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Illinois Association for Gifted Children

ACCELERATE ILLINOIS

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INTRODUCTION

Collinsville, Illinois is unique.

Not only is it the hometown of REM frontman Michael Stipe, it's also home to the world's largest catsup bottle (not ketchup!) and produces 85 percent of the world's horseradish.

It's unique in another way too.

It's home to one of the few school districts in Illinois that has a comprehensive acceleration policy - one that allows high-ability students access to coursework that meets their needs.

The district adopted the policy in 2014, when it was approached by two sets of parents, both wanting early admission to kindergarten for their children, who were performing well above grade level.

Not knowing how to accommodate the parents' special requests, the district's superintendent, Dr. Robert Green, contacted the Illinois State Board of Education for guidance. Unfortunately, they could give him none - there was no state policy dealing with his unique situation.

Left to fend for himself, Dr. Green began doing research into what other districts were doing to accommodate high-ability students. While doing so, he came across work done by the Acceleration Institute - a project of the University of Iowa's Department of Education - that specializes in situations like the one Dr. Green found himself in.

With their research as his guide, he created Collinsville's acceleration policy.

While it allows students to enter kindergarten early, take above grade level coursework, skip grades, or graduate early, it doesn't do so carelessly. It creates an acceleration committee, consisting of each school's principal, the teacher of the student requesting acceleration, the teacher of the class or grade the student would be accelerated to, the student's guardian, and the school's gifted coordinator or school psychologist. The committee, in turn, uses the

Iowa Acceleration Scale - a peer-reviewed assessment tool that takes into the student's academic as well as social and emotional development - to determine whether a student should be accelerated.

"It's worked great so far," Dr. Green told me in a conversation we had by phone as part of a series of calls to superintendents in districts with comprehensive acceleration policies. "Even though we created it for those two students, we've had many more use it to take math or reading classes above their grade level."

Over the two years the policy has been in place, two students have skipped grades and approximately 50 students a year take classes higher than their grade level. No student has been taken out of the acceleration program.

How has it affected Collinsville's bottom line?

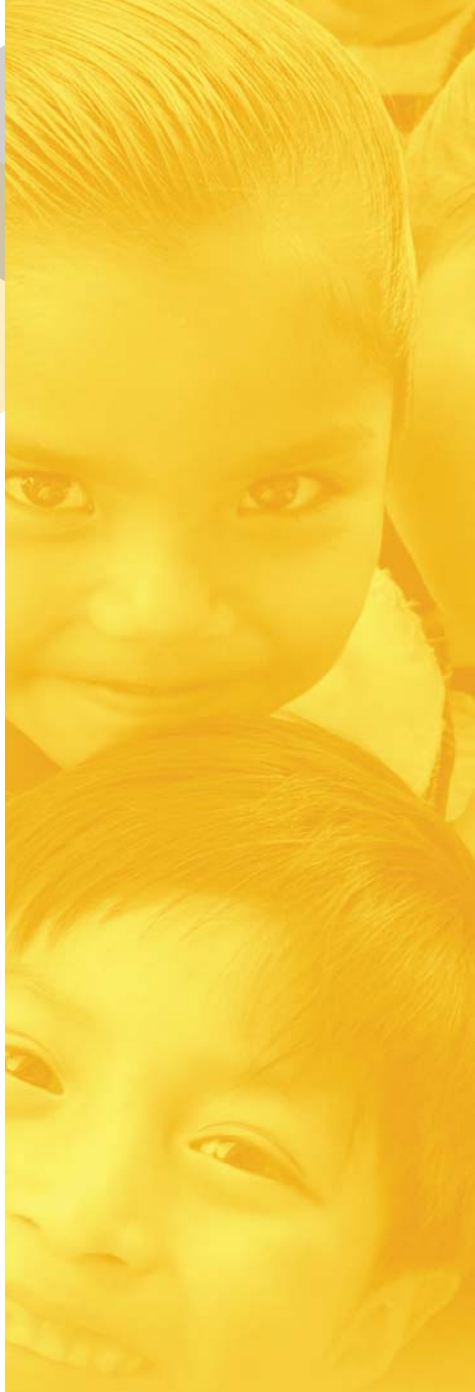
"There's been great return-on-investment," said Dr. Green. "We paid $200 for the assessment materials - a one-time cost - and our teachers only need to devote an additional two hours per student requesting acceleration."

