

Raising the Ceiling: Measuring Growth and Learning Beyond Proficiency

Texas Assessment Conference 2024





Northwestern
Center for Talent
Development

Melissa Hinshaw, MSED

Director Assessment and School Services

Center for Talent Development, Northwestern University

Todd Ketterer, PhD

Executive Director, Center for Gifted

Education and Talent Development

Associate Professor, Educational Psychology

Director of Baylor TIP



Baylor University

SCHOOL OF EDUCATION

Center for Gifted Education and Talent Development

Educational Models for Measuring Growth

A framework that measures and predicts student learning progress over time

Classroom Level:

- formative, summative, interim, pre assessment, informal, grades, standards continuum, benchmark expectations
- measured against grade level aligned curriculum and norms
- Individual students and classroom growth

School Level:

- summative, interim, grades, standards continuum
- Measured against standards aligned continuum and norms
- classroom growth, cohort growth, school growth

State Level:

- Proficiency and growth
- Measured against grade level standards and norms



What growth metrics do you rely on most in your school?

What works well for you?

What seems less effective or informative?

Are you experiencing any growth variances for advanced students?



Limitations of Traditional Growth Models for Advanced Learners

- Assessment ceilings are too low
- Assessment content is not aligned to instruction
- Assessment content is redundant
- Assessment growth models have limited growth projections
- Limited information to inform instruction
- Course involves methods not measurable on typical assessments



Limitations of Traditional Growth Models for Advanced Learners

STARR Exam Limitations:

- What does STARR tell us about growth of advanced students?
- What does STARR tell us about learning readiness of advanced students?



Limitations of Traditional Growth Models for Advanced Learners

Kindergarten MATH-Conditional Growth Distributions

Table D.1.1: Mathematics Grade K Conditional Growth Distributions

Start %ile	RIT	Student Growth			RIT	School Growth				
	Fall	Fall	Winter	Spring	N Fall	Fall	Fall	Winter	Spring	N Fall
	<i>SD</i>		4.91	6.26	7.36	<i>SD</i>		1.28	2.24	2.88
10	123.61		12.56	20.34	25.27	132.60		11.15	18.56	23.25
15	126.66		12.18	19.80	24.64	133.94		11.04	18.36	23.00
20	129.09		11.88	19.38	24.13	134.99		10.95	18.21	22.81
25	131.17		11.62	19.01	23.70	135.90		10.87	18.08	22.64
30	133.04		11.38	18.69	23.31	136.72		10.81	17.96	22.48
35	134.77		11.17	18.38	22.95	137.47		10.74	17.85	22.34
40	136.41		10.96	18.10	22.61	138.19		10.68	17.74	22.21
45	138.00		10.76	17.82	22.27	138.88		10.63	17.64	22.08
50	139.56		10.57	17.54	21.95	139.56		10.57	17.54	21.95
55	141.13		10.37	17.27	21.62	140.24		10.51	17.44	21.82
60	142.72		10.18	16.99	21.29	140.94		10.45	17.34	21.69
65	144.36		9.97	16.70	20.95	141.65		10.40	17.24	21.56
70	146.09		9.75	16.40	20.59	142.41		10.33	17.13	21.41
75	147.96		9.52	16.07	20.20	143.22		10.26	17.01	21.26
80	150.04		9.26	15.71	19.77	144.13		10.19	16.88	21.09
85	152.46		8.96	15.29	19.26	145.19		10.10	16.72	20.89
90	155.51		8.58	14.75	18.62	146.52		9.99	16.53	20.64

