



A Nation Empowered

Evidence Trumps the Excuses Holding Back America's Brightest Students

VOLUME 1

Susan G. Assouline, Nicholas Colangelo, and Joyce VanTassel-Baska
Mary Sharp, Writing Consultant

Belin-Blank Center, College of Education, University of Iowa

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The Connie Belin & Jacqueline N. Blank International Center
for Gifted Education and Talent Development
College of Education
University of Iowa

*Dedicated to the memory of:
Julian C. Stanley, Johns Hopkins University,
founder of the Talent Search Model and the Study of Mathematically Precocious Youth*

and

*James J. Gallagher, University of North Carolina-Chapel Hill,
pioneer in educational policy related to special and gifted education*

*Their scholarship and advocacy for the intervention of acceleration
positively impacts the lives of tens of thousands of students and their families and educators.*

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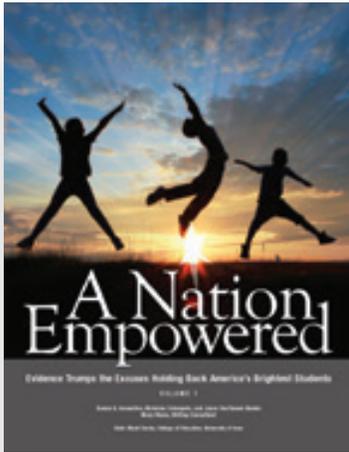
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Evidence Trumps the Excuses Holding Back America's Brightest Students

Volume 1

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THE TITLE IS THE MESSAGE

Empowerment represents potency. Robust empirical evidence is the most effective means of empowering educators and parents of gifted students. Historically, educational decisions have been based on subjective beliefs, individual bias, and personal philosophical preference. Empowerment conveys the fortitude to act with a purpose that is grounded in evidence.

Thank you for reading Volume 1 of the two-volume report, *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students*.

The purpose of this volume is to give voice to accelerated students, their families, and teachers. Acceleration is an educational intervention that can be implemented individually, in small groups, and in large groups. No matter what the format, it is the individual child who is the focus.

We want to re-emphasize our respect for educators who are trying to make the best decisions for their students. In the same way that *A Nation Deceived* was designed to guide the conversation about acceleration, *A Nation Empowered* is designed to empower educators with evidence to use in implementing the various types of acceleration highlighted in Volume 1 or Volume 2.

The intervention of acceleration is critical to the success of America's students. If we recognize individual differences among students, we can serve each student by optimizing learning opportunities.

We hope the evidence in Volumes 1 and 2 of *A Nation Empowered* will help America's educators to allow their advanced students to *soar*.

Acknowledgements

A project such as this requires tremendous team work and collaboration. Our colleagues have been especially gracious in supporting these efforts, and we wish to acknowledge their many contributions.

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Volume 2 of *A Nation Empowered*, authored by 33 experts in the field of gifted and talented education, formed the foundation for the synthesis of evidence in Volume 1. The stories in Volume 1 bring to life the evidence and enrich the findings by drawing attention to the universal message and empowering students, educators, and their families. The students and parents who appear in the vignettes all reviewed their vignette and accompanying photo and provided confirmation regarding their participation. We are tremendously grateful to them for sharing their experiences with academic acceleration. We are indebted to the experts who authored the research-based chapters in Volume 2.

The following individuals reviewed drafts of Volume 1 and provided thoughtful insights and helpful editorial comments and suggestions. We thank them for their commitment to this project.

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Rena Subotnik, American Psychological Association, Washington, DC

Jan Warren, University of Iowa

SPECIAL RECOGNITION TO:

Miraca U.M. Gross, Professor Emerita of University of New South Wales, Sidney, Australia, co-editor and co-author of *A Nation Deceived: How Schools Hold Back America's Brightest Students*. Professor Gross contributed substantially to the philosophical underpinnings associated with acceleration.

Mary Sharp, author, editor, and discussant, provided invaluable input to the project.

Dr. Laurie Croft, Belin-Blank Center Associate Director for Professional Development, reviewed Volume 2 of *A Nation Empowered* and assisted in many ways, including fact-checking.

Dr. Ann Lupkowski-Shoplik, Belin-Blank Center Administrator for the Acceleration Institute, co-editor for Volume 2 of *A Nation Empowered*, and special consultant for Volume 1. This project would not have been completed without her assistance.

Susan Assouline, Nicholas Colangelo, and Joyce VanTassel-Baska

Guest Foreword

Acceleration works. Whereas there are many nuances and dimensions to meeting the academic and psychological needs of gifted students, acceleration cuts through the complexities and provides a reliable and robust evidence-based intervention that is positive for gifted students. This two-volume report, *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students*, endorsed by the National Association for Gifted Children (NAGC), offers research and real-life examples of the effectiveness of this academic intervention.

Historically, the great paradox of acceleration has been that the beliefs and practices of educators (and the general public) did not align with the research evidence. The 2004 report, *A Nation Deceived: How Schools Hold Back America's Brightest Students* initiated a vibrant and sometimes contentious conversation about that paradox. The impact of that 2004 report was to expose to the nation the inconsistencies between research and practice and to bring acceleration to a prominence as an intervention. Over the past decade, *A Nation Deceived*, which also was endorsed by the National Association for Gifted Children, has had a profound impact on the field. The research foundation for *A Nation Deceived* was the template for *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students*.

Volume 1 of the two-volume *A Nation Empowered* report synthesizes the research presented in Volume 2. Several vignettes of accelerated students, concerned parents, and supportive teachers are presented in Volume 1. The vignettes aim to highlight the positive impact of the many forms of acceleration on gifted students. Much progress has been made in addressing the excuses preventing the implementation of acceleration. Research-based evidence empowers educators and parents to make informed decisions rather than rely on personal opinion or misinformation.

The authors in Volume 2 cogently explore twenty forms of acceleration. The research highlights the impact on students' academic as well as social emotional development. Ten years ago, the robust research on the effectiveness of acceleration had not translated into policy and practice. Ten years ago, educators were challenged to engage in the important conversation about acceleration.

Today, practice is improved; however, we can do more and this report empowers parents, educators, and policy-makers. Use this report and join us in ensuring that gifted students have every possible opportunity to excel.

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Message to Schools

Education is our life's work. Collectively, the authors of both volumes of *A Nation Empowered* have spent decades in education. We have tremendous respect for teachers and their involvement in the lives of their students, and both volumes of *A Nation Empowered* have been written with teachers and their gifted students in mind.

Our careers in education began as students in schools, continued as educators, and currently we serve as researchers, administrators, and professors who educate teachers, counselors, and psychologists. In our own teaching, research, and writing, we have been moved again and again by the inherent inequality that arises when educators ignore the individual differences in their students. We know that giftedness cuts across gender, ethnicity, social and economic background, and geographic location. There are students ready to accelerate in all of America's classrooms—in rural areas, in the inner city, and in the suburbs. These students are talented in a variety of academic and creative domains and are found in every type of school.

For very capable students, no intervention is as effective as one of the twenty types of acceleration. Each type of acceleration moves students through an educational program at rates faster, or at younger ages, than typical. Each type means matching the level, complexity, and pace of the curriculum to the readiness and motivation of the student. Examples of acceleration include early entrance to school, grade-skipping, moving ahead in one subject area, and Advanced Placement (AP®). Acceleration is educationally effective and inexpensive. Acceleration can help level the playing field between students from schools that have many economic resources and schools that are economically disadvantaged. Indeed, school is the best place to level the playing field.

A decade ago, we were passionate about bringing forward to the public the truth about the effectiveness of academic acceleration as an educational intervention for students with high academic ability and achievement. This intervention is essential to the vast majority of academically gifted children who will not have the means to find alternatives. *A Nation Deceived: How Schools Hold Back America's Brightest Students* (Colangelo, Assouline, & Gross, 2004) met the goal of changing the conversation about acceleration in America's schools.

A Nation Empowered updates *A Nation Deceived* and aims to empower readers through evidence and tools to confidently implement a variety of accelerative strategies. Acceleration is a powerful educational ally, and the report is designed to provide support and validation to parents, educators, and administrators. It is our hope that parents, educators, and administrators will:

1. Become familiar with the twenty types of acceleration and recognize their effectiveness.
2. Know that they have resources to support their decision.
3. Develop policies that support the equitable implementation of acceleration as an intervention for very capable students, thereby maximizing the success of each and every student.

Thank you for joining us in creating opportunities for students to be challenged and succeed. Together, we can use the evidence to empower schools to allow their students to soar.

Susan G. Assouline, Ph.D.

Nicholas Colangelo, Ph.D.

Joyce VanTassel-Baska, Ed.D.



‘Everyone is entitled to his own opinion, but not to his own facts.’

FORMER UNITED STATES SENATOR DANIEL PATRICK MOYNIHAN

Empowerment Demands Excellence: The Evidence is Clear

Erin Pinney can't help it. She tears up when she talks about sending her son to kindergarten.

A precocious, gifted child, Jackson was reading in preschool. He played better with kids a couple of years older. When Jackson was five years old, Erin's husband wanted to enroll him in first grade. But Erin, a teacher, and other educators said no, that Jackson needed to be with kids his own age in kindergarten, that he had too many behavior issues to be in first grade.

“We were wrong, devastatingly wrong,” Erin says. “He was absolutely miserable and in trouble every day. His teacher was expecting him to sit and learn the sounds of letters and many other skills that he already knew.”

Jackson began experiencing terrible anxiety and night terrors.

Desperate, Erin finally talked to the talented and gifted coordinator in the district, who gave her a copy of *A Nation Deceived: How Schools Hold Back America's Brightest Students*.

Erin Pinney reads to her son, Jackson.
(Photo: Jerry Mennenga)



“I devoured it,” she says, along with several other texts on gifted children and gifted education. Jackson was tested, and his high abilities confirmed.

At mid-year, the Pinneys moved their son to first grade. Three days later, the boy's night terrors stopped. The Pinneys had their happy, bright child back. He was reading and learning and interacting with the teachers and students. He had friends. He wasn't in trouble every day.

“It is good to accelerate kids,” Erin says now, two years later. “It's just so ingrained in our culture that it's good to go to school with people your own age, that it's not good for high-ability kids to be moved ahead. But those attitudes are based on bias and a lack of education. When you see the research, when you're given the tools, you see that acceleration makes complete sense.”

Erin's discovery was not only transformative for her son, it energized her. She is now a teacher for gifted and potentially gifted students in a western Iowa school district, where she also works with classroom teachers.

“Teachers, with minimal knowledge about giftedness, can make a huge impact on gifted child learning. It starts with understanding that gifted children have different needs and knowing a few things about meeting those needs. Then the children will take off on their own.”

Erin’s story, as well as any, sums up the state of gifted education ten years after the groundbreaking policy report, *A Nation Deceived: How Schools Hold Back America’s Brightest Students*, caught the nation’s attention.

In short: Access to programs and support for gifted students has grown as parents, educators, and policymakers have learned about research and the tools that identify giftedness and support acceleration. But far too many parents, educators, and policymakers don’t know about the research and the tools. And that means far too many high-ability children languish in our classrooms, bored and unchallenged, their potential unrecognized and un nourished, their futures imperiled, and their country’s future diminished.

We still haven’t figured out excellence.

Ten years ago, the point of *A Nation Deceived* was to change the conversation about educating gifted students. It did that in a powerful, enduring way.

“We eliminated many of the excuses people were using to hold back gifted students,” says Dr. Nicholas Colangelo, Director Emeritus of the Belin-Blank Center and Dean of the University of Iowa’s College of Education. “The paradox is that even though we know that acceleration worked, we did not put it into practice. We no longer have the luxury to pretend.”

But, still, ten years later, myths too often trump facts. Disconnects continue.

“A powerful argument can be made, based on research, about the importance of acceleration for gifted students,” says Dr. Joyce VanTassel-Baska, Professor Emerita and Founding Director of The Center for Gifted Education at the College of William and Mary. “Yet false ideas about the supposed dangers of moving students through school faster still get air time in teachers’ lounges and at neighborhood kitchen tables.”

The goal of this follow-up report, *A Nation Empowered: Evidence Trumps the Excuses Holding Back America’s Brightest Students*, is to re-energize the discussion around academic interventions for gifted students and once again forcefully present the facts about acceleration as an educational intervention. We now have ten more years of research and practice, hence the evidence.

“We intend to provide the facts about gifted education to busy parents, educators, and policymakers,” says Dr. Susan Assouline, Director of the Belin-Blank Center and Professor of Psychological and Quantitative Foundations at the University of Iowa. “We aim to dispel the perceived conflicts about how we spend our public education dollars. We intend to challenge Colleges of Education to better prepare teachers to recognize and serve gifted students.

“We can’t take shortcuts,” she adds. “We really have to understand what’s involved, the breadth and depth of the options available.”

This volume of *A Nation Empowered* presents vignettes of individual gifted students, their families, and educators who recognize the power of acceleration. Each story captures a universal message about the successful application of various types of acceleration to the academic and social-emotional development of students at different stages in their lives. The message is positive and affirming, while also challenging us to do more. To achieve excellence, America’s gifted students need the help of informed adults.

“I’ve heard it said that the first several strokes of any portrait determine the essence of that portrait,” Dr. Colangelo says. “We are now creating the first strokes of this century. If we want to determine what the portrait of gifted education will be in the twenty-first century, what we do now counts. We need to get away from irrational ideas and confront and call them for what they are, and to realize that the heart and soul of gifted education is recognizing individual differences, appreciating them, and then responding to them.”

The table on page 3 summarizes the research evidence from Volume 2.

20 Important Points about Educational Acceleration

1. Acceleration is the most effective academic intervention for gifted children.
2. For bright students, acceleration results in both long-term and short-term beneficial effects, academically, psychologically, and socially.
3. Acceleration is a very low-cost intervention for addressing the needs of gifted students.
4. Gifted children tend to be socially and emotionally more mature than their age-mates; therefore, for many bright students, acceleration provides a better personal maturity match.
5. When bright students are presented with curriculum developed for age-peers, they can become frustrated and disengaged from learning. Advanced curriculum in core subject matter is essential to challenge them.
6. Testing, especially above-level testing (using tests developed for older students), is highly effective in identifying students who would benefit from acceleration.
7. The K-12 Common Core State Standards, which correspond to math and reading, and the Next Generation Science Standards, which focus on K-12 science, raise academic expectations for most students; however, for highly capable students, these standards do not eliminate the need for accelerative options.
8. The twenty types of acceleration available to bright students fall into two broad categories: grade-based acceleration, which shortens the number of years a student spends in the K–12 system, and subject-based acceleration, which allows for advanced content earlier than customary.
9. Entering school early is an excellent option for some gifted students, both academically and socially.
10. Early entrance to college is effective, both academically and socially, especially when students are part of a cohort of early entrants. This option results in both short-term and long-term academic success, leading to long-term occupational and personal satisfaction.
11. Advanced Placement (AP) is the most available large-scale option for bright students who want to take college-level courses in high school.
12. State residential STEM schools use accelerated approaches that include early admission, AP, International Baccalaureate (IB), and various forms of personalized learning.
13. High-ability students who are economically vulnerable achieve considerably less without support for their abilities than economically secure students.
14. Educators need to ensure that options for acceleration are available for students at all stages of the learning process.
15. Policy on acceleration at state and local levels can facilitate the effective use of the process and promote change. To encourage a major change in America's perceptions of educational acceleration, we need to use legislation, the courts, administrative rules, and professional initiatives.
16. Effective implementation of accelerative options for gifted students with disabilities is necessary for their academic advancement and social and emotional well-being.
17. It is important for educators, parents, and students to be fully involved in the decision-making process about an individual student's acceleration. The *Iowa Acceleration Scale* is an effective instrument for helping schools through the process.
18. The few problems that have been experienced with acceleration have stemmed from inadequate planning and insufficient preparation on the part of educators or parents.
19. Educational equity does not mean educational sameness; rather, equity respects individual differences in readiness to learn and recognizes the value of each student.
20. The key questions for educators are: what type(s) of acceleration does the gifted learner need and when is it optimal to implement the intervention?

For more information on the research that informs these points, see Volume 2 of *A Nation Empowered* (www.nationempowered.org), or Volumes I and II of *A Nation Deceived* (www.nationdeceived.org).

EMPOWERED



'As intimidating and time-consuming as our advocacy was on behalf of our son's acceleration, we were more scared to do nothing.'

KIMBERLY CARTER, PARENT

The Carters: Finding the right fit meant skipping a grade

Mason Carter was so disengaged when he started fifth grade that he made up songs about it. He also came home so frustrated, he says, he felt like a dam that was going to burst.

Before moving to Iowa, Mason had been in a full-time, streamlined program for gifted children in Miami. His father, Andrew Carter, accepted a coaching position at a university, and the family moved to a new city, one without a full-time, self-contained gifted program. Mason languished in the regular classroom, asking for more work, which he quickly completed. It was not a happy time.

“Flags went up for us,” Andrew says. “Until that year, school was where Mason wanted to be. Where I work (in athletics), people want to promote, or sometimes even hitch their wagon to, a star. But that wasn’t happening in Mason’s classroom.”

Andrew, with Mason’s mom, Kimberly, decided they had to begin advocating for their son, or “pressing buttons,” as his father calls it. Mason began an enrichment program, but the 90-minutes-a-week “escape” it offered—Mason’s word—was not enough.

As intimidating and time-consuming as their advocacy on behalf of Mason was, Kimberly says, “we were more scared to do nothing.”

The Carters read the research and talked to gifted education researchers at the University of Iowa. At the end of fifth grade, Mason attained a perfect score on the ACT *Explore* test, a test for eighth graders. On the *Iowa Assessments* (formerly the *Iowa Tests of Basic Skills*), Mason tested in the 99th percentile in all subjects; in some subjects, his performance was similar to advanced high school students.

Mason Carter with his parents, Andrew and Kimberly.
(Photo: Mark Tade)

The Carters began pushing for whole-grade acceleration for Mason and, after additional testing and a number of team meetings with district-level administrators and teachers, Mason was allowed to skip sixth grade. As a seventh grader, he was immediately moved out of pre-algebra and into algebra. He’s doing advanced work in other courses, too. And, most importantly, he’s loving school again.

Mason participated in the decision to skip a grade—something his parents said they would not have pursued if their son hadn’t wanted it. They note that parents may have to push for whole-grade acceleration for gifted children if that option is outside a school’s comfort zone.

“Don’t be afraid,” Andrew says. “A lot of the conventional ‘wisdom’ just doesn’t fit. The hesitancy that even some educators express always starts with the social ramifications. And in our case, we just haven’t seen that.

“Don’t believe the hype. Involve the child in the decision-making, and fully vet it with him or her.”

Andrew, who also consults in sports curriculum development, says the widely accepted Long-Term Athletic Development model holds that children don’t necessarily develop at the same rate or at the same age. The “best practice” in sports now, he adds, is to group children based on their developmental stage rather than their chronological age.

“It’s possible,” Andrew says, “that sport development theory has outpaced conventional education theory.”

Another tip Andrew offers parents seeking the right fit for their gifted child is to focus on their child—“take care of yours,” as one of his friends advised, and don’t try to reform the whole educational system. “I had to shelve my instinct to ‘fix’ the system,” Andrew says, “and instead focus on the immediate task.”