It's surprising, therefore, that despite Collinsville's positive experience with acceleration, its use in districts across the country is negligible.

A 2014 report for the National Center on the Gifted and Talented of 1,566 school districts across the United States (765 elementary, 486 middle, and 315 high school) details how few students are accelerated. The findings are shocking:

- Only 1.7 percent of elementary school districts provide subject acceleration and only .2 percent allow students to skip grades.
- Only 2.4 percent of middle school districts provide subject acceleration and only .3 percent allow students to skip grades.
- Only 6.6 percent of high school districts offer dual enrollment courses, 2.2 percent offer IB courses, and 40.4 percent offer Advanced Placement courses.[1]

Part of the reason for the underuse of acceleration is the lackadaisical attitude state legislatures have had towards it. Nationwide, only 21 states ask districts to develop a formal acceleration policy. Another 19 leave it up to the school district, while another nine have no policy whatsoever.[2] Only one state - Louisiana - forbids it.[3] If only a small percentage of students could benefit from acceleration, the lack of policy nationwide would be problematic, but not alarming.

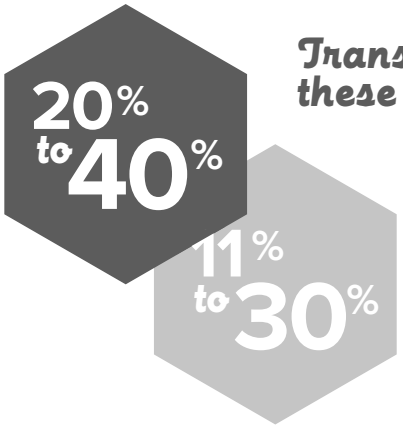


1. Callahan, C.M., Moon, T.R., & Oh, S. "National Surveys of Gifted Programs: Executive Summary", http://www.nagc.org/sites/default/files/key%20reports/2014%20Survey%20of%20GT%20programs%20Exec%20Summ.pdf

2. Dr. Jonathan Plucker, Dr. Jennifer Giancola, Grace Healey, Daniel Arndt, and Chen Wang, "Equal Talents, Unequal Opportunities: A Report Card on State Support for Academically Talented Low-Income Students", Jack Kent Cooke Foundation, 2015.

3. Ibid.

Unfortunately, recent research from Johns Hopkins University shows this isn't the case. The study's authors estimate that 20 to 40 percent of elementary and middle school students perform at least one grade level above their current grade in reading and 11 to 30 percent score at least one grade level above in math.[4]



Translated into raw numbers, these percentages are staggering.

For example, in Wisconsin alone, an estimated 20,000 students per grade level are performing more than one year ahead of expectations. In California, between 1.4 million and 2 million students across the entire K-12 system are performing at similar levels.[5]

In Illinois, 33 percent of students already meet or exceed the proficiency level on the state exam, 36 percent are already proficient or higher in English and Language Arts, and 31 percent are already proficient or higher in Math.[6]

These students are prime candidates for acceleration.

WHAT IS ACCELERATION?

The National Association for Gifted Children defi nes acceleration as "an intervention that moves students through an education program at rates faster, or at younger ages, than typical."[7]

According to the Acceleration Institute, housed at the Belin-Blank Center on the University of Iowa campus, there are 19 different types of acceleration:

- Early Admission to Kindergarten
- Early Admission to First Grade
- Grade-Skipping
- Continuous Progress
- Self-Paced Instruction
- Subject-Matter Acceleration/Partial Acceleration

4. Matthew C. Makel, Michael S. Matthews, Scott J. Peters, Karen Rambo-Hernandez, and Jonathan A. Plucker, "How Can So Many Students Be Invisible? Large Percentages of American Students Perform Above Grade Level", Johns Hopkins Institute for Education Policy, 2016.