Limitations of Traditional Growth Models for Advanced Learners

7th Grade READING-Conditional Growth Distributions

Start %ile	RIT Fall	Student Growth				RIT Fall	School Growth			
		Fall	Winter	Spring	N Fall		Fall	Winter	Spring	N Fall
	SD	5.48	6.95	6.45	SD	1.00	1.75	1.36		
10	193.04	4.48	6.32	5.56	204.89	3.12	4.57	4.57		
15	197.09	4.18	5.91	5.28	206.67	3.07	4.49	4.48		
20	200.31	3.93	5.58	5.06	208.09	3.04	4.43	4.41		
35	207.84	3.37	4.81	4.55	211.40	2.86	4.28	4.25		
40	210.02	3.20	4.59	4.40	212.36	2.93	4.24	4.20		
45	212.13	3.04	4.37	4.25	213.29	2.91	4.20	4.15		
50	214.20	2.89	4.16	4.11	214.20	2.89	4.16	4.11		
55	216.28	2.73	3.95	3.97	215.12	2.86	4.12	4.06		
60	218.39	2.57	3.73	3.82	216.04	2.84	4.08	4.02		
65	220.57	2.41	3.51	3.67	217.00	2.81	4.04	3.97		
70	222.86	2.23	3.27	3.52	218.01	2.79	3.99	3.92		
75	225.34	2.05	3.02	3.35	219.10	2.76	3.94	3.87		
80	228.10	1.84	2.74	3.18	220.32	2.73	3.89	3.81		
85	231.32	1.59	2.41	2.94	221.73	2.70	3.83	3.74		
90	235.37	1.29	2.00	2.66	223.52	2.65	3.75	3.65		

Interim assessment
growth projections
are not
intended to be growth goals!

They are are
descriptive statistics not
prescriptive statistics!

Differentiated Assessment For Advanced Learners

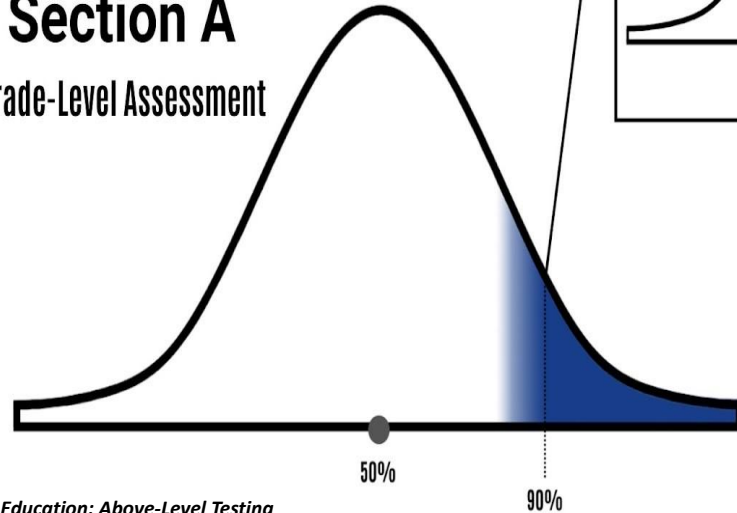
- Why Differentiate?
- Do you differentiate for your lowest achievers?
- How do you differentiate for your highest achievers?



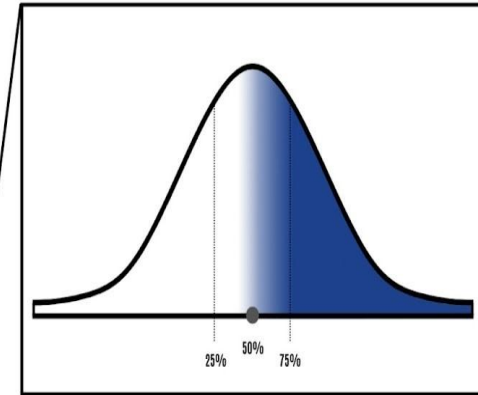
Who needs Assessment differentiation?

How do schools determine who needs differentiated assessment?

