Organization

• Part I
  • Getting on the same page about “gifted” and accomplishment vs. aptitude

• Part II
  • Implications of aptitude for EL student identification
  • An aptitude approach to identification
  • An aptitude approach to G/T services for EL students
Getting on the same page about accomplishment vs. aptitude
Perspective on “gifted and talented”

• “Giftedness” is often a label
• Encourages distinctions between “gifted” and “not gifted”
• Assumes that giftedness is a fixed quality
• Often a one-time identification leading to a permanent change in program
• Singular identification methods exclude those with varied profiles
• Encourages narrow concepts of enrichment
• Some parents covet the label to the detriment of their own children and the program
Think **Aptitude** (more than abilities)

“The degree of **readiness to learn and perform well in a particular situation.**”

• Includes abilities and achievements
• Not just cognitive (motivation and interest matter)
• Not just positive (strengths and weaknesses)
• Depends on the context and the activities involved
• Not fixed
Best practices in screening for talent

- Use multiple measures
  - **Academic**: Domain knowledge and demonstrated achievement
  - **Abilities**: Verbal, quantitative, and spatial
  - **Creativity and interest** based on recommendations (teacher, parent, students’ own ratings)
- Take an “OR” perspective rather than an “and” perspective

Adapted From Renzulli’s *Three-Ring Conception of Giftedness*. In Baum, S. M., Reis, S. M., & Maxfield, L. R. (Eds.). (1998). *Nurturing the gifts and talents of primary grade students*. 
More best practices

- Have to consider the programs available
  - In-class differentiation, enrichment, pull-out programs
  - Need for special programming depends most importantly on the discrepancy between a child’s development and that of classmates

- Cast a broad net
  - Multiple sources of information
  - Initial screening of all students, then further assessment
  - Measure critical aptitudes based on programs offered
Which of the following is consistent with an *aptitude development* rather than an identification focus?

- Placement in grade 3 based on test results from kindergarten
- Program places different students in the pull-out science class than the math class
- Program placement based on total score from an ability test
- Regular classroom teachers also provided with (and use!) assessment results
Part II: Implications of aptitude for EL student identification
Implications of Aptitude for EL students

• Not looking to identify “true gifted”, but seeking to find students who show promise and a need for differentiated instruction

• Preferably have flexibility so that students can receive special services for domains where they show aptitude
  • Not an all-or-none identification

• Choosing assessments that identify EL students with most promise of academic success
Can I increase diversity in identified students by using Nonverbal Batteries?

- **Purported benefits:**
  - Culture “fair”
  - Measure more innate ability not affected by education
  - Increase diversity

- **Problem:**
  - Less related to most school content than Verbal and Quantitative ability (less informative for instruction)
  - Language loading is not the same as cultural loading
  - Often don’t actually increase diversity in selection!

Example of Raven’s Matrix-Type Item
Nonverbal task can actually show larger differences

[SAS difference between non-ELL and ELL students]
CogAT Form 7 Levels 5 - 8

- Figures
- Nonverbal
- Pictures
- Quant
- Pictures
- Verbal
Especially when controlling for other factors...
Similar results for WISC-IV...

WISC-IV Spanish Scores by Percent Education in the U.S.

<table>
<thead>
<tr>
<th>Scale Score (M = 100, SD = 15)</th>
<th>Minimal (&lt;30%)</th>
<th>Most</th>
<th>All (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Scale IQ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal Comp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceptual Reasoning</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

WISC-IV Score
Same “best” predictors of achievement

<table>
<thead>
<tr>
<th>ELL status</th>
<th>Ethnicity</th>
<th>Predicting achv’t</th>
<th>Verbal</th>
<th>Quant</th>
<th>Non-verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-ELL</td>
<td>White (n= 114)</td>
<td>Math</td>
<td>0.74</td>
<td>0.82</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reading</td>
<td>0.76</td>
<td>0.71</td>
<td>0.66</td>
</tr>
<tr>
<td>Hispanic</td>
<td>(n= 221)</td>
<td>Math</td>
<td>0.63</td>
<td>0.77</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reading</td>
<td>0.69</td>
<td>0.57</td>
<td>0.48</td>
</tr>
<tr>
<td>ELL</td>
<td>Hispanic (n= 178)</td>
<td>Math</td>
<td>0.52</td>
<td>0.66</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reading</td>
<td>0.54</td>
<td>0.50</td>
<td>0.44</td>
</tr>
</tbody>
</table>

- Correlations lower for ELL students but show SAME PATTERN of best predictors
- Mean differences not a factor, Variance may be
How different is a correlation of .6 vs. .8?
Conclusions about Nonverbal Tests

• Nonverbal tests are not a silver bullet solution
• Decrease in correlations means you’d select a lot of students who wouldn’t benefit from the program as much as others
• Promised rewards of diversity often don’t materialize
• No clear connection between nonverbal skills and most enrichment options or school content
• There are other ways to reduce the language load without throwing out useful information from Quant and Verbal Batteries!

Questions? Time for Review!