5. Ibid.

6. Illinois Report Card, State Snapshot - PARCC, https://illinoisreportcard.com/state.aspx?stateid=IL&source=trends&source2=parcc

7. National Association for Gifted, "Acceleration", https://www.nagc.org/resources-publications/gift-ed-education-practices/acceleration

- Combined Classes
- Curriculum Compacting
- Telescoping Curriculum
- Mentoring
- Extracurricular Programs
- Distance Learning Courses
- Concurrent/Dual Enrollment
- Advanced Placement
- International Baccalaureate Program
- Accelerated/Honors High School or STEM Residential High School
- Credit by Examination
- Early Entrance into Middle School, High School, and/or College
- Acceleration in College[8]

Advanced Placement and concurrent/dual enrollment are the most well-recognized. They allow juniors and seniors to (in the case of concurrent/dual enrollment) take courses or (in the case of Advanced Placement) take exams for college credit.

Others, however, are less familiar. Telescoping curriculum allows students to complete what would be a year-long class in a semester's time, while curriculum compacting allows students to skip over material they have already mastered.

The most radical and infrequently used forms of acceleration are grade-skipping and credit by examination. Under grade-skipping, students can move ahead one or more grades, depending on their intellectual ability and social and emotional maturity. Credit by examination allows students to earn credit by getting a particular grade on a proficiency test rather than spending a certain amount of time in a classroom.

THE BENEFITS OF ACCELERATION

Despite a body of research spanning back to the 1930s, controversy and misinformation surround acceleration. Numerous studies show positive outcomes for high-ability students when it comes to academic achievement and social and emotional development.

In fact, a recent second order meta-analysis study that comprehensively reviewed almost 100 years of acceleration research, covering nearly 172 empirical studies, found that when high-ability students were accelerated they exceeded the academic achievement of their non-accelerated, but similar high-ability peers by .7 standard deviations, or nearly one-year on a grade-equivalent scale.[9]

8. Susan G. Assouline, Nicholas Colangelo, and Joyce VanTassel-Baska, "A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students - Volume 1", Belin-Blank Center - University of Iowa, 2016.

9. Saiying Steenbergen-Hu, Matthew C. Makel, and Paula Olszewski-Kubilius, "What One Hundred Years of Research Says about the Effects of Ability Grouping and Acceleration on K-12 Students' Academic Achievement: Findings of Two Second-Order Meta-Analyses," Review of Educational Research 86 (4), 2016.

The findings are positive when it comes to different types of acceleration. Studies show that grade-skipping has strong academic effects and early entrance to kindergarten and content-based acceleration have moderate academic effects.[10]

Academic Effect Sizes for Different Acceleration Options[11]

Acceleration Option	Number of Studies	Number of Outcomes	Effect Sizes[12]
Early Entrance into Kindergarten	5	8	+.30
Content-Based Acceleration	13	27	+.42
Whole-Grade Acceleration	5	18	+.67
Early Graduation	10	23	+.23

The positive effects of acceleration also don't stop once a student receives a diploma.

Studies find that accelerated students are more productive throughout their lives when compared to their non-accelerated high-ability peers. In fact, data from the 40-plus year Study of Mathematically Precocious Youth show that a higher percentage of accelerated students achieved higher degrees of education, were published in more scholarly journals, and were awarded more patents at an earlier age than non-accelerated peers of similar ability.[13]

The benefits of acceleration aren't only academic in nature, though. Studies show that accelerated high-ability students feel more comfortable and have higher self-esteem when they are surrounded by peers who share their same intellectual abilities.[14]

Early entrance to school shows positive results on social and emotional outcomes. Studies find that younger students have more positive or better social and emotional adjustment than their older classmates and are more likely to engage in extracurricular activities.[15] A more detailed study of the teacher perceptions of the social and emotional health of early enterers found that they were less likely to have issues adjusting to the classroom.[16]

10.Karen B. Rogers, "The Academic, Socialization, and Psychological Effects of Acceleration: Research Synthesis", A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students, Belin-Blank Center, 2016.

11. Ibid.

12. An effect size of 1 is equal to 1 additional year of learning.

13.David Lubinski, Camilla P. Benbow, and Harrison J. Kell, "Life Paths and Accomplishments of Mathematically Precocious Males and Females Four Decades Later", Association for Psychological Science, 2014.

