

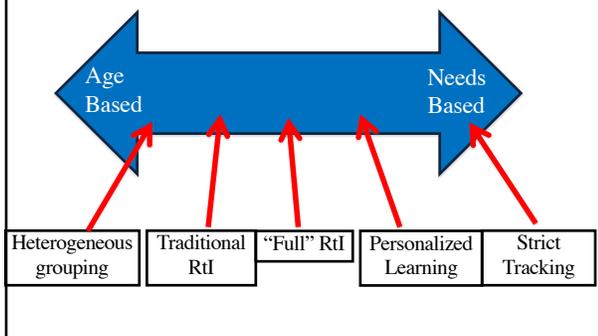
Gifted Education within a Response to Intervention Framework

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First, a few important confessions

- I really don't see myself as a "gifted education" person – I'm just a person who believes in the connection between need and instruction
- In my opinion, RtI / MTSS / personalized learning is what K-12 education should be and should always have been
- In my opinion, RtI / MTSS is what K-12 gifted education programming should be and should always have been

Instructional Continuum



Today

- Why gifted education? What need is it supposed to address?
- Problems with current implementation
- Suggested course corrections
- Application to your district / school

WHAT NEED OR PROBLEM IS GIFTED EDUCATION SUPPOSED TO ADDRESS?

Peters et al. ([2017](#))

The Question: What % of American students are a year or more advanced in reading or math?

- Grades three through seven
- Wisconsin, Texas, Florida state tests
- National (non-representative) MAP data

Full paper on my website

Peters et al. (2017)

The Question: What % of American students are a year or more advanced in reading?

- a. 5% - 12%
- b. 9% - 25%
- c. 19% - 36%
- d. 20% - 49%

Peters et al. (2017)

The Question: What % of American students are a year or more advanced in reading?

- a. 5% - 12%
- b. 9% - 25%
- c. 19% - 36%
- d. 20% - 49%

Peters et al. (2017)

The Question: What % of American students are a year or more advanced in math?

- a. 2% - 8%
- b. 7% - 16%
- c. 14% - 37%
- d. 21% - 44%

Peters et al. (2017)

The Question: What % of American students are a year or more advanced in math?

- a. 2% - 8%
- b. 7% - 16%
- c. 14% - 37%
- d. 21% - 44%

Peters et al. (2017)

The Question: What % of American students are a year or more advanced in reading or math?

Table 2.

Percentages of Students Scoring One Year or More Above Grade Level

Grade	ELA % scoring 1+ years above			Mathematics % scoring 1+ years above		
	Wisconsin	California	Texas ^a	Wisconsin	California	Texas ^a
3	34%	23%	20%	26%	19%	16%
4	39%	29%	25%	26%	18%	29%
5	44%	34%	30%	31%	22%	34%
6	49%	34%	24%	36%	27%	32%
7	47%	38%	30%	37%	28%	33%

^a Texas percentages are based on the approved cut scores set for test year 2021.

Peters et al. (2017)

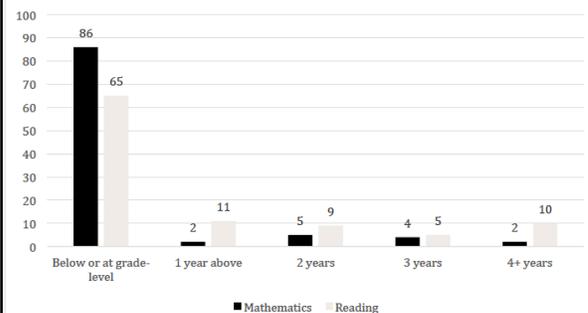


Figure 1. Percent of fifth grade students at and above grade level on NWEA MAP

So What?

- A **large** percentage of American students are above “grade level”
- The more-variable the group of students, the more differentiation will be required for everyone to be appropriately challenged.

