

# *CogAT*<sup>®</sup> in the Classroom

## Local Norms and Equitable Identification



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Professor at University of Alabama, Co-Author of Cognitive Abilities Test (Form 8)



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Classroom



Dr. Joni Lakin

*CogAT*<sup>®</sup>

- Co-Author of *CogAT* (Form 8)
- Professor of Educational Research at the University of Alabama
- Research interests include:
  - Equitable use of test data and equitable talent identification processes
  - Test validity and fairness
  - Broadening participation in STEM careers and promoting STEM retention





## Monica Simonds

- Director of Advanced Learning Programs and Services, Richardson ISD
- Texas Association of Gifted and Talented Secretary
- Co-author of *A Coordinator's Guidebook for Implementing Evidence-based Practices in Gifted Education: Professional Learning Modules*
- 33 years in education (K-12)

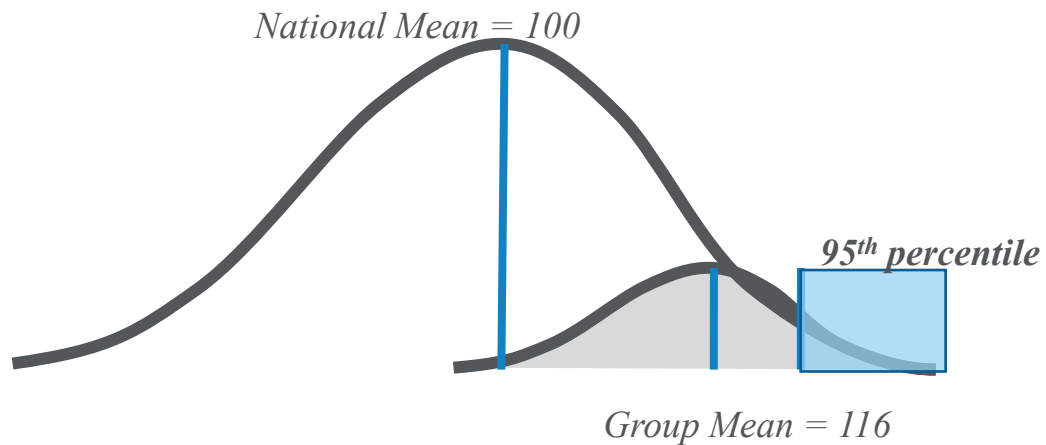




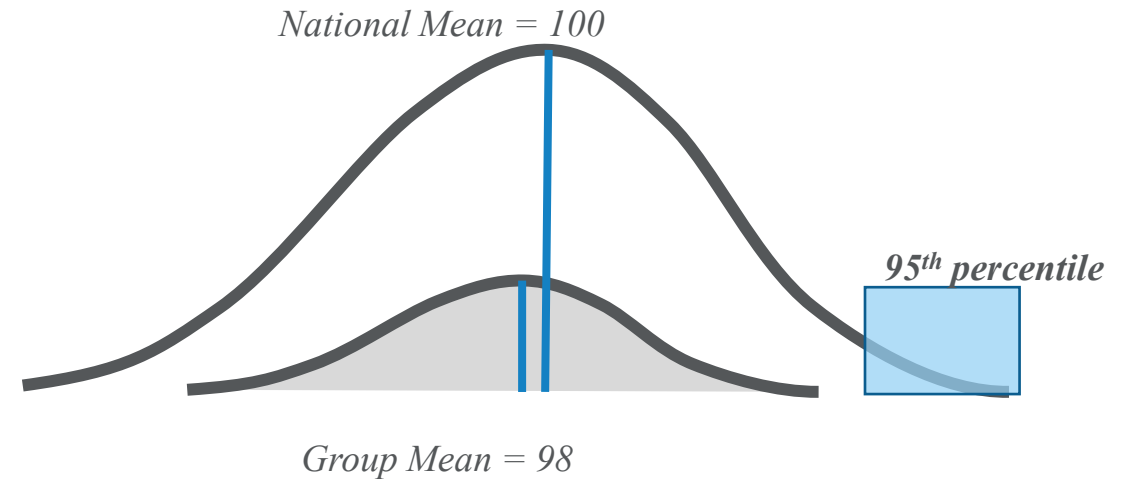
## A tale of two schools:

- National norms provide a baseline for comparisons, but local norms are most relevant to the local student population