14. Miraca Gross, "Exceptionally Gifted Children: Long-Term Outcomes of Academic Acceleration and Non-Acceleration," Journal for the Education of the Gifted - 2006.

15. Tracy L. Coss, Lori Andersen, and Sakhavat Mammadov, "Effects of Academic Acceleration on the Social and Emotional Lives of Gifted Students," A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students, Belin-Blank Center - University of Iowa, 2016.

16.Gagne, F. and Gagnier N., "The socio-affective and academic impact of early entrance to school," Roeper Review, 26, 128-138.

Subject-based acceleration shows social and emotional benefits as well. A study examining gifted students' own perception of their relationships found that students who experienced subject-based acceleration showed higher interpersonal ability than students who did not. Researchers concluded that this was because subject-accelerated students were more comfortable interacting with peers at the same intellectual, rather than age, level.[17]

Finally, students undergoing radical acceleration also fare well when it comes to their social and emotional health. A meta-analysis of studies examining the impact of grade skipping found no negative effects, and moderate positive effects for students who experienced this form of acceleration.[18] A more recent study found that profoundly gifted students who were accelerated two or more years in early elementary school had far greater social self-esteem in childhood and better relationships later in life.[19]

Social and Emotional Effect Sizes for Different Acceleration Options

Acceleration Option	Number of Studies	Number of Outcomes	Effect Sizes
Early Entrance into Kindergarten	4	6	+.20
Content-Based Acceleration	6	8	+.07
Whole-Grade Acceleration	4	4	+.34
Early Graduation	4	6	+.18

What happens when high-ability students aren't accelerated?

One study found that they had trouble socializing, lacked many friends, and formed very few romantic connections. A quarter of the participants ended up in counseling for depression and other mental health issues.[20]

17. Seon-Young Lee, Paula Olszewski-Kubilius, and Dana Turner Thomson, "Academically Gifted Students' Perceived Interpersonal Competence and Peer Relationships," Gifted Child Quarterly 56 (2), 90-104, 2012.

18. Cross, Andersen, and Mammadov, 2016.

19. Gross, 2006.

20. Gross, 2006.

PERCEPTION VS. REALITY

Given the academic, social, and emotional benefits of accelerating high-ability students, why do so few districts have acceleration policies?

It is primarily due to school leader perceptions of the benefits and costs of acceleration.

In fact, a 2012 survey assessing teachers' attitudes about content-based acceleration showed that teachers gave more weight to the perceived negative social and emotional impacts of acceleration rather than the positive academic benefits of the policy.[21] Teachers' concerns ranged from students experiencing emotional or social distress, being considered strange by their peers, being unable to successfully assume leadership roles, and not participating in sports due to their physical size.[22]

The other major factor that impacted teachers' willingness to accelerate students was their belief in their own ability to properly identify students for acceleration. In other words, when teachers are confident that they can correctly identify students for acceleration, they are more likely to.[23]

This confidence comes from two specific sources: training in gifted identification and administrator support. The survey found that teachers that had undergone professional development in gifted education and believed their supervisor would support their decision to recommend a student for acceleration were more likely to view acceleration as a valuable educational intervention.[24]

Outside of teachers, counselors are the staff most often involved in the decision of whether to accelerate a student. A survey of practicing school counselors by the American School Counselor Association in 2010 found that counselors were most comfortable recommending less radical forms of acceleration, including dual enrollment and Advanced Placement classes, but were reluctant to recommend early entrance to kindergarten and first grade or grade skipping.[25]

21. Karen E. Rambo and D. Betsy McCoach, "Teacher Attitudes Toward Subject-Specific Acceleration: Instrument Development and Validation," Journal for the Education of the Gifted 35 (2): 129-152, 2012.

22. Ibid.

23. Ibid.

24. Ibid.

25. Susannah Wood, Tarrell Awe Agahe Portman, Dawnette L. Cigrand, and Nicholas Colangelo, "School Counselors' Perceptions and Experience with Acceleration as a Program Option for Gifted and Talented Students," Gifted Child Quarterly 54 (3): 168-178, 2010.

