# Be ALLIN!

# Holding Accountability Tests Accountable

IDOE Assessment Literacy Conference November 7-8, 2019

# Thank You!

### **ALL IN Project Team**



**Dr. David Rutkowski**Associate Professor
Educational Leadership and Policy Studies



**Dr. Leslie Rutkowski**Associate Professor
Inquiry Methodology



Yusuf Canbolat
PhD Student
Educational Leadership and Policy Studies



# A L L

IN



**A** ssessment L iteracy L eaders INdiana



I know two things about being a teacher. First, I have to like coffee. And second, I have to hate standardized assessment. I know standardized assessments are influencing education but we are not taught anything about them. Why?

### **IU Pre-service Teacher**

### Why standardized assessment literacy?



Standardized assessments govern education debates and policy



There is no other single criteria that teachers and schools are judged on more than assessment results



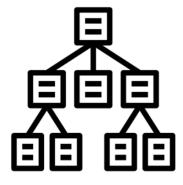
Testing is big money and we need a critical and informed voice



## **Standards**



Survey



Curriculum/Workshops



### Standardized Assessment Literacy Standards

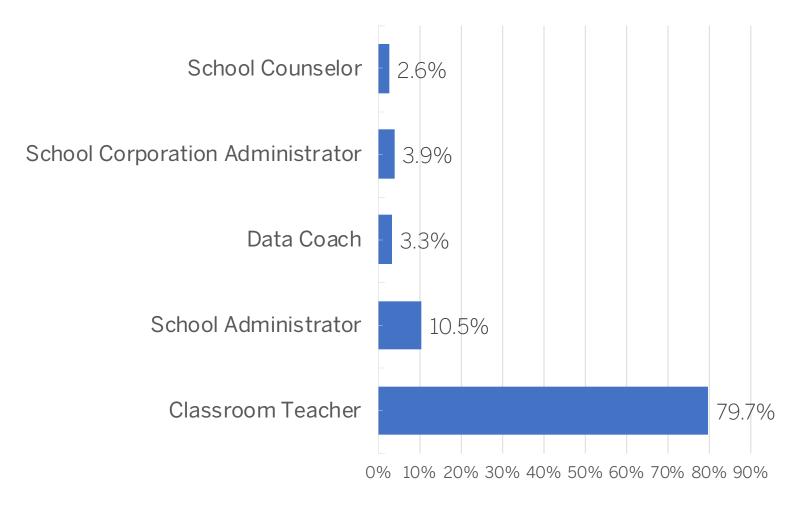
- Balanced assessment systems
- Different purposes for student assessment
- 3. Definitions of and uses for different types of assessments
- Differences between the types of assessment tools 4.
- 5. Different types of assessment methods and when each is appropriate
- Non-technical understanding of measurement concepts associated with 6. assessments
- Non-technical understanding of test theory
- 8. Selecting high-quality assessments
- 9. Reporting results and specific circumstances when each is useful
- Typical standardized test development process

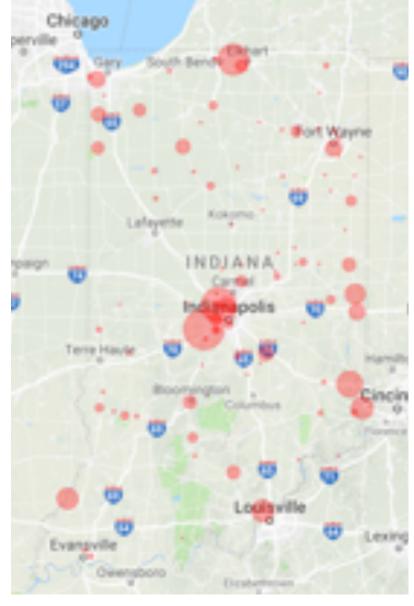




## Assessment Literacy Survey

1071 responses (since March 2019)





## Educators reported a lack of knowledge in...

- Explaining the difference between reliability and validity when referring to standardized tests
- Understanding reliability information presented in a test manual
- Understanding validity information presented in a test manual
- Explaining the concept of measurement error
- Explaining the difference between norm-referenced and criterion-referenced interpretations
- Explaining key differences between classical test theory and item response theory
- Interpreting a test blueprint from a standardized test



