

Research Questions Guiding Use of Digital Curriculum Platforms in Data-Driven Practice

Presented by

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Stakeholder Goals for a Digital Curriculum Platform

- **Curriculum developers** desire robust technology and quality digital content to build standards-aligned units and conduct research to support data-driven practice
- **Educators** desire a digital hub to collaborate, plan, access, and evaluate the effectiveness of standards-based curriculum, instructional, and assessment content

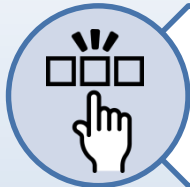


- **Students** desire online instructional materials and information about their progress to help them learn
- **Parents** desire easy digital access to curriculum, resources, and information about student progress to help support student learning at home

Using a Platform to Support Data-Driven Practice



Identify research questions based on stakeholder goals



Select metrics that take advantage of platform capabilities

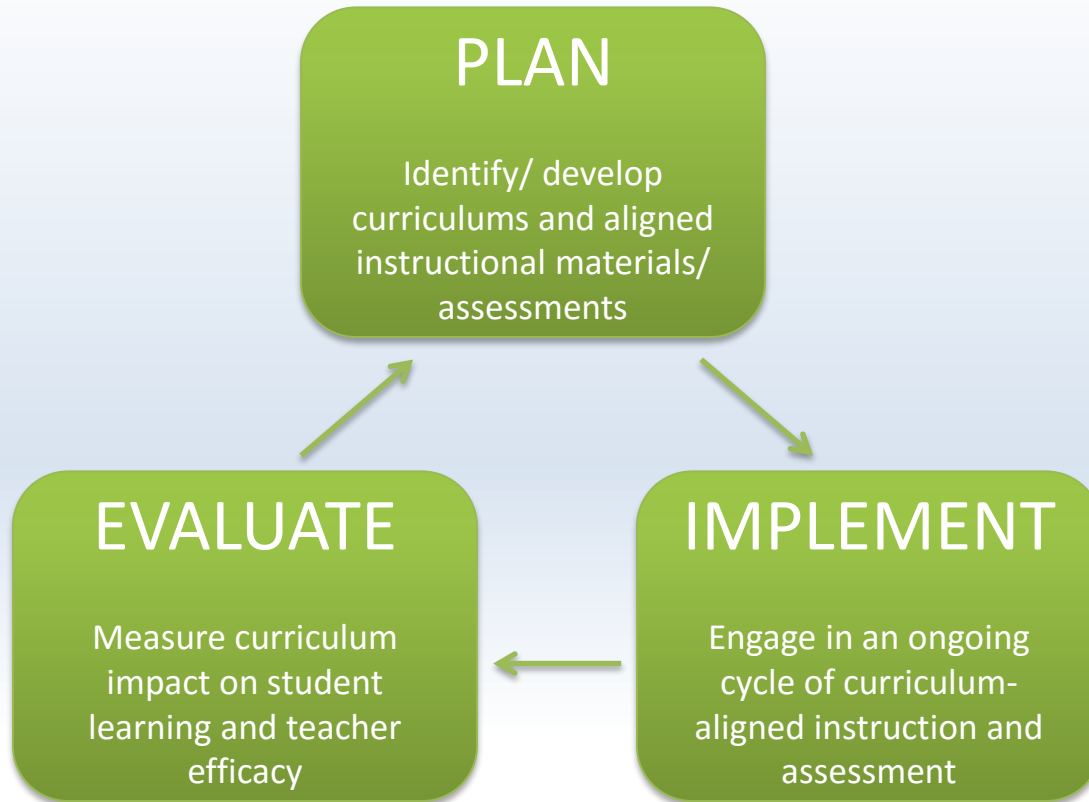


Use platform to continuously collect data and track metrics over time



Evaluate data to drive practice and optimize implementation

Platform Implementation Cycle



Identifying Research Questions

PLAN

Identify/ develop
curriculums and aligned
instructional materials/
assessments

Sample Questions

Does the curriculum comprehensively cover the standards?

Are instructional materials aligned to standards and the curriculum?

Are assessments aligned to standards and the curriculum?

Identifying Research Questions

IMPLEMENT

Engage in an ongoing cycle of curriculum-aligned instruction and assessment

Sample Questions

Is instruction delivered with fidelity to the curriculum?

Are assessment results used to guide differentiated instruction and intervention/enrichment?

