Acceleration: Making Informed Decisions
NAGC Webinar Sept. 2015

Ann Lupkowski Shoplik, Ph.D.,
Administrator, Acceleration Institute
Belin-Blank Center for Gifted and Talented Education
Acceleration is the best-researched, yet most under-utilized educational option available for gifted students.
The backstory: 2004

- The paradox: *Policy and practice were not aligned with research.*
- Students with the strongest needs least likely to receive the correct intervention.
- Although well-intentioned, the reasoning underlying this paradox is false.
- The focus of *Nation Deceived* was to start the conversation and dispel the myths.
Myths/Excuses (from Volume 1, A Nation Deceived)

• Teachers lack familiarity
• Confidence in the value of the intervention is low
• This intervention runs counter to personal beliefs (concerns about equity, etc.)
• Age trumps aptitude

• It will lower the self-esteem of the student or other students
• It’s bad to push kids
• They will have trouble making friends
• It’s not fair to the other kids in a classroom
Before *Nation Deceived* we were in reaction mode. Since *Nation Deceived*, we have:

- Increased awareness about forms and types of acceleration (20 types!)
- Established the Acceleration Institute (formerly Research and Policy on Acceleration; IRPA) at the Univ of Iowa: [www.accelerationinstitute.org](http://www.accelerationinstitute.org)
- Developed *Guidelines for Developing an Academic Acceleration Policy*
- Translated Nation Deceived volume 1 into 10 Languages
Since Nation Deceived (cont’d)

• Revised the *Iowa Acceleration Scale* (IAS) -- 2009
• Developed new decision-making tools for single-subject acceleration: IDEAL Solutions
• Presented at numerous conferences and offered multiple workshops
• Hosted summits on acceleration

None of this would have been possible without private philanthropy
20 different types of acceleration

- Early admission to K
- Early admission to first grade
- Grade-Skipping
- Continuous progress
- Self-paced instruction
- Subject-matter acceleration
- Combined classes
- Curriculum compacting
- Telescoping curriculum
- Mentoring
- Extracurricular programs

- Distance learning courses
- Dual enrollment
- Advanced Placement
- International Baccalaureate program
- Accelerated/Honors HS or STEM Residential HS
- Credit by examination
- Early entrance to MS, HS, or college
- Early graduation from high school or college
- Acceleration in college
What was the impact of *A Nation Deceived*?

- **4 million visitors to the website**
- **150,000 copies of the report downloaded**
- **60,000 print copies distributed**
From *Deception* to *Empowerment*

Evidence Trumps the Excuses Holding Back America’s Brightest Students

Editors:
Susan G. Assouline,
Nicholas Colangelo,
Joyce VanTassel-Baska, &
Ann Lupkowski-Shoplik

Published April 2015

www.nationempowered.org
Big picture: What can we learn from *A Nation Empowered*?

- Acceleration works. An extensive research base supports acceleration.
- Methods have been developed to evaluate candidates for acceleration systematically and guide educators through the process.
- Acceleration can be provided in many ways, including content acceleration, grade-skipping, and dual enrollment. Acceleration can be tailored to individual students’ needs.
What can we learn from *A Nation Empowered*? (Continued)

- Acceleration supports the social/emotional development of gifted students by placing them with other like-minded students.
- Acceleration is an inexpensive option.
- Acceleration supports the continuous academic development of students by providing academic challenges & stimulation.
- Resources for making decisions are available in *Nation Empowered* and at [www.accelerationinstitute.org](http://www.accelerationinstitute.org).
We’re on Twitter!

All students deserve to learn something new each day, and if academically talented students desire to be accelerated and are ready for it, the long-term evidence clearly supports the intervention.

#NationEmpowered
What’s an effect size?

\[ M_{\text{experimental group gain}} - M_{\text{comparison group gain}} \]

\[ \frac{\text{SD}_{\text{pooled}}}{} \]

It allows us to compare the results of many different research studies in a standardized manner.

Interpretation:

.20 = small/negligible
.50 = medium
.80 = large

Another interpretation:
An effect size of .30 would suggest the grade equivalent improvement in a given outcome for one group of about three additional months of achievement of the experimental group over the control group.
Some interesting findings

Interpretation: 0.20 = small/negligible; 0.50 = medium; 0.80 = large
(All of these report academic effects)

Compacted curriculum: +0.20
Concurrent/dual enrollment: +0.41
Single subject acceleration +0.42
Summer university courses +0.43
AP Courses: +0.60
Radical Acceleration: +0.61
Grade skipping: +0.67
Accelerated/honors HS classes: +0.69
Computer online courses: +0.72
Saturday classes on univ. campus +1.56
# Effect Sizes

<table>
<thead>
<tr>
<th></th>
<th>Subject-Based Acceleration</th>
<th>Grade-Based Acceleration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary Academic Effects (all grades)</strong></td>
<td>+0.51</td>
<td>+0.50</td>
</tr>
<tr>
<td><strong>Summary Socialization Effects (all grades)</strong></td>
<td>+0.16</td>
<td>+0.23</td>
</tr>
<tr>
<td><strong>Summary Psychological Effects (all grades)</strong></td>
<td>+0.24</td>
<td>+0.34</td>
</tr>
</tbody>
</table>

*These students gained an additional 5.1 months over comparison grp

5.0 months over comparison group
Academic acceleration produces notable academic gains for students with gifts and talents, regardless of the category of acceleration or actual acceleration option provided.

