Walker Jones School
Washington, DC

Maria Piergallini | Construction Management
PACE Research Seminar | April 22, 2009
- Project Overview
- The Cost and Benefits of Walker Jones’ Pursuit of LEED Certification
- Summary and Conclusions
- Acknowledgements
- Questions & Comments
Project Overview

Project Features
Project Team
Project Location
Project Background
Thesis Topics
Project Overview

Project Features
Project Team
Project Location
Project Background
Thesis Topics
Project Overview

Project Features
Project Team
Project Location
Project Background
Thesis Topics
Project Overview

Project Features
Project Team
Project Location
Project Background
Thesis Topics
Project Overview

Project Features
Project Team
Project Location
Project Background
Thesis Topics
LEED Costs and Benefits

Problem:
Many school districts and their constituents are hesitant of the perceived high cost and unknown benefits of a sustainable school.

Goals:
• Determine cost premium associated with Walker Jones
• Determine greatest features of sustainable design
• Determine greatest benefits to students and staff

Maria Piergallini
PACE Research Seminar
April 22, 2009
LEED Costs and Benefits

Cost Analysis

- Total Additional Cost: $907,426
  - Cost per SF: $7.41

- Additional Cost without Green Roof: $308,826
  - Cost per SF: $2.52
LEED Costs and Benefits

Walker Jones Week 8 Foundations
August 1, 2008

Maria Piergallini  PACE Research Seminar  April 22, 2009
## LEED Costs and Benefits

<table>
<thead>
<tr>
<th>Survey Results</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you taught at a traditional (not sustainable) school?</td>
<td>88.89%</td>
<td>11.11%</td>
</tr>
<tr>
<td><strong>Have you noticed an improvement in:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student performance?</td>
<td>6.25%</td>
<td>93.75%</td>
</tr>
<tr>
<td>Student Test Scores?</td>
<td>3.13%</td>
<td>96.88%</td>
</tr>
<tr>
<td>Student Productivity?</td>
<td>62.50%</td>
<td>37.50%</td>
</tr>
<tr>
<td>Student Attendance?</td>
<td>31.25%</td>
<td>68.75%</td>
</tr>
<tr>
<td>Learning Environment?</td>
<td>93.75%</td>
<td>6.25%</td>
</tr>
<tr>
<td>Your productivity?</td>
<td>90.63%</td>
<td>9.38%</td>
</tr>
<tr>
<td>Does a sustainable School improve the school's image in the community?</td>
<td>69.44%</td>
<td>30.56%</td>
</tr>
<tr>
<td>Are you happier working at a sustainable school than one that is not?</td>
<td>72.22%</td>
<td>27.78%</td>
</tr>
<tr>
<td>Are you more likely to stay at your current school because it is sustainable?</td>
<td>30.56%</td>
<td>69.44%</td>
</tr>
<tr>
<td>Do you incorporate sustainability into your lesson plans?</td>
<td>19.44%</td>
<td>80.56%</td>
</tr>
</tbody>
</table>

Maria Piergallini
PACE Research Seminar
April 22, 2009
## LEED Costs and Benefits

### Survey Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you taught at a traditional (not sustainable) school?</td>
<td>88.89%</td>
<td>11.11%</td>
</tr>
<tr>
<td><strong>Have you noticed an improvement in:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student performance?</td>
<td>6.25%</td>
<td>93.75%</td>
</tr>
<tr>
<td>Student Test Scores?</td>
<td>3.13%</td>
<td>96.88%</td>
</tr>
<tr>
<td>Student Productivity?</td>
<td>62.50%</td>
<td>37.50%</td>
</tr>
<tr>
<td>Student Attendance?</td>
<td>31.25%</td>
<td>68.75%</td>
</tr>
<tr>
<td>Learning Environment?</td>
<td>93.75%</td>
<td>6.25%</td>
</tr>
<tr>
<td>Your productivity?</td>
<td>90.63%</td>
<td>9.38%</td>
</tr>
<tr>
<td>Does a sustainable School improve the school's image in the community?</td>
<td>69.44%</td>
<td>30.56%</td>
</tr>
<tr>
<td>Are you happier working at a sustainable school than one that is not?</td>
<td>72.22%</td>
<td>27.78%</td>
</tr>
<tr>
<td>Are you more likely to stay at your current school because it is sustainable?</td>
<td>30.56%</td>
<td>69.44%</td>
</tr>
<tr>
<td>Do you incorporate sustainability into your lesson plans?</td>
<td>19.44%</td>
<td>80.56%</td>
</tr>
</tbody>
</table>

Maria Piergallini  
PACE Research Seminar  
April 22, 2009
Summary and Conclusions

Benefits
Value
LEED System
Schools

MARIA PIERGALLINI  PACE RESEARCH SEMINAR  APRIL 22, 2009
Acknowledgements