

# MAXIMIZING STUDENT PROGRESS WITH PROFICIENCY SCREENERS

White Paper

Purpose and Intended Use of Proficiency Screeners

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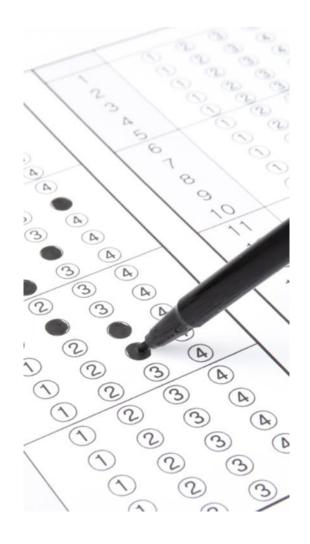
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## **EXECUTIVE SUMMARY**

Current at-risk screening assessments have become a burden on classrooms and teachers, providing a way to assess broad knowledge but not giving insight on student and classroom learning gaps. This white paper explains how IAS proficiency screeners can provide districts with student growth measures that directly align with curriculum mapping while simultaneously providing clear data on standards-level proficiency to help teachers and students address student learning gaps in real time. Using proficiency screeners will improve student achievement in both the classroom and statewide assessments.



**MAXIMIZING STUDENT PROGRESS THROUGH PROFICIENCY SCREENERS** 

# **ASSESSMENT SYSTEM CHALLENGES**



#### **Sparse and Insufficient Data**

The data collected through current assessment systems are too limited to inform meaningful interventions at the district and classroom level.



#### **Classroom Disconnection**

Existing assessments lack coherence with classroom data, such as grades or teacher-created test scores, often providing conflicting and confusing insights.



#### **Testing Burden of Students and Teachers**

Over-testing between benchmarks and classroom assessments happens when assessments don't align with curriculum or provide actionable insights that are needed.

Districts choose what is taught but not what is tested. What if districts have the autonomy to choose?



Tests can align with state learning standards at appropriate times.



Teachers have specific insight to help guide interventions, both on an individual and group level.

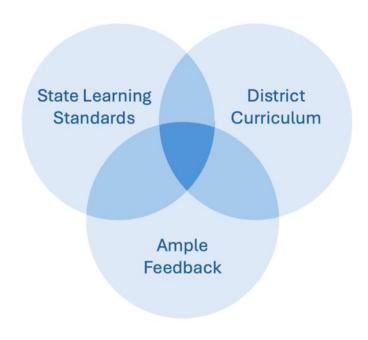


Districts can evaluate and modify curriculum mapping as needed.

# **Introducing IAS Proficiency Screeners**

Innovate Assessment Solutions gives districts flexibility to create a customizable benchmark assessment...

Proficiency Screeners target proficiency in actively taught material, moving away from general screening tests. Unlike commercial screeners, proficiency screeners provide precise data on specific and current standards-level ability rather than using broad indicators. By focusing on what students are learning in real-time, the assessments reduce the burden of unnecessary testing, giving educators maximal instructional time.











# **Proficiency Screeners Plan of Action**



IAS works with each district to create a proficiency screener that aligns with the current standards taught at each time.

Students take the assessment that corresponds with their subject or grade level.

#### Results

By using a novel modeling approach and a predictive model based on current and past proficiency screeners, reports are created to provide information on standard-based proficiency and predictions on state assessments (when available).



#### **Standard Reports**

- Score distributions shown with mastery ranges
- Mastery/Non-mastery proportions and score comparisons
- Item breakdown of correct response probability for each mastery group
- Item characteristic curves and IRT parameter estimates



#### **District Reports**

- Within-building comparisons of teachers
- Predicted proficiency on state summative assessment



#### **Teacher Reports**

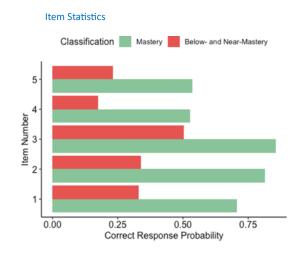
- Guided professional development questions for analyzing and items
- Guided questions for interpreting results and implementing interventions in classroom
- Item option choice selection data for classroom
- Mastery/Non-mastery status for individuals on each standard

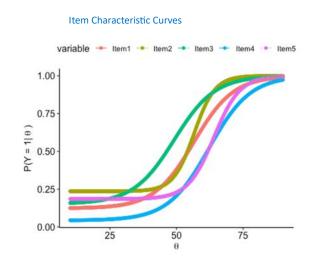
# **Results by Standard**

Proficiency Screeners provide a thorough report for each standard, making it easier to determine which standards needs more attention.