“We eliminated many of the excuses people were using to hold back gifted students.”

DR. NICHOLAS COLANGELO

Starting the Discussion

Seldom has any education publication captured such widespread attention as did *A Nation Deceived: How Schools Hold Back America’s Brightest Students* in 2004.

TIME magazine featured in-depth coverage of the two-volume report, as did the *New York Times*, *Washington Post*, *Boston Globe*, and countless other newspapers. *Education Week* and other journals summarized its findings. The authors—Dr. Nicholas Colangelo, Dr. Susan Assouline, and Dr. Miraca U.M. Gross—were widely interviewed, and they presented their findings at dozens of education conferences.

Why such an impact?

Primarily, it was the knowledge, expressed in clear, straightforward language, that gifted children benefit from acceleration—that is, from moving through course materials faster than typical students. The report looked at fifty years of research about acceleration. Acceleration comes in many forms—skipping grades, starting school early, going to Saturday enrichment classes—but all its forms benefit highly capable, highly motivated students. As a “remedy,” it could be implemented, in most cases, at little cost. The primary message of *A Nation Deceived* was strong and inescapable: Acceleration causes no harm. Rather, it helps gifted children—academically, emotionally, and socially.

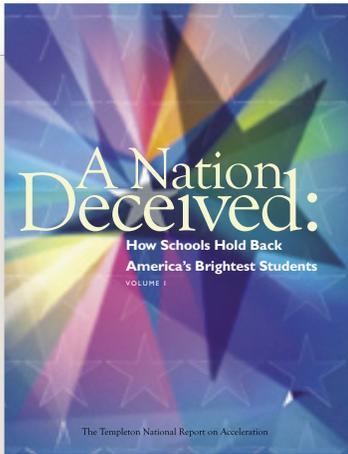
“It is pretty amazing how consistent the research is—that acceleration is a plus when students are ready,”

says Dr. Colangelo, Dean of the College of Education and Director Emeritus of the Belin-Blank Center at the University of Iowa. “That was news to a lot of people, including educators.”

Part of the report’s success was due to its format. The research, with its footnotes and mathematical formulas, was presented in a separate volume of *A Nation Deceived: How Schools Hold Back America’s Brightest Students*. The other volume, Volume 1, summarized the research in layman’s terms. It would become the primary advocacy piece for gifted education, broadly cited and widely used by parents, educators, and policymakers.

“We tend to forget that policymakers don’t read journal articles, they don’t have time to read detailed books, but they do read a well-put-together policy report, which is exactly what *A Nation Deceived* was,” says Dr. Jonathan Plucker, Professor of Educational Psychology at the University of Connecticut. “It was a huge game-changer. Just the way that the report classified acceleration was so helpful because it gave us a common language.”

When *A Nation Deceived* was released, Dr. Colangelo recalls, “It was in an atmosphere of conflict, misunderstanding, and apprehension about acceleration. Our goal, in developing the report, was to start a new conversation in America’s schools regarding the acceleration of gifted students—a conversation based on evidence and research, rather than on personal bias, selective recall, and stereotypical thinking.” That goal was met and then some.



A NATION DECEIVED
BY THE NUMBERS

More than
4 million
visits to the website, www.nationdeceived.org

150,000 plus
copies downloaded from the website

60,000
print copies distributed

73 percent
of those surveyed said the website had
a positive effect on their attitudes about
acceleration

Volume I available in
10
languages

Summary of *A Nation Deceived: How*

PUBLISHED: 2004

AUTHORS: Dr. Nicholas Colangelo and Dr. Susan Assouline, both of the Belin-Blank Center for Gifted Education and Talent Development at the University of Iowa, and Dr. Miraca Gross of the University of New South Wales in Australia.

SUPPORT: The John Templeton Foundation underwrote the report's creation, production (both online and print), and distribution.

CONTENTS: Two volumes. Volume I presents a summary of acceleration research in layman's terms. Volume II, an edited volume, presents research about various forms of acceleration.

For further information and to download the report, as well as the update, *A Nation Empowered*, go to www.nationdeceived.org.

Schools Hold Back America's Brightest Students

SUMMARY: American schools routinely avoid academic acceleration, the easiest and most effective way to help highly capable students. While the popular perception is that a child who skips a grade will be socially stunted, fifty years of research shows that moving bright students ahead often makes them happy.

Acceleration means moving through the traditional curriculum at rates faster than typical. The various forms of acceleration include grade-skipping, early-entrance to school, and Advanced Placement courses. It is appropriate educational planning. It means matching the level and complexity of the curriculum with the readiness and motivation of the student.

Students who are moved ahead tend to be more ambitious, and they earn graduate degrees at higher rates than other students. Interviewed years later, an overwhelming majority of accelerated students say that acceleration was an excellent experience for them.

Accelerated students feel academically challenged and socially accepted, and they do not fall prey to the boredom that plagues many highly capable students who are forced to follow the curriculum of their age-peers.

For the first time, this compelling research is available to the public in a bold new initiative to get these findings into the hands of parents, teachers, and principals. *A Nation Deceived* is available at no cost to schools, the media, and parents who request copies.

You'll find information about entering school early, skipping grades in elementary school, taking Advanced Placement courses, and starting college ahead of time. You'll read the comments of accelerated students, deans of Colleges of Education, a school superintendent, and a school board member. Every sentence in this volume is culled from the research of America's leading education experts.

With all this research evidence, why haven't schools, parents, and teachers accepted the idea of acceleration?

A Nation Deceived presented the reasons why schools hold back America's brightest students:

- Limited familiarity with the research on acceleration.
- Belief that children must be kept with their age group.
- Belief that acceleration hurries children out of childhood.
- Fear that acceleration hurts children socially.
- Political concerns about equity.
- Worry that other students will be offended if one child is accelerated.

The report shows these reasons are simply not supported by research.

Since 2004, more than four million people have visited the *Nation Deceived* website, www.nationdeceived.org. Almost one hundred and fifty thousand copies of the report have been downloaded, and more than sixty thousand printed copies have been distributed. Its content has shaped state and local school district policies. It helped enormously that a grant from the John Templeton Foundation paid for the report's publication and distribution.

“Changing the conversation was the first step to action on behalf of our nation's brightest students,” says Dr. Assouline, Director of the Belin-Blank Center at the University of Iowa. “Part of this had to do with facing that intractable paradox: That policy and practice were not aligned with research.”

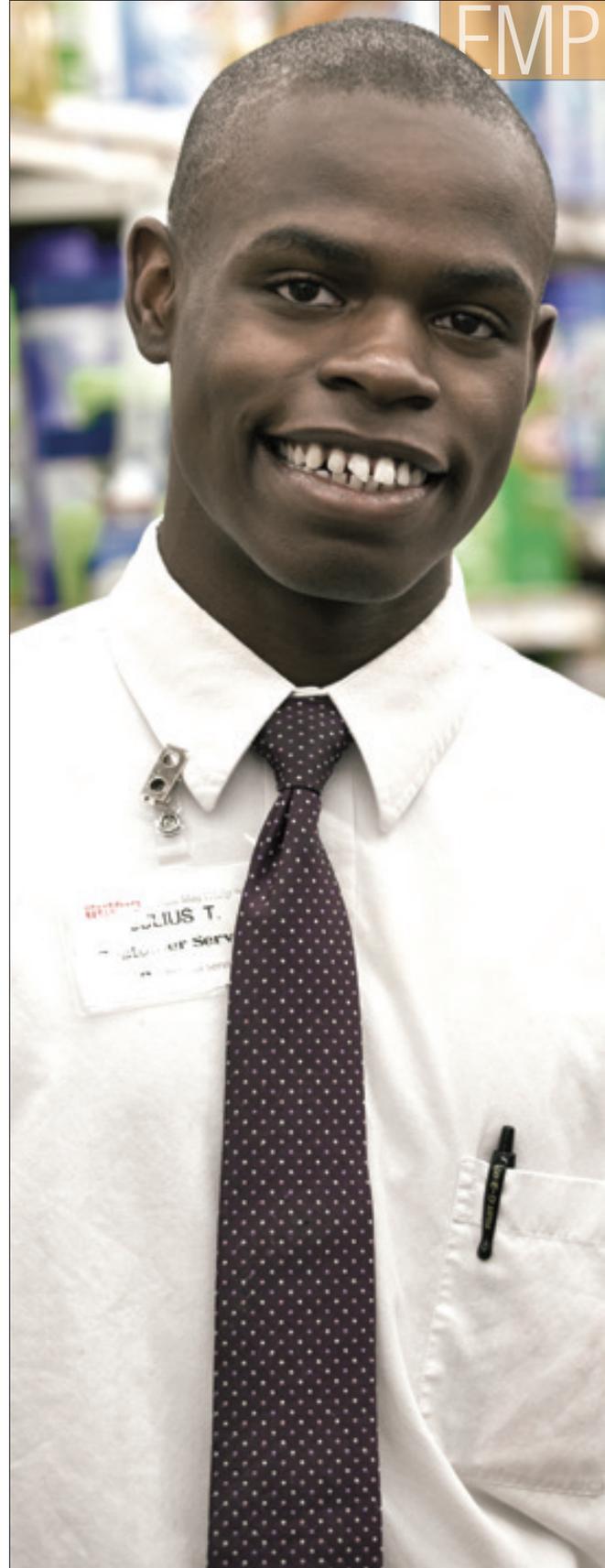
Because of its format, the report reached an audience beyond researchers and educators. “It spoke to a lay audience and parents in a way that hadn't been done before,” says Dr. Joyce VanTassel-Baska. “I know of no other report that caught fire like this one and was able to mobilize changes in public policy.”

“The really powerful thing about *A Nation Deceived* is that it translated very technical information into words that were very accessible to the typical person, the typical parent, or the typical teacher or principal,” says Dr. Ann Lupkowski-Shoplik, an associate research scientist at the Belin-Blank Center. “The terrific thing is that it offers a lot of examples and illustrations. Parents can put their children right into those stories. They can recognize their own kid, and it gives them courage to try this somewhat scary thing called acceleration.”

Dr. Colangelo notes *A Nation Deceived* was written for the United States but generated a tremendous amount of interest in other countries, too. “We began to hear from international educators, ‘This applies to us, too,’” he says.

Volume 1 of *A Nation Deceived* is available in English and nine other languages (www.nationdeceived.org). It's still relevant, and it's still free.

Julius Tembe was an AP scholar in Des Moines, entering the University of Iowa with nearly 100 hours of transfer credit. (Photo: Mark Tade)



Julius Tembe: Motivated by AP challenge

Julius Tembe says he didn't feel like he belonged when he first entered Des Moines Central Academy.

He'd been a good student in elementary and middle school. But Central was a step above—an intensely academic high school intended to challenge the brightest.

One day early on, though, he saw the portraits of National AP Scholars that Central hangs on its walls. That was the inspiration he needed.

“I wanted to prove to myself I could be on that same level,” says the University of Iowa student who's majoring in biology.

In his sophomore year at Central, he took three Advanced Placement classes. That was followed by eight AP classes his junior year and then ten his senior year. He was a National AP Scholar—an honor reserved for students who take at least eight AP exams and score near-perfect (4 or higher on a 5-point scale) on each exam.

His picture went on Central's wall. Thanks in large part to the credit he'd earned from AP courses, he entered the University of Iowa as a first-year student with nearly 100 hours of transfer credit.

Julius says he grew up in a home filled with college-level books from his dad's work in computer science information systems. He and his six siblings, he says, were pushed “to study as much as possible.” His parents also fostered his interest in science—“they kept saying the world needs scientists”—though Julius also loves to study history.

In school, Julius says he has been surrounded by like-minded people, ones who appreciate learning. He's seen what can happen when that's not the case, when a bright student begins hanging out with the wrong people.

He also credits help from several teachers.

Casey Dunley, a counselor at Central, “helped me keep up my motivation,” especially as he was finishing high school. Julius smiles as he recalls Dunley coming to his house and “forcing me to go” to high school graduation, a ceremony Julius was going to skip. Academic Decathlon coach Mark Schmidt also “pushed me to excel” in academic bowls. And Archie Cook, another Academic Decathlon coach, was there to help after a fire destroyed the Tembe family home.

Julius encourages high school students to take as many AP or college-credit classes as possible.

“It might be easier to take the regular class, but when you get to college, you won't have the background that taking an AP class will give you,” he says. “I took AP physics as a high school junior, and it's helping me now in my college physics class. If you put in the effort early, it will be easier later on.”



“Classrooms are the only place where age matters more than ability.”

DR. SUSAN ASSOULINE

What’s Happened in the Past Decade?

Dr. Susan Assouline, Director of the Belin-Blank Center at the University of Iowa, knows many good things have happened in the past ten years to accelerate and better serve gifted students.

Participation in Advanced Placement courses has mushroomed, with online technology extending those AP classes to students in small, rural districts. More middle school students are taking high school classes, and more high school students are taking college classes. Although more states and school districts have policies supporting the acceleration of gifted students, the number of states with an acceleration policy remains small (currently nine). It may be easier than it was ten years ago to identify gifted students and engage most schools in finding ways to better serve them; however, changing anti-acceleration attitudes and practices continues to be a challenge.

Parents and educators can use the University of Iowa’s *Iowa Acceleration Scale* to help them decide if a child could benefit from acceleration. They have access to tests to see if a child could benefit from single-subject acceleration in math, science, or the language arts. States, school boards, and educators can find model policies supporting acceleration at the Acceleration Institute (formerly the Institute for Research and Policy on Acceleration) (www.accelerationinstitute.org/).

“But too many educators still lack familiarity with the idea of acceleration, though it is better than it was,” says Dr. Assouline. “Most of the requests for investigating whole-grade acceleration used to come from parents acting on their own. Now the requests come from teachers.”

Dr. Jonathan Plucker, from the University of Connecticut, thinks policymakers have become much more open to the idea of acceleration than they were ten years ago.

“There’s no question that *A Nation Deceived* had a really big role in creating that new environment,” he says. “I think we also need to keep in mind that policy doesn’t happen like it happens on TV shows. It takes a decade or more sometimes just to move the needle a little bit on some of these issues. We’ve had our decade, and we’re starting to see that needle move a little bit on acceleration.”

Dr. Karen Rogers, Professor Emerita of Gifted Studies at the University of St. Thomas in Minneapolis, sees several positive changes in the past ten years and thinks they represent lasting change.

“*A Nation Deceived* was directly responsible for broadening our perspectives on what acceleration entails,” Rogers says. “We moved beyond acceleration being grade-skipping only. We have better and more focused research on the appropriate acceleration for middle school and high school students. And

more states have actually mandated that there be an acceleration policy.”

One disheartening aspect of the past decade, however, has been the continued bias against acceleration—that so many people, including educators, continue to believe acceleration is bad for students, that it’s bad to push kids, that it will hurt them socially. Some continue to assume age trumps aptitude—except in sports and music, where early ability is recognized and nurtured.

Research studies, however, show that acceleration is the best, most cost-effective academic “intervention” for high-ability, highly motivated students. Paraphrasing science communicator Neil deGrasse Tyson, Dr. As-souline notes, “The good thing about science [evidence] is that it’s true whether or not you believe it.”

But, she allows, “the disasters are memorable.” And it only takes one instance of an accelerated student who doesn’t adjust well to convince busy administrators and harried educators that the safe choice—doing nothing—is better than being sorry. But doing nothing, she says, is also a decision, one that can lead to disengaged, bored students who can create their own disasters.

“As we say in French, happy people don’t have stories to tell,” says Dr. François Gagné, Professor Emeritus of Psychology at l’Université du Québec à Montréal. “You need only one bad example to make a whole project become unacceptable. People always forget the ninety or the ninety-five percent for whom acceleration was the solution for boredom in school.”

Nonetheless, it’s understandable that parents and educators worry about the social impact of accelerating gifted students because students’ social-emotional development is intricately connected to their academic experience and vice versa.

“As a dad, I want to know the impact,” says Dr. Nicholas Colangelo, who’s been studying gifted children and their education for more than thirty-five years. “We know kids do better interpersonally when their learning needs are being met. Acceleration won’t perform miracles, but we know, through research, it certainly won’t harm.”

But what about years from now? It’s much easier to measure math ability and achievement than to determine if someone is happy. But researchers have looked at that very question, catching up with thousands of adults who were accelerated as youngsters.

“From everything we’re able to gather, acceleration was really a plus in their lives,” Dr. Colangelo says. “The part that stuck with me is that these students, later in life when they’re adults, are saying if they could do it over again, they’d want more chances at acceleration.”

The research is robust and unanimous in support of acceleration. You have to really search to find any qualified negatives.

“And therein lies the paradox,” Dr. Colangelo says. “When you don’t believe in something, you demand nearly perfect evidence. If you are comfortable with an educational intervention, anecdotal evidence is plentiful and sufficient. When it comes to acceleration as an intervention, we do have consistently robust research evidence. However, that is not enough to put acceleration into common practice.”

EMPOWERED

The Spratfords: Advocate, pay attention to your gifted learner

For Becky and Eric Spratford of La Grange, Illinois, single-subject acceleration was the right fit for their seventh-grade daughter Samantha and fourth-grade son Nate.

Becky Spratford's advice to parents is to advocate if you see your gifted children are "bored and not engaged" in their classes.

"It's not elitist," she says. "It's just getting your kids what they need so that school is interesting to them. And it's not 'bragging.' It's just saying they need this."

Both Samantha and Nate have been accelerated in language arts and math.

Nate, who recently wrote an eleven-page (single-spaced) biography of President Franklin Roosevelt, says he likes being smart and learning new things. His preference is to stay in a class with children his own age but to accelerate his learning—with other bright students—in certain subjects.

Nate recently competed in a LEGO® robot competition. He and his sister take piano lessons and are in theater and band. Nate also loves memorizing sports stats, especially for the Chicago Bears, and he and his sister have taken Mandarin Chinese lessons through their schools.

Nate Spratford takes part in a "Battle of the Books" practice in La Grange, Illinois. (Photo: Kelly Davis)

"We look for ways they can use their brains," Becky Spratford says. "Both my husband and I had bad experiences back in the early days of gifted education in the '80s, so we know something about what it takes to keep a child engaged and learning."

A school's principal—as well as the school district's gifted education coordinator or teacher—can be of great assistance in making sure a bright child is sufficiently challenged. But even with that support, parents need to pay attention to what is happening in their child's classroom, Becky Spratford advises.

When her daughter was "phoning it in" in French class, for example, Becky emailed the teacher and encouraged the teacher to give the girl extra work. In exchange, Becky's daughter agreed to begin participating more in class.

"My husband and I love learning," Becky Spratford adds. "And we want that for our children."



“All children deserve to learn something new every day.”

DR. JULIAN C. STANLEY

Acceleration Works

Academic acceleration can be divided into two broad categories:

CONTENT-BASED ACCELERATION. This is when gifted students are accelerated by subject area, often in only one subject. They stay in their assigned grade with children their own age but are given more difficult material. Or they might move to another classroom for part of the day. A gifted second grader, for example, takes math with third or fourth graders and then returns to the second-grade classroom for the remainder of the day. A third-grade gifted reader spends time with a fourth-grade reading group before returning to the third-grade class. Acceleration is in a specific subject, and the advanced content is delivered to an identified group of gifted students.