- #NationEmpowered
Alternatives have less support

- Enrichment (.20)
- Pull-out Resource (.20)
- Classroom Differentiation (.25)
- Independent Projects
- Cooperative Learning
- Special-topic Projects
- Field Trips
- Competitions

- Some students’ needs can be met be these approaches
- Anything that helps is a plus
- But, for high ability students none of these approaches has produced the compelling research evidence of acceleration.
Emerging trends in the past decade shaped *A Nation Empowered*

- Twice-exceptionality
- Core curriculum
- Diverse populations
- STEM
- Professional Development
- International impact
- Specialized schools, such as state residential STEM schools
- Early entrance to college
- Bridging the disconnect between in-school programming and out-of-school
Twice-exceptionality

• New chapter that reflects much of the research conducted over the past decade, especially as it concerns Autism Spectrum Disorder (ASD) and acceleration

• For more resources, see www.belinblank.org/clinic
Core Curriculum

- This is a big topic!
  - It also includes curriculum and assessment

- As a field, our biggest concern is that it is still not rigorous enough

- How could it be?
  - The standards are strong, but they were not developed with the gifted student in mind.
Making Decisions about Whole-Grade Acceleration

- **Iowa Acceleration Scale**
  - Developmental factors
  - Interpersonal Skills
  - Attitude & support of student, parent, school
  - Critical issues for grade skipping (attitude of student, level of ability, grade level of siblings)
Content-Based Acceleration

• For students who:
  – Demonstrated academic ability in one or more academic areas
  – Are not recommended for whole-grade acceleration

• Benefits students with uneven academic profiles who need acceleration in the area of their strength

• May have already skipped a grade but need additional acceleration in extreme strength area
Above-level testing differentiates “talented” students from “exceptionally talented” students.

Section A shows the percentile rank on a grade-level achievement test. The students we are focusing on scored at the 95th percentile or above.
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.
Determine readiness for acceleration in STEM

- www.idealsolutionsstem.com

Comprehensive descriptions for readiness for advanced math and science curriculum that are related to the interpretation of scores from standardized tests.

Recommendations are aligned with national standards.

Designed to be used by educators and parents.

Reports are detailed and comprehensive and provide an extensive listing of resources. We’ve investigated the options for you!
Maximize STEM Potential with IDEAL Solutions® for STEM Acceleration
For educators or parents of 3rd – 7th graders

Accelerate Your Student's Math Skills
IDEAL Solutions® for STEM Acceleration can help you match your student's capabilities with a

Success Stories
"The IDEAL Solutions® report incorporated multiple test scores

What is STEM acceleration?
Are there group discounts?

Nurturing Potential | Inspiring Excellence
Resources provided by the Belin-Blank Center, Univ of Iowa

- In-School Testing (new online test, I-Excel, www.I-Excel.org)
- Talent Search
- IDEAL Solutions
- Online Advanced Placement courses plus other courses
Relevant Tools

• Iowa Acceleration Scale: Provides a systematic process for evaluating candidates for grade skipping
• Guidelines for Developing an Academic Acceleration Policy
• Acceleration Institute website www.accelerationinstitute.org
www.accelerationinstitute.org
www.AccelerationInstitute.org

• First Time Here?
  – Parents
  – Educators
  – Policymakers
  – Researchers

• Resources
  – *A Nation Empowered* (paperback book and eBooks for purchase, free pdf also available)
  – *A Nation Deceived* (free download)
  – IDEAL Solutions for STEM Acceleration (content accel)
  – *Guidelines for Developing an Academic Acceleration Policy* (free download)
  – *Iowa Acceleration Scale*
  – Personal stories about experiences with acceleration
  – Acceleration practices and policies *in each state*
  – Relevant research
The Future

- Dissemination and distribution of *A Nation Empowered*
- Preparing future professionals about this highly-researched, yet *still* under-used intervention.
- Additional specialized resources
- Affiliations/partnerships
- An online graduate course on academic acceleration is being offered (fall 2015) through the University of Iowa College of Education. This course will be offered again!
Follow us!

• Follow us on Twitter @belinblank
• Like us on Facebook facebook.com/ BelinBlank
• Read our blog: belinblank.wordpress.com
• Subscribe to our newsletter: www.belinblank.org/newsletter
Thank you for your commitment to empowering our gifted students!


Questions?

Ann-Shoplik@uiowa.edu
Twitter: @AnnShoplik