Section A Grade-Level Assessment



Section B Above-Level Assessment



Benefits of Off-Level/Above-Grade Testing

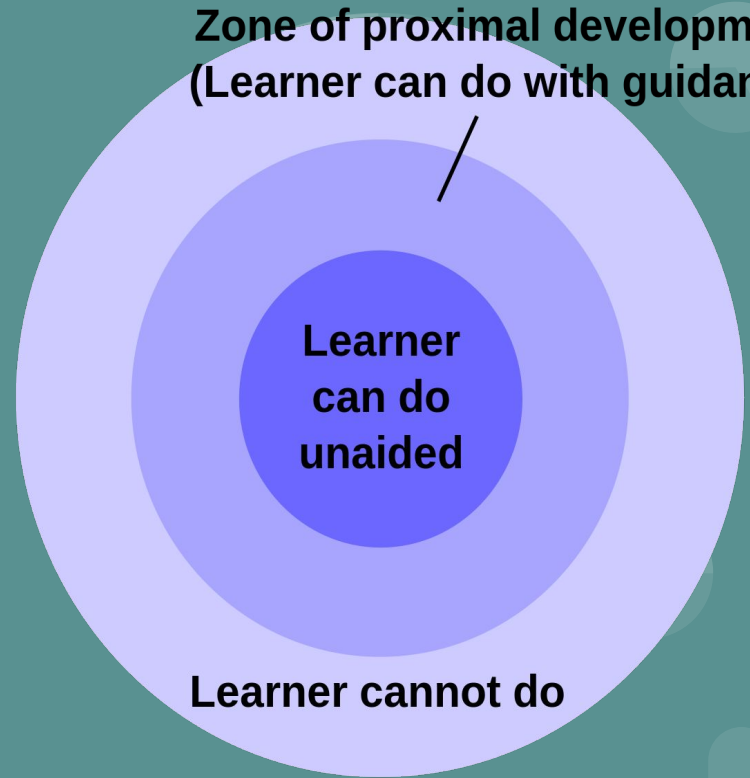
- Informs College and Career Readiness early
- Creates a talent pipeline
- Early exposure and practice on high-level testing
- Allows for differentiated assessment and instruction
- Can measure growth/effect of programming
- Differentiated assessment is responsive