In middle school, gifted students may be bused to math and science classes in a nearby high school in the morning, then returned to middle school for afternoon classes or to pursue advanced material in a certain subject. The main point: The gifted students remain with their age peers but receive advanced instruction in the area, or areas, where they excel. In high school, gifted students take Advanced Placement or International Baccalaureate® classes, often earlier than other students. They might be taking some online classes or courses at a nearby community college.

“Content-based acceleration is the most flexible form of acceleration for schools to employ since it can be applied to individual learners or to groups,” notes Dr. Joyce VanTassel-Baska.

GRADE-BASED ACCELERATION. This is when highly able, highly motivated children are placed in higher grade levels than typical for their age. This is commonly called “grade-skipping,” though it also can apply to children who enter kindergarten or first grade early, or to students who enter college early. This form of acceleration puts bright students with students older than they are but who are their intellectual peers.

“That’s the heart and soul of acceleration. It’s not to take children out of step but to put them in step with what they’re ready for,” says Dr. Nicholas Colangelo of the University of Iowa.

A recent review by Dr. Karen Rogers of research involving more than fifty thousand students in accelerated learning programs came to a very clear conclusion: Gifted students in accelerated programs make notable academic gains. Given a chance, they flourish, regardless of the type of acceleration provided.

The other inescapable finding: Students in almost all acceleration programs also advance socially and emotionally, especially those who are mentored.

“When students are closely matched with what they’re ready to learn—and it never has to be perfect—the odds are that they will achieve more,” Dr. Colangelo notes. “One of the main causes of underachievement isn’t that the work is too difficult, it’s that the work is below what the student is ready to learn. And when a student becomes disengaged because he or she is bored, you see considerably less achievement.”

People who worry about accelerating a gifted student often forget how commonplace acceleration once was in American schools. Gifted learners—Martin Luther King Jr. and Sandra Day O’Connor are two examples—graduated from high school early and went on to college.

“It was not considered remarkable,” says Dr. Jonathan Plucker from the University of Connecticut. “When you were ready, you moved on. I think setting the context—helping people realize that acceleration is something we’ve used for generations in this country and that it has served us exceptionally well—will help people become more comfortable with it.”

Dr. VanTassel-Baska notes that people accept tutorials as “a legitimate way to challenge gifted children at home and school. Yet good tutorials were one of the first forms of acceleration ever used, a mechanism that allowed students to move at an appropriate rate through their school subjects, based on readiness.”

Types of Acceleration

1. Early Admission to Kindergarten
2. Early Admission to First Grade
3. Grade-Skipping
4. Continuous Progress
5. Self-Paced Instruction
6. Subject-Matter Acceleration/Partial Acceleration
7. Combined Classes
8. Curriculum Compacting
9. Telescoping Curriculum
10. Mentoring
11. Extracurricular Programs
12. Distance Learning Courses
13. Concurrent/Dual Enrollment
14. Advanced Placement
15. International Baccalaureate Program
16. Accelerated/Honors High School or STEM Residential High School
17. Credit by Examination
18. Early Entrance into Middle School, High School, or College
19. Early Graduation from High School or College
20. Acceleration in College

W.T. Southern and E.D. Jones (2015) (Volume 2, Page 10)

EMPOWERED

Madeline Bernstein: Find people who challenge you



Madeline Bernstein participates in a discussion during her 2014 summer internship at Fermilab. (Photo: Fermilab)

Madeline Bernstein has some insights into being a smart kid.

First of all, the high school senior from La Grange, Illinois, is one herself. Bright students, she believes, have to be able to navigate middle school social pressures. They have to find people—students and teachers—in high school who will push them to excel. And, at some point, they have to personally resolve to be the best they can be.

Madeline found her calling in math and science, accelerating through algebra and calculus, moving on to Advanced Placement chemistry and physics in high school. As a sophomore, she attended Saturday lectures at the nearby Fermilab, the national physics research lab in Batavia, Illinois. She went on to land a prestigious summer internship at the lab, where she was paired with a scientist and helped conduct research.

When she was a junior, she started a club at her high school—Girls in Engineering, Math, and Science, or GEMS—to encourage young women to pursue education and careers in math and science.

She's thought about why so few young women consider careers in those areas. Part of it, she believes, is a lack of role models, especially in the so-called “hard” sciences.

“It starts at a very early age,” she says. “There’s not the same level of role models as in other fields. Then you run into tradition and instilled prejudices, carried by both men and women and perpetuated over time, that are harder to pinpoint and overcome.”

When Madeline started high school, she found a role model—and a friend—on her cross-country team. The other girl was “a high-achieving senior with four years perspective on high school and what you need to focus on.” That young woman, now a bioengineering student at Purdue University, “is a big reason I’ve had a lot of success.”

Like life, school is a journey, Madeline allows. While it’s a point of pride to be the smart kid in your class in grade school, social pressures can emerge in middle school. That’s when so many students lose their interest in science and math, when it “becomes kind of cool not to care about school.”

But that can change in high school, she says, if you find people “who will challenge and stimulate you. I learned to surround myself with people who were positive influences, a solid base. You begin to feel comfortable being yourself, be it in robotics or writing or in something else.”

Highlights of Accelerative Options

Acceleration is a coat of many colors and sizes. One size, one color, does not suit all bright students. But the variety and proven effectiveness of the many forms of acceleration pretty much guarantee the gifted learner will find a style that just fits.

Among the choices:

Advanced Placement classes

It's not a popularity contest, but if it were, Advanced Placement courses would wear the acceleration crown. Part of this has to do with the comfort level educators and parents have with this acceleration option, which often results in saving tuition costs for college classes.

Advanced Placement (AP) classes are challenging, college-level courses offered to high-ability students while they're in high school. Students are tested over the material at year's end. If they score high enough on the year-end exam, it can mean college credit. Even if they don't score that highly, they're still better prepared for college-level coursework. Researchers are now looking at ways for more students to better access AP courses while simultaneously ensuring student success in AP courses—based on readiness, personality, interest, ability, and motivation.

In 2014, more than 4.2 million AP exams were taken by more than 2.3 million students. This is double the number reported ten years ago in the *Nation Deceived* report. Around fourteen thousand public high schools now offer AP classes. More than one million members of the Class of 2013 took at least one AP exam. That's about 33 percent of those graduating, up from 20 percent a decade earlier.

Another accelerated program for high school students—the prestigious, two-year International Baccalaureate diploma program—also is growing and is now offered in about six hundred and fifty schools in North America.

“The International Baccalaureate diploma program provides students the equivalent of undergraduate work at a selective liberal arts college,” Dr. VanTassel-Baska explains. “It also is widely accepted at universities abroad, allowing students to receive advanced credit and placement for their high school work in the program.”

Talent Searches

“Talent searches have done more for acceleration in the modern era than any other approach to giftedness,” says Dr. Paula Olszewski-Kubilius, Director of Northwestern University's Center for Talent Development.

Basically, talent searches identify highly gifted students by giving standardized exams designed for older students to younger students. The first application of the Talent Search Model occurred when middle-school students took the SAT, a college-entrance exam. It's a low-cost, efficient way of identifying academically gifted students in elementary and middle school. It typically starts with students scoring at the 95th percentile on a grade-level exam; they are then given the ACT or SAT college-entrance exam to give explicit information on what they already know—and most importantly—what they're ready to learn. A middle school student with high math and science scores, for example, may be ready for high school physics. A seventh grader might be ready for ninth-grade work in all areas.

“High test scores have become synonymous with the need for accelerated programming,” Dr. Assouline notes. “The needs for those with high, above-level test scores are simply not going to be met by any means except acceleration.”

Talent search results also are used to identify children ready for faster-paced classes offered after school, on the weekends, or during the summer. In the process, participants often meet other highly able students—a side benefit many say is the best part of the experience.

Researchers find little to no evidence of burnout, superficial learning, or additional social problems among talent search participants. As adults, talent search students who accelerated themselves report it as a positive experience.

Dr. VanTassel-Baska, who was founding director of the Center for Talent Development at Northwestern University, says, “I have found nothing better for the social-emotional adjustment of gifted children than having students of similar ability and interest meet and engage in an advanced and challenging summer academic experience. For some students, it is the first time they have made a friend.”

The Talent Search Model is used throughout the United States, where more than one hundred and fifty thousand middle school students took college-entrance exams in 2012-13. The model also is used in Canada, Australia, China, Ireland, and Spain. Also, elementary school students are increasingly being tested to identify high-ability learners earlier.

Grade-Based Acceleration

Whole-grade acceleration, commonly called grade-skipping, is still an infrequently used accelerative option, despite years of research showing its effectiveness. Less than 1.5 percent of U.S. students are accelerated a full grade or enter school early, and the percentage may actually be declining.

The effect is circular. Whole-grade acceleration is seldom used, leading to a lack of awareness and the lack of a systematic approach to identify children who would benefit . . . which leads to even less whole-grade acceleration.

The *Iowa Acceleration Scale* (IAS) provides the organizational tool—the systematic approach—that schools and parents can use to assess a child’s readiness for acceleration. It involves testing, interviews, observations, and review of records. But often the impetus for acceleration still comes from parents of a gifted student who see their child needs additional academic challenges.

The IAS provides validation of that perception and also can help educators understand that whole-grade acceleration is the right option for a gifted child.

Interestingly, new research has found that teachers, for the most part, are supportive of accelerating high-ability students but believe school administrators and parents would not support acceleration. The conclusion? Show school administrators and policymakers that many parents and teachers support acceleration. Put the accelerated students with self-confident and challenging, but supportive, teachers—then stand back and witness new learning, engagements, and achievement.

Early Entrance to Kindergarten or First Grade

Sending children to kindergarten or first grade a year early is the least disruptive form of acceleration, both academically and socially, assuming the child is ready for school. And yet sixteen states prohibit early entrance, apparently fearing a younger child won’t be ready to focus or write or cut or draw. By way of contrast, other states—Colorado and Ohio are two examples—have well-developed plans allowing early entry to gifted students.

As with grade-skipping, research delivers the good news: Early-entry children—those who started school early because they were ready to learn—perform as well as or better than their older classmates in a wide range of tests and evaluations. Research also shows the children are well-adjusted socially and suggests early-entry is a positive experience for the gifted child.

How do we know if a child is ready to enter school early? As it turns out, parents are often good judges, witnessing a child’s early speaking, reading, or mathematical abilities, long attention span, extraordinary memory, and an early interest in time. Testing—general ability, aptitude, and achievement—also can help determine a youngster’s readiness.

Highlights of Accelerative Options (continued)

The Ohio Department of Education uses the *Iowa Acceleration Scale* to help parents and educators weigh the facts in deciding early-school entry. The state's Office for Exceptional Children produced an elegant flow chart, called Pathways to Acceleration, to help educators with acceleration options. (View the chart on Page 67 in Volume 2.)

Additional assistance for parents and educators is available at www.accelerationinstitute.org, the website for the Acceleration Institute. This website offers success stories, questions and answers, and other helpful information.

The bottom line, according to Dr. VanTassel-Baska: "Given a choice, a child's readiness for advanced-level work should be the determining factor in acceleration, not unfounded worries about potential social-emotional impact."

Early Entrance to College

Having bright students enter college early is not a new idea. What is fairly new is having universities find ways to mentor and support those students.

A number of research studies show the vast majority of gifted students entering college early succeed academically and present "a fairly compelling picture of high achievement and success." As a group, the early entrants are not hampered by social or emotional issues. High performance in classes is the norm. Later in life, researchers also find the early entrants are achieving at high levels, are highly productive, and are earning above-average incomes, while having satisfying social relationships.

This form of acceleration has a fairly long history, with the University of Chicago allowing early-entry in 1937. In the 1950s, the Ford Foundation paid to establish early-entry programs at twelve colleges and universities. The

University of Washington, after seeing the success of some early entrants at Johns Hopkins, began a program in 1977 that admitted students as young as 15. A number of other well-established programs are found in California, Massachusetts, New York, Iowa, Texas, Alabama, Missouri, Georgia, North Carolina, and other states.

The students in many of these early-entry college programs have been monitored and followed over the years, creating a large pool of research to show what works. It's found that the students who succeed bring important intangibles—focus, perseverance, and motivation—and tangibles—good study skills and work habits—to college with them.

And while early college entry was, at one time, one of the few options open to gifted learners, public high schools now offer more accelerated learning opportunities, such as Advanced Placement classes and dual enrollment. Twenty-nine states, in fact, now offer dual enrollment opportunities, allowing students to take college classes and earn college credits while in high school. A few high schools, usually those near university campuses, offer a college curriculum to highly able high school students, with the students continuing to live at home or in a residential setting.

Specialized STEM Schools

The United States has 165 public schools where admission is competitive and the curriculum accelerated, most often in math and science.

Of those schools, sixteen are residential, admitting highly able students focused on accelerated learning in STEM subjects—science, technology, engineering, and mathematics. The schools—in fifteen states, mostly in the Midwest and South—are highly selective, choosing students with high aptitude. Most also seek a balance in gender, race, and income in the student body.

The residential schools offer intense learning environments, research opportunities, and mentorships. They also provide precocious young adults the opportunity to socialize with youths as bright as they are. The schools, because they are residential, make it a point to involve the young scholars in a variety of clubs, sports programs, academic competitions, guest lectures, field trips, and volunteer opportunities.

“Gifted students in these fifteen states have been fortunate in receiving a high-powered education during their high school years, with many benefits accruing to them even into college,” Dr. VanTassel-Baska says. “Students also benefit from having access to national laboratory and university scientists who can be mentors to them.”

Radical Acceleration

Radical acceleration allows highly gifted students—those with very advanced academic ability—to graduate from high school two or three (or more) years early. Researchers find such profoundly gifted students generally succeed academically and socially in college, despite being much younger than their classmates. In fact, the majority do better academically and continue at the top of their fields.

Where such highly gifted students run into trouble—and when they underachieve—is when they’re forced to remain in a traditional educational setting. In most cases, parents have to lobby to have a gifted child radically accelerated. Follow-up studies with such students have found they appreciated being accelerated and said that it added to their motivation and confidence. More than half of radically accelerated students pursued graduate degrees and entered high-status careers.

The Evidence

- “Types of Acceleration: Dimensions and Issues,” Volume 2, page 9
- “Academic Effects of Acceleration,” Volume 2, page 19
- “Social-Emotional Effects of Acceleration,” Volume 2, page 31
- “Whole-Grade Acceleration,” Volume 2, page 53
- “Long-Term Effects of Educational Acceleration,” Volume 2, page 73
- “Talent Searches and Accelerated Programming for Gifted Students,” Volume 2, page 111
- “STEM-Specialized Schools,” Volume 2, Page 137
- “Early Entrance to College: Academic, Social, and Emotional Considerations,” Volume 2, page 153

Junior high student Oscar Ihrig spent two weeks last summer living on a college campus.

He loved it. He spent his days learning how to make an animated film and the evenings playing Ultimate Frisbee on the Pentacrest lawn at the University of Iowa. He's hoping to get into a class on 3D printing this coming summer.

"It was pretty cool," says Oscar, a seventh-grader. "A girl and I made a short animation on 'Love Is Blind.' I made friends, and we've stayed in touch."

Oscar is one of hundreds of students in Iowa—and thousands across the nation—who spend part of their summers on college campuses in summer enrichment classes. The classes are taught at a level faster and deeper than typical for the students' age level. The summer programs—and special weekend activities—are popular acceleration options for gifted and talented students.

Oscar's mom, Dr. Lori Ihrig, is a member of a team that runs the summer and academic-year programs for gifted students through the Belin-Blank Center at the University of Iowa. She also administers a program and teaches a class for high school sophomores and juniors who spend five weeks of their summer on the UI campus, conducting scientific research in university laboratories under the guidance of a faculty mentor.

The summer classes at the University of Iowa cover diverse topics: physical and life sciences, writing, visual and performing arts, engineering, mathematics, technology, social sciences, and leadership. Accelerated summer classes,

available on university campuses nationwide, including the talent search universities (i.e., Johns Hopkins, Duke, and Northwestern universities), follow a similar pattern to those offered at the University of Iowa. Fast-paced classes were based on the model developed by Dr. Julian Stanley at Johns Hopkins University and then replicated other places with much success.

"People often don't consider gifted children as students with special needs, but they are," Dr. Ihrig says. "We consider it a moral imperative to make sure the needs of gifted students are met. We see the challenges teachers and administrators face in meeting the needs of all their students. We understand that effectively identifying gifted learners may pose challenges; we also know that helping high-ability students achieve their potential requires the willingness of educators to overcome constraints."

The summer programs can sometimes fill in academic gaps or provide a challenge for highly able learners. They also provide opportunities—sometimes a lifeline—for gifted students.

"Too often the gifted child is patiently waiting for something to happen, quietly languishing in the back of the classroom," Dr. Ihrig says. "These summer programs, created specifically to meet the needs of gifted learners, can inspire, excite, and challenge these children. They can introduce them, too, to other kids who, like them, want to spend their summers challenging themselves academically."

The Ihrigs: The power of summer learning



Lori Ihrig reads a book at home with her son, Oscar. (Photo: Mark Tade)



“Parents and teachers have a job: to help students interpret what they’re learning, to cheer them on from the sidelines, and to clear obstacles from their path so they can move forward ever faster.”

DR. RANDI LEVITZ

The Tools That Can Help

You know a gifted child. How do you challenge that child? How do you convince others the child can learn at an accelerated pace? One way is to open a toolbox full of resources that can guide you in building a house of learning.

One important tool is the *Iowa Acceleration Scale* (IAS), developed at the Belin-Blank Center in the mid-’90s. The manual guides a team—of teachers, principals, and parents—through a discussion of a student’s academic and social abilities. It provides facts, case studies, and examples to help decide if a child, in kindergarten through eighth grade, would benefit from acceleration. It considers personal characteristics like motivation and maturity. It lays out the big questions surrounding whole-grade acceleration. It aims to remove bias from the discussion while giving due consideration to difficulties. This highly successful guide provides a decision-making model that has been used in all fifty states, Canada, Australia, and New Zealand.

“We know the process of using the tool is the most important aspect,” says Dr. Susan Assouline, who co-authored and updated the scale in 2003 and 2009. “It’s the teamwork that’s involved in discussing a child’s needs that’s of the most benefit.”

Abby Bristow, the gifted and talented coordinator in the Springville (Iowa) Community School District concurs: “This [the IAS] is not a one-size-fits-all tool. This is a personalizing tool because decisions should be made with the specific people and situations in mind.”

Dr. Nancy Hertzog, Professor of Teacher Quality and Education at the University of Washington, emphasized the need for individual assessments.

“You can’t say all four-year-olds will benefit from kindergarten, and you can’t say eighth graders can benefit from skipping high school even if they have high SAT scores,” she says. “We now know a lot more about what it means to have persistence and ‘grit’—that ability to self-regulate and manage your own time, those social skills and soft skills that enhance student success. It’s not just academic success that provides positive outcomes for students.”

Other tools can be found at the Acceleration Institute, founded at the University of Iowa in 2006 after publication of *A Nation Deceived*, to pull together the research on acceleration. The Institute’s website offers several simple, fast, and low-cost tools to see if a child is ready for a faster pace of learning.