Proficiency Screeners also break down information by item within each standard to determine what knowledge in each standard is troublesome.





# **Student Intervention and PD Opportunities**

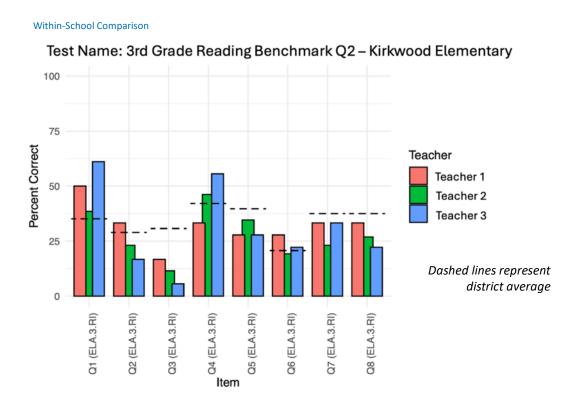
Teachers can provide effective interventions based on individual results as well as create optimal student groups based on student standard mastery.



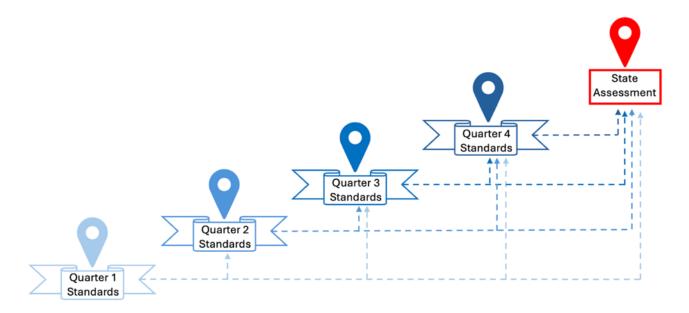
Student 1-26 for standards M.HS.A.CED.2 - M.HS.F.IF.2

Student	M.HS.A.CED.2	M.HS.A.REI.2	M.HS.F.IF.2
Danielle Crider	Below	Mastery	Mastery
Brandon Crumb	Near	Below	Below
Lara Dionisio	Below	Mastery	Below
Brett Encinias	Below	Below	Below
Samantha Garcia	Mastery	Relow	Mastery

In professional development, teachers can share successful teaching strategies for specific content within a standard or brainstorm on more effective pedagogical strategies.



# **Predicting Upcoming Standard Success**



By using previous data (when possible), we have the ability to predict how individuals will perform on upcoming standards throughout the annual curriculum. This leads to understanding which standards effect the learning of subsequent standards.

EXAMPLE: Using data from an urban public school district's 4<sup>th</sup> grade mathematics assessment, the table shows which standards from previous assessments had the biggest predictive impact on standard 4.NF.5, a standard assessed in quarter 4.

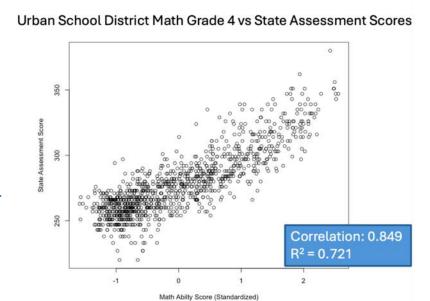
Standard	4.NF.5 SD Increase	
4.NBT.2	0.147*	
4.NBT.4 (Q1)	0.028	
4.OA.3	0.004	
4.NBT.5	0.157*	
4.NBT.4 (Q2)	0.008	
4.OA.3	0.030	
4.NF.1	0.126*	
4.NF.2	0.070*	
4.NF.3	0.088*	

This table shows the increase in standard deviations in 4.NF.5 per one standard deviation increase in each assessed standard.

# **Predicting Future State Assessment Scores**

A higher order model is used to place standards onto an overall math ability continuum that can not only be used to track student growth throughout the year but also is highly predictive of state score assessments.

These are results of from an urban school district's 4<sup>th</sup> grade math assessment.



Grade	State Score R <sup>2</sup>	RMSEA (Model Fit)	Trait Reliability (Omega)
3	0.848	0.049	0.886
4	0.830	0.057	0.889
5	0.783	0.047	0.905
6	0.784	0.064	0.861
7	0.747	0.032	0.859
8	0.742	0.070	0.846



# Transform Assessments to be Effective for Your District.



At Innovative Assessment Solutions, we strive to design evaluations that complement your curriculum. Let's work together to harmonize assessments with educational progress.