Identifying Research Questions

EVALUATE

Measure curriculum impact on student learning and teacher efficacy

Sample Questions

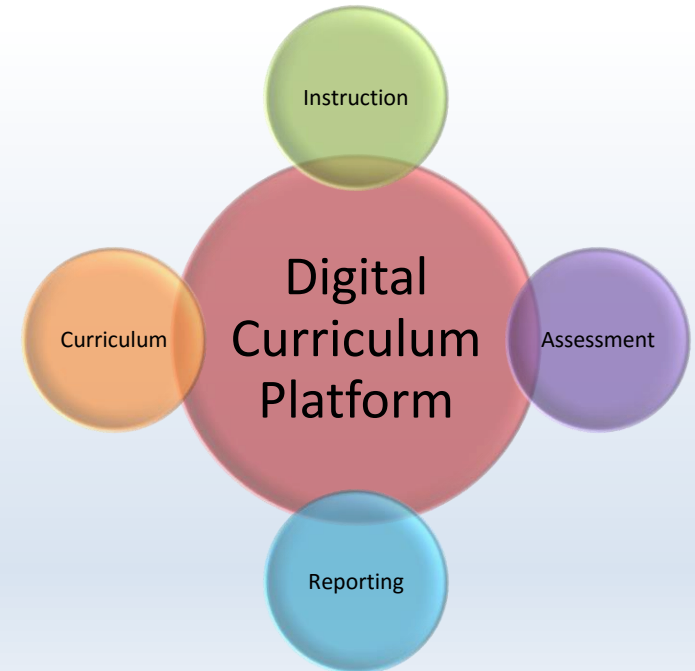
Does the curriculum result in student mastery of standards?

Is the curriculum effective for students of all abilities including special populations?

Do teachers find the curriculum helpful for planning instruction?

Example: The Galileo Digital Curriculum Platform

- Enables rapid development and use of multi-media digital curriculums, units, lesson plans, instructional materials, and assessments
- Supports alignment to Arizona and other state standards in all grades and content areas
- Fully integrated with broader Galileo K-12 Online assessment and reporting system



- Built on the foundation of the ATI research and development program
- Developed in collaboration with educators across Arizona

Innovative Builder Tools for the Digital Age

Digital Curriculum Builder

Create a series of online units representing a course or pacing guide and including vetted digital instruction and assessment resources



Lesson Plan Builder

Organize digital content to plan instruction and assessment for a topic



Dialog Builder

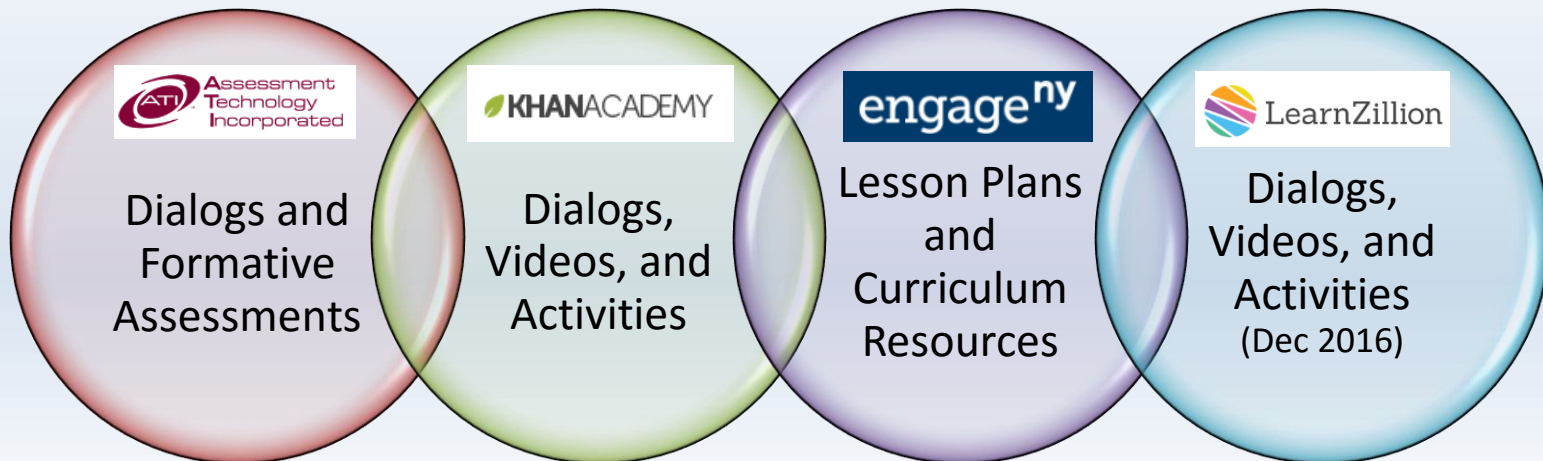
Create online interactive multi-media lessons and assignments integrating instruction, assessment, and teacher-student communication

Builders Support Integration Of:

- Slides organizing content (text, images, videos)
- Standards
- Instructional materials
- Assessment content

Real-Time Access to Valuable Digital Content

A continually growing searchable bank of vetted Arizona standards-aligned instruction and assessment materials



Resource Builder supports integration and sharing of weblink or file resources purchased, identified, or created by the District