The IDEAL Solutions® for STEM Acceleration, developed by the Belin-Blank Center, is an online tool that allows teachers or parents to enter a child’s scores from a standardized test (the ACT, for example) onto a form and determine if the child might benefit from acceleration in science, technology, engineering, or math. Based on the results, the site offers advice on what to do next. The tool is designed for elementary and middle-school students.

Another helpful tool at the Acceleration Institute's website (www.accelerationinstitute.org) is the *Guidelines for Developing an Academic Acceleration Policy*. The free booklet provides a checklist for developing an academic acceleration policy. It lists points a district can consider as it thinks about acceleration—such as access, fairness, communication with parents, student testing—and advice on how to write, implement, and monitor an acceleration policy. It shares model policies.

The Acceleration Institute's website also offers links to the latest books and research on acceleration, including information on early entrance to college. It offers inspiring success stories and videos from teachers and from parents whose children were accelerated. It offers PowerPoint presentations that advocates can use in persuading a school or a state to adopt acceleration as an education strategy.

Last but not least, the website is where people can download a free copy of *A Nation Deceived* and *A Nation Empowered*. Both reports also are available at no cost through the iTunes store.

"The Acceleration Institute and *A Nation Deceived* were made possible through private funding from the John Templeton Foundation," Dr. Assouline says. "It speaks to the power of private philanthropy in getting the word out. We don't have that same support for *A Nation Empowered*, making it all the more important that individuals be a part of this—help us spread the word, give us feedback, reach out to others."

EMPOWERED

Shabana Sidhu was an honors student, taking Advanced Placement classes, when she decided to skip her senior year in high school and start college a year early at the University of Iowa.

"It was a tough decision," says Shabana, now a graduate student at the University of Nebraska Medical Center in Omaha. "My friends were pushing me to stay. So I made a pro and con list, and I saw the benefits of advancing myself instead of staying in high school and going over the same knowledge again. Why not move on to where I wanted to be and further my education?"

Doing that, though, meant negotiating with her high school so she could finish her high school credits while in college and still graduate with her class. Her principal and a trusted teacher thought starting college early was a bad idea. "I don't like being doubted," Shabana says.

Though it wasn't easy figuring out how things worked at the college level, it was the right decision. She majored in biology and is now pursuing a master's degree in public health. She turned an internship at St. Luke's Hospital Cardiology Department into a part-time job at which she continues to work during holiday and summer breaks. During her senior year, Shabana and several classmates raised \$18,000 for the University of Iowa Children's Hospital.

Shabana says her ambitions were nurtured by the summer residential programs she took at the Belin-Blank Center at the UI. "I was hesitant at first. I didn't want to go to 'nerd camp,'" she says. "But I absolutely loved it. You meet people like yourself, bright students working at the same level. I met people from all around Iowa plus scholars from China."

When she early-enrolled at Iowa, she was selected for the National Academy of Arts, Sciences, and Engineering, a Belin-Blank program that provides mentors and programming for gifted students entering college early. She

Shabana Sidhu: Embrace who you are



Shabana Sidhu gathers around the family's game table with her parents, Sarjeev and Homa, and her brothers. (Photo: Mark Tade)

recently joined her father on the Belin-Blank Advisory Board, where she plans to provide a student's perspective.

As the oldest of the four children of Sarjeev and Homa Sidhu, Shabana opened the doors to Belin-Blank's enrichment programs to her siblings.

Shabana's brother Shairaz, now an economics major at the University of Rochester in New York, was bored in fourth grade and, after some lobbying by his parents, was allowed to skip fifth grade. Her brother Rizwan, a junior in high school who likes the performance arts, has taken part in weekend and summer gifted programs. Sister Aleyah, a fifth grader, will be starting the programs soon.

The Sidhus say they've sought out enrichment opportunities for their children. Sarjeev, for example, orders or brings back math and spelling workbooks from around the world for his kids. Homa smiles as she recalls telling friends about

her kids studying for the *Iowa Assessments* (formerly the *Iowa Tests of Basic Skills*), a standardized test. "They told me nobody does that!" (The Sidhu children all test well above their grade levels.)

Sarjeev, a global finance executive in Cedar Rapids, Iowa, talks about the "rule of three" in raising gifted children. "One-third is the child, one-third is the community, and one-third is the home environment," he says. "You recognize you can bring opportunities to your child, but they have to open the door and step in by themselves."

Shabana concurs and encourages other gifted children to "not be shy. You can't let other people define you. You have to be in charge of how you want to live your life. In middle school and high school, I was always labeled 'the smart girl' and then 'the girl who skipped her senior year.' People would judge me. But you have to embrace it. It's who you are, and, in the long run, it will help you."

$$\int_{-\infty}^{\infty} f(t) \sin ty \, dt$$

$$dy \int_{-\infty}^{\infty} f(t) \cos(ty) \, dt$$



“Failure to help the gifted child reach his [or her] fullest potential is a societal tragedy, the extent [of which] is difficult to measure but is surely great.”

DR. JAMES GALLAGHER

What’s on the Horizon?

W

hat will the next ten years mean for gifted education and acceleration?

It’s possible to do some informed speculation, based on what’s happened in the past ten years since the publication of *A Nation Deceived*.

Whatever may be in the offing, Dr. Susan Assouline thinks advocates of gifted education “need to be more nimble in considering educational trends. Some are paradigm shifts. We’ve seen advances in gifted education in the first few decades of this new century, which informed *A Nation Empowered*.”

The emerging trends and challenges that Dr. Assouline see include:

- Common Core State Standards
- Twice-exceptionality
- Accessibility to accelerated learning
- Diversity
- Professional development
- STEM education
- International growth in acceleration

Common Core Standards

The national push for a common core curriculum began in 2009 with the premise that math classes in Massachusetts should be on the same level as the ones in any other state. At the time of the publication of *A Nation Empowered*, forty-five states and the District of Columbia had adopted common core standards—basically an outline of the knowledge all students should be learning in each grade.

While some worried the standards were too challenging, advocates for gifted education worried the standards were not rigorous enough, that the standards in high-achieving schools could be brought down to a standardized, “common denominator” model.

Dr. Assouline suggests another approach: Embrace common core standards but allow gifted students to move through the requirements quickly and go on to advanced work.

Such a strategy starts, as many good things do, with classroom teachers and their ability to “differentiate” a gifted learner—to realize what the bright student already knows and then provide additional challenges for that student, either individually or in a small group. The research proves what we all know: Bright kids like challenges.

Dr. Joyce VanTassel-Baska and Dr. Susan K. Johnsen outline in Volume 2 the steps schools can take

to accelerate learning while adhering to common core standards. The steps require schools to recognize when gifted students understand core concepts and are ready to move on. Testing can affirm that judgment and also reveal what the student is ready to learn. And then in high school, districts need to find ways to offer advanced, college-level courses to high-ability students.

Twice-Exceptionality

A growing field of research and interest concerns twice-exceptional students—those who have the potential for high achievement but who have one or more learning disabilities.

“Too often people think a student with a disability cannot be gifted, or that a student with a disability cannot benefit from acceleration in his or her area of strength,” notes Dr. Megan Foley-Nicpon, an associate professor of counseling psychology and specialist in twice-exceptionality.

Much of the research on twice-exceptionality, particularly of students diagnosed on the autism spectrum, has been done at the Belin-Blank Center at the University of Iowa. The center found that more than 50 percent of the twice-exceptional students in one study would benefit from acceleration.

“It requires a comprehensive evaluation of the student,” Dr. Foley-Nicpon notes.

The thought that a child with learning disabilities or a severe social impairment can benefit from acceleration in some areas is a relatively new concept and a reversal of the common practice of holding back such students or placing them in special education.

But researchers, for example, are finding high creativity among students diagnosed with attention deficit hyperactivity disorder, though the same students struggle with recalling lists of facts. They find that gifted twice-exceptional learners benefit when given more choice in selecting the topics and the pace of learning. That said, the twice-exceptional student needs structure, support, and understanding. Interestingly, researchers also found that smaller schools are more likely to enroll twice-exceptional students in Advanced Placement classes than are larger schools.

EMPOWERED

Karen and Mike Hartman have four children, all of them bright and two with exceptional ability. The two highly gifted girls have entirely different stories, but they also have one thing in common: Their parents advocated for them to be accelerated and challenged in school.

Allison Hartman was reading before age 3 and was “extremely intense,” her mother says. The Hartmans figured she’d do well in school, but behavior issues derailed her. Given medicine for attention deficit hyperactivity disorder, her behavior improved.

School was still hard—she already knew most of what was being taught. What she liked least, she once told her mother, was “knowing all the answers and having to keep them all inside and not say anything.”

Allison “toughed it out” through the elementary grades. By the time she was in fifth grade, tests showed Allison was in the top 1 percent of students her age. Her parents began advocating that she skip sixth grade in their Eastern Iowa school district.

Karen Hartman says acceleration “was kind of unheard of, plus this was a kid with some red flags.” Of the half-dozen educators on the team deciding Allison’s future, the gifted and talented teacher was the only one who “got” Allison and advocated for her acceleration, believing behavioral issues could increase if Allison was not challenged academically.

The Hartmans persevered. They read *A Nation Deceived*. They visited the Belin-Blank Center at the University of Iowa. They used the *Iowa Acceleration Scale* to show Allison was a good candidate for acceleration. They scheduled a psychoeducational evaluation for Allison at the center, half-way through the school year, thereby addressing the school district’s main concern.

The Hartmans: Two routes to the same end

Taken together, it was enough. Allison skipped sixth grade and entered seventh. After that, she further accelerated in science and language arts. She took classes online and at the community college. She picked up two associate degrees with her high school diploma and entered a four-year college with enough credits to be a junior.

“The things we pushed for, we were kind of blazing the trail in allowing for these things to be opened up to other students,” Karen Hartman says. “We opened teacher minds to what could be done, especially after it was a positive experience.”

Then came Gabrielle, or “Gabby” as she’s called, the third oldest of the Hartmans’ children. She was bright but not “over the top,” at least at first. By the end of fifth grade, though, she’d soared through sixth-grade math and was working on pre-algebra, all while helping her fifth-grade classmates with their assignments.

Testing showed Gabby was ready to be accelerated. This time, it was “super easy,” her mother says. “Gabby didn’t have social issues. She was the picture-perfect package for acceleration.”

Gabby skipped sixth grade and went to seventh. And then, after continued achievement, the talented and gifted teaching team recommended Gabby skip eighth grade. That gave her parents pause, so they asked Gabby what she wanted to do. She chose acceleration, even though it meant she was starting ninth grade when most of her friends were entering seventh.

In high school, she’s continued to excel—taking Advanced Placement science and English classes and online college classes. She’d worried about taking band with older students, but she’s excelling there, too—showing promise as a top-flight bassoonist. She’s made friends in high school; she has people to sit with at lunch.



Left: Karen Hartman

Below left: Allison Hartman
(Photo: Bill Highland)

Below: Gabby Hartman
(Photo: Ryno Olson)



Karen Hartman says she and her husband have worked well together in advocating for their two gifted children. “Our team approach allowed us to work off each other’s strengths to get our message across,” she says.

Her advice to other parents: Do your homework. “Have a lot of data up front, read the books, get the results, do the testing. Research shows acceleration works. Know it and share it. It’s hard to argue with.”

Another point: Monitor how your child is doing. “My kids continue to take above-level tests. The tests continue to show acceleration was the right thing to do.”

And her advice to fellow teachers: “Pretest your students. Let them test out of areas they know, and let them go ahead of the rest of the group, work at their own pace. It’s a lot of work, but it’s worth it.”

Ample evidence supports addressing the needs of twice-exceptional students and creating an academic environment that discourages “shaming” and “exclusion.” Teachers are important in helping such bright students grow and develop the skills they need to succeed.

Accessibility to Accelerated Learning

Online courses are opening doors to accelerated learning for bright students, particularly those in rural areas where accelerative options are limited.

“It offers gifted students another way to learn that is not unnecessarily tough for schools to implement,” Dr. Assouline says. “The courses also allow gifted learners to progress quickly through coursework and, if they choose, to pursue their interests outside of school.”

An estimated 2.5 million K-12 students were taking online courses in 2011-12, and one-third of all college students were taking at least one online course in 2013.

“While the explosion in online learning holds great promise for the gifted student, we must be mindful that it can’t happen in a vacuum,” Dr. Assouline says. “Even extremely bright students need the support and encouragement of adults as well as time to share ideas and reflect on new knowledge with student peers. Technology, such as Skype and other programs, provide that human touch and ensure students have a place for questions and discussion.”

The other concern in online learning is the technology gap resulting from differences in income.

In 2013, around 83 percent of Americans had computers in their homes, with 74 percent of them having Internet access. But in households with incomes under \$25,000, the percentage with computers drops to 62 percent and the percentage with Internet access drops to 48 percent. That compares to 93 percent with Internet access in homes with incomes of more than \$100,000, according to the latest U.S. Census estimates.

“Our schools and libraries help equalize opportunity for gifted learners from low-income families,” Dr. Assouline says. “The non-profits and businesses that put computers in the hands of gifted learners—all learners—also help close that technology gap. But the divide still exists and is a contributing factor to the achievement gap.”

Thoughts About Research and Awards

Though we know far more than we ever have about gifted education, questions remain.

Many believe the primary challenge for acceleration research and practice is more public awareness. The facts are there to support accelerating bright students. What’s needed is for more parents, educators, and policymakers to read and understand the research.

That said, opportunities for further research abound.

Dr. Assouline, for example, notes a vast pool of information is being gathered on gifted students who take part in above-grade-level testing—that is, talent searches. The tests reveal what the student is ready to learn. But the diagnostic information that comes with the tests is wasted. The majority of schools don’t use it. “It’s a huge disconnect,” she says.

Dr. Karen Rogers, from the University of St. Thomas, would like a researcher to determine exactly what states have done in terms of acceleration in the past ten years. “How many kids have actually benefited directly? We need a ‘state of the states’ report for gifted education and acceleration,” she says.

Dr. Rogers also would like to see success stories collected and shared with the general public and with educators, “more publications like *A Nation Deceived*.” She’d also like to see more research on the forms of acceleration and new research on old, but still viable, ideas, such as grade telescoping. “If you have a lot of these bright kids in a school, why not put them together in a group and move them more rapidly through the grade-levels?”

Dr. François Gagné, of Montreal, would like to see researchers continue to show, as he has done, the financial advantages of acceleration—how it can save

Business

taxpayers money. And then, of course, that research needs to get to policymakers who can “wave a magic wand” and make it happen.

Dr. Nancy Hertzog of the University of Washington wants research into the impact of acceleration on families of the gifted and the pressures that some accelerated students may be feeling at age 17 to decide their future. More than 40 percent of the gifted students in the UW’s Robinson Center are either immigrants or the children of immigrants, leading to questions about the cultural context of acceleration. She also is interested in helping teachers differentiate gifted learners and also in how the opportunities provided gifted learners can benefit all students.

Dr. Lianne Hoogeveen, from The Netherlands, says her dream is that one day we can simply talk about a “good education” for each child, which leads inevitably to accelerated learning for gifted children. She also encourages researchers to write for the magazines and journals that teachers read and not just for research journals, to tell stories and start discussions with teachers who perhaps have never thought of acceleration as an option.

Dr. Plucker echoes that thought.

“I’m not sure we need a lot more research, though I would like to see some comparative research showing that many of our economic competitors are not shy about using anything that helps maximize their kids’ talents,” he says. “Mainly I think we need to set the historical context—that acceleration has been something we’ve used for generations in this country, and that it served us exceptionally well. When you were ready, you moved on.”

Dr. Jonathan Wai of Duke University concurs: “What really needs to happen is experimenting with ways to persuade the public how to take advantage of the research that already exists on acceleration of the gifted.”

The Evidence

- “Acceleration and STEM,” Volume 2, page 123
- “Acceleration: Common Core,” Volume 2, page 99
- “Acceleration and Twice-Exceptional Students,” Volume 2, page 189
- “Acceleration and Economically Vulnerable Children,” Volume 2, page 181
- “A European Perspective,” Volume 2, page 209
- “An Australian Perspective,” Volume 2, page 225

Diversity

Educators and researchers are committed to closing achievement gaps—especially the “excellence gap.” And while most of us think of race and gender when we hear the word diversity, more attention is being paid to income-diversity and the particular challenges facing bright, low-income students.

About 14 million children are living in poverty in the United States. About 50 percent of public school students qualify for free or reduced-priced lunches, the traditional measure for determining low-income households.

And while U.S. students are showing achievement gains, the gains are markedly higher among students who are not low-income, Dr. Jonathan Plucker and Dr. Bryn Harris report in Volume 2. “Available data suggest that poor American students are not performing at advanced levels and have not done so for generations,” they note.

Identifying and accelerating bright, low-income students, they suggest, can help close that “excellence gap.”

As it now stands, “non-poor” students are three times more likely to take Advanced Placement or International Baccalaureate classes as poor students. Students from higher-income homes are significantly more likely to grade-skip or enter school early.

More research is needed into what works best in identifying and supporting high-ability students from economically vulnerable backgrounds. Dual enrollment—taking a college class while still in high school—may be of particular help to low-income students, especially those with little exposure to higher education. Mentorships are valuable, too, as is an awareness of barriers—a low-income student needs help paying for an AP test; that student may need transportation to an after-school or summer enrichment activity; and that student needs a computer and Internet access that many students take for granted.

Professional Development

In short, the way our Colleges of Education prepare future teachers is in flux, though many new teachers still graduate knowing little about acceleration as an option for bright students.

Dr. Assouline thinks the awareness of acceleration has increased in the past ten years since publication of *A Nation Deceived*. She notes that most of the requests for using the *Iowa Acceleration Scale*—the protocol that determines a student’s readiness for acceleration—now come from teachers. Formerly, most of the requests came from parents.

STEM Acceleration

Talent development, Dr. Assouline says, is inextricably linked to STEM—the acronym for science, technology, engineering, and mathematics—education.

Schools specializing in those areas and the proponents of gifted education and acceleration “need to bring our ideas together,” Dr. Assouline says. “Specialized schools can have an important impact on what happens in non-specialized schools. The programs can be generalized for gifted students anywhere, including those in rural areas and poorer communities. So even if you’re not in those specialized high schools, you’re still exposed to that teaching, which puts you on a level playing field. You don’t have to go to a specialized school to get specialized training.”

One perplexing trend is that many of the students interested in majoring in STEM subjects end up switching to non-STEM fields while they’re in college. That fact collides with another fact: Jobs for STEM graduates will grow by 17 percent in the next ten years.

What to do?

Accelerated learning in the K-12 years is one way to develop high-level STEM talent and keep bright students interested in STEM subjects. Acceleration challenges students early, teaches them to think deeply and broadly, and prepares them for the rigors of college. The students learn to welcome challenging work. Ideally, along the way, they find their passion, or passions—ones that will carry them past the distractions of young adulthood and lead them into rewarding careers.

As always, there are excuses for not accelerating students gifted in STEM subjects. None of them withstand examination.

International Growth in Acceleration

The approaches to educational acceleration in other countries are as varied as they are in the United States.