**Zone of proximal development
(Learner can do with guidance)**

**Learner
can do
unaided**

Learner cannot do



Differentiated Assessment For Advanced Learners

Case Study Supporting Differentiation

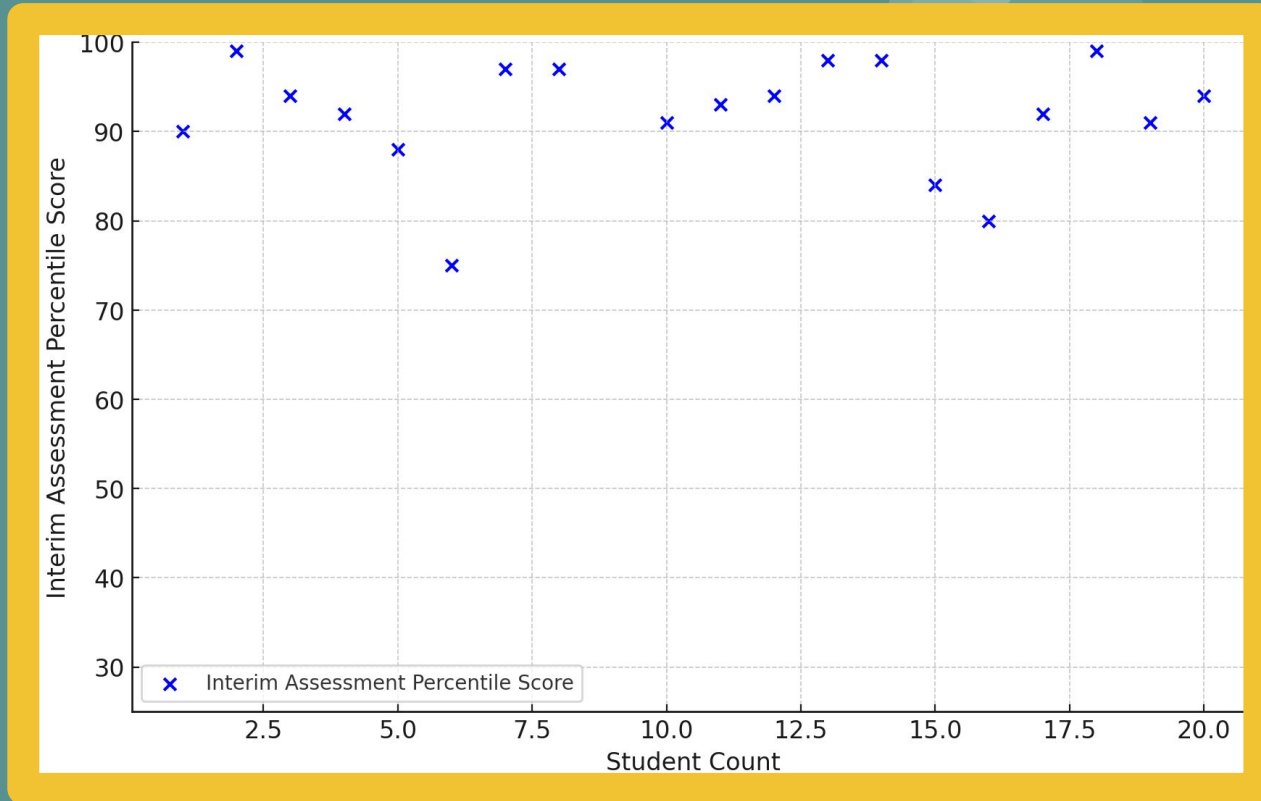
- These four students are all in the same advanced service program in 8th grade ELA
- They all met the base-criteria to be placed in the program
- They all scored proficient or better on their 7th Grade Proficiency exam
- They are all historically in the 90th percentile or above on interim assessments.



Are all of these students ready for the same instruction?

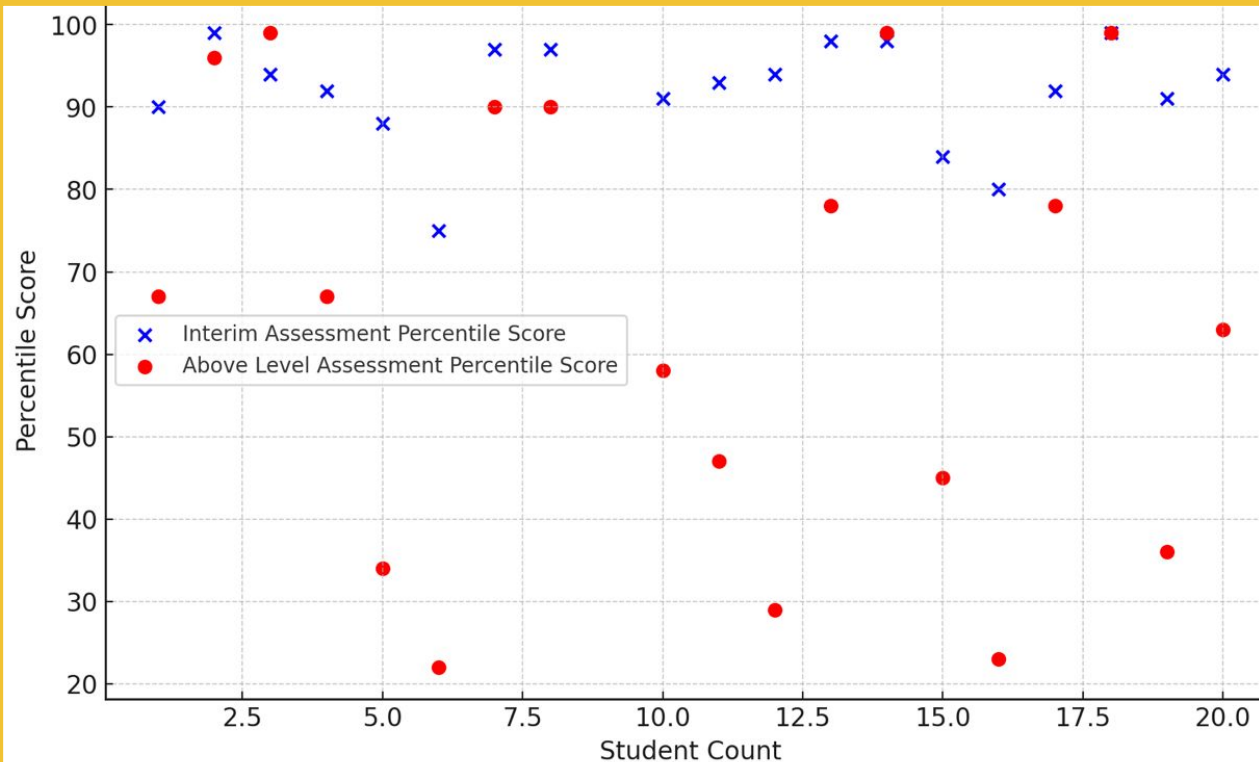
Differentiated Assessment For Advanced Learners