### Curriculum/Workshops (a sample)

- Assessment Literacy: Why?
- How a test comes to life
- Validity
- Reliability (including measurement error)
- Fairness
- Norm and Criterion-referenced interpretations
- Computer-adaptive testing
- Purposes of interim assessments
- Understanding and interpreting interim/standardized assessment score reports
- Evaluating and selecting high-quality (standardized/interim) assessments

# 0

### What we've learned (so far)

- Two days is too much
- Too technical...not great, especially after lunch
- Finding more practical examples
- Need time to make sense of score reports
- General concern about the amount of testing
- Assessment literacy is for everyone
- Feeling the need to teach to the test but not wanting to do that

### Standardized Assessment Cartoon

# Holding Accountability Tests Accountable

What can we do?

# Holding Accountability Tests Accountable

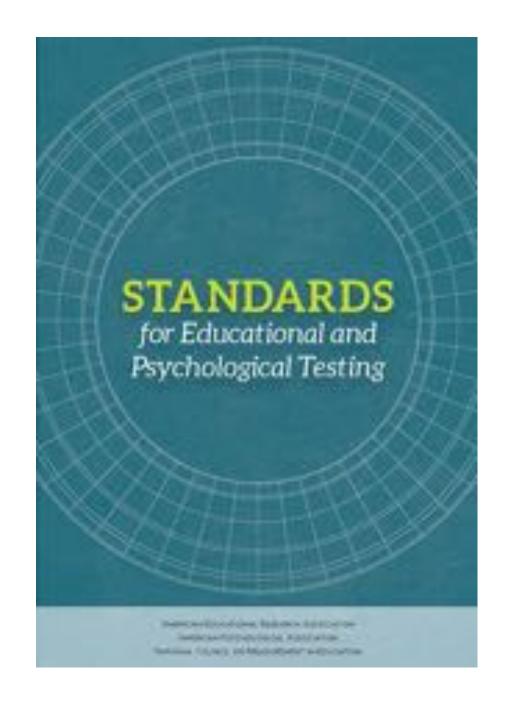
What can we do?

# "Just get rid of them"



# A ssessment L iteracy L eaders

INdiana



## Test Development Standards



# Don't let the assessment do more than it was designed for



# Don't let the assessment do more than it was designed for

How will the assessment be used?



From a talk Dr. Charity Flores gave at Indiana University in March 2019

- Remember, ILEARN is a summative assessment. It's data is intended to be used to:
  - Certify mastery of a set of academic standards or learning goals
  - Identify areas of strength and weakness in overall instruction or educational programming
  - Flag students needing further support
- Summative data is not intended to advise teachers and students of "next steps" in instruction as the data is not specific enough for this purpose.

# Interim Assessments

#### How will the assessment be used?

- The interim assessment should tell you how it can be used, just like ILEARN.
- Make sure the assessment provides evidence to support those purposes



# Indiana Formative (Interim) Assessment Grant Assessment Program Evaluation Protocol

#### 1. Interim/Benchmark Assessment Program:

Assesses English/Language Arts and/or Mathematics.

#### 2. Construct Coherence:

Aligns to the breadth and depth of Indiana Academic Standards and employs strong test development processes.

#### 3. Comparability and Reliability:

Provides a reliable measure across forms and administrations.

#### 4. Fairness and Accessibility:

Provides a fair and accessible measure for all students.

#### 5. Consequences and Uses:

Provides data to differentiate instruction for students and to inform educational decision-making.



# Recognize the limits of standardized assessments





- We get a single score for each student on each domain/subdomain
- But! That's an educated guess
  - The test should tell us how good the guess is and how far we *might* be from "the truth"

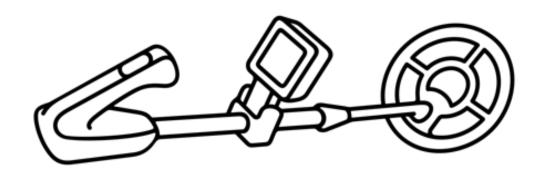


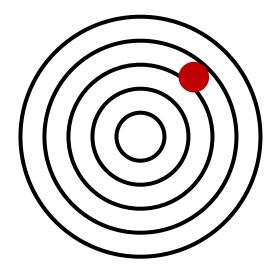
- We get a single score for each student on each domain/subdomain
- But! That's an educated guess
  - The test should tell us how good the guess is and how far we might be from "the truth"





