Parents learn at Block Fest

Block Fest was designed to engage parents and children in early concepts of math and science through block play. After the event parents report that they could see how their children learned through block building at Block Fest (79%) and they learned ways to support early math and science learning for their children (70%). Parent comments about Block Fest showed their enthusiasm:

- "It was a great way to expose some of this learning a child works on every day"
- "It was a great way to engage with your child at a young age."
- "I let my kids have fun with their own L-shaped building your cameraworld."
- "It was a great way to get down on the floor and see the world they do."

Parents see their children learning

At the conclusion of Block Fest in 2007, parents reviewed 21 behaviors and recorded those that described their child at Block Fest. The descriptors represented five developmental categories including:

- Language: describing, asking questions, labeling, pretending
- Cognitive: focusing, thinking, problem solving, wondering, being creative
- Social: sharing, watching others, building with others, planning together, taking turns
- Science: comparing, predicting, experimenting, observing outcomes
- Math: estimating, adding, counting, adding, making patterns

378 respondents completed the survey in 2007. Children with two or more behaviors noted within a category were flagged as showing that behavioral domain. The table below shows the percentage of children in each age group described by 4 or more behaviors within each behavioral domain.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Language</th>
<th>Cognition</th>
<th>Social</th>
<th>Science</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 3 years</td>
<td>28.4%</td>
<td>63.0%</td>
<td>66.7%</td>
<td>52.4%</td>
<td>30.5%</td>
</tr>
<tr>
<td>3 years</td>
<td>41.5%</td>
<td>65.3%</td>
<td>65.5%</td>
<td>54.3%</td>
<td>30.5%</td>
</tr>
<tr>
<td>4 years</td>
<td>52.8%</td>
<td>71.6%</td>
<td>76.3%</td>
<td>61.6%</td>
<td>36.5%</td>
</tr>
<tr>
<td>5 years</td>
<td>55.9%</td>
<td>76.5%</td>
<td>68.7%</td>
<td>65.4%</td>
<td>46.8%</td>
</tr>
</tbody>
</table>

At the table shows, parents report high ratios of social, science, and cognitive behaviors as their children engaged in the Block Fest activities, while language was the least commonly observed. Comparison of behaviors in children aged 5 compared to language: [2] 9.9%, p < 0.05); science (6.4% - 3.9%, p < 0.05) and math (14.39%, p < 0.05). Social and cognitive behaviors were noted at a statistically significant level across age (age comparison of [2] 28.0%, p < 0.05 for cognition, 39.9%, p < 0.05 for social behavior).

These parent observations suggest that Block Fest offered plenty of opportunity for social engagement, and active play with the building materials challenged the children cognitive and social play environment provided a rich context to expose concepts in math and science. Many of the youngest children showed behaviors in these areas, but science and math behaviors were even more commonly observed among the older children at the exhibit.

Block Fest learning goes home

Three months after Block Fest 2004, an email survey was sent to the 118 parent who provided email addresses. Of those reached, 54 completed the survey, a 46% response rate. Those parents report many follow-up activities to Block Fest:

- Parent send information:
  - Talked frequently about Block Fest (46%); talked to their child about Block Fest (79%)
  - Read parent Block Fest handbook (53%); checked out Block Fest website (46%)
  - Looked for information on the internet (53%)
  - Talked to preschool/child care staff about early math & blocks (56%)

- Parents and children build with blocks:
  - Made blocks more available (76%); purchased blocks (31%); made blocks (31%)
  - Played with blocks (with child) (46%); built with objects instead of blocks (46%)
- Parents support children’s early math and science learning:
  - Used math and science words (44%); found math and science in everyday activities (79%)
  - Saw more opportunities to talk about math and science ideas with their children (55%)

These results show that Block Fest provided a context for lasting learning for parents. Months after the event, concepts learned at Block Fest were shown in parent thoughts and in their activities with their children.