Take Aways

1. Any instruction focused *solely* on grade-level standards is going to under- and over-challenge a large % of American students.
2. No matter where we target “standards” or “grade-level” instruction, this will continue to be the case
3. Students in a given “grade level” are incredibly diverse in terms of academic readiness

Engel et al. 2012 Study

- Using Early Childhood Longitudinal data
- Nationally representative data on student math achievement when they entered kindergarten
- 95% of entering student has mastered concepts such as identifying some one-digit numbers, recognizing geometric shapes, 1:1 counting up to ten objects, etc.

Engel et al. 2012 Study

- Given this level of mastery, how many days per week did teachers report spending on this content?
 - a. 4 Days
 - b. 7 Days
 - c. 13 Days**
 - d. 19 Days

Engel et al. 2012 Study

- Given this level of mastery, how many days per week did teachers report spending on this content?
- Teachers spent an average of **13 days per month** re-teaching this content
- This was negatively associated with student growth

Engel et al. 2012 Study

Student math proficiency levels	Fall kindergarten				Teacher reported days/month on content measures	
	Students who have mastered level by fall kindergarten	Proficiency probability scores		Content measures	Mean	SD
		Mean	SD			
Proficiency level 1	95%	0.94	0.15	Basic counting and shapes	12.70	4.11
Proficiency level 2	62%	0.58	0.34	Patterns and measurement	7.68	4.44
Proficiency level 3	25%	0.23	0.31	Place value and currency	8.61	5.12
Proficiency level 4	7%	0.04	0.13	Addition and subtraction	4.38	4.07

Note. Student $n = 11,517$; teacher $n = 2,176$.

So what happens?

TABLE 7
Regression Coefficients and Standard Errors From Models Predicting Spring Kindergarten Math Achievement With Standardized Teacher-Reported Content Measures by Student Proficiency Level Subgroups

Independent variables	< Level 1		Level 1			Level 2			Level 3		Level 4+	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Basic Counting and Shapes*	-.005 (.038)	.052** (.025)	-.032** (.014)	-.032** (.013)	-.053*** (.012)	-.042*** (-.012)	-.019 (.020)	-.034* (.020)	-.044 (.058)	-.039 (.071)		
Patterns and Measurement*												
Place Value and Currency*	.037 (.026)	.019 (.024)	.052*** (.012)	.044*** (.012)	.025** (.012)	.015* (.018)	.049*** (.018)	.038* (.022)	.061 (.052)	.071 (.064)		
Addition and Subtraction	.007 (.024)	.011 (.025)	.013 (.012)	.014 (.010)	.040*** (.011)	.037*** (.011)	.056*** (.019)	.055*** (.017)	.024 (.045)	.055 (.048)		
Full-day kindergarten	.110** (.044)	.150*** (.048)	.024* (.022)	.092*** (.022)	.058*** (.021)	.089*** (.023)	.090*** (.037)	.104*** (.039)	.200** (.090)	.220* (.125)		
Fall kindergarten math test score	1.330*** (.112)	.620*** (.087)	1.090*** (.030)	.780*** (.035)	1.010*** (.027)	.820*** (.030)	.890*** (.033)	.780*** (.038)	.210*** (.054)	.610*** (.056)		
Time on math/week												
Teacher qualifications	X	X	X	X	X	X	X	X	X	X		
Student characteristics	X	X	X	X	X	X	X	X	X	X		
Cognitive skills	X	X	X	X	X	X	X	X	X	X		
Observations	553	553	3,613	3,613	4,345	4,345	2,175	2,175	494	494		
R-squared	.274	.274	.331	.435	.373	.428	.372	.435	.473	.610		

The message: Teaching kids what they already know doesn't result in them learning new things!

Presentation Outline

1. Problems with "gifted" education
2. Proposed course correction:
 1. Identifying student need
 2. Creating services to meet student needs
 3. Creating identification systems
3. Example
4. Applying to your context
5. Problem solving

Why do we Identify Students as Gifted in K-12 Schools?

- To reward them?
- To encourage others to work hard to achieve giftedness?
- To provide these students with an appropriately challenging education?

