Build a Culture of Continuous Improvement by Measuring for Professional Learning Impact

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Introductions

Laura L Summers

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Measuring for PL Impact Origin

Learning Forward’s Redesign Communities of Practice which introduced the PL Team to Guskey’s Model for Measuring Impact & Improvement Science

2015-Present

Partnership 2016-2019

Partnered with Schools with:
- Professional Learning Communities
- PL Impact Plans

Peer-to-Peer Learning

- Learning Labs
- Problems of Practice through Cohorts
- Empathy Interviews
- Improvement Science: PDSA Cycles
System’s Change for Professional Learning

Transition
May 2019 - 2020

Learning Forward’s Redesign Community continues during transition

Change in System
Summer 2019

Reorganization

Change in System
2019-2020

Partnering with departments to offer a cohesive model of professional learning for Leadership Weeks.
• Explore ways to measure the success of district-led professional learning through a coherent system of design, facilitation, and participatory follow-up to measure shifts in teachers practices and student outcomes over time.
Session Outcome #2

- Learn how one school district's professional learning team is building a culture of continuous improvement to close the opportunity-achievement gap and elevate student success through district-led professional learning.
Session Outcome #3

- Create your own professional learning impact plan.
Elements of a Professional Learning System

- The school and system culture support trust, collaboration, and continuous improvement, all of which are essential for adult learning.
- The curriculum and assessments teachers use with students are front and center in professional learning to ensure its relevance.
- High-quality professional learning is grounded in research about the characteristics that make it effective.
- Leadership at both the school and teacher level is essential to create the conditions under which professional learning takes root and flourishes.
- Central office departments and external partners align their work in service and support of schools as the place where teachers’ most important professional learning occurs.

Reference: Aspen Institute (2017). *Developing a professional learning system for adults in service of student learning*
Phase 1
August 2015 - July 2016
District-Based Measuring for Impact

- Measuring for Impact: District-based Literacy Focus
  - Use of Standards for Professional Learning
  - Design of Framework for Effective Professional Learning: FEPL
- PD Survey
Phase 2
August 2016 - July 2017

Coordinate “Communities of Practice” within and across schools

Learn Share

Reflect
#1. Context at the School Level

- PL Team Role: Create Community of Practices in-the-field/at schools
- Measuring for Impact = Student Outcomes
Guskey’s Measuring for Impact Levels

Level 1: PD Quality
Is the PD well-designed pedagogically? Is it accessible to its intended audience? Is it well aligned to content and quality standards? Do intended outcomes align with our system’s priorities and what our educators need?

Level 2: Teacher Reaction
Did teachers find the PD useful or relevant? Was the content engaging?

Level 3: Teacher Learning
What skills or knowledge did the teacher acquire/develop?

Level 4: Change in Teacher’s Practice
Did the PD create a sustained change in teaching practice? What PD efforts have the greatest success in changing practices and what elements do they have in common?

Level 5: Change in Student Outcomes
Did the change in practice impact student outcomes? Did the changes drive improvements in some contexts (e.g. schools/subjects and not others?) What other factors could have impacted the outcomes?
This represents the chain from professional learning to student outcomes; different measures are appropriate at each stage

<table>
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<tr>
<th>What is measured</th>
<th>Questions</th>
<th>Notes</th>
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| PD quality       | ▪ Is the PD well-designed pedagogically?  
▪ Is it accessible to its intended audience?  
▪ Is it well aligned to content and quality standards?  
▪ Do intended outcomes align with our system's priorities and what our educators need? | D1 PD survey |
| Teacher reactions | ▪ Did teachers find the PD useful or relevant?  
▪ Was the content engaging? | |
| Teacher Learning | ▪ What skills or knowledge did the teacher acquire/develop?  
▪ Did a teacher’s attitude change as a result of the PD? | D2 Learning Labs/Video Samples/Progression Map/Review of Student Work/Documentation |
| Change in teachers practice | ▪ Did the PD create a sustained change in teaching practice?  
▪ What PD efforts have the greatest success in changing practice and what elements do they have in common? | |
| Change in student outcomes | ▪ Did the change in practice impact student outcomes?  
▪ Did the changes drive improvements in some contexts (e.g., schools/subjects and not others)? | |

DPS P2P Learning Projects

- PD Standards
- FEPL - Design; Content; & Delivery

This represents the chain from professional learning to student outcomes; different measures are appropriate at each stage.