The increase in gifted learning has been most rapid in Germany, though acceleration, as in the United States, can depend on where a student lives. Early entry to universities is permitted. Switzerland embraces enrichment and acceleration for bright students.

In France, students seldom skip a grade—though efforts are underway to make accelerative options easier for students. But 44 percent of French students enter school when they are 5 years old, a year earlier than required, which accelerates their learning from the start.

Italy eschews acceleration or special classes at all levels, apparently out of fear of elitism, though Italian schools occasionally allow bright students to skip one grade in the first eight years and then skip the last year of high school.

There is little academic acceleration in England and Wales, though some students take their final exams at age 16, a year early. The Nordic countries allow acceleration but, as a general policy, look to develop the potential of all learners.

Russia has had special schools for gifted children since the 1960s. Gifted children are identified in fifth grade and enrolled in the schools, where every graduate is expected to go to college.

Schools in The Netherlands practice acceleration, usually through grade skipping, though Dr. Lianne Hoogeveen reports that many teachers and parents were, at one time, uncomfortable with the option, fearing social and emotional impacts. The publication of *A Nation Deceived* ten years ago helped convince teachers and parents those fears were groundless, she says.

“I won’t say all teachers are in favor of acceleration now, but they’re not all against,” she says. “A lot more children are accelerated.”

In Australia, research into accelerative options mostly conforms to findings in the United States. In Volume 2, you can read twelve compelling case studies of gifted Australian students who entered university early. The students were generally pleased with their experience and welcomed the less formal structure of university classes.



“There are risks and costs to action. But they are far less than the long-range risks of comfortable inaction.”

JOHN F. KENNEDY

The Disconnects

Imagine, if you can, a football coach putting his arm around his starting tailback and telling him the players on the other team are going to feel bad if the tailback runs past them. “So when you get the ball,” the coach tells his player, “ease up.”

No coach would ever say that. And yet, in our classrooms, we tell our smart kids, in subtle ways, “Be careful about how you show your smarts. Don’t be too showy.”

Such “disconnects” hold back America’s brightest students, says Dr. Nicholas Colangelo, founder and director emeritus of the Belin-Blank Center for Gifted Education and Talent Development at the University of Iowa.

Those disconnects between perception and reality, he adds, are probably greater in gifted education than in any other area of education.

Why?

One reason is academic. Some people believe if students learn something too quickly, they don’t really learn it—that the understanding is superficial and temporary. Research studies, however, show that when adolescents learn something in an accelerated setting they retain that knowledge at least into graduate school. “It doesn’t go away,” Dr. Colangelo says.

Another reason behind the disconnect is social-emotional. We all want our kids to be happy and well-adjusted. Some people believe students will pay a social price if accelerated. But, again, research studies

show that acceleration is almost always a plus in the social-emotional sense because students are more engaged—happier—when they’re learning at a rate and in an environment that’s right for them. They enjoy being with like-minded students.

To be fair, the research suggests some gifted children may experience a hiccup when they’re first accelerated and, all of a sudden, aren’t automatically the smartest ones in the room. But the research shows this dip is slight and almost always temporary. In the long run, the “reality check” pays off, Dr. Colangelo tells parents, because a bright child develops realistic self-esteem rather than an inflated sense of self. That common-sense observation is supported by researchers who track down adults who were accelerated as children. The only regret most of those adults have is that they weren’t accelerated earlier.

The politics of education also can create another disconnect. Some people, even some educators, don’t want anything to do with gifted education. They see it as elitist, unfair, and a misuse of resources. Identifying some students as gifted, they believe, somehow makes other students feel bad—even though, again, researchers find that isn’t true. It’s a dilemma, though, because we all develop at different rates; some children, for example, need to learn at a faster pace than others.

Taken together, these disconnects are powerful and continue to hold back gifted students.

“It’s absolutely incorrect to say that America has a problem with exceptional talent,” Dr. Colangelo notes. “America loves exceptional athletic talent. The better you are, the more you’re going to be loved. Also, we have no problem with exceptional talent in the arts.

“The area we have trouble with is intellectual talent. There is an ambiguity about being smart. Among teenagers, the idea of intellectual ability is typically not adored. It’s much easier, in terms of popularity, to be seen as good-looking, as having interpersonal savvy, certainly athleticism, than to be seen as intellectually gifted.”

It is precisely because of that paradox that gifted education programs and acceleration of bright students can be so valuable and affirming. Put a gifted child in accelerated classes, in Advanced Placement courses, in summer programs with other gifted kids, and watch that child unfold and flourish. You’ll see a child who is no longer embarrassed about how much he or she knows. You’ll see a child free to learn even more.

Gifted children, properly supported, grow into adults who invent and create, who solve problems, who see what others don’t. They accomplish more, faster. Years later, researchers find them—almost without exception—to be well-adjusted, satisfied with their work, and happy with their lives.

Acceleration is good for almost all highly able children. It’s good for society. Those are the facts, based on long-term research studies.

“The most compelling argument we have for acceleration is the success of the outcomes,” says Dr. Nancy Hertzog, Director of the Robinson Center for Young Scholars at the University of Washington.

Given such overwhelming factual support for acceleration, why do the disconnects persist?

The Evidence

- “The Impact of Acceleration on Careers,” Volume 2, page 171
- “Long-Term Effects of Educational Acceleration,” Volume 2, page 73



Breanna Kramer stands in the University of Iowa Main Library. She entered college a year early and “loves university classes.” (Photo: Mark Tade)

Dr. Jonathan Wai, a researcher at Duke University’s Talent Identification Program, sees three reasons.

1. Simple numbers. By definition most students are not gifted. Parents care about their children, so why should they care about other people’s gifted children?
2. “Gifted” implies an advantage. If you’re gifted, it means you have a head start in life. Gifted children can have problems, of course, but the majority of Americans see giftedness as an advantage. So, when it comes time to help anyone, the natural inclination is to help those who don’t have a head start and natural advantage.
3. Americans care more about equity than they do about excellence.

“I think that’s the natural climate today,” Dr. Wai adds. “If we can’t persuade people based on that climate, then there’s little we can do.”

Given those realities, acceleration makes even more sense as the most practical and cost-effective way to help gifted children. Why not challenge our brightest children? Why not move them ahead to where they are learning something new every day?

“We have this ambiguity about intellectual talent that’s holding us back,” Dr. Colangelo says. “It’s time—it’s past time—to move on.”

EMPOWERED



Breanna Kramer: From rural Iowa to college, early

Breanna Kramer comes from Franklin, a town in southeast Iowa so small it doesn't have a zip code. And of the hundred people who live there, she jokes, "we're related to half of them."

Nonetheless, Breanna found a way to graduate from Central Lee High School and enter the University of Iowa a year early. She brought with her twenty-four college credit hours she'd earned through classes at a nearby community college and through online classes at the Belin-Blank Center's Iowa Online Advanced Placement Academy.

Breanna was at a science fair when she heard another student talk about the National Academy of Arts, Sciences, and Engineering at the University of Iowa, the Belin-Blank program that, in the past fifteen years, has helped almost two hundred students enter the university early.

"She sounded just like me," Breanna recalls. "I knew I was ready for college."

Even though Breanna had enough credits to graduate from high school early, she had to persuade her school's principal it was OK. She was successful in doing that and graduated as valedictorian. "Graduation day was something I had wanted to go through since kindergarten. It was one of those things I'd looked forward to."

Breanna started classes at the University of Iowa in August 2014. She's majoring in microbiology, with plans for graduate school at the College of Public Health in epidemiology.

"I love university classes," she says. "You don't have daily homework. Academics are based on whether you know the material."

Breanna's interest in science goes back to research she completed in high school about using silver nitrate to treat antibiotic-resistant bacteria (*E. coli*). The project won the state science fair and allowed her to compete at the international fair in Los Angeles.

She's an advocate of acceleration.

"If students want to be accelerated, they know themselves if they are ready," she says. "Otherwise, they're going to feel trapped because they're not moving forward. They'll dread the next year, with too many classes being just plain too easy. It's an awful position to be in."

Breanna also acknowledges the help she's had from Hollie Weber, her high school gifted and talented teacher.

"She helped me figure out I had a brain and should use it," she says. "She found all these programs and options for me in high school and petitioned so I could take AP classes online. She advocated for me and helped me with my schedule. She did everything a guidance counselor would do except she'd go a step further. She's now one of my best friends."



“There is still a culture in many of our nation’s colleges of education that does not fully promote the integration of gifted and talented programs into teacher training.”

DR. SUSAN ASSOULINE

“This is inexcusable.”

DR. NICHOLAS COLANGELO

Educating the Educators

Despite the advances since *A Nation Deceived*, there remains one major disappointment: Colleges of Education still are not preparing teachers to identify and assist the gifted learners in their classrooms.

The reasons are many, and one is simple inertia, which relates to limited funding and state support to initiate new programs and hire qualified faculty. That is coupled with less interest in preparing teachers to support gifted learners, in comparison to other special populations.

It is difficult to add another requirement to teacher education when so many mandates already exist. Much of teacher training focuses on helping lower-achieving students, making sure no child is left behind. The result is that little attention, sometimes half a chapter in a college textbook, if that, is devoted to the gifted learner and even less attention is paid acceleration.

“It is the responsibility of Colleges of Education to prepare future teachers with the most accurate, evidence-based practices to enhance the individual learning needs of students,” says Dr. Nicholas Colangelo, Dean of the University of Iowa College of Education. “Acceleration is documented to be the single most effective intervention for high-ability students. Most education faculty do not cover acceleration in courses or presentations about gifted students.

“This is inexcusable.”

Ten years ago in *A Nation Deceived*, Dr. Camilla Benbow, Dean of the Peabody College of Education at Vanderbilt University, acknowledged the deep commitment Colleges of Education faculty have to social justice and equity. “But,” she added, “we have lost something crucial—the thrust toward excellence. For me, social justice without excellence is empty.”

It takes more to change teacher ideas about acceleration than a weekend or weeklong professional development seminar. “I don’t think it’s that easy,” Dr. Benbow continued. “Yet just because it isn’t easy does not mean we should not do it. Education is full of one-day workshops. This is not a one-day solution.”

Today, when asked to assess teacher preparation in gifted education, Dr. Benbow’s reply is succinct: “I have no evidence that there has been any change.”

Given that reality, it is consummately unfair to “blame” teachers if they know little about acceleration. How can they practice what they’ve never had to learn? How can they know that the disruptive or disengaged student in their classroom might blossom if moved up a grade? How can a teacher—or a school counselor—know that a bright child with social or emotional issues can shed those issues if mentally stimulated?

As of this writing, only one state requires more than a minimal reference to gifted education for teachers in training. Only two states require coursework in gifted education for those training to be school coun-

selors. Only fourteen states rank training in gifted and talented instruction as a top priority for teachers.

Also, only nine states have policies explicitly permitting acceleration of gifted students. One state prohibits it. Sixteen states prohibit early entry to kindergarten. Twenty-nine states allow dual enrollment, but parents have to pay for that acceleration option in twenty-two of those states. Fourteen states provide no funding to local districts for gifted education.

That overview is somewhat disheartening, given the years of research showing the benefits of acceleration for gifted students. And yet the landscape for acceleration is better today than it was ten years ago when publication of *A Nation Deceived* threw down the gauntlet, challenging the nation to stop holding back its brightest students.

Given that almost no person is more important in the education of a child than a teacher, it is imperative that teachers be taught to recognize the gifted learners in their classrooms and know the acceleration options that will keep those students challenged.

“There is still a culture in the majority of our Colleges of Education that does not fully promote the integration of gifted and talented programs into teacher training,” Dr. Susan Assouline says. “Until that happens, gifted education won’t be fully integrated into our schools. Understanding that is critical to empowering what we do and to empowering us as a nation.”

At least awareness of acceleration among educators is improving, even if most of them are learning about it in workshops and summer classes after they graduate.

A 2014 survey by the Belin-Blank Center of 250 educators shows that general awareness of acceleration options is greater now than it was ten years ago, with 80 percent saying they were familiar with *A Nation Deceived* and its message of acceleration. While that percentage is encouraging, doctoral student Staci Fosenburg, an editorial assistant for *A Nation Empowered*, notes that almost half the respondents were gifted education specialists, which perhaps presents a more optimistic picture than if more regular educators had responded.

Importantly, 80 percent of those replying to the survey said they had no undergraduate preparation

EMPOWERED

You can hear Ariel Baska’s heart lift a bit when she talks about the highly gifted students in her Latin classes in Fairfax County, Virginia.

She’ll tell you about the deaf student who was so advanced that Baska created a new class for her designed around Aesop’s fables. The student loved it, and the work opened her to Latin poetry, which she didn’t think she could do because of her disability. Baska reassured her, and the student now “scans” Latin poetry as well as, if not better than, her hearing counterparts. She has received recognition for perfect scores on the National Latin Exam three years in a row. She also was the first deaf student to participate in the Certamen competition, leading her team to first place in the competition.

Another profoundly gifted student, now at Yale University, came to Baska’s Latin classes as a transfer student, already translating Caesar on her own. Baska set up a special after-school club for the student—“just the two of us”—to go through Caesar and the other authors the student wanted to translate and study. This student later won the American Classical League National Latin scholarship, awarded to only twenty students nationally.

A young male student was so talented in his second year of Latin that Baska asked him if he wanted to skip Latin III and go on to Advanced Placement Latin. The student, who was diagnosed on the autism spectrum, never spoke in class but was elated—via email—by the possibility of AP work. He did very well in AP Latin, scoring a 5, the highest score possible, on the year-end AP test—a rarity in what is the toughest AP language exam.

Baska, now in her tenth year of teaching in Fairfax County, restarted the AP course in Latin at Woodson High School three years ago when she saw several of her students needed the extra challenge.

Ariel Baska: Going the extra mile for highly gifted students

“There are very large differences between what is in AP Latin and regular Latin IV,” she says. “AP Latin is accelerated, broader and deeper, requiring more critical thinking skills.”

Most of the students Baska has accelerated in Latin classes—which attracts high-ability students anyway—seem to be twice-exceptional—that is, intellectually gifted but with a learning, physical, or other disabling condition.

“For one reason or another, they seem to be the ones who most desperately need acceleration,” Baska says. “They’re frustrated with repetitive materials and review of things they already know, more so than their more compliant counterparts on the gifted scale.”

When she started teaching, Baska says, she felt ill-prepared to identify and teach gifted students.

“Largely, I understood gifted students based on my experiences as a gifted student going through the system,” she says. “I was twice-exceptional and had lots of problems with teachers who saw me as a threat or a drain. I became a teacher to right those wrongs.”

Even when teachers have had a class in gifted and talented education, “we don’t understand how to apply the ideas,” Baska adds. “The training is so diffuse in describing all the options for gifted children. There isn’t one method you can latch onto easily. I think if we talked more about accelerating—moving students forward into classes where they’ll be challenged—that we’d make much better use of our teaching time.”



Latin teacher Ariel Baska poses with some of her high school students at the Virginia Junior Classical League Convention, where the students competed in Certamen, a quiz bowl for Latin and classics scholars.

BY THE NUMBERS

1

State that requires coursework in gifted education for teachers in training

2

States that require coursework in gifted education for those training to be school counselors

14

States that rank training in gifted and talented instruction as a top priority for teachers

9

States that have policies explicitly permitting acceleration of gifted students

1

State that prohibits acceleration of gifted students

16

States that prohibit early entry to kindergarten

29

States that allow post-secondary dual enrollment

14

States that provide no funding to local districts for gifted education.

State of the States in Gifted Education (2013)

in gifted education or acceleration. Twenty percent reported having some preparation while in college, but only about half of those had a full course in the subject.

In short: Few teachers are prepared to identify and challenge gifted students—including those who are gifted education specialists.

Professors Laurie Croft and Susannah Wood, in Volume 2 of *A Nation Empowered*, outline practical ideas for how teachers and counselors can learn about acceleration and the tools they can use to differentiate gifted learners in their classrooms. The ideas include professional development days or workshops; independent learning, including online learning; listservs and online chat rooms; continuing education classes; increased knowledge of acceleration research combined with an examination of personal beliefs; use of the *Iowa Acceleration Scale* in assessing a gifted learner's potential for acceleration; and increased collaboration.

Dr. Joyce VanTassel-Baska thinks outreach to school counselors is particularly important.

“Until counselors understand how important it is for gifted kids to be accelerated, it’s going to be extremely difficult to change what actually happens in schools, especially because counselors manage student schedules and provide advice on the course plan at the secondary level,” she says.

“Middle school is the critical level for acceleration,” she adds. “We kind of ‘get it’ at the high school level because of the widespread acceptance of Advanced Placement and International Baccalaureate programs, but not in middle school. We need a strategic, multipronged approach for gifted education and acceleration to be part of professional conferences and professional development offerings. It needs to be more than a half-hour in a special education class in teacher-preparation courses.”

The Evidence

- “Acceleration and the Development of Teachers and Counselors,” Volume 2, page 87

EMPOWERED



Claire Chapnick: The fun of teaching gifted learners

The sixth graders rush into Claire Chapnick's classroom in Iowa City. It's early—7:25 a.m. They're excited because, for the next fifty minutes, they are going to study math—super-accelerated math. When the class is over, buses take the students to their respective elementary schools for the start of the official school day.

The twenty-six gifted students, divided into three “clusters” throughout the district, have been selected for the accelerated math class based on their test scores and multiple other measures.

“It's marvelous,” Chapnick says. “I smile as soon as I see my students. They love the fast pace and elevated level of learning. It's fun, too, seeing friendships grow among academic peers.”

The sixth-graders are learning pre-algebra, meaning they're ready for algebra in seventh grade and then honors geometry in eighth grade. As high school freshmen, they can take Algebra II honors, where some of their classmates may be juniors. As sophomores, they can take pre-calculus honors and then calculus as juniors. By their senior year, they have the option of taking advanced math classes at the University of Iowa and applying to have the school district pay their tuition through the state of Iowa's Post Secondary Enrollment Option.

“We are very fortunate that the district offers advanced math for high-ability students,” Chapnick says. “I had a former student who moved to another state where pre-algebra wasn't offered. There was no appropriate class for her ability level.”

Chapnick also teaches “pullout” classes for identified gifted students in their home elementary buildings.

“It's not a replacement for the regular classroom,” she says. “It's a chance for small groups of identified students to learn at a breadth and depth commensurate with their abilities during the regular school day.”

The students love the time: “They come skipping and smiling into class early and beg to work during recess. They wish they had the extended learning class every day.”

Chapnick's first teaching job was at a private school with mixed grade classrooms where class sizes were capped at fifteen students and each teacher had an aide.

“You could individualize instruction and push each student to an appropriate level,” she says. “It was really fun and satisfying.”

Though she loved that job, she jumped at the chance to teach in gifted education, in which she earned her gifted education endorsement.

“I'm lucky. It fits my personality the same way the private school did. It's a joyful experience.”



The Costs of Acceleration

It costs nothing, or relatively little, to accelerate a bright student’s learning. It’s the cost of doing nothing that can be immeasurable.

Consider, for example, what a gifted student can contribute to society, as opposed to a gifted student who is bored and disengaged, one who possibly acts out or even drops out, one who never achieves his or her potential.

