Identifying Academically Talented Middle School Students: Advantages of Online, Above-Level Testing

Ann Lupkowski-Shoplik and Susan G. Assouline
Belin-Blank Center for Gifted Education
University of Iowa
Enhancing the gifted identification process

• General ability
• Achievement
• Student motivation (e.g., teacher rating scales)
• What has been missing?
  – Aptitude in specific areas
Improving how we discover talented students

• Rather than devising a program and fitting the students into the program, our focus shifts to discovering students with specific talents and providing programs for them.

• We can do a better job of matching the programs to the students’ aptitudes when we have specific information about their abilities.
Above-Level Testing

- Uses an achievement test designed for older students
- When that test is administered to younger students, they can showcase their reasoning abilities
- We can learn about their talents in specific areas, e.g., STEM
Above-level testing differentiates “talented” students from “exceptionally talented” students.

Section B shows how the above-level test “spreads out” the scores of the academically talented students. Some students earn low scores, most earn average scores, and some earn high scores.
Above-Level Testing Timeline

• **1916**: Leta Hollingworth tested “Child E” with the original Stanford-Binet Intelligence Scale

• **1971**: Julian Stanley administers SAT to an 8th grader

• **1990**: Susan Assouline, Ann Lupkowski-Shoplik, and others conduct above-level testing for upper elementary students (SSAT, SCAT, Explore)

• **1994**: additional universities conduct above-level testing for 4th – 6th graders

• **2012**: Belin-Blank center provides in-school, above-level testing using Explore (paper)

• **2016**: Belin-Blank center offers above-level testing with online I-Excel
Powerful information from Above-Level Testing

- For example, the **Pyramid of Educational Options** links test scores to specific educational options ranging from less accelerated to more accelerated (e.g., honors classes, mentorships, subject acceleration, grade-skipping, fast-paced classes)
In-School Testing Represents a Paradigm Shift

• Different from the traditional talent search model where parents contact university-based Talent Searches
• The Belin-Blank Center works with schools and establishes testing at a school site
• More students receive access to above-level testing: It is available to any talented student in the school, not just the students whose parents show initiative to register them for testing
A NEW Model: In-School, Above-Level Testing

• The Belin-Blank Center works with educators to provide the advantages of above-level testing to their students

• Testing is done **online** in the school
  – Educators receive test results and recommendations within **a few days**
  – Results are easily distributed to families
A new, online test, I-Excel…

• …is an online test for very capable 4th – 6th graders
  – uses an online platform developed by the Belin-Blank Center for use as an above-level assessment

• …licenses content developed by ACT
  – that was designed to measure academic progress of junior high students.
  – From that content, Belin-Blank has been identifying the academic talents of bright 4th- 6th grade students for over 20 years.

• …provides the power of above-level testing
I-Excel

• Science, Math, Reading, English
• Contains 8th grade level items
• Used as an above-level test for 4th-6th graders
Advantages of In-School Testing

• Enhances strong relationships among university-based centers for gifted education, schools, and parents
• Places scores and interpretation into the hands of teachers
• Promotes information-based differentiation
Advantages of In-School Testing (2)

• Encourages greater accessibility to talent search programming for ALL bright students – not just those whose parents know how to find (and pay for) opportunities

• Aligns with our mission of identifying and providing appropriate educational services for academically talented students

• Flexibility: When and where testing occurs
Interpretation of Test Results

• Provided using IDEAL Solutions®, which is an online tool.
  – Teachers can login and see test scores and interpretation
  – Parents receive individualized interpretation
Educator Aggregate Report

• Background information about above-level testing, purpose of I-Excel. How to interpret I-Excel scores.

• Table of student scores, including highest, lowest, and average score on each section of the test.

• Explanation of the performance of the group of students. Strengths, weaknesses, comparisons to 8th graders.
From the Aggregate Report

Score Distribution for Your Students

- Academically Talented:
  - Math: 1
  - Science: 2
  - Reading/Language Arts: 1

- Very Academically Talented:
  - Math: 5
  - Science: 12
  - Reading/Language Arts: 6

- Very Highly Academically Talented:
  - Math: 10
  - Science: 9
  - Reading/Language Arts: 9

- Extremely Academically Talented:
  - Math: 3
  - Science: 2
  - Reading/Language Arts: 3
Educator Aggregate Report: Interpretation of Test Scores