### “Too many” gifted students

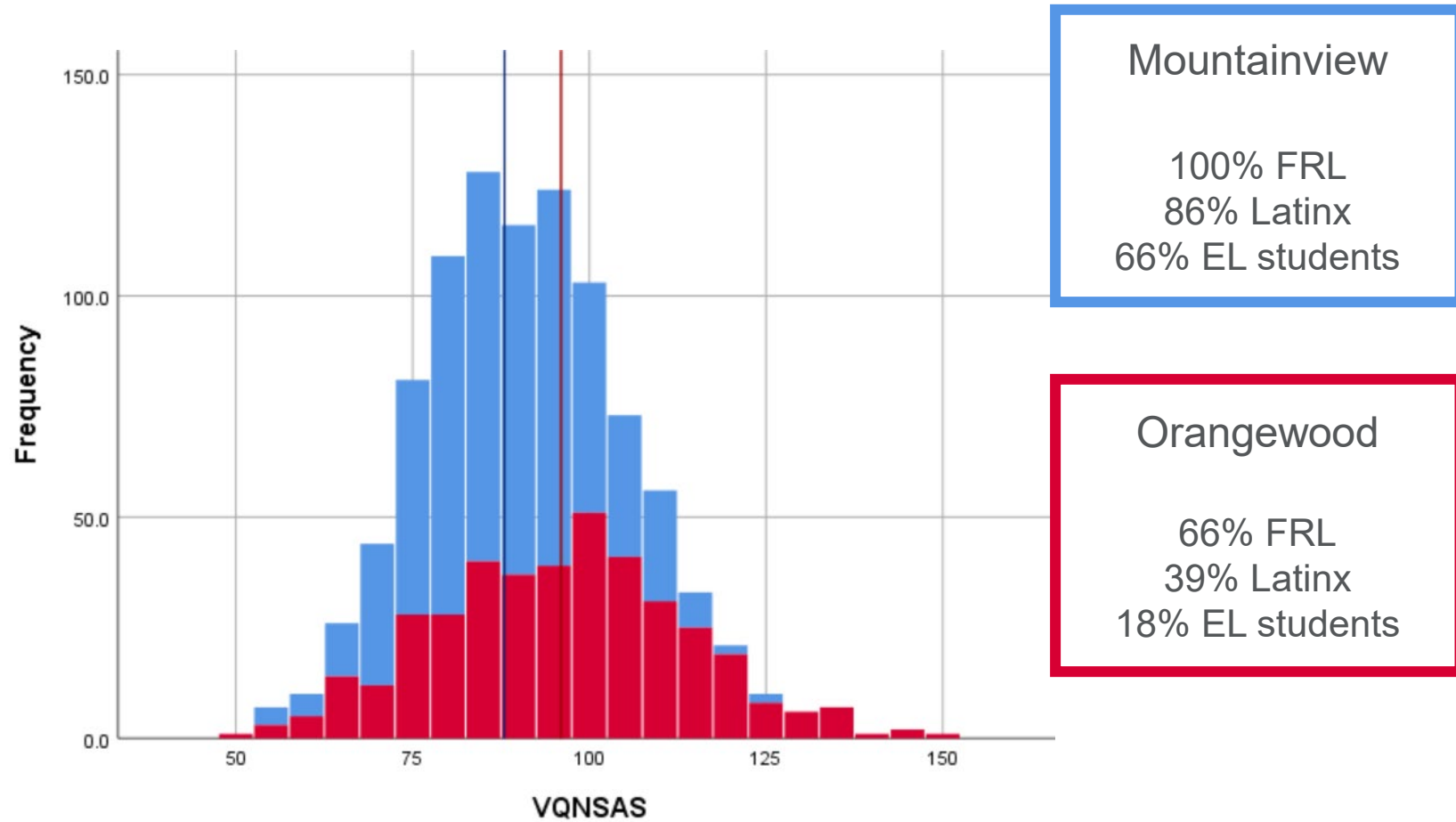


### “Too few” gifted students



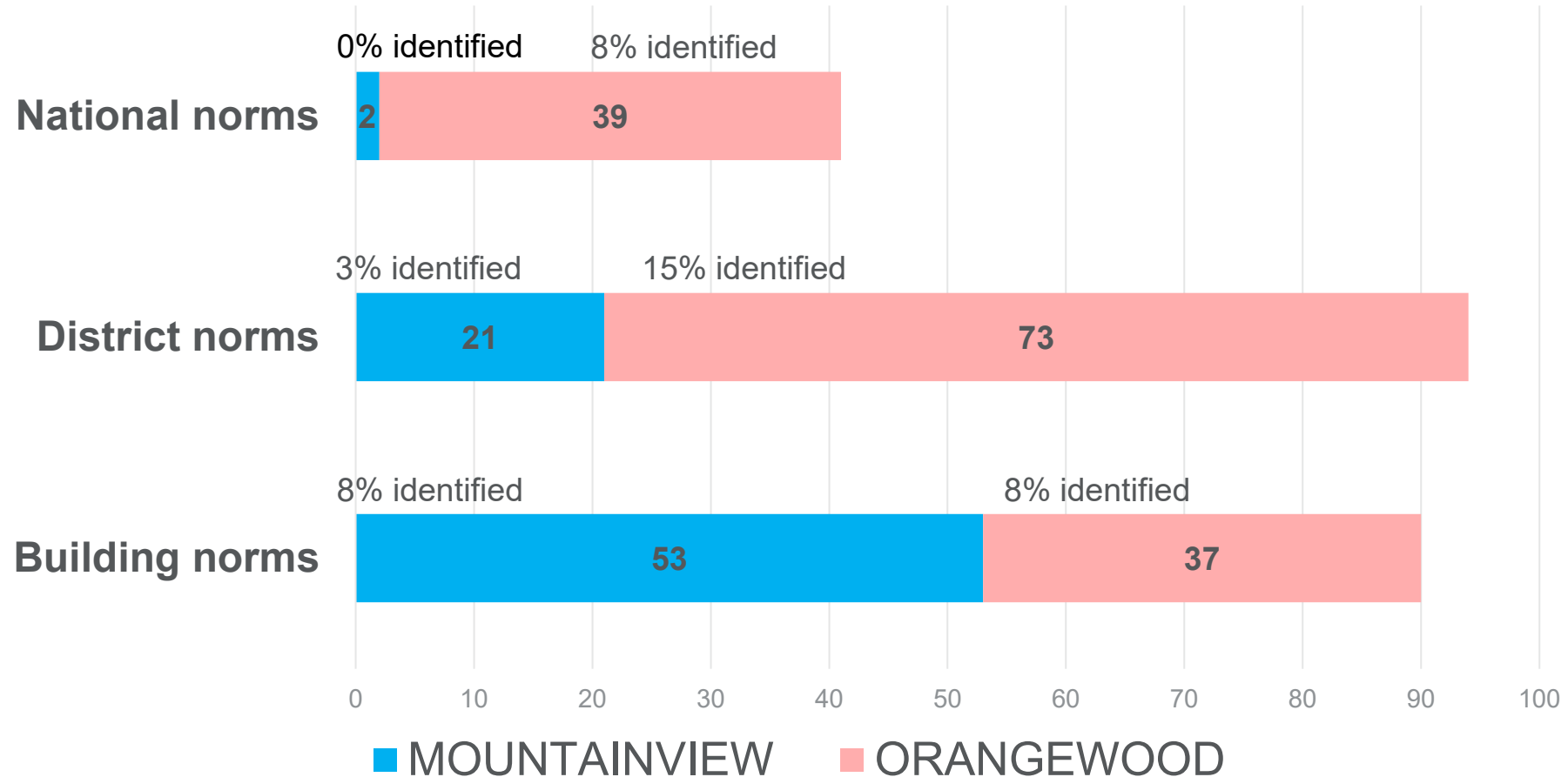


