School District No. 8

2014-2015 Budget

Project Description Form

Date: January 17 2014   **Name of Site**: South Nelson Elementary

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Teacher

Project Category:

Infrastructure

Academic success

Creativity & Imagination

Personalized Learning

Social & Emotional Well-Being

Other – Community Engagement

Date/Length of Project: I believe that this could be a yearlong project, on an ongoing basis.

Description:

Title: Innovative Facility Grants

"Look at your learning space with 21st century eyes: Does it work for what we know about learning today, or just for what we knew about learning in the past?" From The Third Teacher.

     Following up on the highly successful model of the Innovative Practise Grants, this program follows the same model of schools or teams developing a goal/inquiry but with a focus on improving the facilities in which they work. School/teams would choose an area of their facility that requires improvement, where change would make an impact on the quality of teaching and learning. Teams could consist of a combination of principals, teachers, other staff, parents and students. Project proposals would be submitted to a district team for approval. Completed projects would be required to submit photos/video as well as information of the project's impact on the teaching and learning in the space.

Goals of Project (What will the project accomplish?):

There are many potential benefits of these types of projects. The primary goal is <u>improved facilities</u>. As many of our school buildings are old, built in an era of different teaching styles and vastly different technology opportunities, prioritizing areas which could be more effectively utilized would optimize limited budgets. An <u>alignment of our current and emerging teaching philosophies and practises with the learning environment</u> is a second goal of this program. As our styles of teaching change; encouraging collaboration between staff and between students, team teaching opportunities, small group learning, and providing more personalized learning, so too do we need to provide spaces for these types of activities to occur. An <u>increase in academic achievement</u> is also a goal of this program. As we meet the needs of our staff and students more effectively we know they will be more effective learners. Research suggests that there are many simple things that can be done to increase student success if their environment stimulates and nurtures learning. An <u>increase in school and community pride</u> could also be a benefit if partner groups are engaged in the process and enjoy the results. This could also result in <u>lower vandalism rates</u>. We know from projects such as Broken Window in New York City that if we fix things and include the community in the process that future damage is reduced. Finally an <u>increase in community engagement</u> could be a goal/result if the community is involved in the process and/or benefits from the results. For example, providing comfortable spaces for parents to meet at drop off and pick up times in elementary schools could result in greater engagement in school activities and discussions.

Measurement of the Project:

Within each individual project, a measurement tool/plan would be described and implemented. To measure the project as a whole, a review of completed facility tasks as well as teacher morale, student achievement and parent satisfaction, as per Ministry surveys could be used. Access and use of technology, vandalism rates, and utilization of particular areas in school buildings could be measured depending on the individual projects.

Budget Impact:

This is a flexible project where the budget could be determined later. A maximum for individual project submissions could be established, with a maximum for the total cost of the entire project. As per the Innovative Practise Grants, projects could be limited to a certain amount ($5000?) with flexibility depending on how many projects are proposed.

Additional Information:

Some quotes and information about this vast topic of educational facilities:

1"For some years there has been a growing consensus about the directions in which teaching and learning are evolving. Pioneering educators are now experimenting with various formulas that reflect that consensus. Of the many changes underway in education, two trends in particular are revolutionizing the design of the learning environment:

- the shift from the teacher as a "sole practitioner" to interactive team teaching
- the recognition that students have a variety of learning styles requiring varied and flexible learning situations."

- See more at: http://www.archfoundation.org/2013/01/voice-of-the-teacher-2/#sthash.cmZd9ADe.dpuf

2. "Form follows function. It seems obvious but is often forgotten: Teaching and learning should shape the building, not vice versa." From www.thethirdteacher.com, pg.69.

3. Data on various facility upgrades can be found at www.ncef.org .

4. Research Paper Excerpt -

Effects of school design on student outcomes

C. Kenneth Tanner
School Design and Planning Laboratory, Department of Workforce Education,
Leadership, and Social Foundations, University of Georgia,
Athens, Georgia, USA

Abstract
Purpose
– The purpose of this study is to compare student achievement with three school design classifications: movement and circulation, day lighting, and views.
Design/methodology/approach
– From a sample of 71 schools, measures of these three school designs, taken with a ten-point Likert scale, are compared to students' outcomes defined by six parts of the Iowa Test of Basic Skills (ITBS): Reading comprehension, Reading vocabulary, Language arts, Mathematics, Social studies, and Science. Data are tested through reduced regression analysis, where the difference between R_2 of the reduced regression is compared to the R_2 of the full regression. This result, in each case, is defined as the effect of the school's physical environment on students' outcomes represented by achievement scores on the ITBS.
Findings
– Significant effects are found for Reading vocabulary, Reading comprehension, Language arts, Mathematics, and Science.
Practical implications
– The study's findings regarding movement and circulation patterns, natural light, and classrooms with views have implications for designing new schools or modifying existing structures. They are especially important to school leaders, educational planners, and architects who engage in programming for educational facilities.
Originality/value
– This study is part of original research efforts at the University of Georgia,

USA. Since 1997, the focus of research in the University of Georgia's School Design and Planning Laboratory (SDPL) has been the measurement of the impact of the school's physical environment on aspects of affective, behavioral, and cognitive learning. All SDPL research has been quantitative in nature, where measures of the physical environment were compared to measures of student outcomes. There are two immediate values to these studies: educational leaders may use the findings to assess their existing school facilities and determine where improvements will have the greatest impact, or planners may use the findings to guide architects in the design and construction of new educational facilities.

5. Research Paper: The Impact of Color on Learning

Kathie Engelbrecht, Assoc. IIDA
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Excerpt :

Relieves eye fatigue:

Eye strain is a medical ailment diagnosed by increased blinking, dilation of the pupil when light intensity is static, reduction in the ability to focus on clear objects and an inability to distinguish small differences in brightness. End wall treatments in a classroom can help to reduce instances of eyestrain for students by helping the eye to relax as students look up from a task. Studies suggest that the end wall colors should be a medium hue with the remaining walls a neutral tint such as Oyster white, Sandstone or Beige. The end wall treatment also helps to relieve the visual monotony of a classroom and stimulate a student's brain.

Increases productivity and accuracy

As demonstrated by an environmental color coordination study conducted by the US Navy, in the three years following the introduction of color into the environment **a drop of accident frequency from 6.4 to 4.6 or 28% was noted.**
[4]

This corroborates **an independent study demonstrating white and off-white business environments resulted in a 25% or more drop in human efficiency.**
[5]

Color's demonstrated effectiveness on improving student's attention span as well as both student and teacher's sense of time, is a further reason as to how color can increase the productivity in a classroom. The mental stimulation passively received by the color in a room, helps the student and teacher stay focused on the task at hand. **This idea is further supported by Harry Wohlfarth's 1983 study of four elementary schools that notes that schools that received improved lighting and color showed the largest improvements in academic performance and IQ scores.**

"The principal goal of education is to create men who are capable of doing new things, not simply repeating what other generations have done – men who are creative, inventive, and discoverers." Jean Piaget

Respectfully submitted,

S. Maguire