“Research is clear that students who have the appropriate educational dose are significantly likely to go on to earn more and make amazing innovations,” says Dr. Jonathan Wai, a researcher at Duke University. “As a society, we need to think about where technological, medical, and other breakthroughs come from. And they come, to a large degree, from the gifted population. So, in that sense, if we invest in these students, we actually have a payoff for all of us.”

On the money yardstick, acceleration can save taxpayers money by advancing gifted learners through public schools more quickly. Bright students who do well in Advanced Placement classes in high school or who dual-enroll in college classes can reduce the time—and the tuition—required for a college degree.

Few educational “interventions,” in fact, are as modest in cost as acceleration. (See Appendix C, page 60.) Some costs may be attached—such as transportation or educating educators about acceleration—but acceleration offers a big payoff: an engaged learner.

“Hide not your talents. . . . What’s a sundial in the shade?”

BENJAMIN FRANKLIN

ation

Not only that, but “grade-skippers” graduate earlier, enter the workforce earlier, acquire more prestigious jobs, and end up earning more, Dr. Wai and Dr. Katie Larsen McClarty report after reviewing the research on students who were accelerated. The studies also found that accelerated students, years after they’re out of school, are just as satisfied with their lives and careers as non-accelerated students, putting to rest the fear of acceleration’s social consequences. The main regret the accelerated adults have, in looking back over their time in school, was not accelerating sooner.

Dr. Jonathan Plucker, a Professor of Educational Psychology at the University of Connecticut, reminds us that other countries—“our economic competitors”—“are not shy about using anything that helps maximize their kids’ talents. I see it around the world.”

It was that fact that inspired Myron and Jacqueline Blank of Des Moines, Iowa, to donate \$10 million to establish a center at the University of Iowa to advocate for the appropriate education of gifted and talented students.

“They saw Japan become a world economic leader, in part because they had identified their most promising students at an early age and put them on an accelerated academic track,” recalls their grandson Jeffrey Perry. “They saw how the Japanese were innovating as a result of this because their gifted students were generally better at math, science, and technology than their American counterparts.”

Dr. Ann Lupkowski-Shopluk, who now works at the University of Iowa center named in honor of the Blanks, offers even more encouraging news about the long-term economic benefits of acceleration.

“We know through the research that if we’re comparing two groups of students who are equally able, the students who are accelerated are the ones who will be seeking out challenges. When children are appropriately challenged throughout school, they actually take advantage of more opportunities, look for additional opportunities to be challenged. In college, they tend to seek more challenging majors, complete higher-level degrees, seek out higher-level careers. It’s a very positive comparison.”

The Evidence

- “The Impact of Acceleration on Careers,” Volume 2, page 171
- “Long-Term Effects of Educational Acceleration,” Volume 2, page 73
- “The Costs of Acceleration, Deconstructed,” Appendix C, page 60



“America cannot afford to ignore the needs of its brightest students and, by doing so, squander their potential.”

U.S. SENATOR CHUCK GRASSLEY

What You Can Do

The most important thing you can do right now on behalf of the nearly five million gifted children in the United States is to advocate for the best education we can give them. That approach has worked in the past, and it will work in the future, but only through perseverance.

“We need knowledgeable and persistent champions,” says Dr. Joyce VanTassel-Baska, Professor Emerita from the College of William and Mary.

Advocating for gifted education can be on behalf of a specific child or it can be on behalf of all gifted and talented children in your school district or state. It often involves educating and lobbying educators, administrators, school boards, legislators, and state education officials. It can be as simple of giving someone a copy of *A Nation Deceived* and *A Nation Empowered* and asking them to read the evidence. It can be as difficult and time-consuming as seeing acceleration policies adopted, funded, and monitored.

For starters, Dr. VanTassel-Baska says, every state needs a policy on acceleration for gifted students—yet fewer than ten states have such a policy. Only about half the states even define what constitutes a gifted student, according to the latest *State of the States in Gifted Education*¹. Policies regarding programming and professional training vary widely from state to state.

“Even the handful of states that have a policy on acceleration make it discretionary rather than a manda-

tory consideration,” Dr. VanTassel-Baska says. “Policies do make a difference. Mandates matter. If states don’t tell schools they have to have a policy, they don’t. We’ve not found the right combination to make this happen nationally in Congress, so we have to encourage these policies at the state and local level. If we can get school districts showing acceleration success stories, then the future for acceleration will be more promising.”

Even the current push for a common core curriculum “can be a friend” of acceleration, Dr. VanTassel-Baska adds. “At the local level, we can be sure acceleration is in place after students have completed the common core. For example, half the states now have policies for dual enrollments, where high school students can take college-level classes. Options like that help gifted and talented kids.”

But for now, “many states fail to provide strong direction regarding the education of gifted and talented students,” she says. “The development of appropriate policies in gifted education at local, state, and national levels provides that glue that holds gifted education together.”

¹A copy of the report can be obtained at the website for the National Association for Gifted Children, www.nagc.org. The NAGC advocates for high-ability learners and supports research and collaboration with other organizations and agencies to improve the quality of education for all students. Its website has an excellent “Advocacy Toolkit” that offers tips on how to maximize your impact and how to work with the media, among other pointers.

A 'To-Do' Checklist

Here are practical steps you can take to advocate for gifted education:

- Work with your school to ensure acceleration is an option for high-ability students so students can move through the curriculum at their own pace.
- Make sure acceleration of gifted learners is part of any conversation about the new Common Core State Standards.
- Offer to help your school handle the logistics of acceleration, including scheduling and transportation.
- Encourage educators to learn more about acceleration either through in-service programs or through continuing education courses.
- Encourage (or, if need be, insist) on testing that identifies students who may benefit from acceleration.
- Get the research on acceleration to teachers, administrators, counselors, or school board members who may be letting one bad experience with acceleration cloud their thinking on its benefits.
- Keep pointing out that many acceleration options come at little or no financial cost to a school district.
- If needed, advocate for changes in your school's acceleration practices and policies.
- Let your U.S. senators and representatives, and your state legislators, know that you support gifted education and acceleration policies. Share the facts, the research, and the success stories with them. Help them see the need to identify and support gifted students; to support teacher training and research in gifted education; and to promote programs that ensure America's brightest students can compete and contribute in the twenty-first century.

Dr. Nicholas Colangelo, Dr. Susan Assouline

The Evidence

- "Public Policy and Acceleration," Volume 2, page 43

Dr. Karen Rogers, Professor Emerita of Gifted Studies at the University of St. Thomas in Minneapolis, proposes an advocacy strategy that focuses on school counselors and principals. Make sure, she advises, those leaders have read *A Nation Deceived* (and, now, *A Nation Empowered*) and understand acceleration as an option for gifted students.

"We need to be at every national conference touting this message about the social and emotional benefits of acceleration, as well as the academic," Dr. Rogers says. "We haven't gotten to these people, and they really are the sticking points, I think, to acceleration."

Rogers, like VanTassel-Baska and many others in gifted education, sees the need for state policies on acceleration. (See Ohio's first-in-the-nation example in *Whole-Grade Acceleration*, page 67, Volume 2.)

"How can we still be saying, given all the research, that acceleration is not a policy in every state?" Dr. Rogers asks. "The minute we don't have a policy, we'll have a principal saying, 'Oh, we can't accelerate this child because there is no policy.' No policy means nothing will happen."

Once state policies are in place, she adds, they must be monitored to make sure they're put into practice.

The road ahead is not easy, cautions Dr. Nancy Hertzog, Professor of Teacher Quality and Education at the University of Washington and Director of the Robinson Center for Young Scholars.

"It's hard to make policies because not everybody fits," she says. "Policies should be seen as pathways. Policymakers have to understand that. We have to individualize our systems."

It's critical, too, that the people who know and understand the benefits of acceleration tell their story and keep telling it, says Dr. Jonathan Wai, a researcher in the Duke University Talent Identification Program.

"The greatest research in the world, if it doesn't connect with the parties that need it, to persuade them to actually act on that information, the research will actually matter very little," he says. "Today, we're competing for the public's attention with celebrities like Justin Bieber and Miley Cyrus and a million other causes. We as academics need to value public engagement as a core part of our job."

EMPOWERED

Gail Hubbard: Practical routes to acceleration



Gail Hubbard wants people to know that acceleration policies matter.

“If you want to be able to accelerate kids, by grade or by subject area, you need a mechanism to do so,” says the Virginia educator. “If you don’t have a policy, a bright child may be accelerated in one school but not in another.”

The policies that support gifted children the most consistently are those set by state regulation. The Virginia Regulations Governing Educational Services for Gifted Students is one example of such regulation. (www.doe.virginia.gov/instruction/giftededucation) If a statewide policy is not in place, policies at the district level become even more crucial.

At the district level, Hubbard says, it is sometimes necessary to be “innovative.” Expanding existing district policies, regulations, and procedures to provide a framework for acceleration is often effective.

For example, if your district lacks a policy on acceleration, school level committees that make recommendations on promotion and retention could also make recommendations on acceleration.

“What you really need for acceleration at the elementary and middle school level is a procedure that’s understood, so acceleration is not an extraordinary thing,” she says.

More practical advice: If your state or district lacks acceleration policies, it is usually easier to accelerate a bright student by subject, rather than by a whole grade. Addressing a student’s need for advanced work in a given subject area is a more easily implemented and accepted practice.

With the prevalence of Advanced Placement, International Baccalaureate, Cambridge Programme, and dual-enrollment college courses—which are viewed as highly rigorous by policymakers—acceleration has become a more common

practice at the high school level, adds Hubbard, who retired in 2012 as the supervisor of gifted education and special programs in Prince William County Public Schools.

Virginia, she notes, also offers an Early College Scholars Program that supports student access to college-level courses offered at local high schools; Virtual Virginia online courses; academic-year Governor’s Schools; and dual enrollment programs established between public schools and community colleges (http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/). It helped, she adds, that a former Virginia governor made such opportunities a priority.

It is also important, she says, to track the performance of accelerated students at all levels and to share that information with district and state administrators. The statistics and charts in those reports illustrate the positive results of acceleration policies. They provide the data that ensure acceleration “is not a personal thing that a principal does or doesn’t do. It’s a regulated practice that’s monitored, with reported results, so its value is supported by the gifted community and by the school system community as a whole.”

The actual process of reporting increases the likelihood that the policy will be implemented. “If you have to report on it, it gets done,” Hubbard says.

In summary, Hubbard’s advice for proponents of acceleration:

- Involve stakeholders at the state and/or district level in planning for acceleration.
- Formalize written policies and regulations for acceleration.
- Collect data and report results to stakeholders.
- Monitor and adjust to improve acceleration policies and practices.

She concludes: “Establishing and maintaining a coherent, consistent policy for acceleration is well worth the effort.”

Justifications for Gifted Education Over the Decades

When we can't make a case on its merits, we come up with justifications for what we want to do, for ways to make something palatable. And so it's been for gifted education, often with unintended consequences.

Dr. Nicholas Colangelo reviewed how the United States has approached gifted education over the years:

1950s and 1960s—National Security Model

It's been said Russian Premier Nikita Khrushchev likely did more for gifted education than even Lewis Terman, who introduced and popularized IQ tests in the early twentieth century. When the Russians launched Sputnik, the first manmade satellite to orbit the Earth, in 1957, America saw that technology as a threat to national security. The Cold War birthed a white-hot Space Race. It was a heyday for bright students, but it was a reaction rather than a planned response. The unintended consequence: Bright students were pushed into the areas where we were vulnerable—math and science—perhaps at the expense of individual dreams and other pursuits. A few decades later, with the 1983 publication of *A Nation at Risk*, we transitioned into a competitive philosophy, which continues to this day.

1970s—Natural Resources Model

The Marland Report to Congress in 1972 sounded the alarm on how the nation was failing to adequately educate its 1.5 million to 2.5 million gifted and talented students. Efforts ramped up to identify and support this “natural resource.” That happened, though funding and policies were slow in developing. The unintended consequence: A child's ability becomes more important than the child, and we started treating children like “minerals.” Any time you make an investment, you want it to pay off. You want to be No. 1, meaning competition was valued over cooperation. It became easier to disregard different types of giftedness.

1980s and 1990s—Special Education Model

In this era, gifted students were treated very much like special education students, just at the top end of the bell curve. The unintended consequence: In times of limited financial resources, who's more special? It's hard to argue highly able students need as much one-on-one help as students with special needs. It created a conflict where none was intended.

1990s and 2000s—Equity Model

The *National Excellence* report in 1993 again called on the nation to do a better job educating bright students. But it also framed gifted education as an equity issue, where schools needed to do a better job with early childhood education and with increasing learning opportunities for gifted children who were poor and non-white. The unintended consequence: You worry less about the essence of a gifted program than having the right proportions and standards of selection. What started off as a positive becomes mired in process, sometimes creating dependent, at-risk “victims” rather than self-sufficient, independent learners.

2010s—Talent Development and Social Capital Model

Every child is different. Those individual differences must be taken into account in providing a sound education for all children, including the gifted child. It's not because we have a military threat or they're victims. If you do right by one child, you do right by many. It's the heart and soul of what schooling should be about. So far, the consequences are only positive—if we can only implement it.

EMPOWERED



Randy Lange: Acceleration is ‘the best intervention’

Too often, geography determines whether a bright child has access to gifted and talented programs and services, says Dr. Randy Lange.

“Our community is relatively high-achieving and affluent and expects some type of service,” says Lange, the Talent Development Program Coordinator for Elementary School District 102 in La Grange Park, a Chicago suburb. In fact, the Talent Development Program in his district resulted from a school board initiative.

But because Illinois (and many other states) and the federal government do not mandate services for gifted children, funding is not required, and bright students in too many districts do without any programs or challenges, he adds.

“There’s a lot to be said for local control, but sometimes it leads to a lack of any programming or services. It’s a money issue. It’s a real problem.”

Dr. Lange is a strong supporter of acceleration.

“The research base is rock solid that acceleration is the best intervention that schools and families have for gifted and talented students,” he says. “The positive impact includes academic, social, and emotional benefits. In my opinion, there are two key reasons to accelerate. An accelerated placement is much more likely to provide the best match between the learner’s needs and the curriculum and instruction. Candidates for acceleration need the complexity and pacing that comes with acceleration.

“Acceleration also increases our chances manyfold that America’s brightest students remain engaged and motivated to learn. I have observed over and over these students basking in the excitement of challenge and learning with, and from, like-minded peers. Mother Teresa’s quote—‘To keep a lamp burning, we have to keep putting oil in it’—fuels my drive to do all I can every day.”

The best way to identify gifted learners, he believes, combines ability and achievement testing with teacher input regarding a student’s motivation, interest, and perseverance.

“Schools need an identification protocol that incorporates multiple measures and focuses on the student as an individual,” he says. “The *Iowa Acceleration Scale* is invaluable in whole-grade acceleration decisions. It makes above-level testing mandatory for these decisions. Acceleration is a very important, involved decision, but out-of-level testing is the cornerstone.”

Initial doubts about accelerating gifted learners, he adds, can be overcome once educators become familiar with acceleration research as outlined in *A Nation Deceived* and *A Nation Empowered*. Its progress, Dr. Lange notes, shows up in the experiences of two La Grange Park students profiled in this volume—Madeline Bernstein and Nate Spratford. When Madeline, now a high school senior, was first considered for acceleration, the district had no set protocol or policy for acceleration, and it was difficult, he says. Six years later, with policies in place, there were no misgivings about acceleration when Nate’s abilities were identified.

“In my mind, this is why every state needs a mandate for gifted education services,” Dr. Lange says. “I’m committed to my sphere of influence, but I continue to believe that a movement as strong and effective as the civil rights movement is coming for the gifted and talented students in our country one day soon.”

Appendix A: About the Authors

SUSAN G. ASSOULINE

Susan G. Assouline is the director of the Belin-Blank Center and has a faculty appointment as professor of school psychology. In 2015, she was appointed the Myron and Jacqueline Blank Endowed Chair in Gifted and Talented Education. She received her B.S. in general science with a teaching endorsement, her Ed.S. in school psychology, and her Ph.D. in psychological and quantitative foundations, all from the University of Iowa. Upon completion of her doctorate, she was awarded a two-year post-doctoral fellowship at the

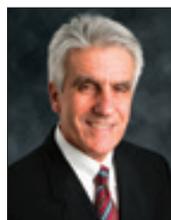


Study of Mathematically Precocious Youth (SMPY) at Johns Hopkins University, and upon completion joined the Belin-Blank Center staff in 1990. She is especially interested in identification of academic talent in elementary students and is co-author with Ann Lupkowski-Shoplik of both editions of *Developing Math Talent: A Comprehensive Guide to Math Education*

for Gifted Students in Elementary and Middle School. As well, she is co-developer (with Nicholas Colangelo, Ann Lupkowski-Shoplik, Jonathan Lipscomb, and Leslie Forstadt) of the *Iowa Acceleration Scale*, a tool designed to guide educators and parents through decisions about grade-skipping students. She is a leading expert on the decision-making process for acceleration and has consulted on several hundred acceleration cases. She has conducted numerous workshops for parents and teachers on acceleration, development of mathematical talent, and twice-exceptional students. Dr. Assouline is a frequent presenter at national and international conferences. She co-authored, with Nicholas Colangelo and Miraca U. M. Gross, *A Nation Deceived: How Schools Hold Back America's Brightest Students* (2004). With her colleague, Dr. Megan Foley-Nicpon, she received the Mensa Education & Research Foundation Award for Excellence in Research in 2007 and 2010. In 2005, she received the State of Iowa Board of Regents Staff Excellence Award.

NICHOLAS COLANGELO

Nicholas Colangelo is the Dean of the College of Education at the University of Iowa. He is also the founding director and Director Emeritus of The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development. He is author of numerous articles on counseling gifted students and the affective development of gifted and acceleration. He has edited three editions of *Handbook of Gifted Education*, (with Gary Davis). He has co-authored *A Nation Deceived: How Schools Hold Back America's Brightest*

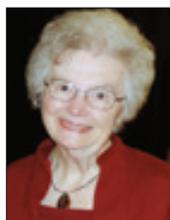


Students (with Susan Assouline and Miraca U.M. Gross). He has served on the editorial boards of major journals including *Counseling and Development*, *Gifted Child Quarterly*, *Journal of Creative Behavior*, *Journal for the Education of the Gifted*, and *Roeper Review*. He has presented a number of research papers at national and international conferences and

has been a keynote speaker on numerous occasions. In 1991, he was presented with the Distinguished Scholar Award by the National Association for Gifted Children; in 1995, he received the Alumni Achievement Award presented by the School of Education, University of Wisconsin-Madison. In 2000, he received the State of Iowa Regents Award for Faculty Excellence and in 2002 received the President's Award from the National Association for Gifted Children. Dr. Colangelo received the Michael J. Brody Award for Faculty Excellence in Service from the University of Iowa in 2008. He received the Hancher-Finkbine Medallion for Faculty from the University of Iowa in 2012 and the Ann Isaacs Founder's Memorial Award, presented by the National Association for Gifted Children (2012). In 2013, he received the International Award for Research presented by the World Council for Gifted and Talented Children.