# Building Differences





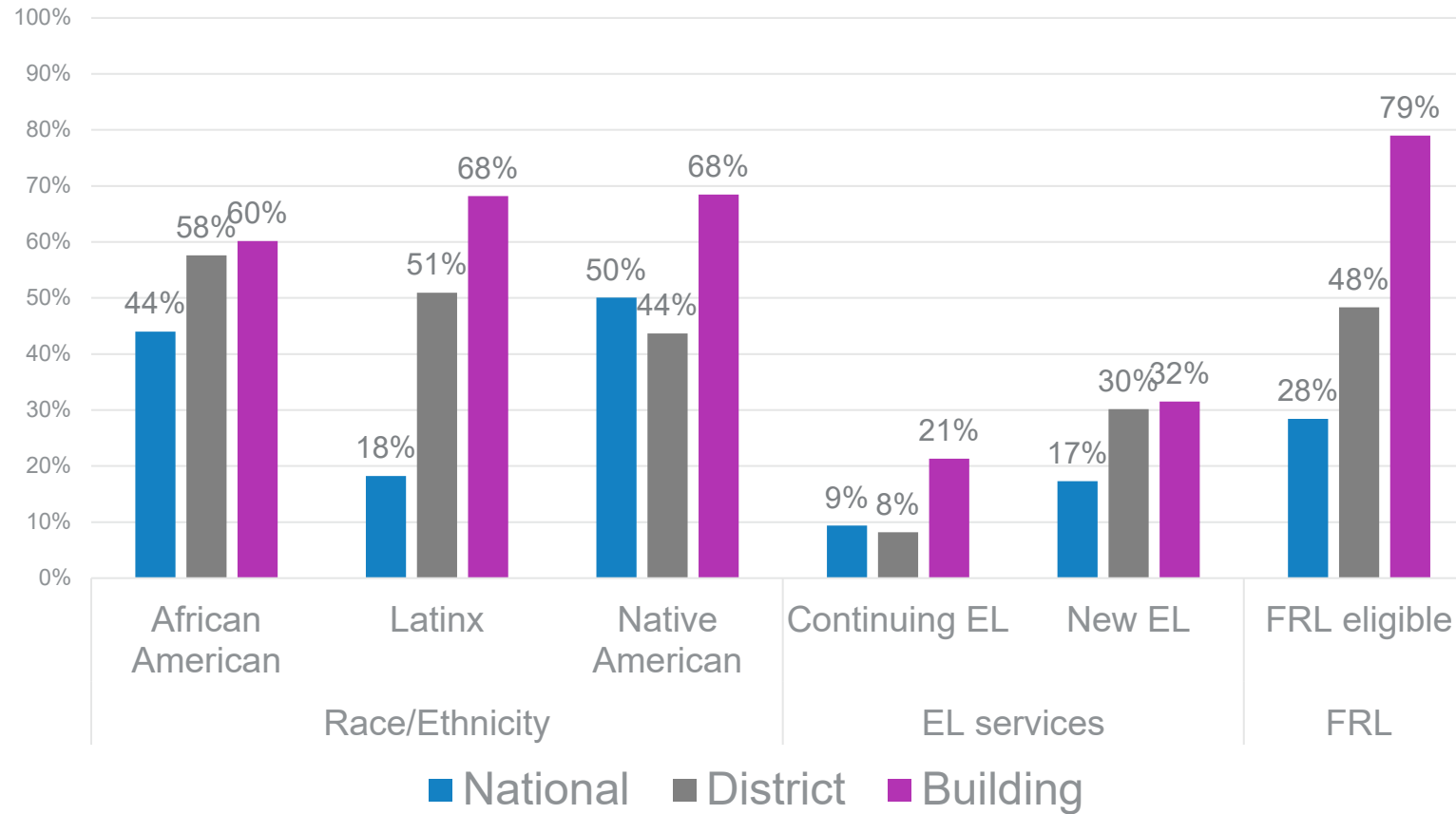
## Impact: Contribution of each school to identified pool





# Using Building Norms

Proportional Representation Across Norm References





No reason not to provide multiple reference points!

