



## Tell Me About Your School: Brookside and Sibley Elementary

Client Profile: Elementary Education

Strategic Project Goals: social responsibility • health and safety

Fusion Business Services was approached by Sam Probst of EcoMetrics and the West Michigan Chapter of the United States Green Building Council to help support the vision to have every child in a sustainable built environment within a generation. How are sustainable schools changing communities, influencing students, teachers, staff and parents? We believe the social impact of green schools should be measured and distributed in order to show the positive results of a sustainable building, foster evidence based decisions and meet strategic goals. To support this effort Fusion uses researched based measurement and reporting to assess sustainability from the inside out and understand the social impacts buildings have on their occupants and the community at large.

Schools in West Michigan have sited social changes since implementing the green building rating system LEED (Leadership in Energy and Environmental Design). Some of these changes include stronger pride of ownership (reduced or zero vandalism), higher morale from staff and students, attraction and retention of students and staff and reduced absenteeism. Sibley Elementary and Brookside Elementary of Grand Rapids Public Schools allowed us to survey students and teachers. Sibley is a new LEED building that has been occupied for one year and Brookside is an existing school built in 1954. We choose Brookside Elementary to compare to Sibley because we feel the pre construction information is important. Brookside is the school selected as the site for the 2008 West Michigan United States Green Building Council's Emerging Green Builders Design Competition. Brookside will be either renovating their current facility or building new based on LEED standards, using feedback from the competition at their discretion. All information was gathered in the after school program so as to not take up valuable classroom time. This allowed a sampling of K-5 students in each school to respond. We also asked teachers to respond at their discretion. Although not scientific, this information allows us a glimpse into the hearts and minds of a school's most valuable asset, it's people. In the future we intend to expand these studies to include students, teachers, faculty, parents and the community at large.

*"The effective management of culture can improve an organization's ability to perform by aligning formal and informal systems with specific values and goals."*

*Ted Miller, "Five Steps to Creating a Winning Culture." Healthcare Financial Management. September 2004*

## Discoveries

### Social Responsibility

Understanding and supporting culture is key in making a facility work for its occupants. Teacher comments from Sibley praised the bright and colorful atmosphere and consistently listed daylight as what they liked best about their new building. Our research on daylight shows a direct impact on student achievement and behavior. Comments on culture also sighted that the building was stark, not “warm and friendly”, and clinical. Future considerations would be to measure and document an organizations culture in order to make evidence based design decisions. Surprisingly Sibley results were lower than Brookside throughout the report. Could culture be influencing responses despite the facility? How can culture be enhanced and supported through the building?

### Health and Safety

Based on the report, children’s like or dislike of school has an impact on satisfaction of thermal comfort in both schools. Teachers from Sibley noted temperature changes though out the day. According to the United States Green Building Council, comfortable indoor temperatures enhance productivity and keep students more alert. A potential solution would be to make user control easily accessible in individual classrooms to help with thermal comfort for both teachers and students. Despite differences in window sizes the majority of children from both schools acknowledged they could see outside during the day, and made comments or drew pictures about their feelings. Responses from children who look outside where overwhelmingly positive. How can views to the outside continue to be enhanced as Brookside explores new design options? Is there such a thing as too much glass? Teachers from Sibley noted glass as a safety, maintenance and acoustics concern. To what extent does design consider how significant building changes will effect it’s occupants and building maintenance?

### Conclusion

LEED buildings not only exhibit financial and environmental benefits but as we’ve seen in this report make a measurable impact on social equity. As a starting point the Brookside and Sibley report exposes the sweet spot of the triple bottom line, the people! Fusion’s goal is to continue to explore the social impact of LEED facilities. We want to dive deeper, gather more data and learn more by obtaining pre and post measurement in order to make good decisions that not only support the environment but the organizations culture.



*“I learn a lot of things looking outside.” Brookside student*

*“...because it feels good to have a new school.” Sibley student*

*“...love all the natural light and brightness.” Sibley teacher*



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