**What is measured?**

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2. **Teacher reactions**
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3. **Teacher Learning**
   - What skills or knowledge did the teacher acquire/develop?
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   - What PD efforts have the greatest success in changing practice and what elements do they have in common?

5. **Change in student outcomes**
   - Did the change in practice impact student outcomes?
   - Did the changes drive improvements in some contexts (e.g., schools/subjects and not others)?
   - What other factors could have impacted the outcomes?

**How/Tool:**

Participant Responses: Mean Rating Per Item

- Learning lab intended outcomes were clearly communicated.
- Learning lab related tasks were clear and manageable.
- I would recommend collaborating with the Compact Blue team to others.
- The Compact Blue team supported my learning.
- The Compact Blue team was flexible/adaptable to my cohort needs.
- I liked how the Compact Blue team facilitated my cohort's learning lab days.
- Communications from the Compact Blue team were sufficient to meet my needs.
Frequently Mentioned Beneficial Aspects From Individual Learning Lab Events

- Shored Pop/Goal
- Support and Feedback From Facilitator
- Collaboration With Team
- Planning Time
- Feedback & Discussion
- Time To Reflect
- Hosting a Lab
- Observation*
- Collecting Data
- Strategies and Resources*
- Experimenting/Pushing Out of Comfort Zone
- Other***

Number of Times Aspect Was Mentioned

*Observation is significantly higher than other aspects.
Level 4: Change in Teacher’s Practice

Change in teacher’s practice was measured in multiple ways. The descriptions and graphs below display some of these measures, followed by trends and questions that arose from the data analysis.

The Peer-to-Peer Learning Facilitators developed a tool (progression map) to track the strategies and change ideas that teachers implemented based on their new learnings and wonderings aligned to the cohort POP during the debrief of each learning lab experience. These new strategies were the result of observation of practice, analysis of observed data, debrief conversations amongst teachers, and sifting through research-based best practice resources.

In the next slide, you see the breakdown of the 103 change ideas implemented by teachers. This is a compilation of all learning cycles (Plan-Do-Study-Act Cycles) across all cohorts in the school’s network.
Learning Cycle Change Ideas Implemented by Teachers

- Student Analysis Tasks
- Discussion Protocols for Thinking
- Teacher Class Management
- Student Self Management
- Modeling
- Sentence Stems
- Reading Strategies
- Writing Strategies
- Vocabulary Supports
- Collaboration
- Scaffolds
- Other

Level 4: Data from Progression Map
Within the reflection of each learning cycle, teachers identified whether they would adopt, adapt, or discard the newly-implemented strategy or change idea. Adoption or adaptation of these show evidence of Level 4: Change in Teacher Practice. Of the 103 newly-implemented strategies across the network, 70.8% were adapted and/or adopted by teachers and 26.2% were inconclusive and did not have enough information to label as adapt/adopt/discard. The adapt/adopt/discard comparisons can be seen in the graph on the next slide.
Result of Learning Cycle Change Ideas

- Blue: Adopted
- Red: Adapted
- Orange: Discarded
- Green: Not Enough Information

Total Occurrences for All BNS Cohorts
Level 5: Change in Student Outcomes

As mentioned in the Level 1: PD Quality narrative, participants in each cohort determined which indicators from the LEAP Framework were most aligned to their POPs and used these as a pre and post-student assessment to determine the effects of their work in these cohorts over the course of the experience. Each cohort selected the 4 common student observational indicators they predicted to see growth in as a result of a focus on their common POP.