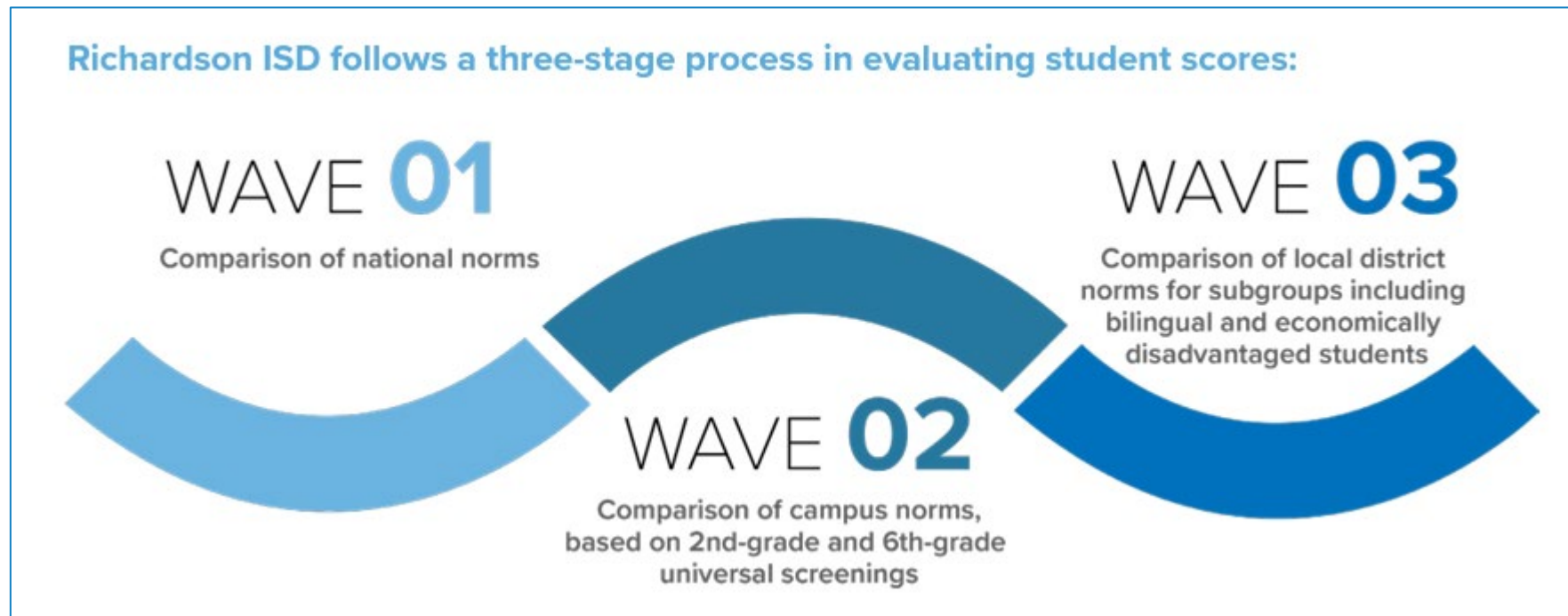
<b>Students</b>	<b>National APR</b>	<b>District Local PR</b>	<b>EL Local PR</b>	<b>Building Local PR</b>
Laurie	76	81	95	91
Cora	82	95	N/A	98
Tony	90	99	N/A	99
Crystal	65	52	80	72





# A Playbook for Advancing Equity and Inclusion

- Richardson ISD helped cut down on the under-identification of minority and economically disadvantaged students, who may have been previously overlooked due to bias in the referral system



# A real-world example



Elementary School	Grade 19-20	Enrollment 19-20	%GT of Total Pop 19-20	%GT of Total Pop 2020-2021(PreCovid)	%GT of Total Pop EOY 2021-2022*	Core+	Pullout
Audelia Creek	02	64	2%	6%	5%	22	3
Aikin	02	81	1%	10%	6%	13	8
Carolyn Bukhair	02	95	2%	4%	5%	23	4
Forest Lane Academy	02	90	3%	8%	6%	16	7
Forestridge	02	81	4%	11%	7%	23	6
Northlake	02	77	10%	13%	9%	21	18
RISD Academy	02	127	1%	3%	5%	28	5
Skyview	02	103	3%	8%	5%	25	7
Stults Road	02	93	1%	6%	7%	27	6
Spring Valley	02	45	7%	13%	7%	12	10
Thurgood Marshall	02	88	3%	6%	4%	12	4
Wallace	02	101	11%	20%	11%	25	32
District Total or Average			4%	9%	10%		

