Governance Board Meeting

July 6, 2016

Project Overview

8:00 – 9:30

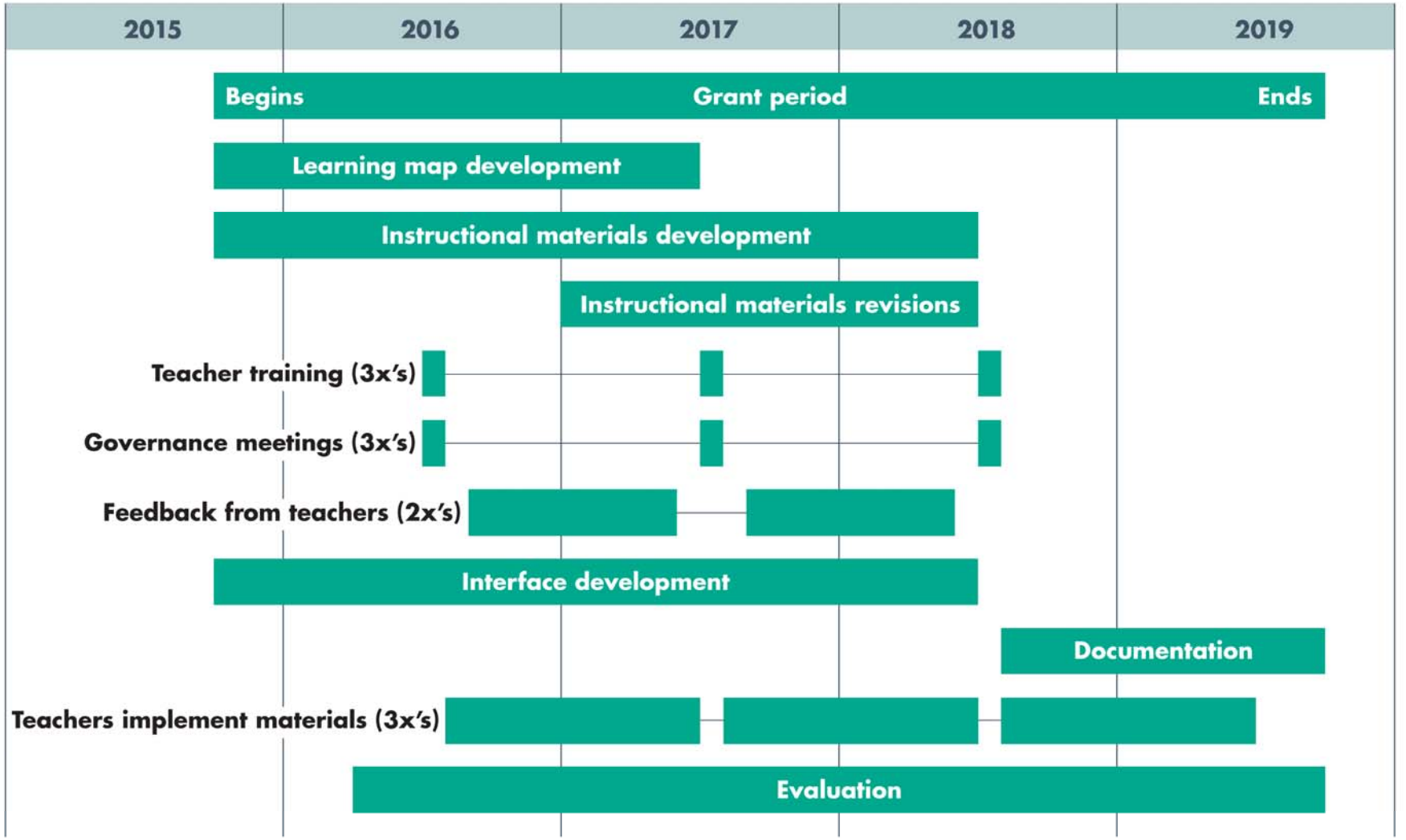
Enhanced Learning Maps Project Goal

To improve teachers' ability to use effective formative assessment tools and practices to provide personalized instruction resulting in greater student achievement

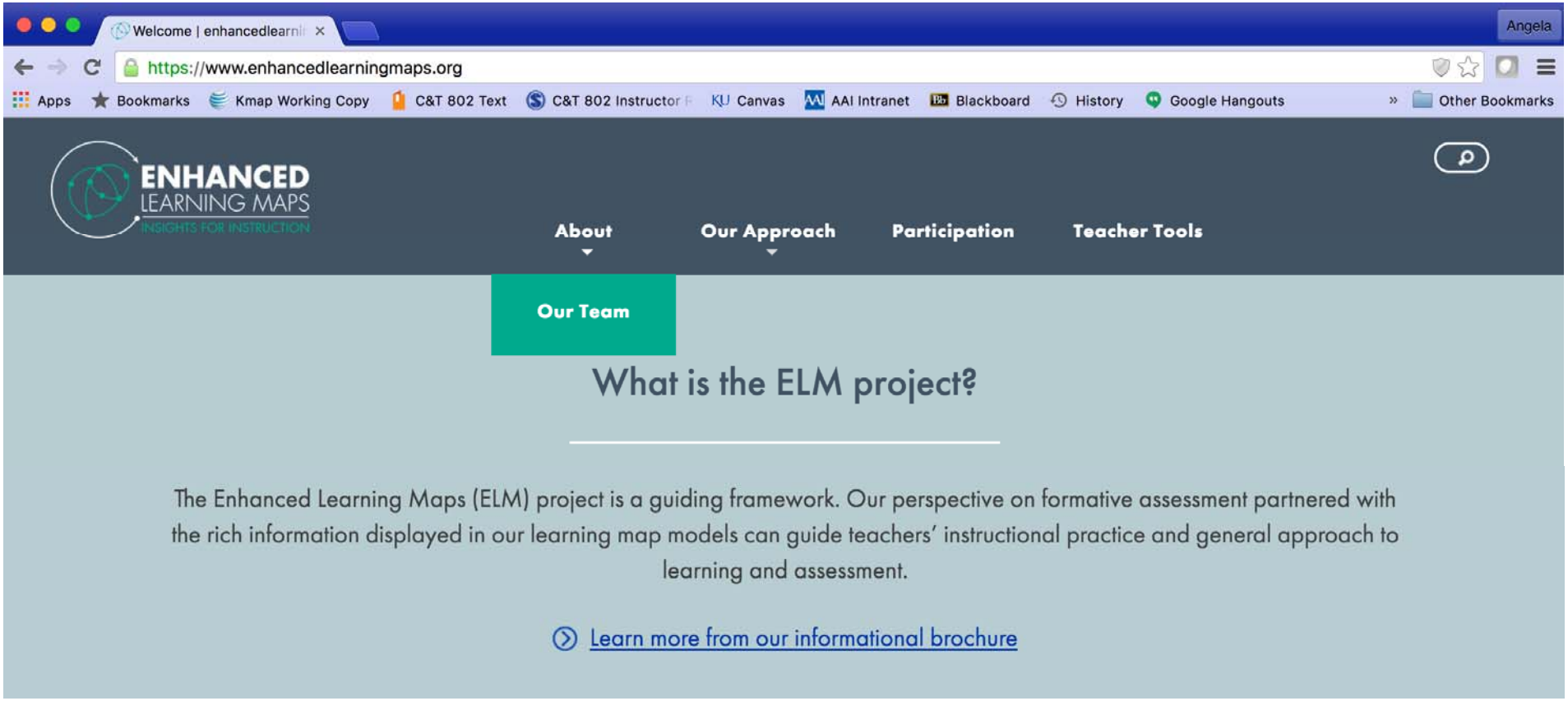
Enhanced Learning Maps Project Objectives

- Produce learning map models, classroom activities, performance tasks, and objective item sets for grades 2-8 ELA and math.
- Develop technology-based interactive learning map structures and resources.
- Partner with 400 teachers from 5 partner states over 3 years to implement learning map-driven formative assessment in classrooms.
- ELM strategies and resources will be sustainable and replicable by the conclusion of the grant funding period.