Teachers collected data at the beginning and the end of the experience aligned to these indicators and reported that data in their progression maps. 62.9% of the indicators tracked by teachers across the Beacon network showed student growth.
Student Growth Data: Observable LEAP Indicators Aligned to Cohort POP

Total Occurrences for All BNS Cohorts

- Growth Observed for Indicator: 20
- No Growth Observed for Indicator: 0
- Incomplete Data for Indicator: 1
As mentioned in Level 4: Change in Teacher’s Practice, the progression map tool was used to track the strategies and change ideas that teachers implemented based on their new learnings and wonderings aligned to the cohort POP during the debrief of each learning lab experience. An analysis of the documented learning cycles (Plan-Do-Study-Act Cycles) was done with the data across all cohorts in the Beacon network. This analysis included looking at the impact on students that was a result of the newly-implemented practices and change ideas that existed within each learning cycle. Of the 103 learning cycles implemented by teachers across the network and documented by individual teachers, 76.7% resulted in a positive impact on students, as shown on the next slide.
Student Impact Data: Learning Cycle Change Ideas Implemented by Teachers

<table>
<thead>
<tr>
<th>Impact on Student Outcomes</th>
<th>Total Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Impact on Student Outcomes</td>
<td>80</td>
</tr>
<tr>
<td>Zero or Neutral Impact on Student Outcomes</td>
<td>15</td>
</tr>
<tr>
<td>Inconclusive Impact on Student Outcomes</td>
<td>10</td>
</tr>
</tbody>
</table>
Trends/Patients from Teacher Reflection of Student Data from Final Reflection

Total Occurrences for All BNS Cohorts

- Increase Student Skills**
- Increase Reading, Speaking, Listening and Writing Skills
- Increase Social Emotional Intelligence (Whole Child)
- Other***
Phase 3
August 2017- May 2019
Tackling The Big 3 - Mapping the System

What are we trying to accomplish?

How will we know a change is an improvement?

What changes might we introduce into the system?
“All improvement requires change, but not all change is an improvement.”
Learning from failure is valued.
SITUATION: While DPS is on a course of continued improvement, opportunity gaps remain and not every student succeeds; each year, we fail to meet the needs of thousands of students in the area of mathematics. While some students are improving in math, over half of our students are not meeting expectations. Gaps have grown in mathematics.

THEORY OF CHANGE: By establishing and supporting an equity-based mathematics community of practice for teachers and leaders which includes collaboration and inquiry cycles using improvement science tools, more students will demonstrate proficiency, achievement gaps will be narrowed, and DPS students will graduate college and career ready.

AIM STATEMENT: Over the course of the 2017-2018 and 2018-2019 school years, participants in the Equity-Based Math Communities of Practice will demonstrate an increase of 8.8% overall and 8.5% for Black and Hispanic students, respectively, earning “Meets” or “Exceeds” on the CMAS Math Test (grades 6 – 8) and an increase of 8.9% overall and 8% for Black and Hispanic students, respectively, earning “Meets” or “Exceeds” on the CMAS Math or PSAT/SAT (Grades 9-11).
Impact

- 4 schools engaged in a total of 16 PDSA cycles trying out unique change ideas on separate timelines, at different frequencies, with variable data collection
- Teachers embraced and took ownership of the process
- Teachers reported initial shifts in practice and in how they see students in math class
- Students demonstrated initial academic, engagement, and mindset changes
  - Focus Group Questions
EBMP Participants

Individuals from 4 schools participated between November 2017 - May 2018

<table>
<thead>
<tr>
<th>AHS</th>
<th>AMS</th>
<th>BHS</th>
<th>CHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assistant Principal</td>
<td>• Senior Team Lead &amp; 9th–10th grade math teacher</td>
<td>• Principal</td>
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</tr>
<tr>
<td>• 8th – 10th grade math teacher</td>
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<td>• Teacher</td>
</tr>
<tr>
<td></td>
<td>• 6th – 7th grade math teacher</td>
<td>• Math dept para/in-class support</td>
<td>• Teacher</td>
</tr>
</tbody>
</table>
Evidence of Impact

Link to Data Display
PL Impact Plan
Measuring Level 5

What is measured?

1. PD quality
2. Teacher reactions
3. Teacher Learning
4. Change in teachers practice
5. Change in student outcomes

How/Tool:

- Did the change in practice impact student outcomes?
- Did the changes drive improvements in some contexts (e.g., schools/subjects and not others)?
- What other factors could have impacted the outcomes?

Measuring Level 4

What is measured?

1. PD quality
2. Teacher reactions
3. Teacher Learning
4. Change in teachers practice
5. Change in student outcomes

How/Tool:

1. Did the PD create a sustained change in teaching practice?
2. What PD efforts have the greatest success in changing practice and what elements do they have in common?
3. Did the change in practice impact student outcomes?
4. Did the changes drive improvements in some contexts (e.g., schools/subjects and not others)?
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Measuring Level 3

What is measured?