Why do we Identify Students as Gifted in K-12 Schools?

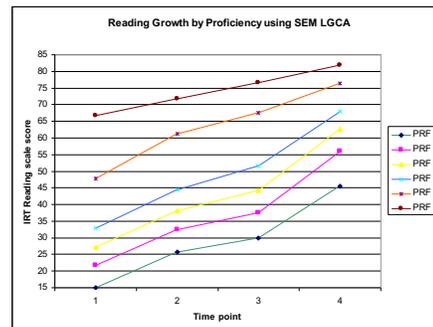
We are not interested in identifying bright kids in order to congratulate them on their choice of parents or some other happenstance of nature or nurture. Rather, the goal is to identify those children who either currently display or who are likely to develop excellence in the sorts of things we teach in school (Lohman, 2006, p. 7).

- Our goal is to target students who have unmet needs

Why do we Identify Students as Gifted in K-12 Schools?

"The term 'gifted and talented', when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities. (2018 reauthorization of ESEA)

What's a need?



McCoach & Rambo

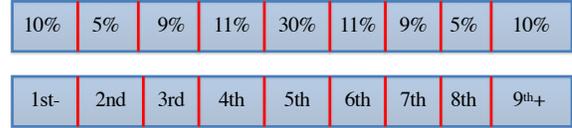
Growth in the summer and in 1st grade as a percentage of the growth made in K

Proficiency level	K	summer	1st
Prof 0	100%	39.7%	147.3%
Prof 1	100%	48.8%	172.6%
Prof 2	100%	56%	169.6%
Prof 3	100%	63.7%	143.2%
Prof 4	100%	49.3%	67.3%
Prof 5	100%	100.3%	105.2%

McCoach & Rambo

Tier I

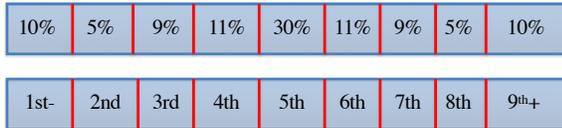
We can't talk about gifted ed until first talking about who we are reaching with existing services



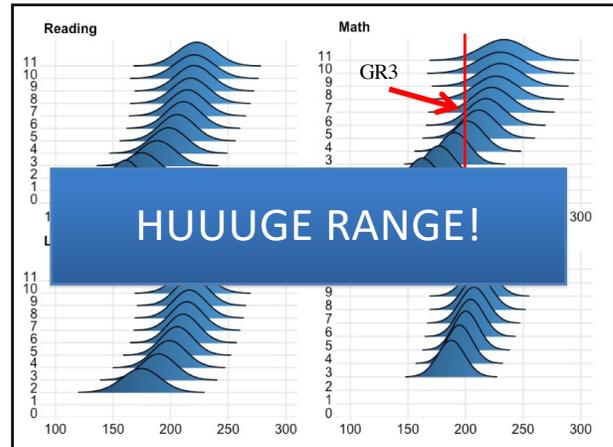
To what level is the instruction targeted? How far can teachers reach?

Gifted and General Education

Both have the same goal:



Making sure all of these students are challenged somewhere, through some curriculum or intervention, while in school



Why do we Identify Students as Gifted in K-12 Schools?

The reason for the idea of “giftedness” was to serve as an indicator for some need for a service that was not currently being provided

Gifted signaled a need for an intervention – same as any other label in education:

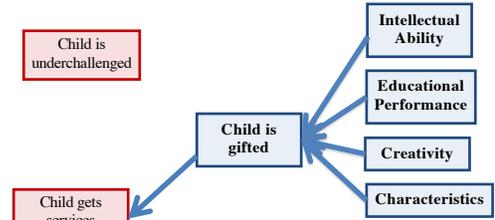
Learning disabled, EBD, visually-impaired, etc.

This is Crazy

- As a first step in challenge more advanced learners we need to do the following:
 1. Narrow the range of learning needs within each classroom
 - Total School cluster grouping
 2. Narrow the range of learning needs within each grade level
 - Subject and full-grade acceleration

So where has historical
"gifted education" gone wrong?