Enhanced Learning Maps timeline



Team Members



State Partners

- Alaska
  - Margaret McKinnon, Deb Riddle
- Iowa
  - Emily Thatcher, Pam Barry, Kim Neal
- Kansas
  - Nancy Lister – Project Administrator
  - Beth Fultz, Jackie Lakin
- Missouri
  - Lisa Sireno
- Wisconsin
  - Kristen Burton, Marci Glaus

Advisors

- Barbara Bradley
  - University of Kansas, ELA Instruction
- Bruce Frey
  - University of Kansas, Classroom Assessment
- Russell Gersten
  - Instructional Research Group, Intervention
- Margaret Heritage
  - UCLA, Formative Assessment
- Karen Karp
  - Mathematics Education, Special Education

Project Staff

Leadership and Administration

- Neal Kingston
- Angela Broaddus
- Marianne Perie
- Dale Cope
- Sasha Feryok

ELA

- Sarah Marten
- Russell Swinburne Romine
- Jonathan Schuster
- Katie Leman

Technology

- James Miller
- Richard Branham
- Chris Gayler
- Dain Vermaak

Mathematics

- Lindsey Weiland
- Nicki Lindner

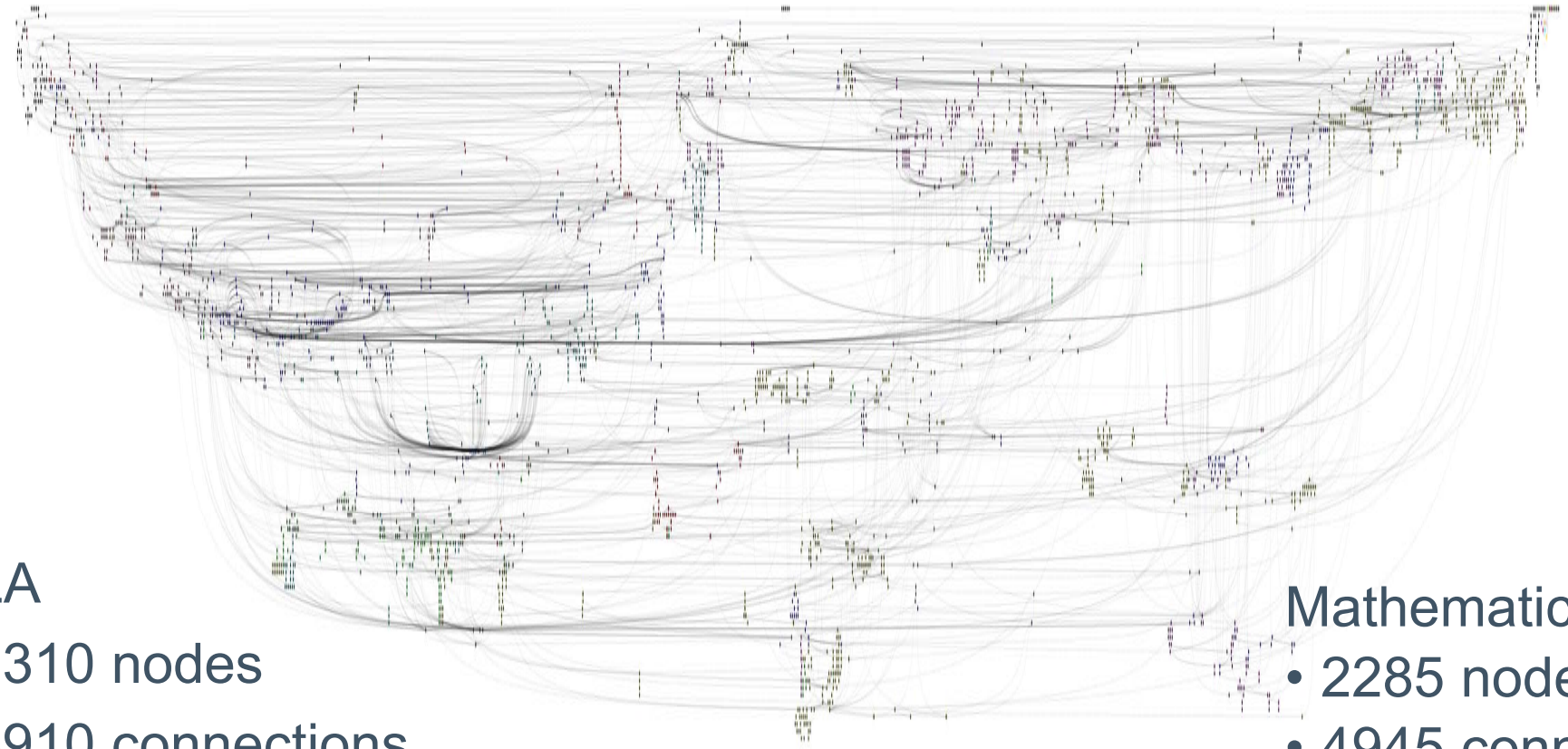
Break

9:30 – 9:45

The ELM Maps: History, Purpose, Current work, and Software

9:45 – 10:30

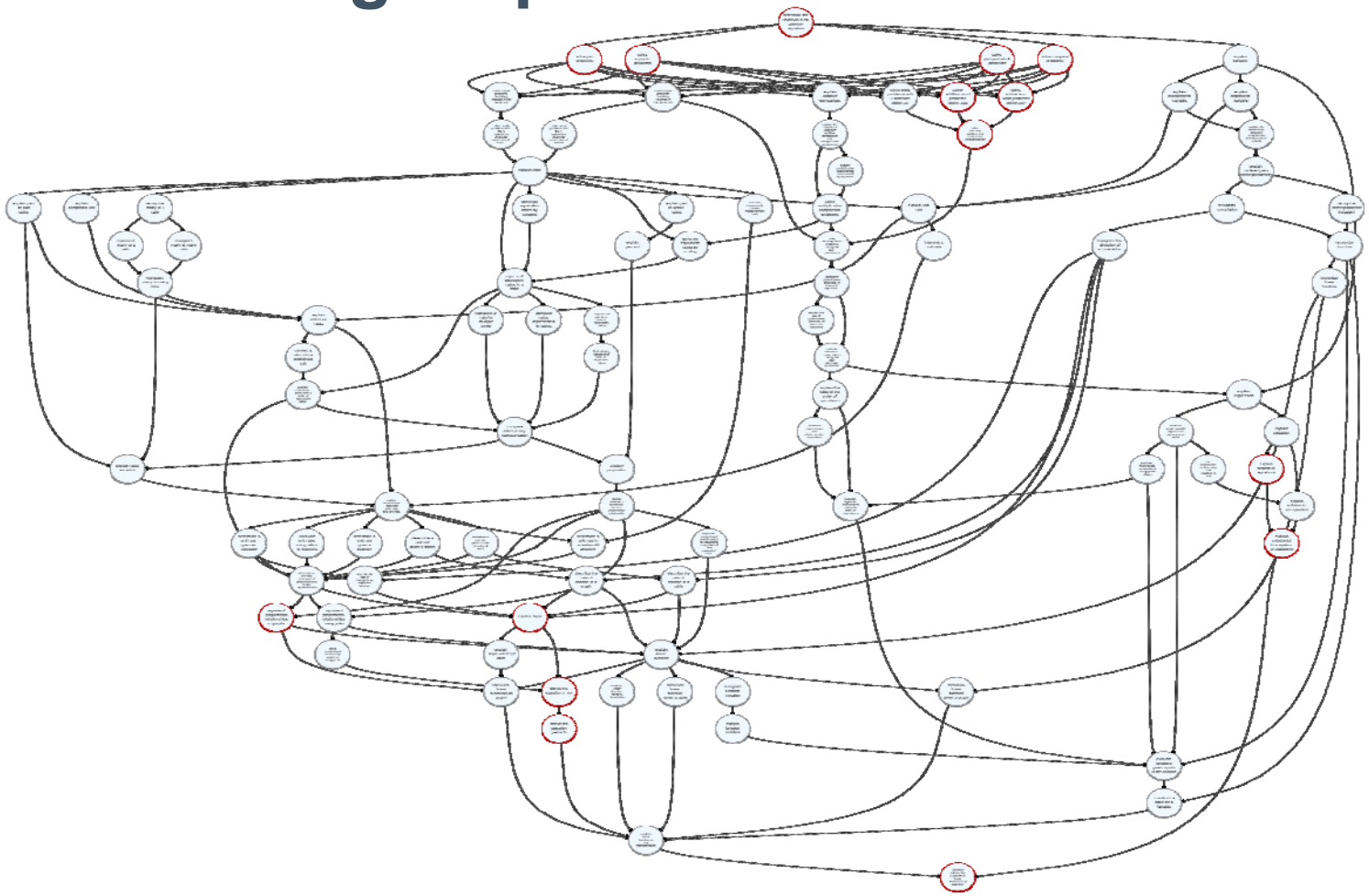
Learning Map History



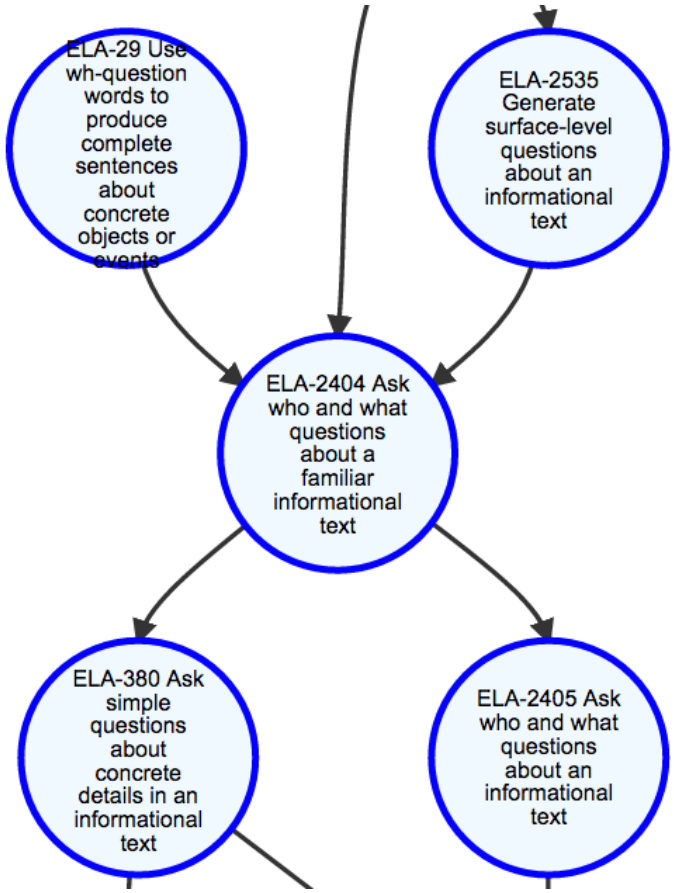
ELA
- 2310 nodes
- 5910 connections

Mathematics
- 2285 nodes
- 4945 connections

Our Learning Map Model



Closer Look


ELA-29 Use wh-question words to produce complete sentences about concrete objects or events
ELA-2535 Generate surface-level questions about an informational text
ELA-2404 Ask who and what questions about a familiar informational text