1. PD quality
2. Teacher reactions
3. Teacher Learning
4. Change in teachers practice
5. Change in student outcomes

How/Tool:

- What skills or knowledge did the teacher acquire/develop?
- Did a teacher’s attitude change as a result of the PD?
- Did the PD create a sustained change in teaching practice?
- What PD efforts have the greatest success in changing practice and what elements do they have in common?
- Did the change in practice impact student outcomes?
- Did the changes drive improvements in some contexts (e.g., schools/subjects and not others)?
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Measuring Level 2

What is measured?

1. PD quality
2. Teacher reactions

- Did teachers find the PD useful or relevant?
- Was the content engaging?

How/Tool:

Measuring Level 1

What is measured? PD quality

Questions

- Is the PD well-designed pedagogically?
- Is it accessible to its intended audience?
- Is it well aligned to content and quality standards?
- Do intended outcomes align with our system's priorities and what our educators need?

How will you answer these questions? How will you know?

Phase 4
December 2018 - Present
The Problem:
Central Office Staff Thinking about Inputs, not Outcomes
Our Plan:
Combine these models into one, use with fidelity with one department at 4x/year PD with one group of participants
Susana Cordova unanimously voted in as Denver Public Schools superintendent
Cordova replaces Tom Boasberg, who resigned from the position after 10 years at the helm

Denver teachers go on strike after failing to reach pay deal
The school district said schools will remain open during the strike and will be staffed by administrators and substitute teachers.

Denver Public Schools announces 150 central office job cuts
It’s part of a plan to restructure the district and free up more money for teacher pay. Impacted employees were notified of the changes this week.
In the past, central office has overwhelmed school teams with **too much** content, competing priorities.

With **new priorities**, we needed to:
- align the **what** and **why**
- bring clarity to the **how**: all sessions grounded in measurable criteria for success

Limit to **four sessions; followed by ½ day of work time** after each session for implementation planning.
July Leadership Week

What are we trying to accomplish?

- Roll out new district priorities; Foster deep understanding
- Bring focus and coherence to initiatives
- Improve participant experience in sessions
- Set ourselves up to measure for impact
- Reducing # of sessions
- Integrate Frameworks for Culturally Responsive Education into all sessions
- Be explicit about criteria for success
- Integrate Adult Learning Best Practices

What changes might we introduce into the system?

How will we know a change is an improvement?

Set ourselves up to measure for impact
Be explicit about criteria for success
Integrate Adult Learning Best Practices
The Payoff

- Instructional Superintendents had a foundation to build off of
- The boat is rowing in the same direction for all 150+ schools
- Leaders were able to turn key ideas to their educators as the year started
- Positive participant experience survey data: learning met needs
- Outcomes to track: Criteria for Success met?
This represents the chain from professional learning to student outcomes; different measures are appropriate at each stage.

**What is measured?**

**Questions**

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School teams have different gaps/needs.

Improve on collaboration by formalizing:
- a “Working Group” with membership from all content teams to collaborate on content—no more single players; met weekly
- processes for alignment across teams
- Facilitation feedback and facilitation practice Session Practice: Rehearsal for EVERY session, twice
Fall Leadership Week

What are we trying to accomplish?

- Build on Knowledge and Skill Gaps preventing success in IIPs
- Narrow the scope
- Improve Facilitation Quality
- Increase attendance
- Increase # of sessions to accommodate specific gaps
- Create Collaboration on Content
- Practice Sessions
- Market sessions in principal meetings

What changes might we introduce into the system?

How will we know a change is an improvement?
The Payoff

- Increased belief in need for collaboration from central office teams; this is a key lever for team success
- Greater understanding of priorities; and commitment to continue them into ’20–’21
- Highest attendance in week’s history
- Classroom strategies were taught explicitly to building leaders: Math Rigor, Literacy and Graduation Prep
This represents the chain from professional learning to student outcomes; different measures are appropriate at each stage.

### Questions

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**How/Tool:**

THANKS!

Any questions or requests for more information:

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Session ID: 2225

NOTE: Session ID should be in all CAPS and is case-sensitive.