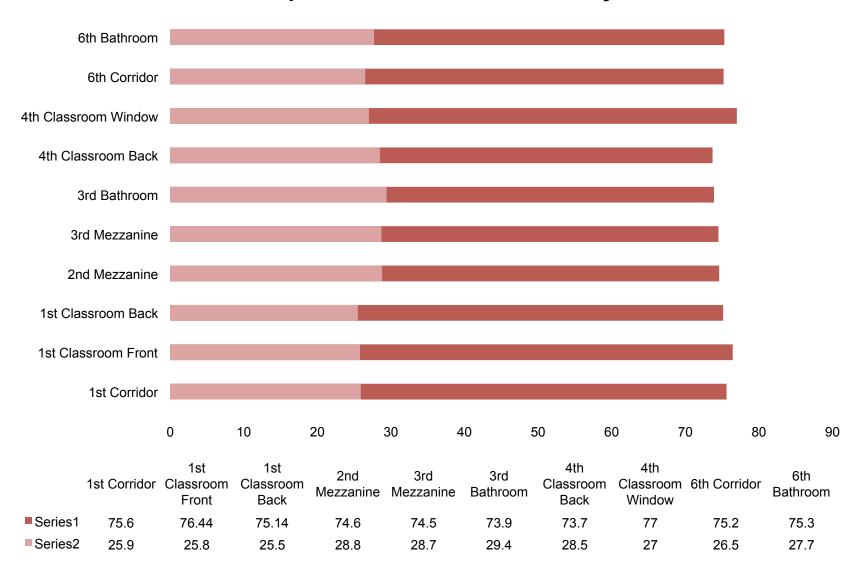


Findings/analysis **Temperature**

Relative Humidity

| 1st Corridor | 75.6 | 1st Corridor | 25.9 |
|----------------------|-------|----------------------|------|
| 1st Classroom Front | 76.44 | 1st Classroom Front | 25.8 |
| 1st Classroom Back | 75.14 | 1st Classroom Back | 25.5 |
| 2nd Mezzanine | 74.6 | 2nd Mezzanine | 28.8 |
| 3rd Mezzanine | 74.5 | 3rd Mezzanine | 27.7 |
| 3rd Bathroom | 73.9 | 3rd Bathroom | 29.4 |
| 4th Classroom Back | 73.7 | 4th Classroom Back | 28.5 |
| 4th Classroom Window | 77 | 4th Classroom Window | 27 |
| 6th Corridor | 75.2 | 6th Corridor | 26.5 |
| 6th Bathroom | 75.3 | 6th Bathroom | 27.7 |

Temperature & Relative Humidity



findings/analysis

Maximum Temperature Difference = 3.3 F

Maximum RH Difference = 3.9%

conclusions

- Multiple spaces within the building did <u>NOT</u> have same average temperature during a weekend day.
- Multiple spaces within the building did <u>NOT</u> have same relative humidity during a weekend day.

Lessons learned

- The highest temperatures were recorded along the building envelope.
- The first floor spaces had a lower humidity than the rest of the building.
- 3 The mezzanine had identical temperatures on the 2nd and 3rd floor.