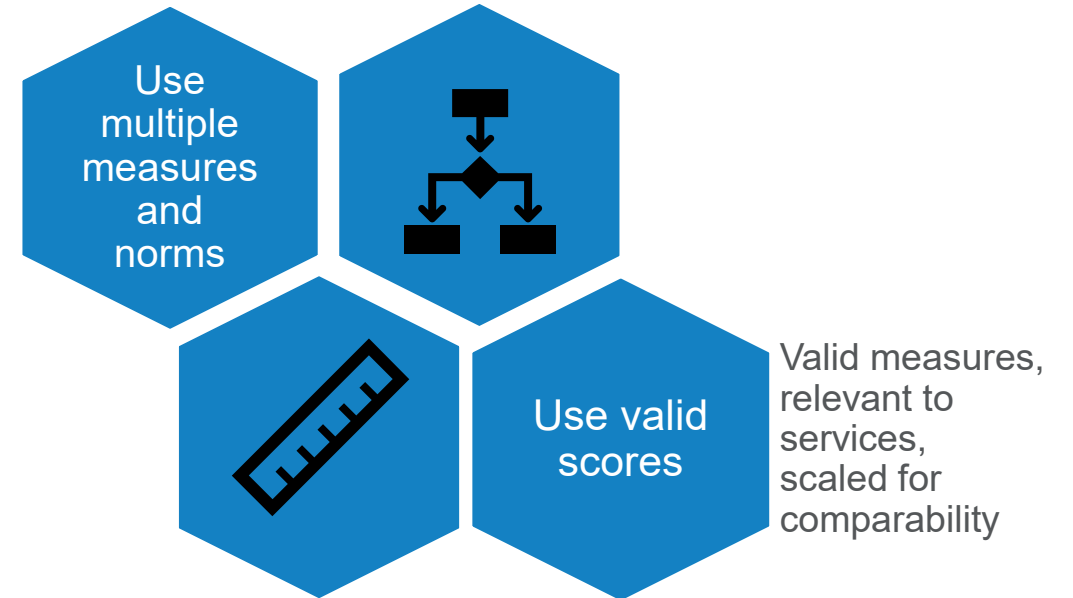
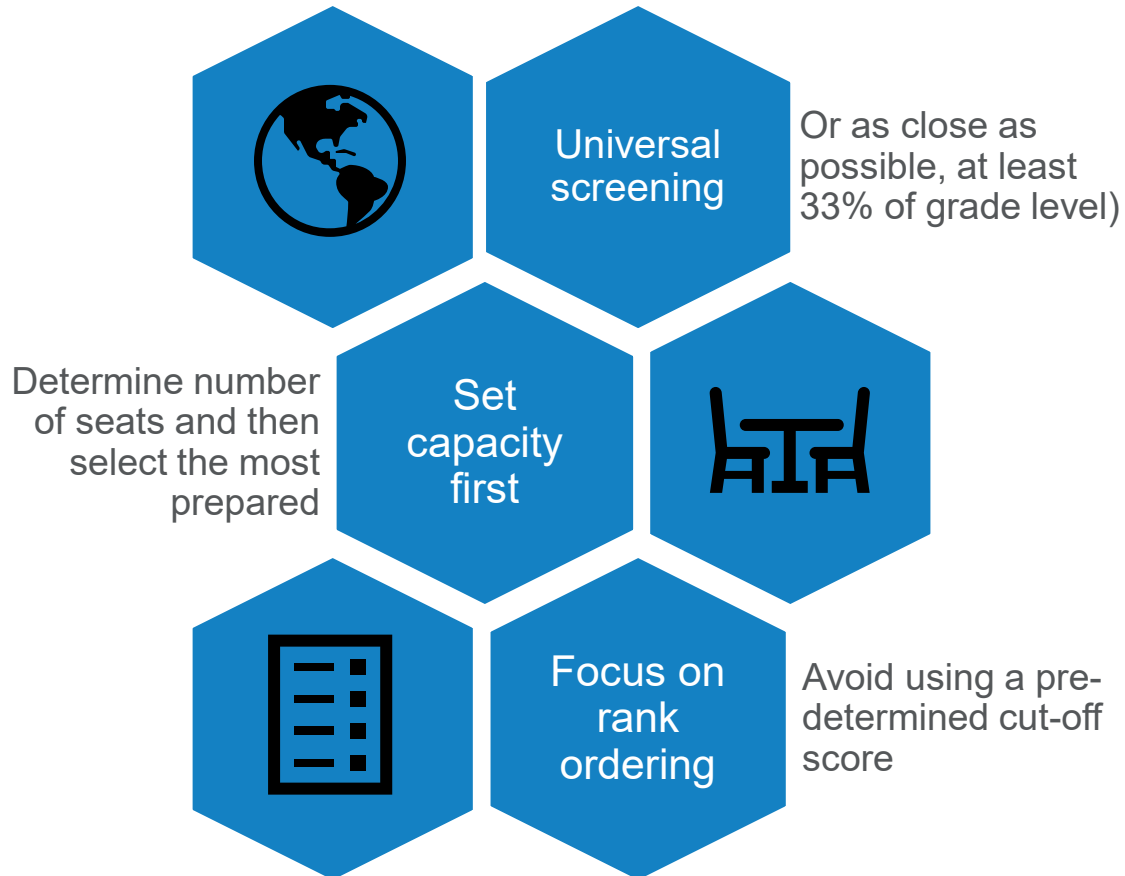