- What steps has your school taken to (a) increase diversity of G/T programming or to (b) identify talent among EL students?
- Do any of you have special programs targeted to EL students?
An aptitude approach to identification for EL students
How do I appropriately interpret test results for English learners?

- Challenge: want **useful and valid** test scores while identifying diverse students
- Some options are available that decrease the verbal load of ability tests
- **ESSENTIAL:** Consider “readiness for additional challenge” and “aptitude” continuous **evaluations** rather than “gifted” and “high achieving” **labels**
Option 1: Reducing the language demands of ability tests

• Some districts use single-format nonverbal tests with the problems outlined in the previous section

• Multidimensional nonverbal tests are a better option when they measure verbal and quantitative abilities in a nonverbal format.
“Nonverbal” Verbal

Can be omitted for Alternative Verbal battery

"Which one swims in the ocean?"

- Cat
- Shark
- Bird
“Nonverbal” Quantitative

Number Analogies

Number Puzzles

Number Series
Traditional Nonverbal

Figure Matrices

Paper Folding

Figure Classification
Why do you need multiple batteries?

- “Intelligence” vs. “abilitieS”--intelligence is not a unitary characteristic
- Everyone has relative strengths and weaknesses in different content
- Learning depends on domain-specific skills
  - Classroom activities and pull-out programs emphasize different skills
  - Alignment with services offered
Does it work? Yes

CogAT Form 7: Alternative Verbal Scale

Figure 7: Composition of the Verbal and Alternative Verbal scores at Level 7

Table 51: Percentage of ELL and Non-ELL Verbal and Alternative Verbal Scores in the Top 10 Percent of the Distribution on Levels 5/6-8
Benefits of multidimensional nonverbal

• Measures important aptitudes for school
• Drastically reduces receptive language load
• Can reduce group differences more than traditional figural formats
  • See next slide
Group Differences on Nonverbal Formats


In SAS scale points (SD=16)

*Note that this is still a multi-dimensional measure with three formats*
Option 2: Using *Opportunity to Learn* Norms

- If the goal is to identify students ready for challenge, need to see which students know the most *given their opportunity to learn the content*
- Using national age norms presumes that all students have had equal opportunity to develop the practiced skills
  - Uses age to control for opportunity to learn (OTL)
- Can use local and subgroup norms to control for clear differences in OTL within age groups
Identifying ELs ready for challenge: Opportunity to Learn Norms

- Would any meet typical identification cut-offs?
- Which students show more aptitude for greater challenge or acceleration?

<table>
<thead>
<tr>
<th>Student</th>
<th>Raw score out of 48</th>
<th>Verbal SAS</th>
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<tbody>
<tr>
<td>1189</td>
<td>48</td>
<td>105</td>
</tr>
<tr>
<td>1107</td>
<td>42</td>
<td>90</td>
</tr>
<tr>
<td>1111</td>
<td>41</td>
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<td>1130</td>
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<td>69</td>
</tr>
<tr>
<td>1163</td>
<td>27</td>
<td>68</td>
</tr>
</tbody>
</table>
Identifying ELs ready for challenge: Opportunity to Learn Norms

- National norms (SAS) show only average ability among most able students
- Instead, can **rank-order** ELL students at a school
- These are students who can reason best given similar opportunity to learn
- Use multiple years of data to increase comparison group

<table>
<thead>
<tr>
<th>Student</th>
<th>Raw score out of 48</th>
<th>Verbal SAS</th>
<th>Rank within ELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>189</td>
<td>48</td>
<td>105</td>
<td>1</td>
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<tr>
<td>1107</td>
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<td>27</td>
<td>68</td>
<td>12</td>
</tr>
</tbody>
</table>
An aptitude approach to G/T services for EL students
Using this information

- Subgroup norms show some students are high scoring compared to student with similar OTL
- **Does not mean** they are ready for the same types of enrichment or gifted programming as other students
- **Does mean** they are ready to be challenged and may require differentiated instruction
General Solutions

• Increasing size of program and variety of programs more effective for increasing diversity of program

• Renzulli and Reis’s Schoolwide Enrichment Model
  • Broad access to resources

• Tailored programs for EL students are also needed…
Accelerated English Learning

“High-potential ELLs often have the ability to learn a second language at a faster pace but need teachers who will challenge them and provide structured opportunities to develop academic language proficiency.”

Pereira & Oliveira in “Meeting the Linguistic Needs of High-Potential English Language Learners: What Teachers Need to Know”, Teaching Exceptional Children
Programming options for EL students

- **Programming goal**: to encourage interests and improve achievement at a rate faster than would otherwise occur with typical instruction
- Current level of achievement is primary guide
- For on- and below-grade-level achievement options include: tutors, after-school or weekend classes/clubs, etc.
  - Support for motivation critical!
- For achievement well in advance of peers, consider single-subject acceleration
Final Questions? Final Review

- Were there any new-to-you ideas in this talk?
- Any suggestions you think would be infeasible or difficult for your district to implement?
- What actions do you plan to take for your talent development program to promote the success of EL students?
Questions?
See *handout for links to additional resources.*
Joni.Lakin@Auburn.edu