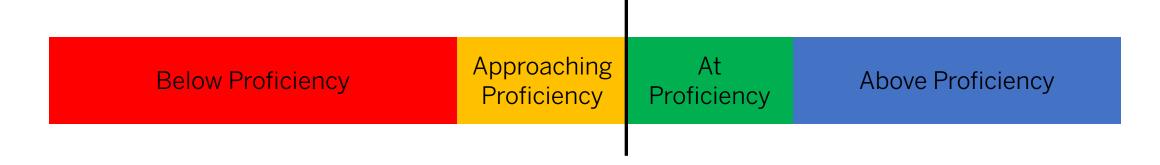
- We get a single score for each student on each domain/subdomain
- But! That's an educated guess
  - The test should tell us how good the guess is and how far we might be from "the truth"





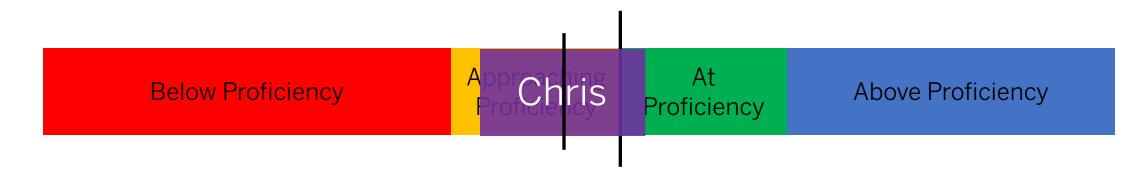


- We get a single score for each student on each domain/subdomain
- But! That's an educated guess
  - The test should tell us how good the guess is and how far we *might* be from "the truth"





- We get a single score for each student on each domain/subdomain
- But! That's an educated guess
  - The test should tell us how good the guess is and how far we might be from "the truth"





## **A** Predictive Problems

Did Not Pass	Pass	Pass+
Sally James	Ryan Ahmed	Sayed Rose
Alejandro Leo Susan	Jennifer	
Elizabeth Marshall		



#### **Predictive Problems**

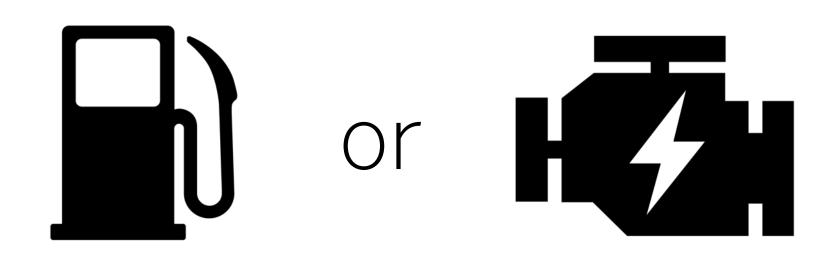
Did Not Pass	Pass	Pass+
Sally	Ryan	Sayed
James	Ahmed	Rose
Alejandro	Jennifer	
Leo		
Susan		
Elizabeth		
Marshall		



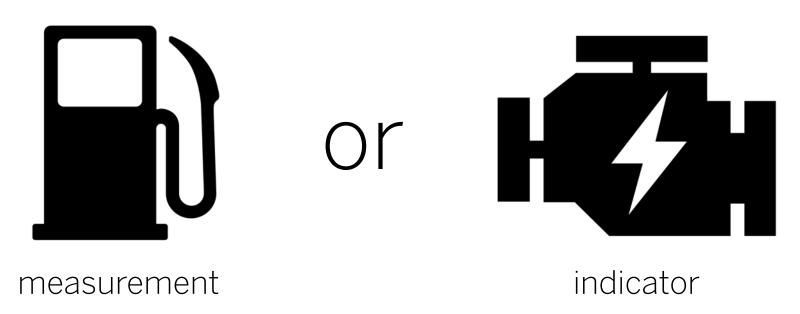
#### **CAUTION:**

These students are at the beginning of their learning and based on our data, only about 50% of these predictions will be accurate.

