Making Learning Visible
2001

Children as Individual and Group Learners
Ben Mardell and Gina Stefanini
Throughlines

1. How can we best inspire and nurture creative thinking and problem solving in our students and ourselves?
2. What is understanding, and how does it develop?
3. What are the roles of reflection and assessment in student and teacher learning?
4. How can participants continue to share and pursue their understanding of Project Zero’s ideas with others after the institute?
We will look more closely at teaching strategies involved in MLV, particularly in regards the use of documentation and children as individual and group learners.
HMM... WONDER WHAT THAT MEETING'S ABOUT...

... AND WHY I WASN'T INVITED.
HI, FOLKS. INTERRUPTING?
NO, NO, WE'RE JUST GOING OVER FIRST-QUARTER NUMBERS.

LADIES-ONLY MEETING, I SEE.
UM... SO IT IS. PROBLEM?
NOT AT ALL. IN FACT, THERE'S GOOD DATA SHOWING THAT THE MORE WOMEN IN A GROUP, THE MORE INTELLIGENT IT IS.

GROUP IQ DOESN'T CORRELATE WITH THE AVERAGE IQ OF ITS MEMBERS. IT CORRELATES WITH EMOTIONAL INTELLIGENCE!
So the collective smarts in this room go way up when... when...

...I'm not in it.

Poppy, no! You can stay!

No one's correlating, Mike.
Agenda

Six strategies that promote group learning

*What happens to learning and learning groups when we document: Shifts in practice*

A group learning activity: *Throw your money away*

*Meet the directors: Kindergartners study the Boston Marathon*

*(Bringing MLV strategies home)*
Six strategies to promote group learning

1. Nurturing children’s capacities to learn together
2. Designing engaging tasks that benefit from a group perspective
3. Facilitating conversations that deepen learning
4. Forming groups intentionally
5. Choreographing individual, small-group and whole-class learning
6. Using documentation to support individual and group learning
What happens to learning when we document...

Shifts in Practice
What happens to learning when students document learning?

students engage in assessment?

groups of students reflect on documentation and share ‘aha’ (meaning making) moments?
The practice of documentation is the observing, recording, interpreting, and sharing artifacts of learning.
Throw Your Money Away
(The Airplane Activity)
Instructions for Learners

As a group, come up with two different designs for paper airplanes that can fly at least ten feet carrying at least five pennies.

Begin solo, thinking about designs for about 5 minutes. Then you will have about 15 minutes as a group to design the two planes.
Instructions for Documenters:

Please observe the following questions:

A) What do you notice about the individual and group's process of building knowledge (and what can you point to that makes you say that)?

B) What do you notice about the individual and group learning about aerodynamics (and what can you point to that makes you say that)?
STEP II: DEBRIEFING IN SMALL GROUPS

**Documenters:** Share with the learners your observations and documentation about the individuals' and group's process of building knowledge and learning about aerodynamics.

Identify interesting or important moments or shifts in the ways ideas were being developed.

Ground your interpretations in your observations and **be sensitive to the feelings of the learners.**
**Learners:** Share your responses to the documenters' observations and interpretations as well as your own reflections regarding interesting or important moments or shifts in the learning process and what you learned about aerodynamics.
As a Small Group: Choose one thing you learned about either individual and group learning, documentation or aerodynamics to share with the whole group.
Making Learning Visible In Your Own Setting

• What connections to my own work am I already making?
• What new ideas are emerging?
• What will you bring back to your own setting?
• Make a Plan.
• Share your Plan.
LOOKING AT LEARNING IN GROUPS: CLASSROOM DISCUSSION GUIDELINES
ENTRY-POINT CHARTS: ENGAGING ALL MEMBERS OF THE GROUP
<table>
<thead>
<tr>
<th>Student</th>
<th>Connection</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addie</td>
<td>Interested in civil rights movement; might be interested in history of women runners</td>
<td>Strong group leader</td>
</tr>
<tr>
<td>Alex</td>
<td>Loves all things Italian; might be interested in Italian runners</td>
<td>Alex could help Mike overcome his shyness</td>
</tr>
<tr>
<td>Andrew</td>
<td>Loves hearing and telling stories</td>
<td>Ability to read and write</td>
</tr>
<tr>
<td>Christopher</td>
<td>Father ran the race; likes competition</td>
<td>Organizational skills, focus on task</td>
</tr>
<tr>
<td>Mike</td>
<td>Working with Alex might help him participate more</td>
<td>Encouraging and supportive group member</td>
</tr>
<tr>
<td>Student</td>
<td>Connection</td>
<td>Contribution</td>
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<td>-----------</td>
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</tr>
<tr>
<td>Paul</td>
<td>Family in Alabama</td>
<td>Good listener</td>
</tr>
<tr>
<td>Yusef</td>
<td>Mother is a lawyer</td>
<td>Graphic ability</td>
</tr>
<tr>
<td>Illana</td>
<td>Grandmother participated in civil rights movement</td>
<td>Knowledgeable about civil rights movement</td>
</tr>
<tr>
<td>Sheniah</td>
<td>Loves to read</td>
<td>Strong writer</td>
</tr>
</tbody>
</table>
Chapter 10
Making Learning Visible in an Age of Accountability