Gifted Education as Often Implemented

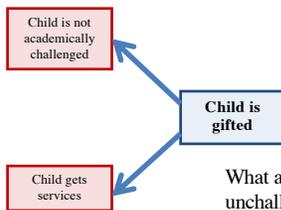


Giftedness as a status creates the need for specialized services.

Not that the child is unchallenged.

...well, maybe

Gifted Education as Often Implemented



What about a non-identified, unchallenged child? Do they get the intervention?

Maybe a child whose score is one percentile below the cutoff?
The traditional model says "NO."

Quiz

What percentage of Tennessee Schools identified ZERO students as gifted in the 2015 – 2016 school year?

- a) 9%
- b) 21%
- c) 38%
- d) 51%

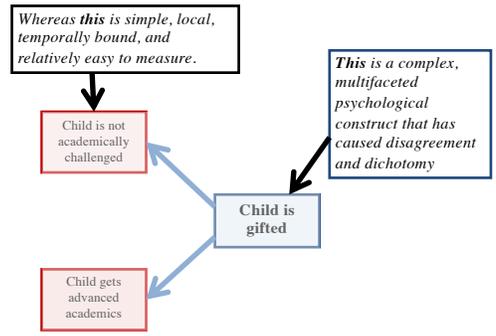
Quiz

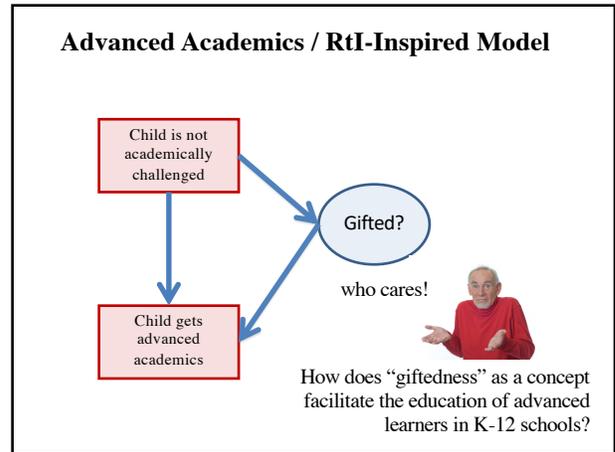
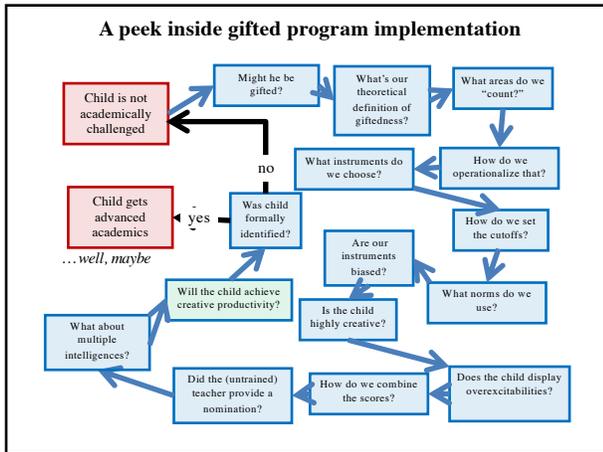
What percentage of Tennessee Schools identified ZERO students as gifted in the 2015 – 2016 school year?

- a) 9%
- b) 21%
- c) 38%
- d) 51%

Is the Concept of Giftedness Helpful?

(If our goal is appropriate challenge for advanced learners)





When it comes to instruction...