## How to get local norms

- Many publishers offer local norms with scoring services
  - Riverside currently offers local norms based on building or district (part of setting up a testing event)
- Easy to calculate after the fact or to create local norms IF
  1. You have a score which provides a valid basis for comparison, AND
  2. You universally screen (or very widely screen) so your resulting local percentile ranks are meaningful
  3. OR You have longitudinal data to create a large pool of data for comparison in context



# Practices that make local norms effective



Matthew McBee, Scott J. Peters, Tamra Stambaugh, & Kiana Johnson (2019). Implementing Local Norms: A Step-by-Step Guide <https://osf.io/jbasv/>



## Opportunity to Learn Norms: Identifying ELs ready for additional challenge

**These are students who can reason best given the same opportunity to learn**

*Use multiple years of data to increase comparison group*

Student ID	Verbal SAS	Rank within ELs
1189	105	100
1107	90	97
1111	90	97
1130	88	97
1145	80	95
1183	76	95
1105	75	93
1124	73	93
1108	71	91
1132	69	85
1118	69	85
1163	68	80



# Local Norms Tools

FAQ and Excel file for easy local PR calculations:

	A	B	C	D	E
		Student SAS	Local Percentile		
1	Student ID	scores	Rank		
2		150	=NORM.DIST(B2,E\$4,E\$5,TRUE)		
3		150	NORM.DIST(x, mean, standard_dev, cumulative)		
4		149	93% Average		119.636
5		140	84% SD		20.2205
6		139	83%		

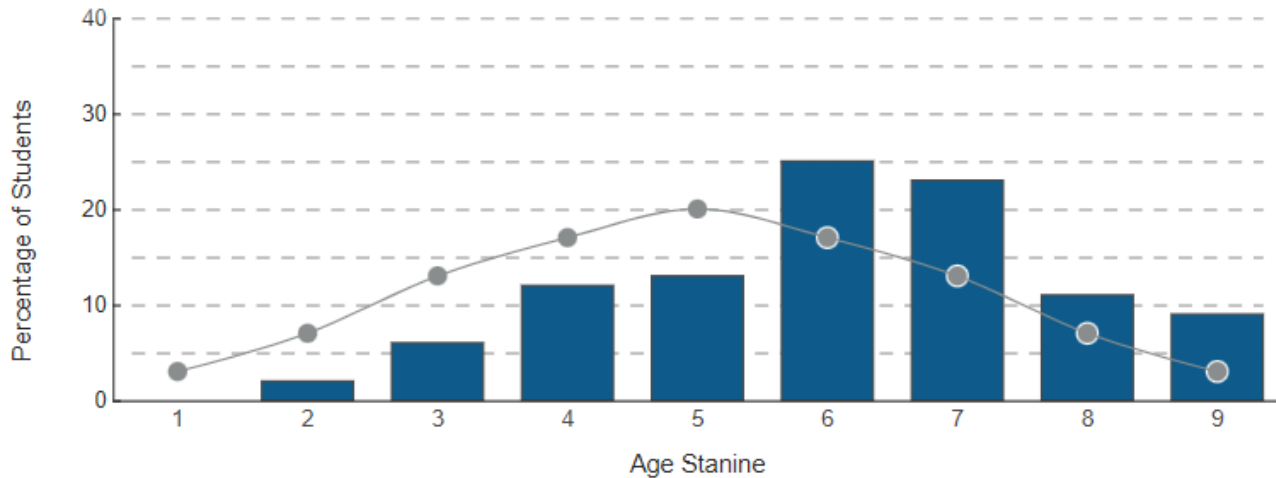


1. Calculate the local average using **=AVERAGE(A:A)**
2. Calculate the local standard deviation using **=STDEV.P(A:A)**
3. Now create a new column of scores that will be the local percentile ranks using **=NORM.DIST(X,Y,Z,TRUE)** where X is the student SAS you are converting, Y is the local average from step 2, and Z is the result from step 3. “True” refers to the option to report cumulative percentile ranks, which we want. You can copy this function for the entire column to get local scores for all students.

- Even in a high performing district where the mean score is on the higher end of average, variation in student performance across buildings calls for different strategies in identifying and serving students.

