Building and Sustaining Tech Culture with PLCs

Todd Lark, SWMSS
"We won’t experience 100 years of progress in the 21st century — it will be more like 20,000 years of progress (at today’s rate)"

~Ray Kurzweil
Tech Trends in Education

★ Long-Term Trends for Five or More Years
  ○ Redesigning Learning Spaces
  ○ Rethinking How Schools Work

★ Mid-Term Trends for Three to Five Years
  ○ Collaborative Learning
  ○ Deeper Learning Approaches

★ Short Term Trends for the Next One to Two Years
  ○ Coding as a Literacy
  ○ Students as Creators
Communicating to Stakeholders
Building the Backbone (and making it sing)

★ Physical Network

★ Professional Development
Building Out Infrastructure

- Ensuring Interoperability
- Safeguarding Student Privacy
- Selecting the Right Devices
- Maintaining Network Access
Developing a Measurable and Understandable Framework (SAMR)

(Substitution~Augmentation~Modification~Redefinition)
Use Open Educational Resources (OER)

**THE 5 Rs of OPENNESS**

- **Retain:** The right to make, own and control copies of the content
- **Reuse:** The right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)
- **Revise:** The right to adapt, adjust, modify or alter the content itself (e.g., translate the content into another language)
- **Remix:** The right to combine the original or revised content with other open content to create something new (e.g., incorporate the content into a mashup)
- **Redistribute:** The right to share copies of the original content, your revisions or your remixes with others (e.g., give a copy of the content to a friend)
Putting Students First

Ensuring Teacher Readiness
Identifying Rock Stars
Sharing the Load

* Build a tech team
  * Administrators, curriculum team members, technologists and tech savvy teachers
* Develop the SAMR Framework
* Develop a rubric that fits that Framework and make expectations clear (essential questions)
* Educate and train your Rockstars
Develop a calendar and a menu

....and make it tasty
Educators in the most rapidly achieving schools cite data-driven instruction and inquiry as one of the most important factors in helping all students achieve success.
The Driving Questions All Stakeholders Must Continue to Ask

- Where are we in terms of our goals?
- Where are our students in terms of their college and career readiness?
- How do we get there from here?
The Why and the When

- Why are we collecting data and why does this data contribute to instructional and student success?
- When should I collect data? How often?
- How often is too often?
The Data Backbone

- Collection and analysis
- Professional Development
Highly active Leadership Team: facilitate teacher-leader and tech team data analysis meetings after each interim assessment and maintain focus on the process throughout the year.
Introductory Professional Development: teachers and leaders are effectively introduced to data-driven instruction—they understand how interim assessments define rigor and experience the process of analyzing results and adapting instruction using tools such as the PAA (Post Assessment Assessment) or an Assessment Analysis Sheet.
Where tech, data and teachers intersect
Where tech, data and teachers intersect

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<thead>
<tr>
<th>CUMULATIVE REVIEW OF PROFICIENT STANDARDS</th>
<th>Instruction on how to address each of the following</th>
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<tbody>
<tr>
<td>Spiral in HW</td>
<td>Spiral in Do Now</td>
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<td>Spiral in Do Now</td>
<td>Do Mini-Lesson</td>
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<td>Do Now with Mini-Lesson</td>
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<th>SMALL GROUP INSTRUCTION</th>
<th>INSTRUCTIONAL PLAN HOW OR WHEN WILL YOU STRUCTURE SMALL GROUP INSTRUCTION</th>
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<td>What standards warrant more time for small-group instruction and review?</td>
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<th>STANDARDS ANALYSIS</th>
<th>ANALYSIS OF WHY STUDENTS DID NOT LEARN IT</th>
<th>INSTRUCTIONAL PLAN: WHAT TECHNIQUES WILL YOU USE TO ADDRESS THESE STANDARDS</th>
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<tr>
<td>WHOLE CLASS INSTRUCTION</td>
<td>What standards warrant more time for whole-class instruction, re-teaching and review?</td>
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<td>STUDENTS OF MAJOR CONCERN</td>
<td>WHAT THEY NEED MOST HELP WITH?</td>
<td>INSTRUCTIONAL PLAN: WHEN OR HOW WILL THEY GET TUTORS, SUPPORTED ADDRESSED</td>
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Implementation Calendar: Begin school year with a detailed calendar that includes time for assessment creation/adaptation, implementation, analysis, planning meetings, and re-teaching (flexible enough to accommodate district changes/mandates)
Ongoing Professional Development: PD calendar is aligned with data-driven instructional plan: includes modeling assessment analysis/action planning and is flexible to adapt to student learning needs
Developing a Culture of Data Driven Instruction

**Build by Borrowing:** Identify and implement best practices from high-achieving teachers & tech-forward schools: visit schools/classrooms, share & disseminate resources/strategies
“The schools and districts that doubled student achievement added another layer of testing—common formative or benchmark assessments. These assessments were designed to provide detailed and concrete information on what students know and do not know with respect to specific learning targets.” (Odden & Archibald, 2009)
Questions?