<p>Relevant concerns</p> <ul style="list-style-type: none"> • Which students have already mastered the content I am planning to teach today? • What can I do to respect their right to learn something new today? • How can I maintain order in this class of 32 students? 	<p>Irrelevant concern</p> <ul style="list-style-type: none"> • Which children in my class are above some arbitrary national norms on some combination of <i>general intellectual ability, achievement, creativity, leadership, or...</i>? <p style="border: 1px solid red; padding: 2px; font-size: small;">Using national norms as a point of comparison is completely uninformative for planning instruction in a particular classroom at a specific moment. – Need local norms</p>
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- ### The traditional gifted education approach:
1. Adopt a theoretical definition of giftedness.
 2. Identify the gifted
 - McBee, Peters, & Waterman (2014)
 - McBee, Peters, & Miller (2016)
 - Peters, Rambo-Hernandez, Makel, Matthews, & Plucker (2019)
 3. Provide an educational intervention (if there's any money, time, energy, or political will left)
- By nature of *being* gifted, a child automatically requires something different from what he or she is currently experiencing.

- ### The RtI / Advanced Academics Approach
1. Understand what academic needs are not being met by existing services.
 - Universal screening and progress monitoring
 2. Create interventions to meet unmet needs
 - Tiers of service
 3. Identify those students that have a need for and are likely to flourish in the intervention we've created

The RtI / Advanced Academics Approach

1. Understand what academic needs are not being met by existing services.

Students require an intervention if and when the current intervention (Tier I) isn't sufficiently challenging

"Students unresponsive to generally effective intervention are in need of more intensive instruction" (Fuchs, Fuchs, & Stecker, 2010)

Step 1: Look at our Students

This is where students are

Top 10%

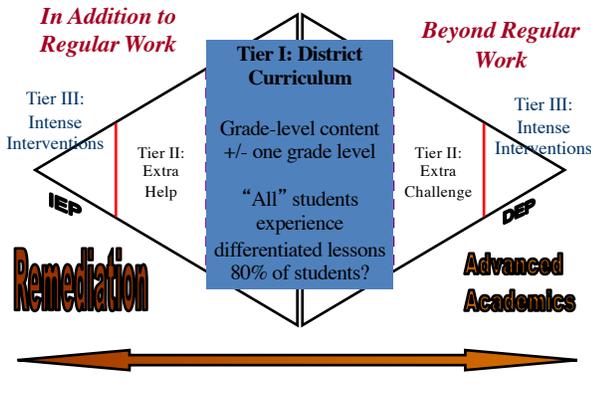
Olson Elementary and Toki Middle Math (Spring 2017)							
Grade	Proficient	-2SD	-1SD	Mean (SD)	+1SD	90th	+2SD
2	194						
3	204	169	185	201 (16)	217	222	233
4	216	175	194	213 (19)	232	237	251
5	226	187	206	225 (19)	244	250	264
6	231	179	200	221 (21)	242	248	263
7	237	192	212	232 (20)	252	258	272
8	244	190	212	234 (22)	256	262	278

Think of this as “grade-level” curriculum

Facts

- The top few 5th-graders are scoring above 80% of 8th graders
- 7th grade Toki students include those who are at 2nd grade math proficiency as well as those at the HS level (95th percentile for 11th grade)
 - Will all of these students be challenged in a “7th grade level” classroom?
 - What planning and structures would be needed to assure growth / learning for all?

Response to Intervention



Step 2: Provide for for Unmet Needs

- Domain specificity as the rule!
- Design or select services based on what needs are not being met by existing programming
1. There’s no such thing as a generic “gifted” curriculum or services
 2. Interventions will look different year to year
 3. Services will look different across schools
 4. Services will look different depending on a school’s population this year

Step 2: Provide for for Unmet Needs

- Domain specificity as the rule!

The “goodness” or “badness” of a Tier II/III or GT intervention depends solely on whether or not it alleviates an otherwise unmet advanced academic need

Alleviate Need?

- You ID students based on high math scores, high reading scores, or high teacher ratings and then provide them with a creative problem solving curriculum
- You ID students based on language arts / reading Forward scores and then allow them to participate in Lego League

Alleviate Need?

- You ID students using an IQ test and those who score 130+ receive math enrichment
- You ID students using a nonverbal ability test (e.g., NNAT, TONI) and then provide those who score 130+ with advanced math, reading, and science

Alleviate Need?

