S.T.A.T. Year Two Evaluation

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July 12, 2016
S.T.A.T. Evaluation Model

Professional Development
- Administrators
- S.T.A.T. Teachers
- Classroom Teachers

Measurable Outcomes
- Year 1+
  - Classroom Environment
  - Teacher Practice
  - Digital Content
- Year 1+
  - Student Engagement
- Year 2+
  - P21 Skills

Goals
- Years 3/4+
  - Student Achievement
    - MAP
  - PARCC
    - Graduate Globally Competitive Students

7/12/2016
Summative Year One Report

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7/12/2016
Data Sources

• Interviews and Focus Groups (principals, S.T.A.T. teachers, classroom teachers)

• Classroom Teacher Survey (CRRE survey)

• S.T.A.T. Teacher Program Survey (BCPS survey)

• Classroom observations in schools (OASIS-21 Instrument)

• Digital content usage (BCPSOne)

• Student behavioral data from Lighthouse Schools

• S.T.A.T.-specific climate survey items (BCPS survey)
• Research on school-district technology integration initiatives shows¹:
  – Higher student engagement
  – Increases in student-centered instruction
  – Improved student achievement

• Second-year results in BCPS show:
  – Promising changes from teacher- to student-centered learning
  – Shifts to teacher coaching rather than presenting
  – Focus on using data to customize instruction
  – Strong impact student engagement

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7/12/2016
S.T.A.T. Teacher Program

• S.T.A.T. teachers were consistently viewed as critical to S.T.A.T. implementation
  – More positive views in non-LH elementary (2015 to 2016)

• Need clearly defined roles of the S.T.A.T. teacher
• Balance between instruction and technology
Summary: Professional Development

- Conflicting views on effectiveness of summer PD
- Highly valued PD offered by S.T.A.T. teacher
- Need a stronger focus on instructional practices and effective integration of technology
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7/12/2016
Observation Rating Scales

- Not observed: Not observed in class
- Rarely: Received little emphasis/time in class
- Somewhat/Occasionally: Receives modest emphasis/time in class
- Frequently: Receives substantial emphasis/time in class
- Extensively: Highly prevalent in class
Impact on Classroom Environment

**Information and resources that support independent thinking are highly visible**

<table>
<thead>
<tr>
<th></th>
<th>LH Grades 1-3</th>
<th>Phase 2 Grades 1-3</th>
<th>LH Grades K,4,5</th>
<th>LH Middle Grade 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensive</td>
<td>58.6%</td>
<td>60.0%</td>
<td>46.2%</td>
<td>60.7%</td>
</tr>
<tr>
<td>Somewhat/Occasionally</td>
<td>17.2%</td>
<td>20.0%</td>
<td>7.7%</td>
<td></td>
</tr>
<tr>
<td>Not observed</td>
<td>24.1%</td>
<td>20.0%</td>
<td>46.2%</td>
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</tbody>
</table>

**Student utilization of work spaces**

<table>
<thead>
<tr>
<th></th>
<th>LH Grades 1-3</th>
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<th>LH Middle Grade 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensively</td>
<td>24.1%</td>
<td>30.0%</td>
<td>34.6%</td>
<td></td>
</tr>
<tr>
<td>Frequently</td>
<td>17.2%</td>
<td>7.5%</td>
<td>15.4%</td>
<td></td>
</tr>
<tr>
<td>Somewhat/Occasionally</td>
<td>50.0%</td>
<td>5.0%</td>
<td>7.7%</td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td>13.8%</td>
<td>7.5%</td>
<td>15.4%</td>
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</tr>
<tr>
<td>Not Observed</td>
<td>15.4%</td>
<td>26.9%</td>
<td>7.7%</td>
<td></td>
</tr>
<tr>
<td>+ &lt; 5.0%</td>
<td>67.9%</td>
<td>21.4%</td>
<td>7.1% +</td>
<td></td>
</tr>
</tbody>
</table>
Summary: Classroom Environment

• Moderate impact
  – General improvements over baseline observations
  – Arrangement of classrooms to support different instructional approaches

• Less frequent use of different workspaces, independent acquisition of materials and resources
### Impact on Teacher Practices

#### Teacher presentation

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Not Observed</th>
<th>Rarely</th>
<th>Somewhat/Occasionally</th>
<th>Frequently</th>
<th>Extensively</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH Grades 1-3</td>
<td>20.7%</td>
<td>17.2%</td>
<td>58.6%</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Phase 2 Grades 1-3</td>
<td>10.0%</td>
<td>5.0%</td>
<td>72.5%</td>
<td>+</td>
<td></td>
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<tr>
<td>LH Grades K,4,5</td>
<td>11.5%</td>
<td>11.5%</td>
<td>73.1%</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>LH Middle Grade 6</td>
<td>25.0%</td>
<td>7.1%</td>
<td>60.7%</td>
<td>+ +</td>
<td></td>
</tr>
</tbody>
</table>

