Fresno’s Personalized Learning Initiative

Year 2 Analytics – 2017-18
Towards Transformation

• complex ecosystems
• situated in local contexts
• changes in readiness & learning design
• shifts in perceptions & practice
• journeys

It takes community(s) to transform educational (eco)systems
Moral mandate: Ready for #AsYetImagined

**Future Shift...**
World is infused with technology, rapidly changing & globally interconnected

**Readiness Shift...**
We must better prepare students with whole-child competence For iterations of learning/work and life journeys

see NGLC MyWays
Initial Theory of Action

Quality practices for meaningfully integrating technology into curriculum and instruction to improve personal learning.
## Fresno’s Personalized Learning Initiative (PLI)

<table>
<thead>
<tr>
<th></th>
<th>District</th>
<th>PLI Year 1</th>
<th>PLI Year 2</th>
<th>PLI Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>101</td>
<td>89</td>
<td>90 (10 partners sites)</td>
<td>26 PLI Partner Site</td>
</tr>
<tr>
<td>Students</td>
<td>72,000</td>
<td>12,423</td>
<td>17,045</td>
<td>25,000+</td>
</tr>
<tr>
<td>Teachers</td>
<td>3,800</td>
<td>202</td>
<td>362</td>
<td>650+</td>
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</tbody>
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*Note: "partners sites" refers to the number of cooperating partners at various sites.*
The PLI Learning Cycle

Technology Enhanced
Student Voice, Choice
Learning Outcomes
And Collaboration Pedagogical Model
Learning Environment

Analyzing Outcomes
Envisioning Goals
Implementing
PLI Has Explicit Learning Outcome Goals

- Skilled Communicator & Collaborator
- Digitally Literate Citizen
- Responsible & Ethical Decision Maker
- Strong Academic Foundation
- Adaptable & Productive Problem Solver
- Creative & Adaptive Learner
Implementation Includes, Pedagogy, Community, and Tech

Pedagogy centered on greater student voice, collaboration, and tech for assessment & instruction

1:1 Devices in PLI Classrooms

Training on Digital Apps

Technology Support

Community of Practice
PLI shared improvement journey

Year 1 AY 1617
- PL, Supports, Growth
- 202+ teachers in Cohort 1; 12,423 students
- Experiential Professional Development
- Research: REA, Microsoft, Fresno State

Year 2 AY 1718
- Maturing Practices & Program
- 362+ teachers in Cohorts 1 and 2; 17,045+ students
- Several Partner Sites; 31 Exemplar Teachers
- Research: REA, Microsoft, HMH, Digital Promise

Year 3 AY 1819 Site
- Expanding Program with Site Adoption
- 650+ teachers in Cohorts 1, 2, 3 and 26 Partner Sites
- Sites + Education Elements collaborate on learning design
- Impacting 25,000+ students
- Research: Fresno Unified, Microsoft, Digital Promise, HMH
Professional Learning that Shifts Perceptions and Practice

- Shared “Why” and models
- Experiencing practice
- Digital apps training
- Communities of practice
- Shifts teaching practices...
- Transforms learning experiences...
PLI Professional Learning looks like...

- Experiential
- Aligned
- Collaborative
- Supportive
- Actionable

“PLI PL models what we want to see in classroom”
PLI Professional Learning Progression

• The "Why" and effective use of digital tools in support of high quality instruction (SAMR)
• Formative data analysis to support instruction and shift practices with PLCs
• Blended/Personalized Learning Design
• Enhancing Task for Real World, Problem Solving, and Innovation (21CLD)
A multi-stakeholder partnership for leveraging data for improvement
Our data model is designed to enable analytics across disparate data sets, including tech usage data.
Analytics Q1: Is PLI continuing to improve learning outcomes as it expands in Year 2?
The PLI is working

In year 2 of its implementation, the Fresno PLI is continuing to improve outcomes at scale in elementary and middle grades in key subjects.

* Statistically Significant Relationship  †Preliminary SBAC data, rescaled to 100 Points
The PLI is working for **all** students

The PLI is helping close achievement gaps in Fresno.