ELA-380 Ask simple questions about concrete details in an informational text
ELA-2405 Ask who and what questions about an informational text

Working on the Map

Demonstration

Current Status of the Map

Math

- Each CCSSM in grades 2 – 8 has an ELM Map View.
- More than half of HS CCSSM also have ELM Map Views.
- Average number of nodes per ELM Map View is 13.
- Average number of nodes directly aligned to a standard

ELA

- 75% of LM sections covering all RL and RI CCSS for grades 2-5 have been reviewed.
- Teachers can access 80% of ELM Map Views covering target RL and RI CCSS for grades 2-5.
- Average number of nodes per ELM Map View is 33.
- Average number of nodes aligned to a standard is about 2.

Developing the Software

- Lessons learned from prior work
- Design process
  - Front end of software
- Recent improvements
  - Back end – database and supporting structures
- Languages used
- Releases and updates
- Availability, licensing, open source status after grant ends

Project Activities

10:30 – 12:00

Our Approach

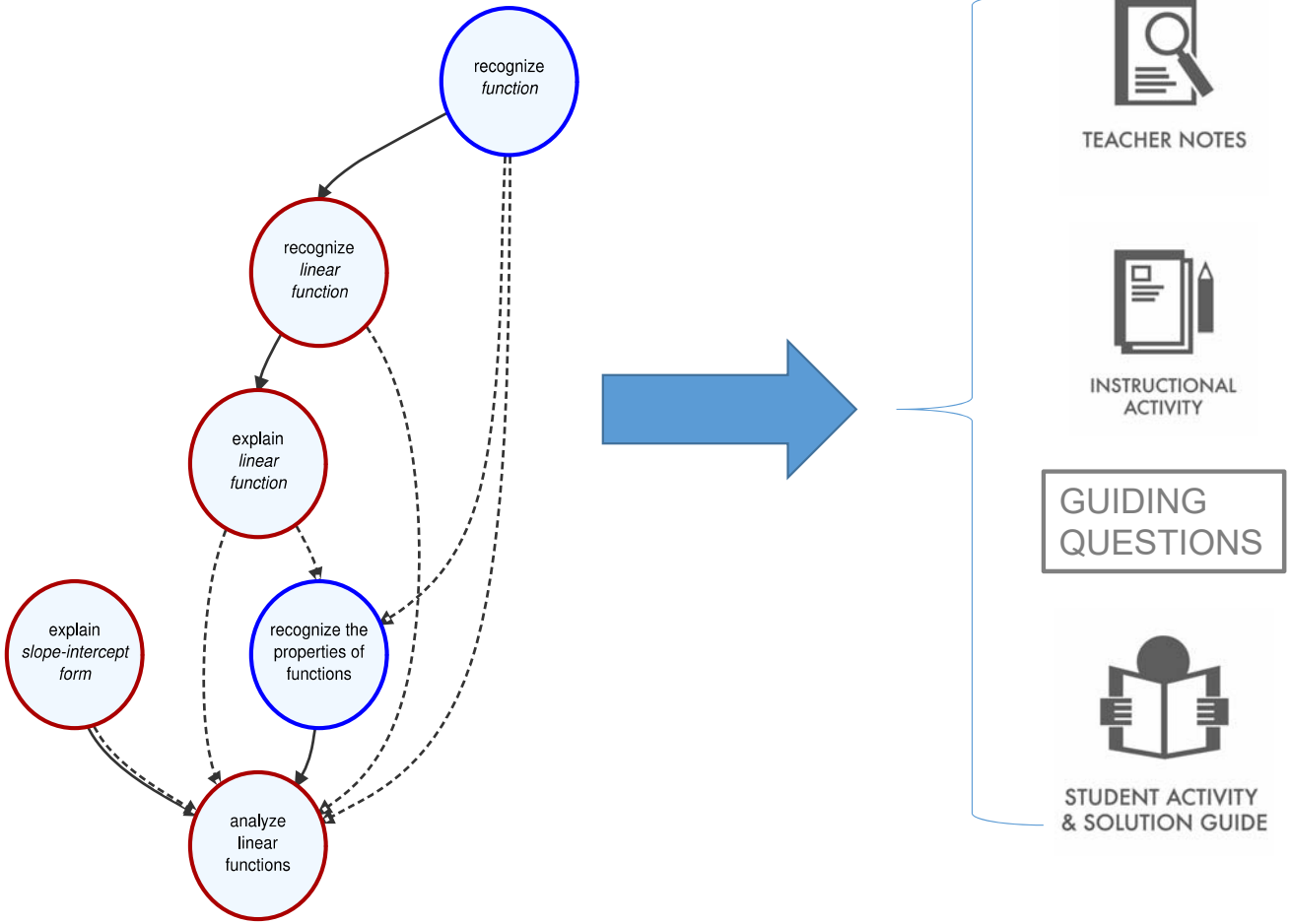
- Lessons learned from previous work with teachers
  - Learning map models contain valuable instructional information.
  - Teachers wanted more content embedded in the map.
- Lessons learned from literature
  - Teachers can productively use learning progressions for instruction.
  - Teachers can interpret student responses within a formative assessment paradigm.
  - Teachers struggle to use learning progressions with assessment data to productively inform instructional decisions.