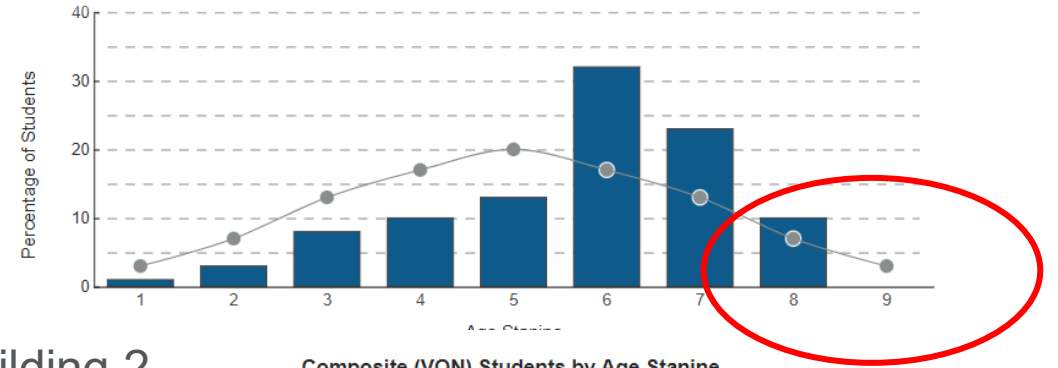
District

Composite (VQN) Students by Age Stanine



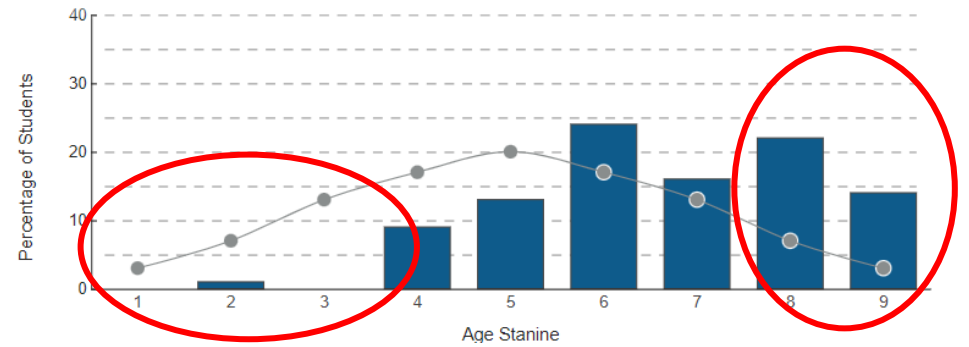
Building 1

Composite (VQN) Students by Age Stanine



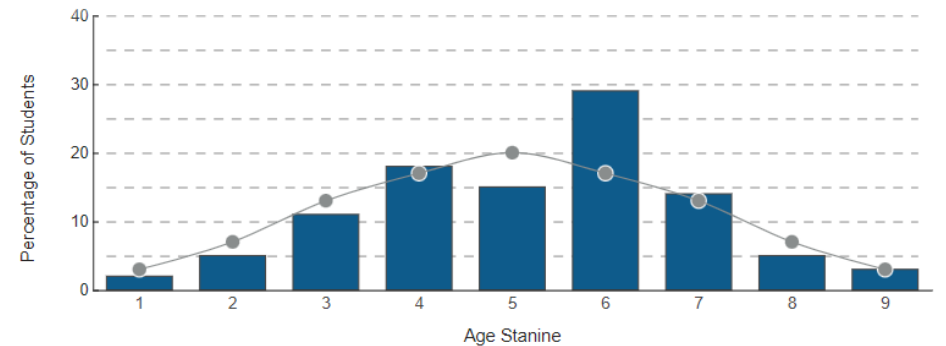
Building 2

Composite (VQN) Students by Age Stanine



Building 3

Composite (VQN) Students by Age Stanine





Coming in September 2023!

***www.cogat.com***

The screenshot shows the website's header with the Riverside Insights logo on the left and navigation links for Home, Ability Profile Finder (highlighted), District Leader Resources, Teacher Resources, Parent Resources, and CogAT on the right. The main content area features a large blue box with the text "Cognitive Abilities Test™ (CogAT®)" and the tagline "The #1 Measure of How Students Learn" accompanied by a clock icon. To the right of this text are two circular images: one of a woman pointing at a whiteboard in a meeting, and another of a young boy with glasses working at a desk. Below this are three light blue buttons with icons and text: "I am a District Administrator" (with a gear icon), "I am a Teacher" (with a teacher pointing at a board icon), and "I am a Parent" (with a family icon). The footer contains the CogAT and Riverside Insights logos on the left, and a blue button labeled "Ability Profile™ Finder" on the right.