JOYCE VANTASSEL-BASKA

Joyce VanTassel-Baska is the Jody and Layton Smith Professor Emerita of Education and former Executive Director of the Center for Gifted Education at the College of William and Mary in Virginia where she developed a graduate program and a research and development center in gifted education. She also initiated and directed the Center for Talent Development at Northwestern University. Prior to her work in higher education, Dr. VanTassel-Baska served as the state director of gifted programs for Illinois, as a regional director of a



gifted service center in the Chicago area, as coordinator of gifted programs for the Toledo, Ohio, public school system, and as a teacher of gifted high school students in English and Latin. She has consulted on gifted education in all fifty states and internationally. She is past president of The Association for the Gifted of the Council for Exceptional Children,

and the Northwestern University Chapter of Phi Delta Kappa, and the National Association for Gifted Children. Dr. VanTassel-Baska has published widely, including twenty-nine books and more than 550 refereed journal articles, book chapters, and scholarly reports. She also served as the editor of *Gifted and Talented International*, a publication of the World Council on Gifted and Talented, for seven years from 1998-2005.

Dr. VanTassel-Baska has received numerous awards for her work, including the National Association for Gifted Children's Early Leader Award in 1986, the State Council of Higher Education in Virginia Outstanding Faculty Award in 1993, the Phi Beta Kappa faculty award in 1995, the National Association for Gifted Children Distinguished Scholar Award in 1997, the President's Award, World Council on Gifted and Talented Education in 2005, the Distinguished Service Award, CEC-TAG, in 2007, and the NAGC Distinguished Service Award in 2010. Also in 2010, she was inducted as an American Educational Research Association (AERA) Fellow. She was honored in 2011 with the Lifetime Achievement Award from Mensa International. In 2013, she received the Distinguished Service Award from the World Council on the Gifted and Talented. In 2014, she was honored with the Legacy Award from NAGC and a scholarship fund established in her name from Rutgers University. Her major research interests

are on the talent development process and effective curricular interventions with the gifted. She holds B.A., M.A., M.Ed., and Ed.D. degrees from the University of Toledo, an institution that awarded her its Distinguished Achievement Alumna Award in 2003.

MARY SHARP, Writing Consultant

Mary Sharp is an Iowa writer and editor who has written four books and edited twenty. She worked as a reporter and editor of daily newspapers before retiring after sixteen years as the city editor of *The Gazette* in Cedar Rapids, Iowa. She also worked as a science writer for Lawrence Berkeley Laboratory in Berkeley, California. She has won numerous writing and editing awards and was twice named Master Columnist by the Iowa Newspaper Association. She led *The Gazette's* coverage of a devastating flood



in Cedar Rapids in 2008, work that won the Sigma Delta Chi 2009 national award for deadline reporting. This volume is her second collaboration with the Belin-Blank Center at the University of Iowa. She was a primary contributor for the Belin-Blank Center's 25th Anniversary Commemorative Volume.

Appendix B: About the Belin-Blank Center and the Acceleration

The Connie Belin and Jacqueline N. Blank Center for Gifted Education and Talent Development (Belin-Blank Center): www.belinblank.org

The Belin-Blank Center (BBC) is a comprehensive center focused on nurturing potential and inspiring excellence through myriad programs and services. The Center's academic home is in the University of Iowa's College of Education. The mission of the Belin-Blank Center is to empower and serve the international gifted community through exemplary leadership in programs, research, and advocacy.

The Belin-Blank Center:

- Identifies gifted, talented, and artistic learners;
- Offers specialized educational opportunities for students;
- Increases awareness and use of acceleration to enhance learning;
- Provides assessment, counseling, and consultation services;
- Develops curriculum resources and materials;
- Facilitates the professional development of educators;
- Disseminates information through conferences and publications;
- Leads in local, national, and international policy formation;
- Enhances educational opportunities through technology;
- Collaborates with the worldwide gifted community; and
- Promotes access, diversity, and equity in developing talent.

The Belin-Blank Center supports the development of gifted education programs throughout the world. Our international efforts include the Templeton International Fellows program. We have conducted professional development programs for educators from South Korea and Russia. Students from other countries, especially China and Hong Kong, are regular participants in our summer programs.

Housed at the Belin-Blank Center, the Wallace Research and Assessment Clinic is home to the National Institute for Twice-Exceptionality (NITE). Twice-exceptionality refers to gifted students who have learning, behavioral, and/or social-emotional difficulties. NITE provides a clearinghouse for resources related to the topic of twice-exceptionality. The NITE team of licensed psychologists and researchers has actively researched this. Abstracts of several recent research publications are available on the Assessment and Counseling Clinic webpage, www.belinblank.org/clinic.

Acceleration Institute:
www.accelerationinstitute.org

The Belin-Blank Center's Acceleration Institute was originally established under the name, Institute for Research and Policy on Acceleration, in 2006 through the generous support (2006-2012) of the John Templeton Foundation. The Acceleration Institute is dedicated to the study of curricular acceleration for academically talented children.

The primary purposes of the Acceleration Institute are:

- Conducting research on the cognitive and affective characteristics that moderate students' success with different forms of academic acceleration;
- Synthesizing current research on acceleration in ways that are useful to practitioners, policymakers, and researchers; and
- Serving as an international clearinghouse for research and policy on acceleration.

Belin-Blank Center Staff

Directors

Susan G. Assouline, Ph.D., *Myron and Jacqueline Blank Chair in Gifted Education, Director*

Nicholas Colangelo, Ph.D., *Dean, College of Education, Director Emeritus*

Laurie Croft, Ph.D., *Clinical Associate Professor, Associate Director for Professional Development*

Brian Douglas, M.B.A., *Assistant Director for Finance, Operations, and Technology*

Megan Foley Nicpon, Ph.D., *Associate Professor of Counseling Psychology, Associate Director for Research and Clinic*

Jan Warren, M.A., *Assistant Director for Student Services*

Administrative Staff

Alissa Doobay, Ph.D., *Supervisor of Psychological Services for Wallace Assessment and Counseling Clinic*

Kristin Flanary, M.A., *Coordinator for Iowa Online Advanced Placement Academy (IOAPA)*

Joyce Goins, Ph.D., *Licensed Psychologist, Assessment and Counseling Clinic*

Lori Ihrig, Ph.D., *Supervisor for Curriculum and Instruction, Program Director for STEM Excellence and Leadership*

Joshua Jacobs, A.A.S., *Network Administrator*

Emily Ladendorf, B.A., *Online Technology*

Ann Lupkowski-Shoplik, Ph.D., *Administrator, Acceleration Institute; Adjunct Professor, Psychological and Quantitative Foundations*

Ashlee Van Fleet, M.A.T., *Administrative Curriculum and Instruction*

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Clar Baldus, Ph.D., *Clinical Associate Professor for Art Education, Consultant, Visual Arts Programs*

Leslie Flynn, Ph.D., *Clinical Associate Professor for Science Education, Coordinator JSHS*

Clerical Staff

Rachelle Blackwell

Lori Hudson

Melissa Keeling

Bridget Pauley

Nancy Whetstine

Appendix C: The Costs of Acceleration, Deconstructed

By David Frisvold, Associate Professor of Economics,
The University of Iowa

In general, there are two broad categories of acceleration: grade-based acceleration and subject-based acceleration. Within these broad categories, costs associated with several of the specific types of acceleration, as defined by Southern and Jones (2004) in *A Nation Deceived* and in Volume 2 of *A Nation Empowered*, are considered.

This analysis shows the costs of grade-based acceleration are likely to be less than the costs of subject-based acceleration.

In general, the costs of grade-based acceleration are low. The highest-cost forms of acceleration are likely to be mentoring and extracurricular programs, while the lowest-cost forms of acceleration are grade-skipping, combined classes, and early admission to first grade.

However, when considering which type of acceleration to implement, it is important not choose simply the lowest dollar cost for acceleration but to consider the overall costs, including the benefits of the acceleration.

Overall, the potential costs of acceleration involve:

- 1) Implementation costs, including costs to the student, family, class, teacher, school, and school district.
- 2) Possible unintended negative consequences to the student.
- 3) Possible unintended negative consequences to others in addition to implementation costs (such as consequences to other students from any disruptive behavior from accelerating a student).
- 4) Opportunity costs.

The opportunity costs include the costs of the alternative options the student could have participated in, which could be any missed benefits from the acceleration. A cost-benefit analysis would compare the discounted costs to the discounted benefits, since both the costs and benefits would occur over multiple years. A full cost-benefit study is beyond the scope of this analysis, which focuses primarily on the implementation costs for this academic intervention.

Below are specific types of acceleration, possible costs, and a summary statement about the potential magnitude of these costs. The main focus is on implementation costs.

Type: Early Admission to Kindergarten

Overall assessment: The costs of early admission to kindergarten are likely to be small.

Potential costs:

1. An extra child in kindergarten could lead to an additional teacher being hired because of exceeding state-based, class-size thresholds.
2. An extra child in a kindergarten class increases the class size, which could lead to a decrease in achievement and increase in disruptive behavior in the classroom. The literature is somewhat mixed on this, but the impact from one student is reasonably small.
3. The student would start school a year earlier and would potentially complete school a year earlier. The discounted total costs of schooling would be higher because the costs are occurring one year earlier.

Type: Early Admission to First Grade

Overall assessment: The costs of early admission to first grade are likely to be zero or very small.

Potential costs:

1. There would be an increase in class size in first grade and a decrease in class size in kindergarten.
2. An extra child in first grade could lead to an additional teacher being hired because of exceeding state-based, class-size thresholds.

Type: Grade-Skipping

Overall assessment: The costs of grade-skipping are likely to be zero or very small.

Potential costs:

1. There would be an increase in class size in the higher grade and a decrease in class size in the lower grade.

Type: Continuous Progress

Overall assessment: The costs of continuous progress are likely to be more than the grade-based accelerations described above, but remain small. The costs are primarily borne by the teacher.

Potential costs:

1. The process of providing additional content to an individual student in the class involves additional time and effort of the teacher in the planning, implementation, and grading of the additional content.
2. Unless the teacher works longer, this could involve less time and effort devoted to other students in the class by the teacher.
3. Costs of the textbooks, which are relatively small.

Type: Self-Paced Instruction

Overall assessment: The costs of self-paced instruction are likely to be less than the costs of continuous progress and likely to be very small.

Potential costs:

1. Similar to continuous progress, but involves less time and effort of the teacher.

Type: Subject-Matter Acceleration/Partial Acceleration

Overall assessment: The costs of subject-based acceleration or partial acceleration will depend on how this acceleration is implemented. The costs would likely range from very small, when the student is enrolled in a higher-level class within the same school, to moderately high when the student is enrolled in a class after school or during the summer. Classes after school or during the summer will have costs similar to the extracurricular programs described below.

Potential costs:

1. Transportation costs if students need to leave their school to attend another school; for example, an elementary school student attending a middle school class.
2. Transportation costs, likely paid by the household, if the student attends summer school or after-school classes, which can include gasoline, wear and tear on vehicle, and the driver's (such as a parent or caregiver) time.
3. Overhead costs from the additional use of the building, if the student attends summer school or after-school classes.
4. Additional teacher wages for providing summer school classes or after-school instruction.
5. There would be an increase in class size in the accelerated subject and a decrease in class size in the lower-level class.

Type: Combined Classes

Overall assessment: The implementation costs of combined classes are likely to be zero or very small.

Potential costs:

1. The positive peer effects for younger students from interacting with older students could be offset by any negative peer effects for older students from interacting with younger students.

Type: Curriculum Compacting

Overall assessment: Similar to continuous progress, the costs of curriculum compacting are likely to be more than the grade-based accelerations described above, but remain small. The costs are primarily borne by the teacher.

Potential costs:

1. The potential costs are similar to those for continuous progress.

Type: Telescoping Curriculum

Overall assessment: The discounted overall costs of telescoping curriculum are likely to be similar to curriculum compacting. The initial costs of implementing this type of acceleration are higher than curriculum compacting, but the advanced grade placement would reduce the overall costs by decreasing the number of years in school.

Potential costs:

1. The potential costs are similar to those for continuous progress and curriculum compacting.
2. Because the outcome for telescoping curriculum is more advanced than the outcome for curriculum compacting, the costs may be higher.
3. These costs would be reduced by the decrease in the number of years the student is in school.

Type: Mentoring

Overall assessment: The costs of mentoring are likely to be higher than subject-matter acceleration or partial acceleration since mentoring is provided to one student instead of a class. Mentoring is likely to be one of the types of acceleration with the highest cost.

Potential costs:

1. The wages of the mentor or the expert tutor.
2. If the mentoring occurs after school, the transportation costs (e.g., gas, wear and tear on the vehicle), parent/caregiver's time from attending the mentoring sessions.
3. If the mentoring occurs after school, the time costs to the student of attending the mentoring sessions.
4. If the mentoring occurs after school in the school building, the overhead costs from the additional use of the building.

Type: Extracurricular Programs

Overall assessment: The costs of extracurricular programs are likely to be less than mentoring, but would otherwise likely be the highest cost type of partial acceleration.

Potential costs:

1. The wages of the instructor.
2. Overhead costs from the additional use of the building.
3. Additional costs of the course supplies are likely zero since the student would have taken the course during the school day in the absence of the extracurricular program.
4. The transportation costs to attend the after-school or summer programs.
5. The time costs to the student of attending the extracurricular programs.
6. These costs are potentially offset by any decrease in the number of years the student would be in school due to the advanced credit.

Type: Distance-Learning Courses

Overall assessment: The costs of distance-learning courses may be less than extracurricular programs, which may have overhead costs and transportation costs. There may be a fee to cover the tuition of an online class. Overall, these costs are likely to be larger than the costs of grade-based acceleration, but still small.

Potential costs:

1. The wages of the instructor.
2. Tuition fees for online courses.
3. Costs of developing and maintaining the website to deliver online instruction.
4. Costs of filming and producing online or televised instruction.
5. The time costs to the student for participating in after-school courses if the courses cannot be completed during the school day.

Type: Early Graduation

Overall assessment: The costs of early graduation would depend on how this acceleration is implemented.

Potential costs:

1. Since early graduation would occur as the result of other types of acceleration individually or in combination, the costs would depend on how the student achieved the required credits in a shortened time period.
2. In 2010, Marc Tucker, the president of the National Center on Education and the Economy, estimated that it would cost school districts \$500 per student to offer a program providing tests to students to graduate students early (Dillon, 2010). The costs would pay for courses, tests, and teacher training.
3. These additional costs would be reduced by the decrease in the number of years the student is in school.

Type: Concurrent/Dual Enrollment

Overall assessment: The costs of concurrent or dual enrollment are likely to be low and primarily entail the costs of certifying the rigor and standard of the course. These costs can be expected to rise as the grade level increases due to the variety of courses and their level of difficulty.

Potential costs:

1. The costs of certifying the rigor and standards of the course.
2. Any fee to transfer credit imposed by a college (this is not common).
3. The lost tuition revenue to the college.
4. Additional costs if the course is an Advanced Placement course as described below.

Type: Advanced Placement Classes

Overall assessment: The costs of Advanced Placement are likely to be higher than concurrent/dual enrollment or credit by examination due to the uniform standards involved in certifying the rigor of the course and exam, which also should be viewed in light of the benefits of these standards. Overall, the costs of Advanced Placement courses are moderate.

Potential costs:

1. Costs (fee, transportation, and time) to the student to take the AP exam.
2. An additional teacher could be hired if the class size is much lower than the average class size in the school.
3. Additional training for the teacher.
4. A higher salary may be needed to hire a more qualified teacher certified to teach the AP class (may not be common).
5. Costs of having an agency (College Board) approve AP syllabi, certify teachers, and prepare the exam.
6. The lost tuition revenue to the college if the student attends college for a shorter period of time.

Type: Credit by Examination

Overall assessment: These costs are likely to be low.

Potential costs:

1. The costs of certifying the rigor of the exam or activity.
2. The costs (including time) of administering the exam or activity.
3. Any fee to transfer credit imposed by a college.
4. The lost tuition revenue to the college if the student attends college for a shorter period of time.

Type: Acceleration in College

Overall assessment: The costs of acceleration in college will depend on the type of acceleration implemented.

Potential costs:

1. If this acceleration occurs because of the use of other accelerative techniques, then the potential costs depend on the techniques used.
 2. The lost tuition revenue to the college if the student attends college for a shorter period of time.
-

References

Dillon, Sam. (2010). "High Schools to Offer Plan to Graduate 2 Years Early," *New York Times*. New York, NY: The New York Times Company. Available at: <http://www.nytimes.com/2010/02/18/education/18educ.html>.

Southern, W. Thomas, and Eric D. Jones. (2004). "Types of Acceleration: Dimensions and Issues" in Nicholas Colangelo, Susan G. Assouline, and Miraca U.M. Gross (Eds.), *A Nation Deceived: How Schools Hold Back America's Brightest Students, Volume 2*. Iowa City, IA: The University of Iowa.

Appendix D: Resources for Parents and Educators

This appendix offers resources that may be useful for parents and educators of gifted and talented students. The entries in each category below serve as a representative sample, rather than an exhaustive list, of available resources.

CENTERS FOR GIFTED EDUCATION AND TALENT SEARCHES

Academic Talent Search

California State University, Sacramento CA
<http://www.csus.edu/coe/ats/>

The Belin-Blank International Center for Gifted Education and Talent Development

University of Iowa, Iowa City, IA
<http://www.belinblank.org>

Center for Bright Kids

<http://www.centerforbrightkids.org>

Center for Gifted Education

College of William & Mary, Williamsburg, VA
<http://education.wm.edu/centers/cfge/>

Center for Gifted Studies

Western Kentucky University, Bowling Green, KY
<http://www.wku.edu/gifted/>

Center for Talent Development

Northwestern University, Evanston, IL
<http://www.ctd.northwestern.edu>

Center for Talented Youth

Johns Hopkins University, Baltimore, MD
<http://cty.jhu.edu>

Davidson Institute for Talent Development

Reno, NV
<http://www.davidsongifted.org>

Frances A. Karnes Center for Gifted Studies

University of Southern Mississippi, Hattiesburg, MS
<http://www.usm.edu/karnes-gifted>

Gifted Development Center

Denver, CO
<http://www.gifteddevelopment.com>

Gifted Education Research Resource and Information Center

University of New South Wales, Sydney, NSW, Australia
<https://education.arts.unsw.edu.au/about-us/gerric/>

Gifted Education Resource Institute

Purdue University, West Lafayette, IN
<http://www.geri.education.purdue.edu>

Gifted Students Institute

Southern Methodist University, Dallas, TX
<http://www.smu.edu/gsi/>

Jodie Mahony Center for Gifted Education

University of Arkansas at Little Rock
<http://ualr.edu/gifted/>

Neag Center for Gifted Education and Talent Development

University of Connecticut, Mansfield, CT
<http://www.gifted.uconn.edu>

Office of Precollegiate Programs for Talented and Gifted (OPPTAG)

Iowa State University, Ames, IA
<https://www.opptag.iastate.edu/>

Robinson Center for Young Scholars

University of Washington, Seattle, WA
<https://robinsoncenter.uw.edu/>

Talent Identification Program

Duke University, Durham, NC
<http://tip.duke.edu>

University of Minnesota Talented Youth Mathematics Program (UMTYMP)

University of Minnesota, Minneapolis, MN
<http://mathcep.umn.edu/umtymf/>

Wisconsin Center for Academically Talented Youth

Madison, WI
<http://www.wcaty.org>

CONTESTS AND COMPETITIONS

American Mathematics Competitions

<http://www.maa.org/math-competitions>

Offers a series of competitions, including American Mathematics Contest 8, 10, and 12; American Invitational Mathematics Exam; United States of America Mathematical Olympiad (USAMO).