Alonzo, de los Santos, & Kobrin, 2014; Furtak, 2012; Furtak, Morrison, & Kroog, 2014

Developing Instructional Resources

- Literature
- Conceptual focus
- Holistic approach
  - Iterations of work in the map, teacher notes, activities
- Usability
  - Inclusive of all needed materials
  - Allow teachers flexibility in implementation

Informed Instruction System



Now you try

www.enhancedlearningmaps.org

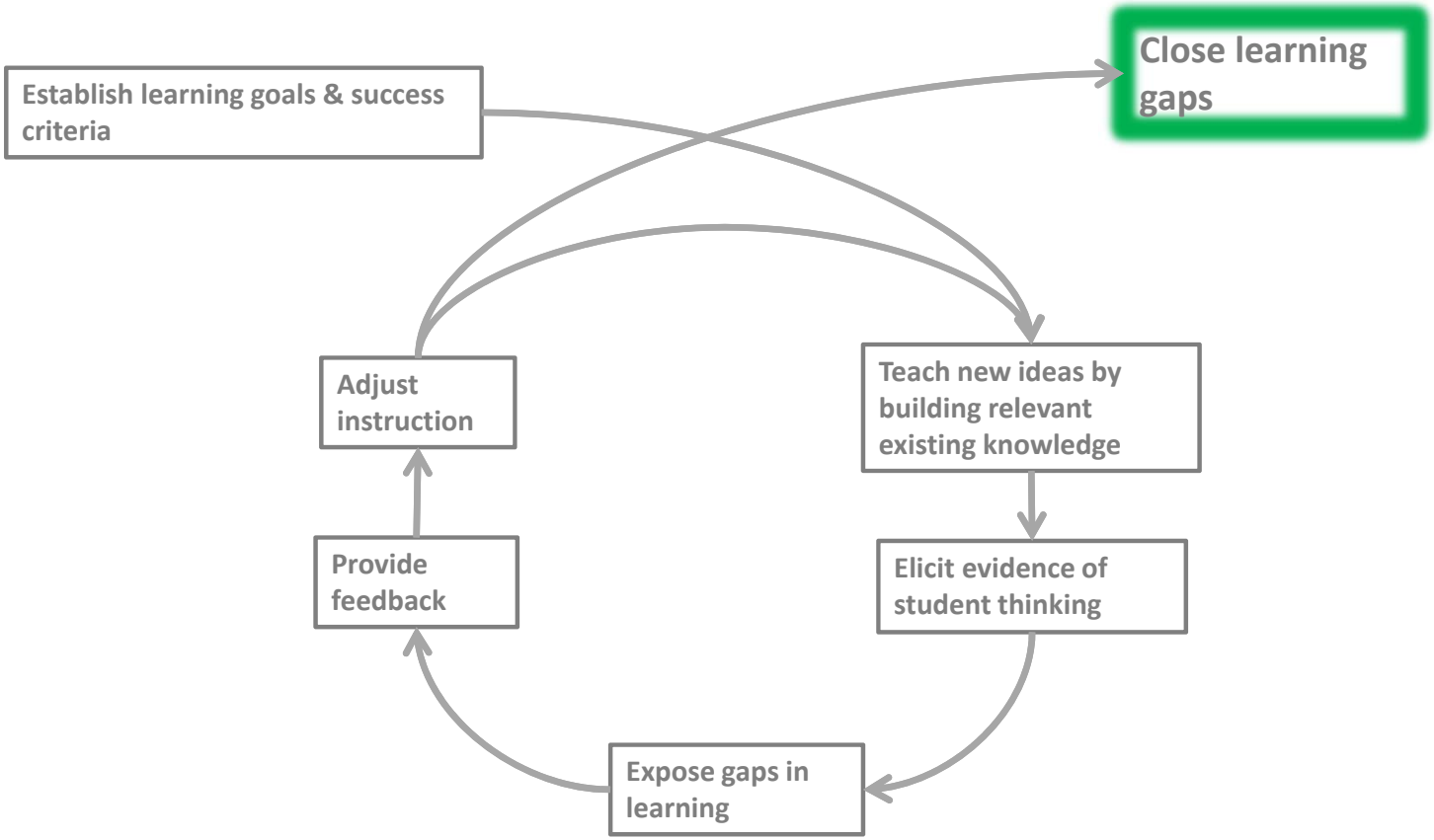
- Email: ELMPartner@ku.edu
- Password: enhancedLMpartner2?

- Math Example:
  - Standard 8.F.2 or
  - Keyword linear function (select *and* rather than *or*)
- ELA Example:
  - Standard RI.3.1 or
  - Keyword lesson

Reactions

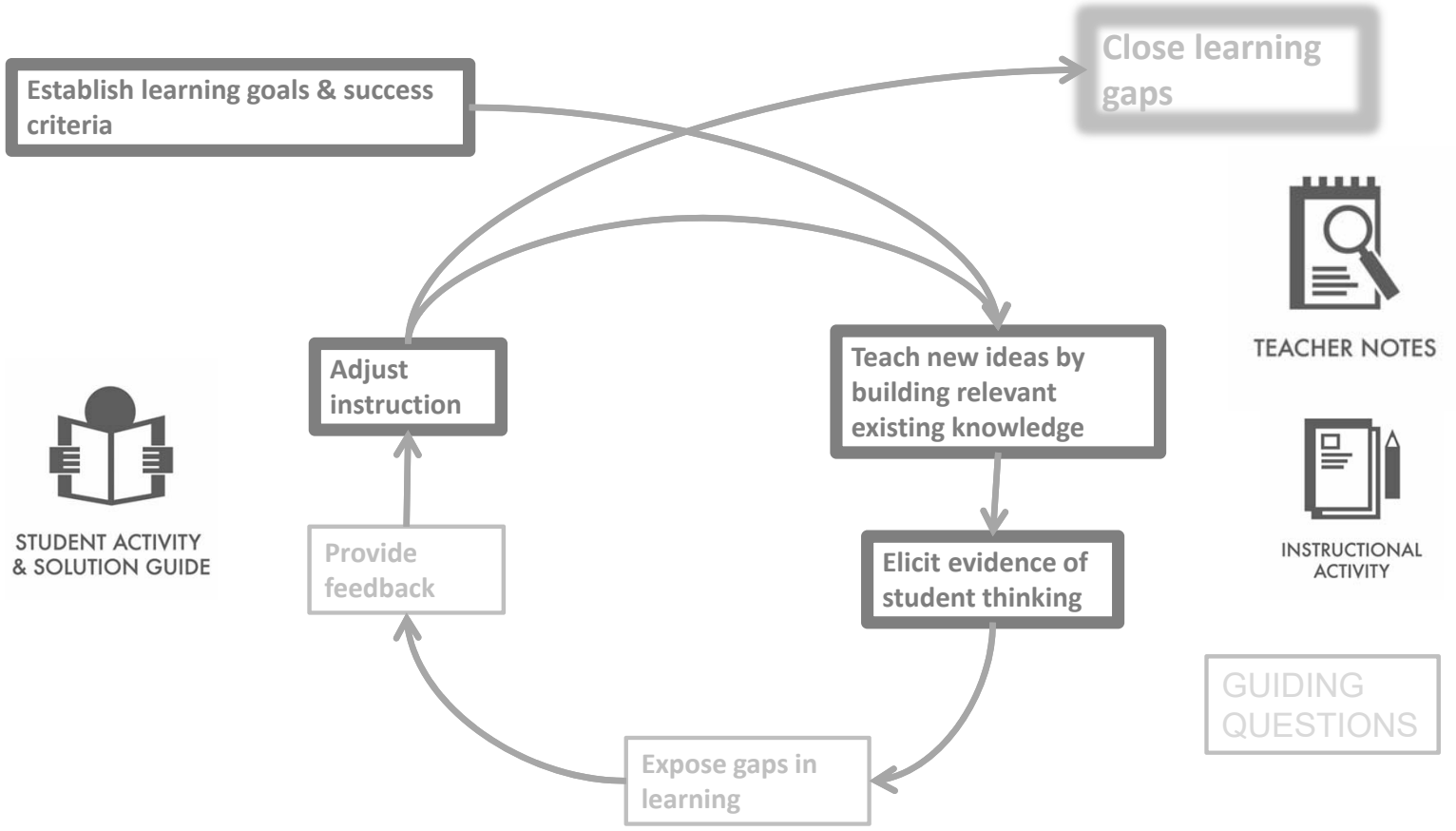
- What information in the Learning Map Model do you think might be useful for teachers?
- What are your recommendations for engaging teachers in the Teacher Notes?
- What are your thoughts about the Instructional Activity and Guiding Questions?
- How do you think teachers might use the Student Activity?
- What are your thoughts about the Solution Guide?
- Do you have feedback about the software?

