Strategies for Communicating Research: Make a Better Presentation

Ronald Dietel
CRESST/UCLA
American Educational Research Association
April 29th, 2013
Baegel District Formative Assessment Study: Alignment, Achievement, and Analysis in the 2008/2009 School Year

Research Questions

- Are the district’s formative assessments aligned to state and school district content standards?
- Do the district formative assessments improve learning in mathematics?
- What is the correlation between performance on the district assessments and performance on the state test?

Formative assessments that are not aligned to standards are not useful in guiding and informing instruction, Garcia and Wilson, 2008

Random selection of 400 students who received different types of math instruction (ten lessons each) before taking the district mathematics assessment:

- Data on mathematics alignment
- Evidence collected in mathematics formative assessment using different mathematics curricula and instruction
- Learning experts analysis of data
- Triangulation of data
## Factor Analysis

### Teacher and Student Reports of Opportunity to Learn

<table>
<thead>
<tr>
<th>Score Distribution</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>T</td>
<td>S</td>
<td>T</td>
</tr>
<tr>
<td>1. How often did you read literature?</td>
<td>3%</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>2. How often did your teacher read aloud to you?</td>
<td>6%</td>
<td>1%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>3. How often did you write compositions?</td>
<td>3%</td>
<td>1%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>4. How often did you take notes on your ideas before beginning to write a composition?</td>
<td>11%</td>
<td>1%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>5. How often did you use information from books to support ideas in your compositions?</td>
<td>9%</td>
<td>3%</td>
<td>13%</td>
<td>20%</td>
</tr>
<tr>
<td>6. How often did you rewrite your compositions to make them better?</td>
<td>6%</td>
<td>1%</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>7. How often did your teacher explain how your compositions would be scored?</td>
<td>8%</td>
<td>5%</td>
<td>13%</td>
<td>23%</td>
</tr>
</tbody>
</table>
Understanding the end game

- Shifts focus from service re-use to process re-use
- Leverages domain expertise and provides autonomy to LOB
- Integration focus is on business and technology
- SOA Grid executes process model and provides persistence for long running processes
- Process defines data and semantics; abstracted and transformed from individual SORs
Two BIG Tips

LESS is MORE

PRACTICE MAKES PERFECT
Audience

- Policymakers
- Practitioners
- Researchers
- Parents
Less content

- Reduce or skip literature review/background
- Cover one research question
- Limit and simplify charts and tables
- Estimate one minute per slide
Baegel Alignment Study Results

• Are the district’s formative assessments aligned?
• Random selection to treatment and control groups
• Key Finding- 54% alignment to state standards
• Recommendations
Rule for Better PowerPoints

- 6 bullets per page
- 6 words per bullet
- 6 information points on graphics
- Minimum Font Size – 18 points
NAEP Reading Achievement
Grade 4

1992
34%
At Basic

2009
34%
At Basic
How to Make A Table - *if you must*

- Use the least number of possible cells
- Round numbers - two digits maximum
- No decimal points
# NAEP Reading Achievement

## Grade 4

<table>
<thead>
<tr>
<th>Proficiency Level</th>
<th>1992</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Basic</td>
<td>38%</td>
<td>32%</td>
</tr>
<tr>
<td>Basic</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>Proficient or Above</td>
<td>28%</td>
<td>33%</td>
</tr>
</tbody>
</table>
Get Attention

- Ask a question
- Provocative fact or visual
- Have audience “do” something
Keep Attention

- Eye-contact
- Smile
- Hands
- Movement
How to Practice

• Practice at least 3-4 times…
• In office before you leave
• In hotel
• In actual presentation room
• Videotape
Logistics

- Expect naked room
- Audible
- Check technology
Verbal

- Slow down
- Restate big point
- Avoid “more research” needed
More Tips

• Bring your stuff
• No excuses
• Avoid PowerPoint notes
• Try new ideas
Remember…the two BIG Tips

LESS is MORE

PRACTICE MAKES PERFECT
Make a Better Presentation

Ronald Dietel

American Educational Research Association

San Francisco, California – April 29, 2013