- Online accessibility to all test scores.
- Guidelines for comparing your students’ scores to a range of educational options educators might consider.
- Educators can sort scores so, for example, they can see the students who scored highest on the math section or any other section.
- Information on the screen can be printed, if desired.
Educator Aggregate Report

• Pictorial representation of how the students performed as a group. Scores are related to the Pyramid of Educational Options.
• Lists of resources that might be useful for these students.
• This report is NOT accessible to parents because it is for educator use only (parents get a different report)
Individual Student Report: For Families

- Background information about participating in above-level testing and what it means for highly capable students.
- Student’s scale score, national percentile compared to 8th graders, and national percentile compared to other talented students in his/her grade.
Individual Student Report (2)

• Explains what the scores mean.
• Lists the student’s score in each subtest, linked to specific content. In particular, the recommendations based upon scores are tied to CCSS for math and reading/language arts and NGSS for science.
• Specific resources useful for the family.
Individual Student Report

Your Mathematics/Science Scores Compared to 8th Graders

- Mathematics
  - 8th grade average
  - Talented
  - Highly Talented
  - Very Highly Talented
  - Extremely Talented

- Science
  - 8th grade average
  - Talented
  - Highly Talented
  - Very Highly Talented
  - Extremely Talented
Test Dates: It’s Flexible

- No date is off limits except Dec. 20-Jan. 20
- Test on weekdays or weekends
- Select the time of day that is best for you
- Testing time is 2 hours (plus 30 to 45 minutes for reading directions plus breaks).
- Testing session can be split into 2 days.
Before the Test

• Teacher receives link to test manual, reads test manual, and identifies proctors.

• Teacher trains proctors, sets up test room with tech people, takes care of all details concerning testing logistics
Sample Test

• Sample test is available for students to try, become familiar with “look” of the online test as well as the directions
• Use sample test to test computer system at school
Payment Information

• Schools can pay the test fee using budgeted funds for identification OR

• Parents pay the fee to the school
  – School can pass along the cost of the testing to parents or
  – School may add an additional fee to cover any administrative costs
• Teacher can log in at any time to see who is registered.
• Teacher gets confirmation email with list of students who are registered one week before test
• Teacher can remind non-registered students
Computer Requirements

• I-Excel requires at least 5 Mbps download speed. In our experience, many schools have 20 or 25 Mbps download speed.

• Can check speed using online speed test, for example, Verizon Speed Test: http://my.verizon.com/services/speedtest/

• Chrome or Firefox
Specifics: **Day of Test**

- School receives link plus login codes for students
- Students login
- Students test
- Our aim is for test scores to be available to school personnel within 48 hours
After the Test

- Teacher gets email (within 48 hours after the test): Scores are ready
- Teacher views scores online
- Teacher views aggregate and individual information online
- Teacher either prints individual student reports for parents OR sends parents link via email with scores and interpretation
Pilot Testing

- Conducted in schools in Iowa, Illinois, Ohio
- Feedback:
  - Teachers found the process to be straightforward and convenient
  - Students liked taking the test on the computer
Teacher Feedback

• Online testing is a more flexible, accessible option for schools
• No extra software to install and very little tech knowledge required.
What Do Teachers Say?

• “Having given my students above-level paper-and-pencil (and the dreaded bubbles) tests from a major college-admissions testing company, I was delighted at the ease and efficiency of the I-Excel online platform.

• My students resoundingly preferred not only the computer-based format but also the more reasonable testing time.

• ...the eighth-grade questions and passages are superbly designed to be appropriately challenging for a fourth grader but also to give me the data and insights I need to plan programming for our advanced learners.”
Aligning Results with Programming

- I-Excel Math results, for example, help schools identify students who would benefit from subject acceleration in math.
- I-Excel Science results help schools identify students who would benefit from subject acceleration in science.
Aligning Results with Programming

- Some schools have integrated in-school testing into their annual cycle of identification and accommodation.
- The faster turnaround available with online testing makes planning for future semesters easier.
What Makes this Unique?

• We are inclusive of schools, rather than reaching out only to individual families
• Our goal is to help schools identify these students and adjust their educational programs so these students are better served every day, not just in summer or weekend programs outside of school.
We are open to possibilities for working with schools, e.g.,

- Testing and interpretation only OR
- Testing Plus: “Plus” includes
  - professional development opportunities for their teachers,
  - reduced rates to attend programs for educators at the Belin-Blank Center,
  - etc.
For more information:

www.i-excel.org
Questions?

Ann-Shoplik@uiowa.edu