Formative Assessment Process

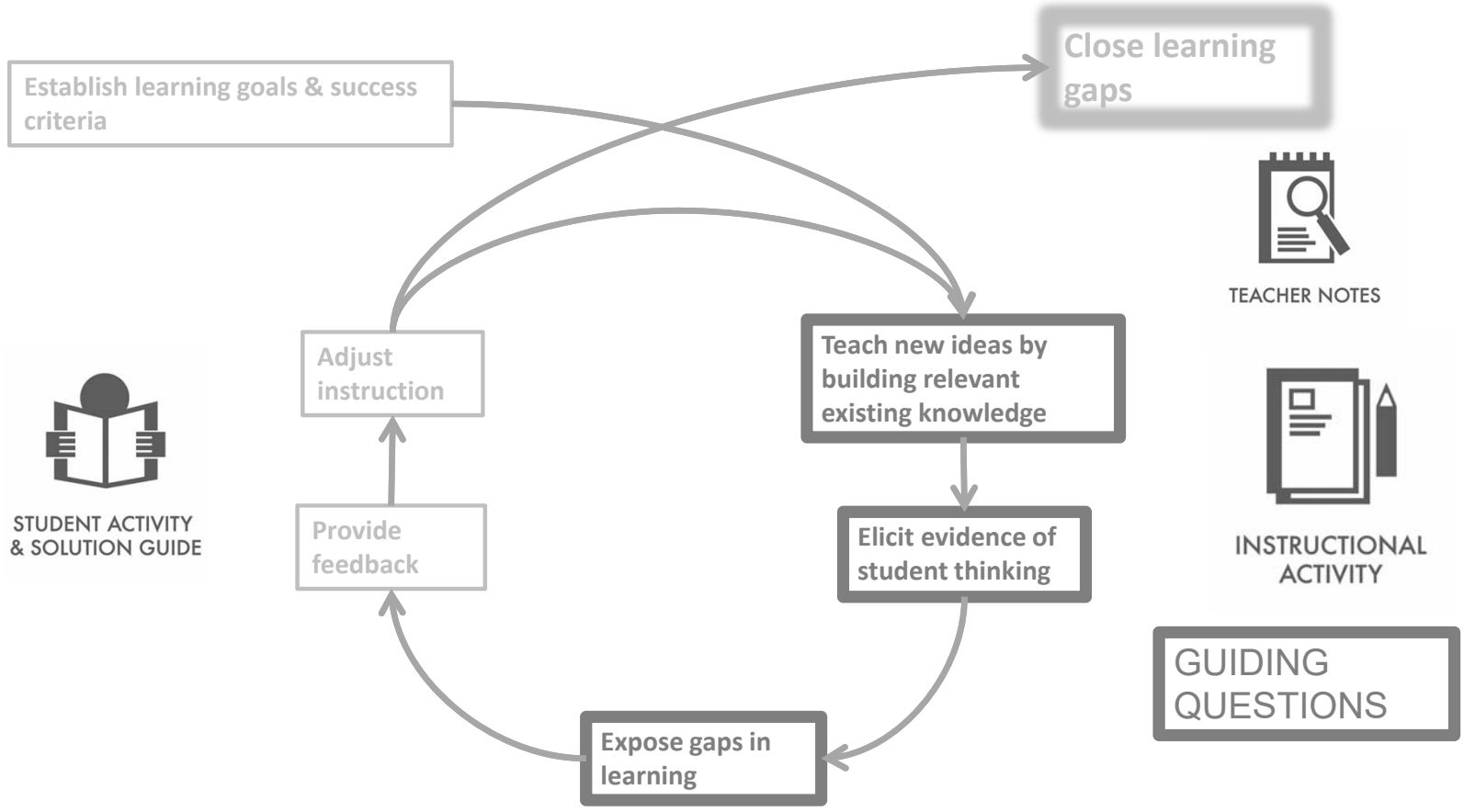


Heritage, 2010

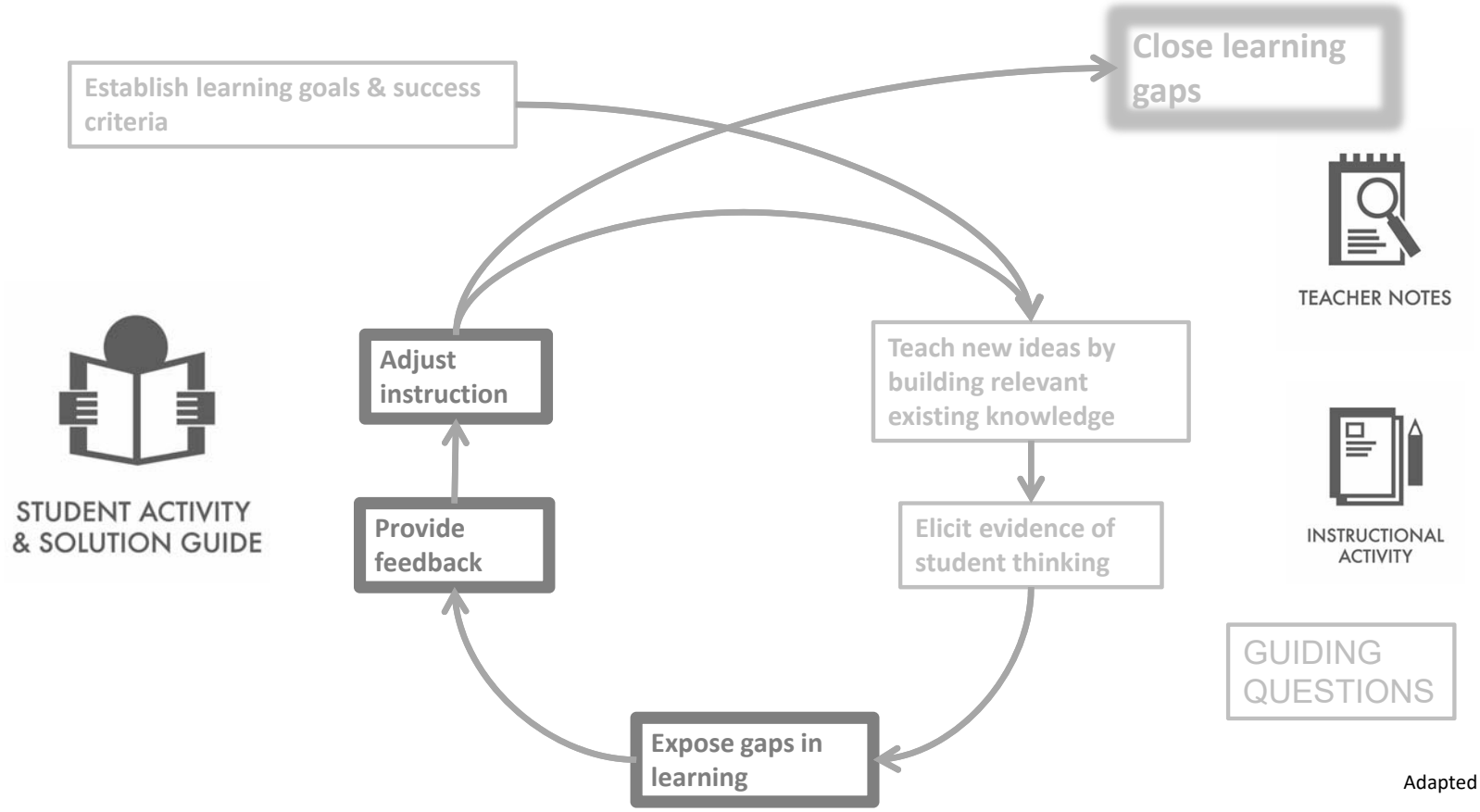
Teacher Notes



Instructional Activity

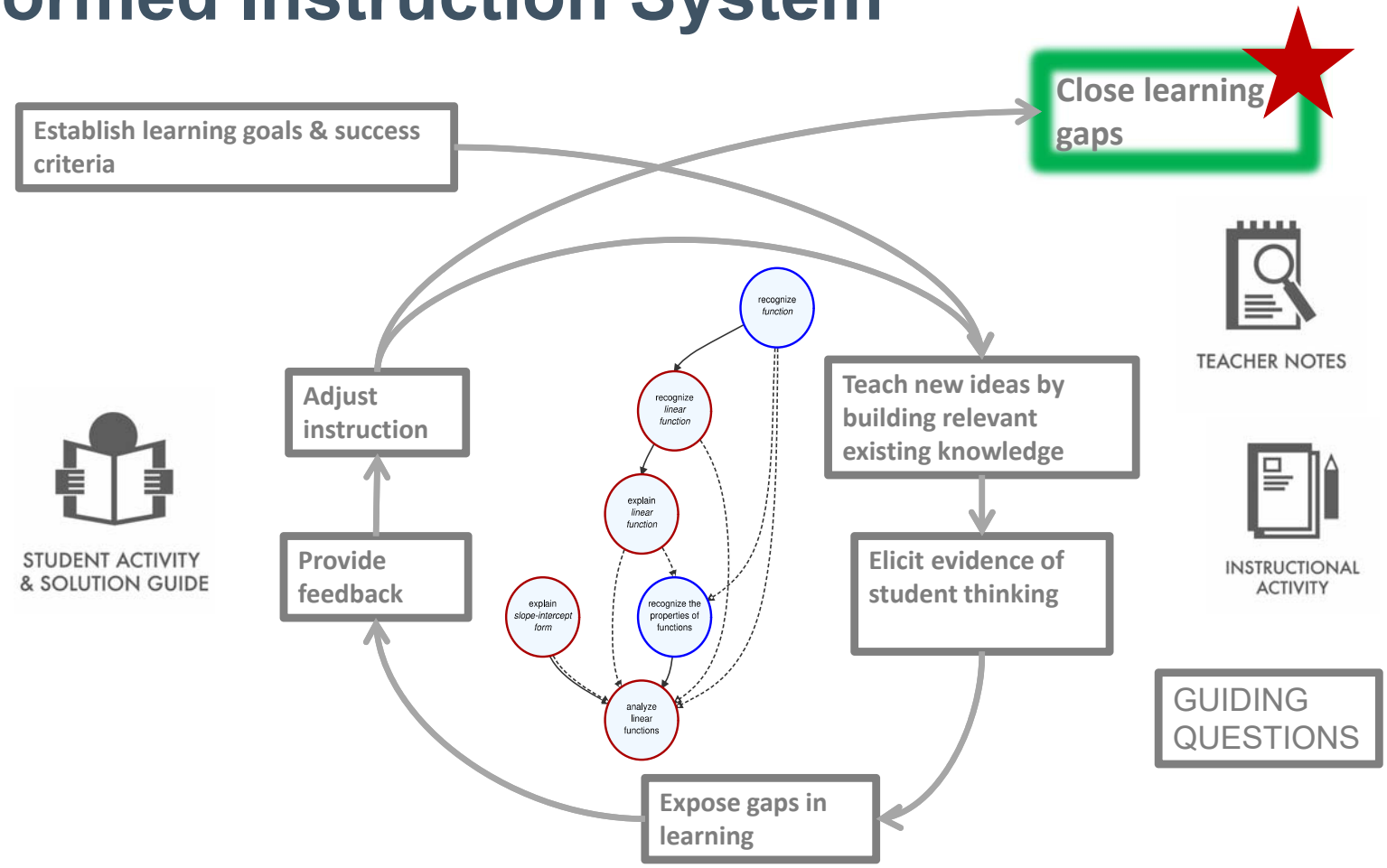


Student Activity & Solution Guide



Adapted from Heritage, 2010

Informed Instruction System



Mathematics Content Development

Grade	August 2016		December 2016
5	5.OA.3	5.NF.1,2	5.MD.3,4
	5.NBT.5	5.NBT.6	5.G.4
6	6.NS.5,6	6.EE.6,7	6.G.1
	6.EE.2.a,c	6.RP.1,3.a	6.SP.1,2,3
7	7.NS.1	7.RP.3	7.G.4
	7.EE.1,2	7.G.4	7.SP.8
8	8.EE.7	8.NS.1,2	8.F.1,2,3
	8.EE.8	8.F.2,3	8.SP.1,2,3

Mathematics Content Development

Grade	August 2017 – December 2017		
2	2.OA.1	2.NBT.1	2.MD.9
	2.OA.4	2.NBT.5	2.G.1
3	3.OA.5,6	3.NF.1,2	3.MD.6,7
	3.OA.8	3.MD.3	3.G.2
4	4.OA.1,2	4.NF.2	4.MD.5
	4.NBT.2	4.NF.6	4.G.3

ELA Content Development

Grade	August 2016		December 2016	
2	RI.2.3	RI.2.6	RL.2.2	
	RI.2.8	RL.2.3	W.2.2	
3	RI.3.1	RI.3.5	RL.3.2	
	RI.3.6	W.3.2	RL.3.3	
4	RI.4.2	RI.4.5	RL.4.3	
	RI.4.8	RL.4.2	W.4.1	
5	RI.5.2	RI.5.8	RI.5.5	RL.5.6
	RL.5.2		W.5.1	

ELA Content Development

Grade	August 2017 – December 2017		
6	RI.6.2	RI.6.5	RI.6.6
	RL.6.2	RL.6.5	W.6.2
7	RI.7.2	RI.7.5	RI.7.8
	RL.7.1	RL.7.6	W.7.2
8	RI.8.2	RI.8.5	RI.8.6
	RL.8.1	RL.8.2	W.8.1

Teacher Feedback

- *"The map can be used to **take students back** to nodes/concepts where they have **gaps** that are preventing them from learning new material."*

- *"I often speak of the learning gaps students have. Now I feel **I have a better tool** to help identify with the goal of filling in those gaps."*

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Teacher Feedback