American Model United Nations International

<http://www.amun.org/>

American Regions Mathematics League (ARML)

<http://www.arml.com>

ARML is a national mathematics competition for high school students.

American History Essay Contests

<http://www.dar.org/national-society/education/essay-contests>

Destination Imagination (DI) Challenge Program

<http://www.destinationimagination.org/challenge-program>

Teams work together to solve their chosen challenge, and team solutions are assessed at regional, state, or country tournaments.

Future Problem Solving Program International (FPSP)

<http://www.fpsp.org>

FPSP offers competitive and non-competitive activities in creative problem solving.

Intel Science Talent Search (Intel STS)

<https://student.societyforscience.org/intel-sts>

Intel STS is the nation's most prestigious science research competition for high school seniors. Students submit independent research projects and winners receive college scholarships.

Junior Science and Humanities Symposia

<http://js.hs.org/>

JSHS is designed to challenge and engage students (Grades 9-12) in science, technology, engineering or mathematics (STEM). Individual students compete for scholarships and recognition by presenting the results of their original research efforts before a panel of judges and an audience of their peers. Opportunities for hands-

on workshops, panel discussions, career exploration, research lab visits and networking are provided.

MATHCOUNTS

<http://www.mathcounts.org>

MATHCOUNTS is a national competitive mathematics program for middle school students. Students can win scholarships and other prizes.

Math Day at the University of Nebraska-Lincoln (UNL)

<http://www.math.unl.edu/programs/mathday>

UNL Math Day invites Nebraska high school students to participate in one individual and two team math competitions. Top prizes include scholarships to UNL. The University of Nebraska Lincoln also sponsors the

All Girls/All Math Summer Camp

<http://www.math.unl.edu/programs/agam>

for high school girls who have completed geometry.

Math League Contests

<http://www.mathleague.com>

The Math League offers contests for students in grades four through 12.

Math Olympiads for Elementary and Middle Schools (MOEMS)

<http://www.moems.org/>

The Olympiad Program includes a series of math problem solving contests for school-based teams of up to 35 students in grades four through eight. School math clubs can meet year-round to explore math topics and prepare for contests, which are offered monthly from November to March.

National Academic Quiz Tournaments (NAQT)

<http://www.naqt.com/index.html>

NAQT organizes middle school, high school, community college and college national quiz bowl championships and provides a format for independent tournaments.

National Geographic Bee

<http://www.nationalgeographic.com/geobee/>

The National Geographic Bee is open to schools with students in grades four through eight. School champions may qualify to participate in their state Bee, and state champions attend the national championship, where prizes include scholarships.

National History Day (NHD)

<http://www.nationalhistoryday.org>

Students select an historical topic, conduct research, and develop a project representing their knowledge. Projects can be entered for judging at local, regional, state and national levels, and prizes include scholarships and internships.

National Merit Scholarship Program

<http://www.nationalmerit.org/nmsp.php>

High school students who take the Preliminary SAT/ National Merit Scholarship Qualifying Test (PSAT/ NMSQT) and meet published eligibility criteria are entered in the National Merit Program. Winners receive college scholarships.

National Science Bowl

<http://science.energy.gov/wdts/nsb/>

The National Science Bowl is an academic competition that tests students' science and math knowledge. Regional champions in middle school and high school divisions advance to the national championship.

Odyssey of the Mind

<http://www.odysseyofthemind.com>

Odyssey of the Mind invites students from kindergarten through college to form teams and solve a wide variety of creative problems. Competitions occur at local, state, and world levels.

Science Olympiad

<http://soinc.org/>

Science Olympiad offers programs for students in kindergarten through grade twelve. Competitions occur at regional, state, and national levels.

Scholastic Art and Writing Awards

<http://www.artandwriting.org/>

The nation's longest-running, most prestigious recognition initiative for creative teens, and the largest source of scholarships for young artists and writers.

Scripps National Spelling Bee

<http://www.spellingbee.com>

The Scripps National Spelling Bee program offers opportunities for schools to enroll in the program, develop and hold local contests, and send winners to the next levels of competition, culminating yearly in the National Spelling Bee.

Tests of Engineering Aptitude, Mathematics and Science (TEAMS)

<http://teams.tsaweb.org>

TEAMS is an annual one-day competition in which middle and high school students can apply their math and science knowledge to solve real-world engineering challenges.

U.S. National Chemistry Olympiad (UNSCO)

<http://www.acs.org/content/acs/en/education/students/highschool/olympiad.html>

The UNSCO is a chemistry competition for high school students. The local competitions are open to all high school students, and nominees are selected to take the national exam. Top performers on the exam go on to the study camp, and four students are selected to represent the U.S. at the International Chemistry Olympiad.

U.S. Physics Team

<http://www.aapt.org/physicsteam/>

The American Association of Physics Teachers recruits, selects, and trains teams to compete in the International Physics Olympiad Competition. Schools can register high school students to participate in the local exam, and top scorers go on to take the USA Physics Olympiad Exam.

U.S.A Mathematical Talent Search (USAMTS)

<http://www.usamts.org>

The USAMTS is a free math contest open to all U.S. middle and high school students. The competition aspect of the program is secondary to the development of problem solving and math reasoning skills.

United States Academic Decathlon (USAD)

<http://usad.org/>

The USAD is a scholastic competition for teams of high school students. Teams are made up of three "Honor" students (3.75-4.00 GPA), three "Scholastic" students (3.00-3.749 GPA) and three "Varsity" students (0.00-2.999 GPA).

DISTANCE LEARNING

Advanced Placement (AP) Program

<http://apcentral.collegeboard.com>

AP courses are offered in many high schools nationwide. National examinations are given each May, and high scores earn college credit. Many states sponsor grants to pay for online AP courses if they are not offered in person.

CTYOnline

Center for Talented Youth, Johns Hopkins University

<http://cty.jhu.edu/ctyonline/index.html>

CTYOnline offers challenging courses for eligible students in grades Pre-K to 12. These courses are available year-round, and each student receives guidance, feedback, and evaluation from a CTY faculty member.

GIFTEDANDTALENTED.COM

(formerly the Education Program for Gifted Youth [EPGY] at Stanford University)

<http://giftedandtalented.com>

Computer-based courses designed to meet the needs of advanced learners in grade K-12.

Gifted LearningLinks

Center for Talent Development, Northwestern University

<http://www.ctd.northwestern.edu/gll/>

GLL offers challenging online courses for gifted and talented students in kindergarten through grade 12.

Iowa Online Advanced Placement Academy (IOAPA)

Belin-Blank Center, University of Iowa

<http://www.iowaapacademy.org>

Since 2001, IOAPA has offered access to Advanced Placement (AP) courses to all Iowa high school students, especially those in small and rural schools. The Belin-Blank Center has recently begin expanding the online AP learning program to schools outside of Iowa.

University of Nebraska High School

University of Nebraska

<http://highschool.nebraska.edu>

The University of Nebraska High School (UNHS) is an accredited school offering flexible, self-based online coursework. Students in any location may choose to enroll at UNHS full-time to earn a UNHS diploma, or they may transfer credits earned through UNHS to their local school.

EARLY ENTRANCE TO COLLEGE PROGRAMS

Below is a sample of early entrance to college programs. More information can be found in the Brody and Muratori chapter in *A Nation Empowered* (Vol. 2) and at http://www.accelerationinstitute.org/Resources/early_college.aspx and http://www.hoagiesgifted.org/early_college.htm.

*Organizations marked with an * are members of the National Consortium of Early College Entrance Programs.*

Accelerated College Entrance

California State University, Sacramento

<http://www.csus.edu/coe/ace/>

For students in grades 11 and 12

Advanced Academy of Georgia*

University of West Georgia

<http://www.westga.edu/-academy/>

For students in grades 11 and 12

Bard College at Simon's Rock*

<http://www.simons-rock.edu/>

For students who have completed 10th grade

Boston University Academy*

<http://www.buacademy.org>

For students in grades nine through 12

The Clarkson School*

Clarkson University

<http://www.clarkson.edu/tcs/>

For students who have completed 11th grade

The Davidson Academy of Nevada

<http://www.davidsonacademy.unr.edu/>

For students under the age of 18 who meet the Qualification Criteria

The Early College

Guilford College

http://ecg.gcsnc.com/pages/Early_College_At_Guilford

For students in grades nine through 12

Early Entrance Program*

California State University, Los Angeles

<http://web.calstatela.edu/academic/eep/>

For qualified students 11 to 18 years old

Early Entrance Program*

Belin-Blank Center, University of Iowa

<http://www.belinblank.org/academy>

Formerly the National Academy of Arts, Science, and Engineering

Massachusetts Academy of Math and Science

<http://www.massacademy.org/>

For students in grades 11 and 12

Program for the Exceptionally Gifted*

Mary Baldwin College

http://www.mbc.edu/early_college/peg/

For girls between the ages of 13 and 15

Robinson Center for Young Scholars*

University of Washington

<https://robinsoncenter.uw.edu/>

For students who have completed at least sixth grade and are younger than 15 years old

Texas Academy of Mathematics and Science*

Denton, TX

<https://tams.unt.edu/>

For Texas students in grades 11 and 12 who are interested in math and science

ORGANIZATIONS

Most states have an organization to promote advocacy for gifted and talented students at the state and local level; provide pre-service and in-service training in gifted education; and support parent/community awareness, education, and involvement. See the NAGC website for specific information by state.

National Association for Gifted Children (NAGC)

<http://www.nagc.org>

NAGC is a non-profit organization dedicated to serving parents, educators, community leaders, and other professionals who work on behalf of gifted children. It hosts an annual convention and publishes several periodicals. In addition, most states have an NAGC-affiliated state organization, and the NAGC website offers state-specific policies and information.

American Psychological Association (APA) Center for Gifted Education Policy (CGEP)

<http://www.apa.org/ed/schools/gifted/index.aspx>

The mission of the CGEP is to generate public awareness, advocacy, clinical applications, and cutting-edge research ideas that will enhance the achievement and performance of children and adolescents with special gifted and talents.

The Association for the Gifted (TAG)

<http://cectag.com/>

TAG is a special interest division of the Council for Exceptional Children (CEC). It promotes the welfare and education of children and youth with gifts, talents, high potential, and those who are twice-exceptional.

Supporting Emotional Needs of the Gifted (SENG):

<http://sengifted.org/>

The mission of SENEG is to foster environments in which all gifted children and adults can understand and accept themselves and be understood, valued, and supported by others.

PERIODICALS

Connecting for High Potential

<http://www.nagc.org/resources-publications/nagc-publications/connecting-high-potential>

This publication from the National Association for Gifted Children is designed to bridge the gaps between parents and teachers of gifted children and to offer opportunities to examine each perspective.

Gifted Child Quarterly (GCQ): <http://www.nagc.org/resources-publications/nagc-publications/gifted-child-quarterly>

GCQ is the scholarly journal of the National Association for Gifted Children. It contains articles of interest to professionals and those with some experience in the field of gifted education.

Gifted Child Today (GCT)

<http://gct.sagepub.com/>

GCT provides practical advice about teaching and parenting gifted and talented children. Articles cover topics relevant for parents, teachers, and administrators of gifted students.

Imagine

<http://cty.jhu.edu/imagine/index.html>

Imagine is written for students in grades 7-12, and is published by the Johns Hopkins University Center for Talented Youth.

Journal for the Education of the Gifted (JEG)

<http://jeg.sagepub.com/>

JEG is the official publication of The Association for the Gifted (a division of the Council for Exceptional Children). It presents information and research on the educational and psychological needs of gifted and talented children.

Parenting for High Potential

<http://www.nagc.org/resources-publications/nagc-publications/parenting-high-potential>

This magazine is published by NAGC and designed for parents.

Roeper Review

<http://www.roeper.org/Roeper-Review>

This publication is designed for professionals and includes articles that are research-based and often deal with both theoretical and practical issues.

Understanding Our Gifted

<http://www.ourgifted.com/>

This online journal is published quarterly, and each issue focuses on a different gifted education topic.

Vision

<http://www.belinblank.org/newsletter>

Vision is the monthly newsletter from the Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.

WEB AND PRINT RESOURCES

The Acceleration Institute

(formerly the Institute for Research and Policy on Acceleration), a project of the Belin-Blank Center for Gifted and Talented Education, the University of Iowa
<http://www.accelerationinstitute.org>

This website is home to many resources that are useful for making acceleration decisions, developing acceleration policies, and examining specific forms of acceleration. The watershed publication on acceleration, *A Nation Deceived: How Schools Hold Back America's Brightest Students*, can be downloaded for free. A PowerPoint presentation discussing acceleration is available for download. The Policy section provides information about state legislation regarding acceleration for all 50 U.S. states that can inform parents and educators interested in acceleration. The downloadable *Guidelines for Developing an Academic Acceleration Policy* may be of assistance to school personnel who are considering creating a policy. Also found on this website are acceleration stories: personal anecdotes from parents, teachers and students who have had experiences with acceleration.

Academic Earth

<http://academicearth.org/>

A collection of free online college courses from many universities. Courses include biology, chemistry, computer science, engineering, mathematics, physics, and psychology.

ALEKS

<http://www.aleks.com>

Web-based assessment and learning system that uses adaptive questioning to determine what a student knows and doesn't know in a course. ALEKS then instructs the student on the topics he or she is most ready to learn.

Cogito

<https://cogito.cty.jhu.edu/>

Sponsored by the Center for Talented Youth at Johns Hopkins University, this website connects exceptional students from around the world who love science, technology, engineering and math. Students can participate in online interviews with mathematicians and scientists; view science and math-related news articles, essays, videos and blogs; and access a database of academic programs and math and science competitions. Cogito also includes members-only discussion forums.

Davidson Gifted Database

<http://www.davidsongifted.org/db/>

This database features an online article library, searchable resources for and about gifted students, gifted education state policy information, and a gifted issues discussion forum.

Developing Math Talent: A Comprehensive Guide to Math Education for Gifted Students in Elementary and Middle School (2nd ed.)

By Assouline, S., and Lupkowski-Shoplik, A. (2011). Published by Prufrock Press (Waco, TX). This handbook integrates the unique roles of educators and parents in responding to the exceptional needs of mathematically talented students.

Educational Opportunity Guide

<https://eog.tip.duke.edu/guide/search>

This guide is updated annually by Duke University's Talent Identification Program (TIP). It lists many summer and school-year programs throughout the country.

Federal Registry for Educational Excellence (FREE)

<http://free.ed.gov/>

The FREE website compiles digital teaching and learning resources.

Genius Denied

<http://www.geniusdenied.com>

By Davidson, J., & Davidson, B. (2004). Published by Simon and Schuster (New York). Additional resources, blogs, news, and other information are listed on the website.

The Hoagies Gifted Education Page

<http://www.hoagiesgifted.org>

This website hosts a wide variety of resources for parents of gifted students, educators and professionals working with gifted students, and gifted kids and teens.

IDEAL Solutions for STEM Acceleration

<http://www.idealsolutionnsstem.com>

This is an online tool that assists parents and educators in making decisions about academically talented students. Teachers can gain research-supported recommendations regarding students' readiness for acceleration in STEM subjects. Recommendations are aligned with national standards. The goal is to assist school personnel with accelerated placement in STEM subjects so they can feel confident that their placement decisions are supported by research.

Iowa Acceleration Scale, 3rd Edition

<http://accelerationinstitute.org/Resources/IAS.aspx>

Developed by Susan Assouline, Nicholas Colangelo, Ann Lupkowski-Shoplik, Jonathan Lipscomb, and Leslie Forstadt (2009). Published by Great Potential Press (Scottsdale, AZ). This instrument provides a systematic and thorough method of decision-making for educators and parents who are considering whole-grade acceleration for students in kindergarten through eighth grade.

Khan Academy

<https://www.khanacademy.org/>

Provides practice exercises, instructional videos, and a personalized learning dashboard that empower learners to study at their own pace in and outside of the classroom. Subjects include math, science, computer programming, history, art history, economics, and others.

LISTSERVS

Belin-Blank Center Listserv

The Gifted Teachers email list provides a way for educators around the world interested in gifted education to interact. Nearly 1,000 educators currently participate. To subscribe to the list, send an email message to listserv@list.uiowa.edu. Leave the subject line blank. In the text of your message, write: SUBSCRIBE GIFTED-TEACHERS First-Name Last-Name.

Center for Gifted Education Policy (CGEP) Listserv

The CGEP Listserv is a forum of over 400 subscribers from around the world that engenders communication among researchers in giftedness studies and education. It provides opportunities for researchers and graduate students to discuss issues, exchange information, and generate potential collaborations. See <http://www.apa.org/ed/schools/gifted/listserv/index.aspx> for instructions on how to subscribe.

Hoagies Gifted Education Page

The Hoagies Gifted website contains a listing of many different email lists, Facebook groups, blogs, and other online communities for individuals interested in gifted education. Visit http://www.hoagiesgifted.org/on-line_support.htm.

A NATION EMPOWERED: **SOCIAL MEDIA**

For current information about *A Nation Empowered*, visit www.nationempowered.org, follow @BelinBlank on Twitter, or read the Belin-Blank Center blog at <https://belinblank.wordpress.com/>.

This new report, *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students* builds on the momentum of the 2004 report, *A Nation Deceived: How Schools Hold Back America's Brightest Students*.

A Nation Deceived initiated a critical dialogue about academic acceleration, an under-used intervention. *A Nation Deceived* exposed to the nation the inconsistencies between research and practice and brought acceleration to prominence in the field.

A Nation Empowered shifts the impetus from conversation to action.

Empowerment galvanizes determination with evidence.

Volume 1 portrays the determination of students, educators, and parents to strive for excellence.

Volume 2 reveals the evidence that trumps the excuses that hold bright students back.

Excuse

Evidence

There are considerable financial issues regarding education; we can't afford to do everything.

Acceleration is a highly cost-effective intervention. Many interventions are high-cost and yield ambiguous results. Acceleration stands out as an exception: It is low-cost and the results are positive.

We can't be sure of the long-term impact.

As with any student, we cannot know the long-term impact of school until years down the road. But the evidence is compelling: Acceleration has long-term educational benefits that extend to careers.

The Common Core State Standards (CCSS) eliminate the need for this intervention.

The Common Core State Standards (CCSS) were not developed with the gifted student in mind. The CCSS, which focus on proficiency for all students, do not address the need for advanced complexity and pacing required by students who are gifted.

Volumes 1 and 2 of *A Nation Empowered, Evidence Trumps the Excuses Holding Back America's Brightest Students* equips students, families, and educators with facts to refute biased excuses.

Belin-Blank Center Acceleration Institute, University of Iowa
www.accelerationinstitute.org

The Acceleration Institute is dedicated to the study of curricular acceleration for academically talented children

The website features

- Acceleration stories
- Tools for making informed decisions about acceleration
- Acceleration policies
- Research on acceleration
- Professional development