Selecting Metrics Based on Platform Capabilities

PLAN Identify/develop curriculums and aligned instructional materials/ assessments	Sample Questions	Sample Galileo Metrics
	Does the curriculum comprehensively cover the standards?	<ul style="list-style-type: none">• Percent of standards covered• Number of times each standard is covered
	Are instructional resources aligned to standards and the curriculum?	<ul style="list-style-type: none">• Number of resources aligned to each standard• Number of resources aligned to each unit
	Are assessments aligned to standards and the curriculum?	<ul style="list-style-type: none">• Percent of standards assessed• Number of times each standard is assessed

Selecting Metrics Based on Platform Capabilities

IMPLEMENT Deliver curriculum-aligned instruction to students	Sample Questions	Sample Galileo Metrics
	Is instruction delivered with fidelity to the curriculum?	<ul style="list-style-type: none">• Number of lesson plans delivered• Number of standards covered• Observational ratings of classroom instruction
	Are assessment results used to guide differentiated instruction and intervention/enrichment?	<ul style="list-style-type: none">• Number of formative assessments administered• Number of intervention groups created

Selecting Metrics Based on Platform Capabilities

EVALUATE

Measure curriculum impact on student learning and teacher efficacy

Sample Questions

Does the curriculum result in student mastery of standards?

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Do teachers find the curriculum helpful for planning instruction?

Sample Galileo Metrics

- Percent of students forecasted to show standards mastery
- Percent of students mastering each standard

- Percent of students in targeted subgroups forecasted to show standards mastery
- Percent of students in targeted subgroups mastering each standard

- Percent of lesson plans with linked unit
- Teacher survey ratings

Collecting and Evaluating Data to Guide Practice

- **Curriculum Developers** can make periodic updates to curriculum, instructional resources, and assessments based on evaluation of content effectiveness and availability of new content
- **Educators** can differentiate instruction, plan intervention/enrichment activities, and adapt assessment in real-time based on student mastery
- **Students** can track their own progress and immediately see the impact of their efforts
- **Parents** can evaluate student progress and focus additional support where it is most needed

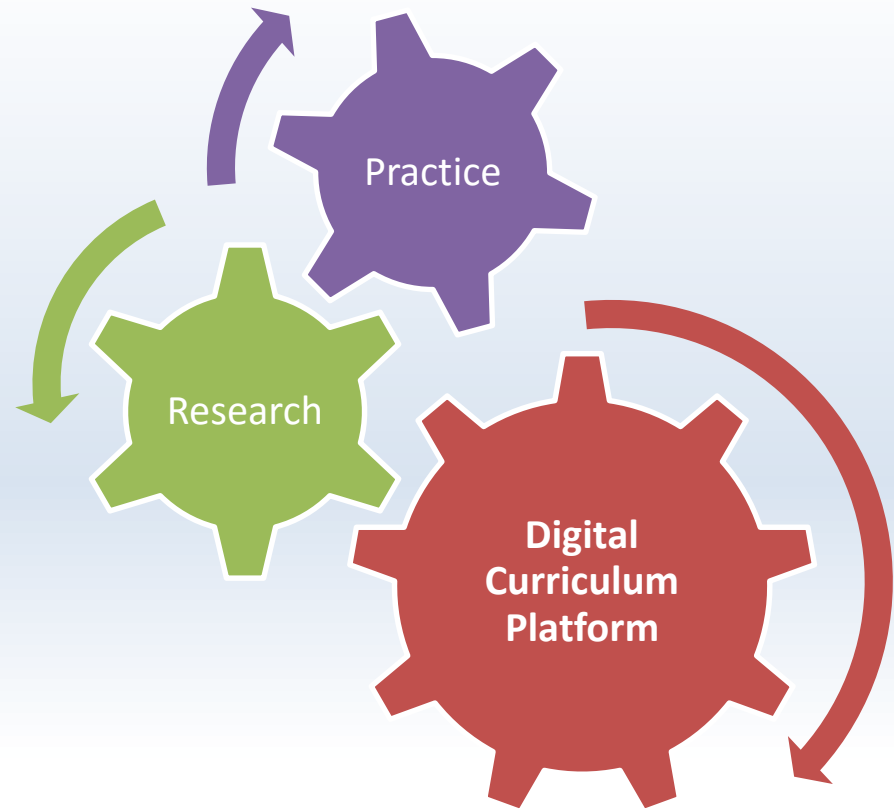
Platform Tools Support:

- Ongoing data collection, evaluation, and improvement by all stakeholders



A Key Role for Digital Curriculum Platforms

- Digital curriculum platforms can be designed to meet the goals of all stakeholders related to curriculum, instruction, assessment, and evaluation
- A cyclical approach to platform implementation can support ongoing research to guide data-driven practice
- Platform capabilities should be considered in selecting metrics for data collection and tracking
- Platforms providing tools that support ongoing evaluation and improvement by all stakeholders will have the greatest impact on practice



Questions?

Thank you for your attention!

I look forward to the opportunity
to discuss these topics further.

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