- *"Teachers can use the map to **look forward or back** depending on the **needs of their students**. This* (map) *could really help an instructor differentiate their teaching."*

- ***"I have a mental roadmap** for the future of equations and functions that my students will be traveling. I really think this helps me visit the topics I currently teach."*

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Lunch

12:00 – 1:00

Future Uses of the Learning Map Structure

1:00 – 1:30

Future Uses

- Tracking progress
- Reporting

Project Evaluation

1:30 – 2:30

Teacher Voices

2:30 – 3:00

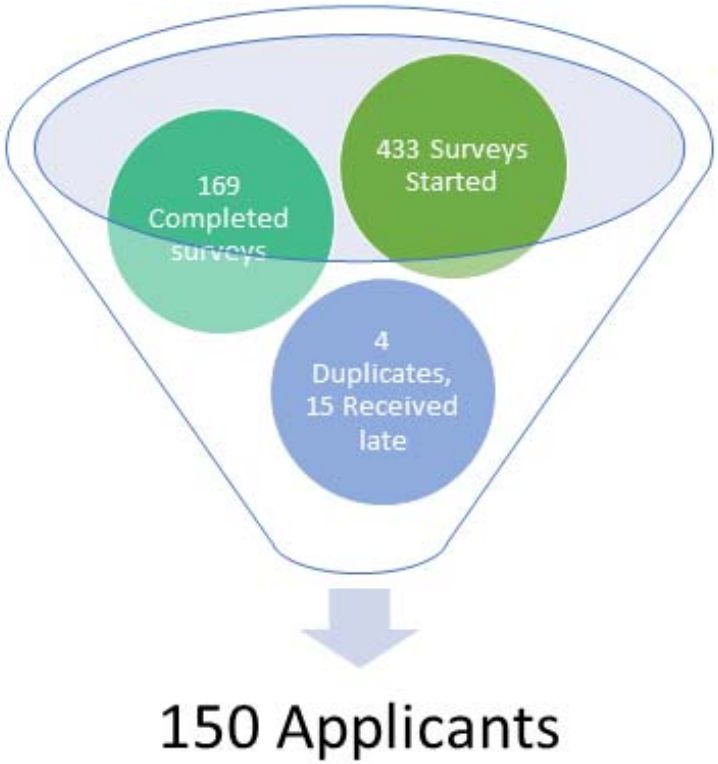
2016 Teacher Participants

3:00 – 3:40

Application Procedures

- Recruitment message provided to partners 3/14/16
- Strategy to target participants varied by state
- Qualtrics survey
    - Why do you want to participate in the project?
    - What do you hope to gain or learn?
    - What is your current understanding of formative assessment?
    - What is your experience teaching special populations?

The Applicant Pool



Why do you want to participate in the ELM project?

"The first thing that caught my attention were words about students being able to make mistakes. This is a integral part of learning and I do not believe we allow enough mistakes in our learning environment. I want to be a part of this project to help foster an environment throughout our state where students learn while making mistakes and grow as a result."

What do you hope to learn from your participation in the ELM project?

"I hope to increase the quality of my ELA units with better formative assessments and to provide better feedback for students to improve in their reading, writing, and listening/speaking skills."