- You are going to provide the M-squared curriculum to gifted kindergarteners (emphasizes geometry and measurement)
- You identify the top 2% (based on national norms) in the area of math and those who are identified receive differentiated instruction in the general education classroom.

Alleviate Need?

- You see some 3rd graders have already mastered 3rd grade math by the start of the year, so you implement proactive subject-specific and full-grade acceleration.

One other problem...

- Would...
- Should....
- If the answer is ever yes, it's not a "gifted" intervention and we shouldn't be restricting access.
- Could...

Step 3: Identification

Two goals for identification:

1. Locate ALL students who will be successful in the interventions we want to provide
 - The measures must work to locate who we set out to locate
2. Locate ALL students who need the services we have to provide

Common Practice

- Students who are highly creative, intelligent, advanced in math, advanced in science, advanced in art, etc. are identified as "gifted"
- These students are then provided with a 30 minute per week enrichment program.
- Does this program eliminate their demonstrated advanced academic need?

What to do about this...

- Cluster group and PD for Tier I
- Pull-out & push-in for Tier II
- Specialized classes, acceleration, & DEPs for Tier III

Things that Influence Tier I

- Alignment: Similarity between common core curriculum, state of Wisconsin content standards, and local curriculum
- Reach: Ability of your general education teachers to differentiate
 - Remember, +/- 80% in Tier I

Things that Influence Tier I

- Alignment: Similarity between common core curriculum, state of Tennessee content standards, and local curriculum
 - Is your school very “average” in terms of need?
 - Are very few of your students more than a grade level or two above or below where they are in school?
 - Is your curriculum aligned to what students are ready to learn?

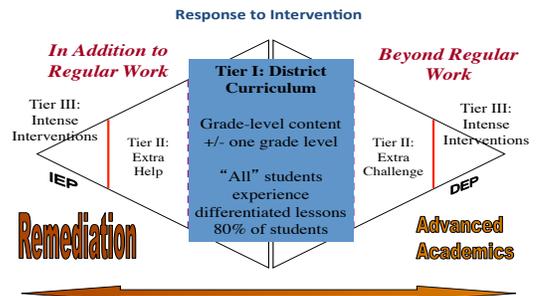
Things that Influence Tier I

- Reach: Ability of your general education teachers to differentiate
 - Remember, +/- 80% in Tier I
 - This is the elephant in the room
 - How far can a typical teacher reach? An ideal teacher?
 - Does it vary by content area? Domain? Other factors?
 - Does this mean “giftedness” could come down to which teacher you were assigned?

This is the ballgame: Tier I

1. How far up and down do you think you can effectively differentiate in your classroom?
 - a. Up and down half a grade-level in content
 - b. Up and down a full grade-level in content
 - c. Up and down two grade-levels in content
 - d. Up and down three grade-levels in content

What if only 50% of students learn in Tier I?

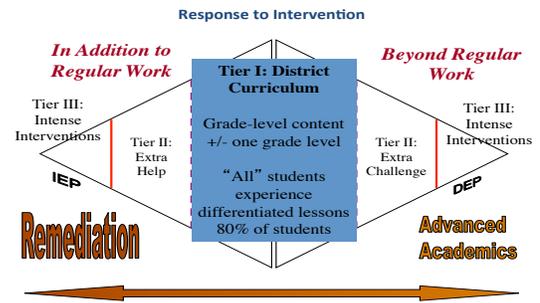


Classroom Configuration

	TOTAL	Classroom 1	Classroom 2	Classroom 3
HIGH ACHIEVING =>>225	8	3	3	2
ABOVE AVG = 218 - 225	5	1	1	3
AVERAGE = 203 - 217	27	10	10	7
LOW-AVG = 202 - 195	15	4	5	6
LOW =<195	5	3	1	1
SPECIAL EDUC.				
TOTAL	60	21	20	19

Heterogeneous classroom grouping – small class sizes

What if teachers could differentiate to reach 99% of students??