#### Flexible grouping based on student and task needs

<table>
<thead>
<tr>
<th>Grade Level</th>
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<th>Extensively</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH Grades 1-3</td>
<td>17.2%</td>
<td>+</td>
<td>69.0%</td>
<td>10.3%</td>
<td></td>
</tr>
<tr>
<td>Phase 2 Grades 1-3</td>
<td>27.5%</td>
<td>+</td>
<td>55.0%</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>LH Grades K,4,5</td>
<td>26.9%</td>
<td>+</td>
<td>61.5%</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>LH Middle Grade 6</td>
<td>25.0%</td>
<td>+</td>
<td>67.9%</td>
<td>+</td>
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</tbody>
</table>

+ < 5.0%
Summary: Teacher Practice

- Teachers favoring coaching and facilitating instruction over presentations

- Increased teacher collaboration, personalization of learning and responding to individual student needs
Impact on Digital Content: BCPSOne Usage

S.T.A.T. Grades (LH and non-LH)

Semester 2, 2014-15

- Link tiles: 81.3%
- Repository content tiles: 10.9%
- Other tiles: 6.8%
- Assignment tiles: 44.3%
- File tiles: 23.9%
- Assessment tiles: 20.6%
- Instruction tiles: 6.8%

Semester 2, 2015-16

- Link tiles: 81.3%
- Repository content tiles: 10.9%
- Other tiles: 6.8%
- Assignment tiles: 44.3%
- File tiles: 23.9%
- Assessment tiles: 20.6%
- Instruction tiles: 6.8%
Summary: Digital Content

• Successes with using technology:
  – Customize lessons
  – Improved student competence, positive impact

• Challenges with technology integration:
  – Inappropriate/off-task use
  – Malfunctions
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7/12/2016
Impact on Student Engagement

• Very high overall

• Varied across groups:
  – 3/4 increased use of digital tools
  – 3/4 increased independent work
  – 3/4 decreased formal collaborative learning
  – 3/4 decreased formal student discussion
Summary: Student Engagement

• Evidence of increased student engagement across data sources

• Participants described a strong impact, noting collaboration in schools

• Significant improvement in attendance rate in Lighthouse schools

• Expressed concerns that technology was sometimes a distraction
Impact on P21 Skills

**Inquiry-based approaches**

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Not Observed</th>
<th>Rarely</th>
<th>Somewhat/Occasionally</th>
<th>Frequently</th>
<th>Extensively</th>
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</thead>
<tbody>
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<td>LH Grades 1-3</td>
<td>86.2%</td>
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<td>10.3%</td>
<td>3.5%</td>
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<td>5.0%</td>
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</tr>
<tr>
<td>LH Grades K,4,5</td>
<td>80.8%</td>
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<td>11.5%</td>
<td>7.1%</td>
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</tr>
<tr>
<td>LH Middle Grade 6</td>
<td>64.3%</td>
<td>7.1%</td>
<td>10.7%</td>
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**Learning incorporates authentic/real world contexts**

<table>
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<tbody>
<tr>
<td>LH Grades 1-3</td>
<td>41.4%</td>
<td>20.7%</td>
<td>34.5%</td>
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<tr>
<td>Phase 2 Grades 1-3</td>
<td>52.5%</td>
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<td>15.0%</td>
<td>25.0%</td>
<td>5.0%</td>
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<td>19.2%</td>
<td>26.9%</td>
<td>7.7%</td>
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<tr>
<td>LH Middle Grade 6</td>
<td>57.1%</td>
<td>10.7%</td>
<td>21.4%</td>
<td>10.7%</td>
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Summary: Impact on P21 Skills

- Low frequency of P21 skills compared to traditional practices.

- Principals felt positive impact on problem solving, critical thinking, student technology skills.

- Teachers expressed the need to better balance technology and teacher instruction for promoting critical thinking.
Perceptions of S.T.A.T.

• Principals, S.T.A.T. teachers, classroom teachers:
  – Change in teacher practices, increased student engagement, customization

• Parents and students:
  – Very strong and positive reactions
Recommendations

• Professional development

• S.T.A.T. teacher roles and responsibilities

• Technology integration model

• Student device use
Conclusion

• Highly positive perceptions of S.T.A.T. teachers

• Impact most noticeable on student engagement and teacher practices

• S.T.A.T. viewed positively by all stakeholders