# How do we view standardized assessment data?

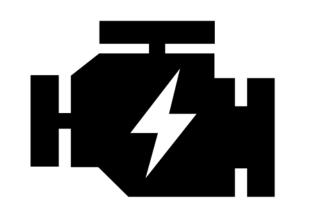


# How do we view standardized assessment data?



Garner, B. (2018). The epistemic foundations of mathematics teachers' data use: What do the data say? Paper presented at the 2018 AERA Annual Meeting, New York, NY. Link [handout], Link [AERA]





Data as measurement	Data as indicator
Data use is objective	Data use is interpretive
Learning is correctness	Learning is sensemaking
Teaching is technical	Teaching is responsive



# Measurement: Targeted re-teaching

#### Assessment cycle:

- 1. Interim assessment
- 2. Identify focal topics
- 3. Targeted re-teaching days
- 4. Exit ticket

Targeted re-teaching may temporarily increase test scores, but is unlikely to support students' thinking or teacher learning.

#### Students are sorted into binary groups: "got it" or "missed it"

Greta: Topics 7 and 9 are the worst, right? Like 8 is okay?

Coach Diane: Topic 7—there were 290 kids that missed that whole topic.

Greta: That missed all three [questions]?

Coach Diane: Either three or two out of the three.

Greta: Okay. Okay.

Coach Diane: 290. The Focus Topic 8 is what they did best on.

#### Obvious instructional response: Re-teaching with questions isomorphic to initial assessment

Coach Diane: So, the kids that are getting intervention on Topic 9, what're the rest of the kids gonna do?

Greta: Just have enrichment.

June: How about, you know, that could be a good time maybe to do what you were talking about, some time on Gizmos or something.

# Indicator: Analyzing student thinking

#### Assessment cycle:

- 1. Interim assessment
- 2. Identify focal students
- 3. Collect student work
- 4. Analyze work
- 5. Plan instructional response
- 6. Assessment

Analyzing students' sensemaking supports rich teacher learning opportunities and has potential to support more ambitious and equitable instruction.

#### Centering student sensemaking around content: Bubble kids are likely to show common misconceptions

Mr. Donovan: What about Tommy?

Deanna: I think Tommy got the table...finding the unit rate, but then, when he had to apply it and figure out how much money for seven hours, it was supposed to be \$35, and he put \$3.05.

. . . .

Deanna: I mean, I think for the most part, he has the concept, but...

Coach Lindsay: Well, but it sounds like he has the procedure for how to find unit rate

. . .

Deanna: He can't — So, I, I'm gonna say no. It says how much money will he earn in seven hours and he put \$3. And if he looks at the table, he should be able to figure out that's not right.

#### Plan instruction to respond to student thinking:

Coach Lindsay: Okay. So, what are we gonna ask them to get them back on track? Give students feedback on their work, have them analyze their errors.



#### **Get Involved!**



#### **Get involved!**

- Standard setting
- Scoring of open-ended items
- Other opportunities?
  - NAEP
  - ACT/SAT
  - School corporation committees

# Holding Accountability Tests Accountable

What can we do?



Don't let the assessment do more than it was designed for



Recognize the limits of standardized assessments





**Get involved** 

### **ALL IN Workshops**

- Focused on understanding and using standardized assessments appropriately.
- Can be held in your school or school corporation (although our travel costs keep us relatively close to Bloomington)
- We are hosting a one-day workshop at Indiana University on Friday, Feb. 7, 2020.
  - Depending on demand, we will schedule additional workshops.

# Understanding and Using Standardized Assessments Workshop

- When: February 7, 2020 from 9:00a 3:30p
- Where: Indiana University School of Education
- Cost: FREE
- Credit: 8-10 PGPs (depending on completed activities)
- Note: Limited enrollment Space for about 20 educators
- We are asking for a short statement of support from administrator to secure a spot.