**Adjusted Means, Scaled† SBAC Scores by Ethnicity for Language Arts:** Fresno Unified PLI and Non PLI Elementary Students

**Adjusted Means, Scaled† SBAC Scores by Ethnicity for Math:** Fresno Unified PLI and Non PLI Elementary Students

* Statistically Significant Relationship  †Preliminary SBAC data, rescaled to 100 Points
Analytics Q2: How and where is the improvement happening?
PLI Professional Learning’s Impact

PLI professional learning is having a significant impact in Fresno. Middle school teachers who took two PLI professional development classes saw student SBAC scores grow on average more than six points.

Statistically Significant Effects of Teacher PLI PD Class Dosage on Student MATH SBAC* Outcomes by School Type

Statistically Significant Effects of Teacher PLI PD Class Dosage on Student Language Arts SBAC* Outcomes by School Type

*SBAC preliminary data, rescaled to 100pt scale. Elementary n = 19384, Middle School n= 8939

*SBAC preliminary data, rescaled to 100pt scale. Elementary n = 19807, Middle School n= 9014
PLI teachers use Teams as the online collaboration platform to engage in communities of practice.

Fresno’s Teachers Use of Microsoft Teams 2017-2018

Source: Based on Fresno Unified Teacher use of Microsoft Teams.
“One of the best ways is they're starting to hear less of me. Teachers, we love to hear our own voices, and that's great. But that doesn't affect learning. I think, for some of my kids, the PLI allowed them to be heard. There are a lot of quiet kids in my class, but if they're recorded in a video explaining a concept, trying to teach something, I've heard some of their voices the first time just through the technology. It gives them a voice.”

- Fresno PLI Teacher
PLI students are using digital tools more than non PLI students with the same access to technology.
Variations of digital tools improved outcomes in different grades.
The longer students use the tools, the stronger the association tool use has with outcomes

Effect of Additional Month of Tech Use on 8th Grade ELA SBAC Scores for PLI Students
(Use of Microsoft Teams and Assessments)

*SBAC preliminary data. PLI n= 7487
Houghton Mifflin Harcourt (HMH) Go Math had a positive association with higher math outcomes in some grades.
PLI students are digitally collaborating at even higher levels in Year 2, expanding their digital as well as their academic skills.

Student Document Collaboration  
(based on Word, Excel, PowerPoint or OneNote)

Based on monthly patterns, from July 2016 to February 2018. SPO WXPO Collaboration.
Next steps in the PLI Partnership

**Deepening the Improvement:**
- Research and expand highest impact teaching practices within the PLI
- Experiment with more real-world activities that draw on students’ interests and cultures
- Using learning analytics to accelerate improvement

**Broadening the Impact:**
- High school math focus
- School-wide approach with 26 partner schools
PLI Partner Site Model

- Collaboration with **Education Elements**, Sites, and District
- 18 month process to implement blended learning
- Trainer-of-trainers with 6-10 PLI lead teachers per site
- Monthly in-depth site support
- Ongoing teacher access to effective PLI professional learning
Theory of Change - Ecological Convergence

Innovating within Context and across Communities

Drivers
- Leadership vision & support
- Teacher choice & commitments
- Experiential professional learning
- Professional learning communities
- Job-embedded coaching
- Evidence-based, improvement cycles

Conditions
- Working digital learning environments
- Responsive supports

Agents across communities
- IT+ Instruction; IT+ Purchasing
- PLI + ILT; PLI + Content Managers + Coaches
- Research Partners like Microsoft, Digital Promise
- Research Partners like Microsoft, Digital Promise
- Ed Tech Partners like HMH
- Change Partners like Education Elements

see Microsoft Education Transformation Framework
Better preparing students for their #AsYetImagined futures

Video
• Student Voice, Choice and Collaboration View at https://youtu.be/U3wBBdDdDRA
• PLI professional learning. View at https://vimeo.com/265254283

Blogs

Papers
• Enabling Analytics for Improvement: Lessons from Year 2 of Fresno’s Personalized Learning Initiative.
• Advancing achievement and equity: Growing evidence from the Fresno Unified School District Personalized Learning Initiative.
• Fresno Unified, The Futures Challenge and 21st Century Learning Design

Thank You!