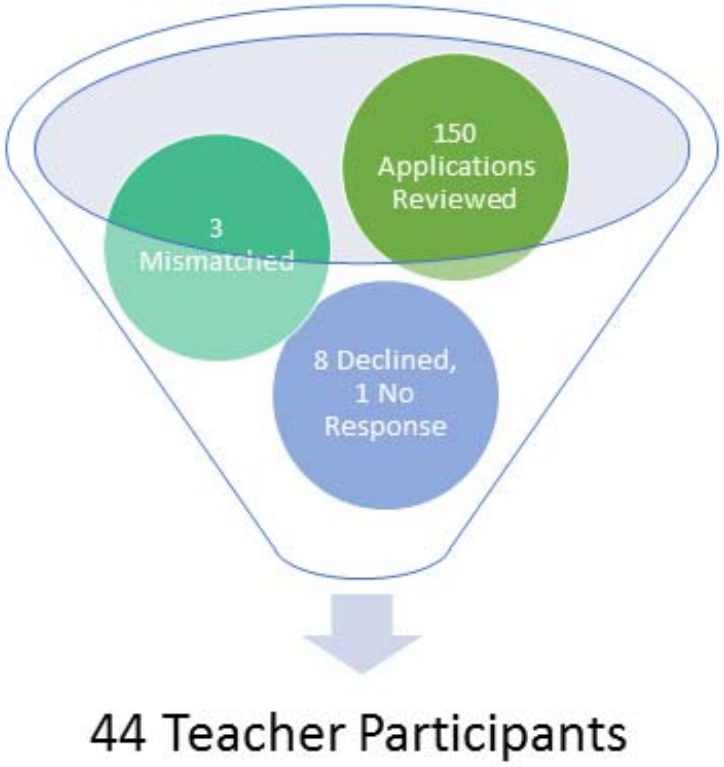
"I would like to learn more ways my students can benefit from formative assessment."

"Quality resources and fresh strategies."

Selection Procedures

- State partners selected teachers using Qualtrics information
- Up to 10 teachers per state, 5 ELA/ 5 math
- Selected participants notified in early May
- Non-selected applicants also notified

Selecting Participants

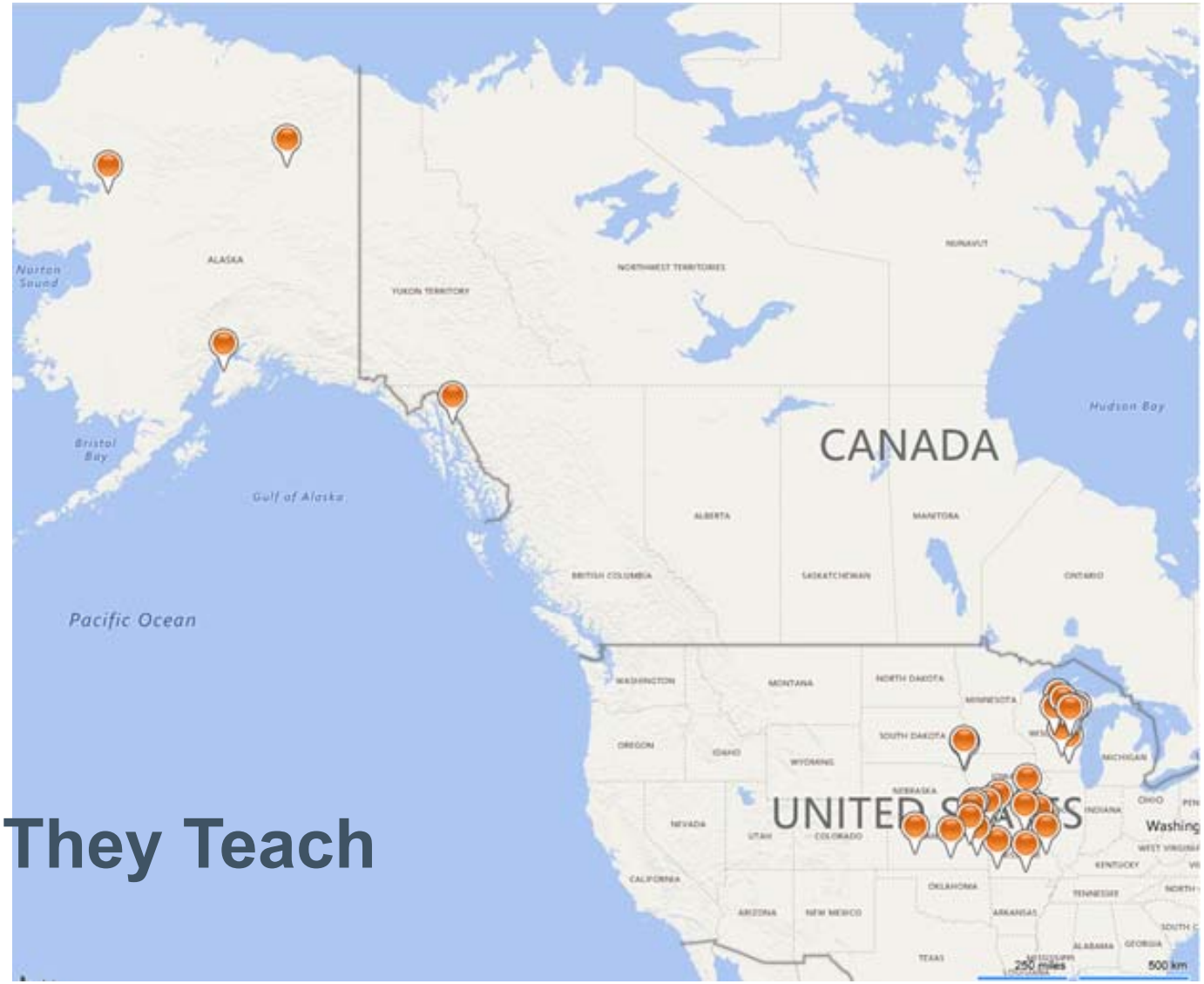


- 24 ELA participants
- 20 Math participants

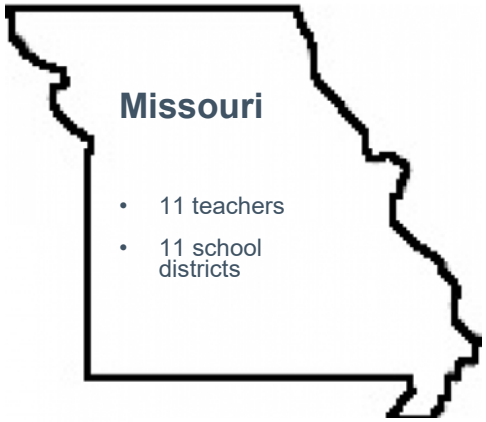
The Teacher Cohort

- 32 participants (72%) teach both ELA and math
- 42 are female, 2 male
- Over half (59%) have a Master's degree +