#### Thank You

#### **Graphics**

From the Noun Project

- Fuel by Yair Cohen
- Check Engine by Alexander Skowalsky
- Hand by Stephen Borengasser
- Error by Hea Poh Lin
- accountability by Max Hancock
- test by Andrei Yushchenko
- leader by Wilson Joseph
- Survey by sevgenjory
- Badge by Andrew Doane
- Metal Detector by Oleksandr Panasovskyi
- decision tree by Becris
- Swiss Army Knife by MaxineVSG
- learn more by Leonardo Schneider
- cancel by Arthur Shlain
- Money by Joe Mortell
- Judge by zidney

Jim Popham's "Test Score Precision" Link

Story. (Aug. 26, 2006). Cult of standardized testing. *Rock River Times*. Link

#### References

AERA., APA., & NCME. (2014). *The standards for educational and psychological testing*. American Educational Research Association (AERA), American Psychological Association (APA), and National Council on Measurement in Education. <u>Link</u>

Garner, B. (2018). The epistemic foundations of mathematics teachers' data use: What do the data say? Paper presented at the 2018 AERA Annual Meeting, New York, NY. Link [handout], Link [AERA]

Indiana Department of Education. (Oct. 4, 2019). Assessment literacy. Link

Kahl, S. R., Hofman, P., & Bryant, S. (2013). Assessment literacy standards and performance measures for teacher candidates and practicing teachers. Measured Progress. <u>Link</u>

Michigan Assessment Consortium. (2017). Assessment literacy standards. <u>Link</u>
Popham, W. J. (2018). Assessment literacy for educators in a hurry. ASCD Books. Link

Our Website
bit.ly/alliniu
bit.ly/beallin\_slides





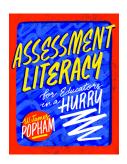
Assessment literacy consists of an individual's understanding of the fundamental assessment concepts and procedures deemed likely to influence educational decisions. (p. 2)



Assessment literacy is the set of beliefs, knowledge and practices about assessment that lead a teacher, administrator, policymaker, or students and their families, to use assessment to improve student learning and achievement. (p. 2)



- Understands the types and purposes of assessment;
- Believes that assessment is an essential part of teaching and learning;
- Utilizes data to drive informed decision-making for the success of every child.



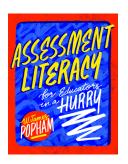
Assessment literacy consists of an individual's understanding of the fundamental assessment **concepts** and procedures deemed likely to influence educational decisions. (p. 2)



Assessment literacy is the set of beliefs, **knowledge** and practices about assessment that lead a teacher, administrator, policymaker, or students and their families, to use assessment to improve student learning and achievement. (p. 2)



- Understands the types and purposes of assessment;
- Believes that assessment is an essential part of teaching and learning;
- Utilizes data to drive informed decision-making for the success of every child.



Assessment literacy consists of an individual's understanding of the fundamental assessment concepts and **procedures** deemed likely to influence educational decisions. (p. 2)



Assessment literacy is the set of beliefs, knowledge and **practices** about assessment that lead a teacher, administrator, policymaker, or students and their families, to use assessment to improve student learning and achievement. (p. 2)



- Understands the types and purposes of assessment;
- Believes that assessment is an essential part of teaching and learning;
- Utilizes data to drive informed decision-making for the success of every child.



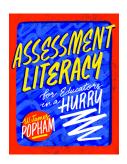
Assessment literacy consists of an individual's understanding of the fundamental assessment concepts and procedures deemed likely to influence educational decisions. (p. 2)



Assessment literacy is the set of **beliefs**, knowledge and practices about assessment that lead a teacher, administrator, policymaker, or students and their families, to use assessment to improve student learning and achievement. (p. 2)



- Understands the types and purposes of assessment;
- Believes that assessment is an essential part of teaching and learning;
- Utilizes data to drive informed decision-making for the success of every child.



Assessment literacy consists of an individual's understanding of the fundamental assessment concepts and procedures deemed likely to **influence educational decisions**. (p. 2)



Assessment literacy is the set of beliefs, knowledge and practices about assessment that lead a teacher, administrator, policymaker, or students and their families, to use assessment to **improve student learning and achievement**. (p. 2)



- Understands the types and purposes of assessment;
- Believes that assessment is an essential part of teaching and learning;
- Utilizes data to drive informed decision-making for the success of every child.