Classroom Configuration

	TOTAL	Classroom 1	Classroom 2	Classroom 3
HIGH ACHIEVING =>>225	8	8		
ABOVE AVG = 218 - 225	5		5	0
AVERAGE = 203 - 217	27	10	10	7
LOW-AVG = 202 - 195	15	3	7	5
LOW =<195	5	0	0	5
SPECIAL EDUC.				
TOTAL	60	21	22	17

Cluster grouped classes

Sample Cluster Grouping Configuration

ID Category	4 th grade Clsrm 1	4 th grade Clsrm 2	4 th grade Clsrm 3	4 th grade Total grade
High-Achieving	6	0	0	6
Above-Average	0	7	6	13
Average	10	10	10	30
Low-Average	8	0	6	14
Low	0	8	0	8
Sp. Educ.	1*	0	3**	4
Total	25	25	25	75



*note. This student is twice-exceptional.

**note. These students see the same teacher consultant who also helps the classroom teacher.

Sample Cluster Grouping Configuration

ID Category	3 rd grade Clsrm 1	3 rd grade Clsrm 2	3 rd grade Clsrm 3	3 rd grade Clsrm 4	3 rd grade Clsrm 5	3 rd grade Total grade
High-Achieving	10	10	0	0	0	20
Above-Average	0	0	7	7	7	21
Average	0	8	8	8	0	24
Low-Average	16	0	0	9	0	24
Low	0	6	10	0	10	26
Sp. Educ.	0	2*	0	2	4**	10
Total	26	26	26	26	21	125

*note. These students are Learning Disabled and Gifted.

**note. These students are LD and see the same teacher consultant who spends 4 half days per week working in this classroom, the teacher consultant will work in the classroom with the teacher. Her class size has been reduced.

So what do “advanced” tiers look like?

- Tier I – not a gifted or a remediation tier – 80% of all students (both ends of diamond)
- This is the general classroom curriculum
- Whatever is “grade-level” or average at your school +/- whomever a teacher can reach / challenge with differentiation – This will vary by school, by year, and by teacher
- **Some degree of whole-school cluster grouping seems like a must for RtI / Tier I to work

Tier II – Advanced Side of Diamond

- Pull-Out Programs
- RtI Intervention Periods
- Subject-specific acceleration
- High Achieving / gifted cluster (in cluster grouping)
- Curriculum compacting
- Full-time Academic Academies

Tier III – Advanced Side of Diamond

- Full-grade acceleration
 - Early entrance to college or kindergarten
- Replacement / online courses
- Independent study course / unit replacement
- Differentiated Education Plan (DEP)

Mind Bender

Under this model, we'd expect to see MORE identified "gifted" kids in lower-resource, lower-achieving schools and fewer in high-resource, high-achieving schools.

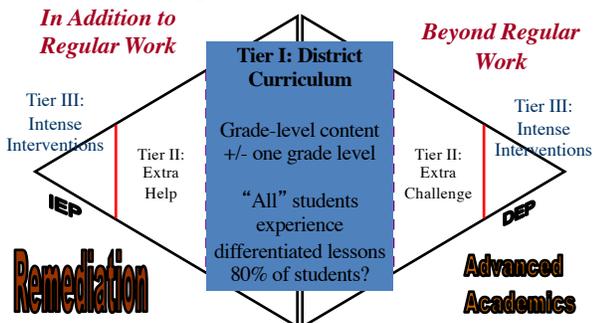
WHY?

How would this work in TN?



Scott Peters v. State Law

Response to Intervention



Summary

- Advanced Academics sees gifted services as:
 1. Local in time and place with regard to identification and services
 - Students move in and out of services based on need
 2. Inherently domain specific
 - Generic, global gifted identification is problematic

Summary

- Advanced Academics sees gifted services as:
 1. Being necessary when current services are not sufficiently challenging, and
 2. Effective if they alleviate unmet academic needs.

Questions?