Where They Teach

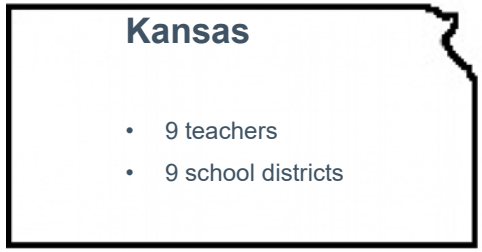


Where They Teach



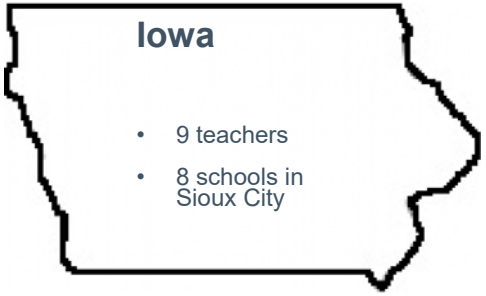
Missouri

- 11 teachers
- 11 school districts



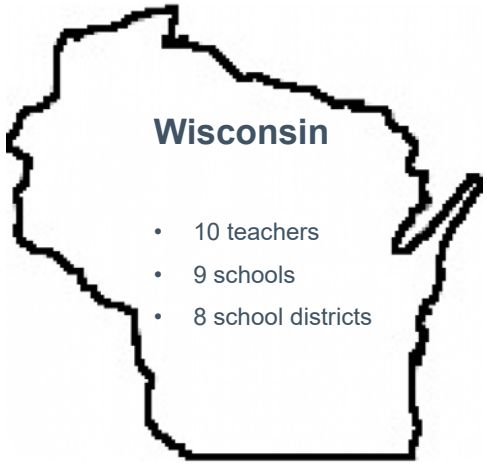
Kansas

- 9 teachers
- 9 school districts



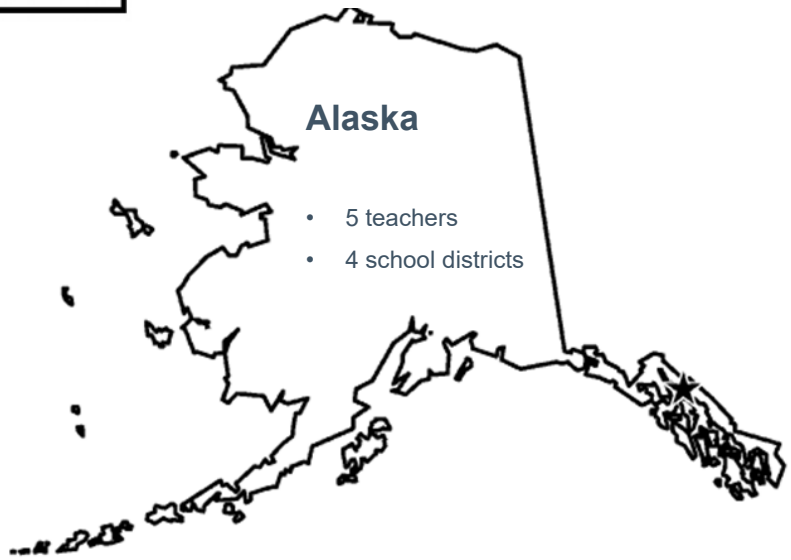
Iowa

- 9 teachers
- 8 schools in Sioux City



Wisconsin

- 10 teachers
- 9 schools
- 8 school districts



Alaska

- 5 teachers
- 4 school districts

Current Use of Formative Assessment

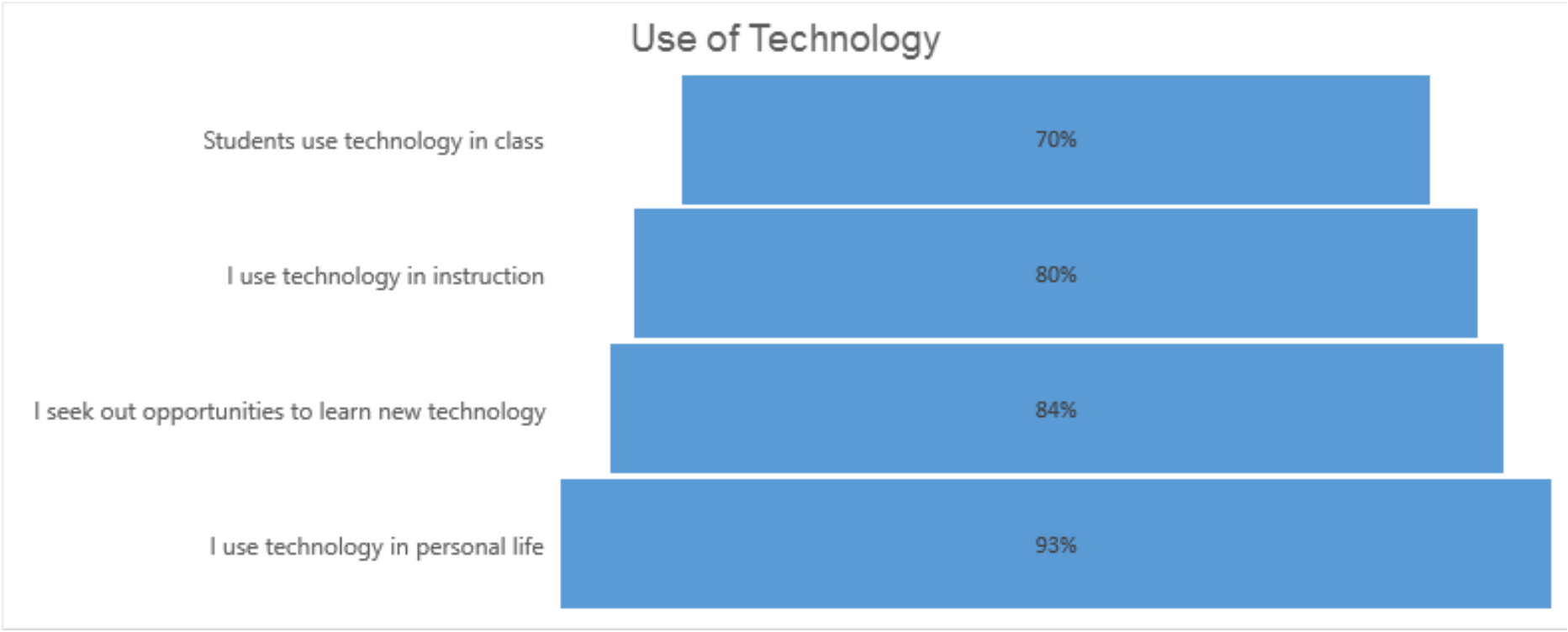
- Pacing of instruction
- To develop probing questions for greater DOK.
- How?
  - Observation of students
  - Warm-up activity
  - Technology assisted (Kahoot, Nearpod, etc)
  - Classroom exit ticket

27% of the cohort said they want to learn more about formative assessment

*"I feel like there are so many learning standards in fourth grade that **I cannot break down the learning** as much as needed. I would like to learn how to do this better."*

*"This is an **area I struggle with**. I want to learn more about how to incorporate my students' thoughts and ideas into the assessment process instead of just using my own observations. I want to know more about using formative assessment as a road map to **help me determine what my students need** to be the most successful in my classroom."*

Frequent Use of Technology



Expectations of Teachers

- Participate in face-to-face training activities.
- Implement up to six instructional units published by the ELM project.
- Submit feedback about each instructional unit.

Teacher Training Overview

- Formative Assessment
- Effective Interventions
- Use the ELM website and Learning Map Software
- Navigate the Enhanced Learning Maps Structure
- Explore instructional resources
- Understand the ELM Feedback Instrument

Ongoing Support for Teachers

- State partner calls
- Content update anticipated for December 2016
  - Related webinar for teacher participants in January 2017
- Limited software changes until July 2017
- Collaboration tool in the ELM software
- Email/phone support

Feedback Instrument

- 75 questions
- 9 sections
    - School environment (one time only)
    - Learning map interface
    - Teacher notes
    - Student materials and supplemental teacher resources
    - Student engagement and understanding
    - Effectiveness of the student activities
    - Feedback guide
    - Final thoughts

Communication and Calendaring for 2016 - 2017

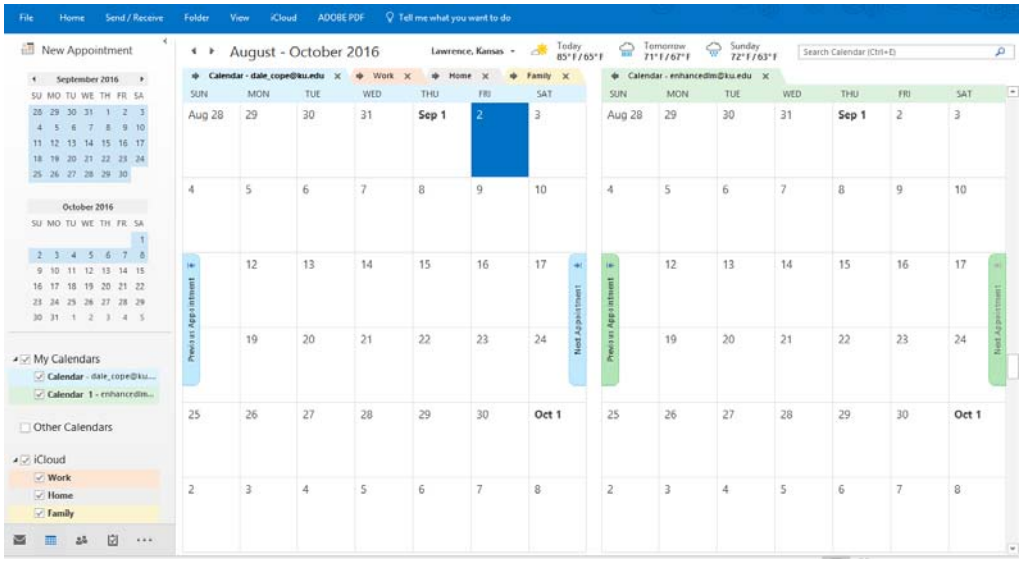
3:40 – 4:15

Communication

- With ELM
- With state partners
- With teachers
- With principals of participating teachers

Meetings

- October 2016 Online Meeting
- January 2017 Online Meeting
- April 2017 Online Meeting



- Summer 2017 Face-to-Face Board Meeting and Training Event

Reception

4:15 – 5:00

Neal Kingston

Director of AAI
Principal Investigator
University of Kansas

Angela Broaddus

Co-Principal Investigator
Center for Educational Testing and Evaluation
University of Kansas

Nancy Lister

Grant Administrator, Career, Standards,
and Assessment Services
Kansas State Department of Education

Contact: EnhancedLM@ku.edu

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