Interim Test Scores



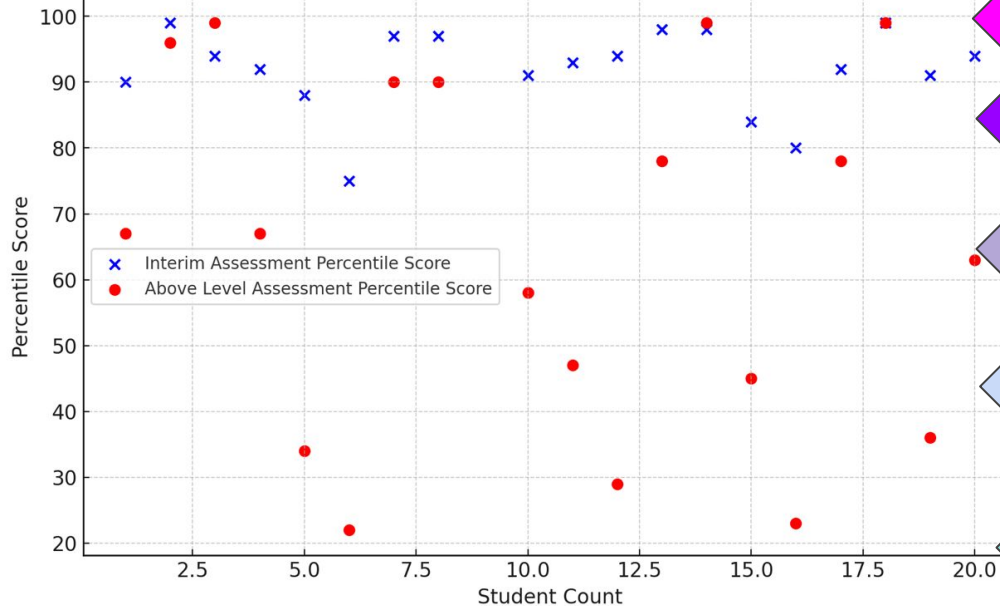
Differentiated Assessment For Advanced Learners

Interim Scores Compared to Above Level Scores (SAT)



Differentiated Assessment For Advanced Learners

What does this tell us about programming and placement?



Student is grossly misplaced and requires acceleration

Honors course is redundant and student is likely misplaced and requires acceleration

Honors course is likely easy and student needs extension and differentiation

Honors course is just right

Honors course is likely challenging and rigorous

Differentiated Assessment For Advanced Learners

Measuring Growth with Above Level Assessment