The hesitation to recommend more advanced forms of acceleration stems from counselors limited familiarity with gifted education. Of the survey respondents, 32.7 percent indicated that they've had formal training – 13.4 percent as part of one class period, 9.4 percent as a course, 6 percent through an in-service presentation, and 10.1 percent by "other" means.

Counselors were much more likely to rely on information from colleagues (70.5 percent) and meetings (51 percent) to determine if acceleration was a worthwhile intervention for high-ability students.[26]

From the top down - research shows that the individuals involved in decisions about whether to accelerate a student are either unaware of the research illustrating its academic, social, and emotional benefits or give more weight to its perceived negative consequences.

METHODOLOGY

The authors of this report initially examined the policy manuals of all 862 school districts in Illinois to see if they contained formal acceleration policies addressing early entrance to kindergarten and first grade, content-based acceleration, grade-based acceleration, and/or early graduation. If the authors were unable to determine whether a school district had an acceleration policy based on the district's policy manual, they sent a Freedom of Information Act request to the district's superintendent requesting clarification.

The FOIA request asked these specific questions:

- Does your district have an acceleration policy?
- If yes, does it allow students to enter kindergarten early?
- If yes, does it allow students to enter fi rst grade early?
- If yes, does it allow students to take classes at a higher level than their current grade?
- If yes, does it allow students to skip grades?
- If yes, does it allow students to graduate high school early?

When the authors of this report received a response to its FOIA request, they made changes to the original data set, but only under very specific circumstances.

If the authors could not confirm or deny the existence of an acceleration policy in any of the areas based on a reading of the district's policy manual, they used the superintendent's response to the FOIA request as the definitive answer.

26. Ibid.

Since almost all districts that have acceleration policies do not keep up-to-date data on student usage, it was nearly impossible for the authors of this report to determine how many students had been accelerated, the demographics of those students, and what types of acceleration had been used.

For its research on the availability of advanced coursework, the authors of this report used two different sources. Data for the availability of Advanced Placement courses at the school level was provided directly by the College Board. Data about the availability of other advanced courses was gathered either through a Freedom of Information Act request sent to all high school districts in early 2016 or data sent to the authors by the U.S. Department of Education - Office of Civil Rights.

ILLINOIS SNAPSHOT

Apart from a handful of districts whose superintendents and teachers believe in the power of acceleration, most districts statewide do not have formal acceleration policies. The reasons given for the lack of such a policy run the gamut: concerns about its academic impact, its possible negative social and emotional effects, and the fact that such a policy is not needed in a district with a high proportion of low-income students.

Current Illinois law leaves it up to the school district or authorizer (in the case of charter schools) to determine whether a school allows early entrance, content-based acceleration, grade-based acceleration, and/or early graduation.

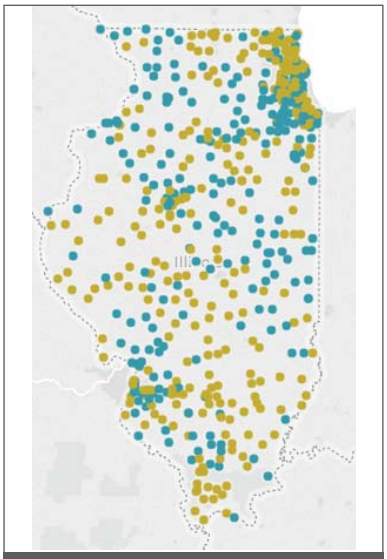
EARLY ENTRANCE

Though Illinois law states that a child must turn five on or before September 1 of the year they start kindergarten to enroll, it does allow districts to permit a child to attend school prior to that date, if the district believes the child is ready for school.

Unfortunately, not many school districts take advantage of this option. For those that do, most fail to follow best practices.

Early Kindergarten[27]

District Behavior	% of Districts
District has policy	43.35
District does not have policy	40.77
District does not have information on policy [28]	15.35



Blue dots indicate districts that have early entrance to kindergarten policies. Yellow dots indicate those that do not.

Some districts set unrealistically high cut scores for students to qualify for early entrance. Northbrook SD 28, for example, requires a child to score within the very superior range (98th percentile or higher) on a cognitive ability test administered by the district.[29]

Other districts, like Lake Zurich CUSD 95, have age restrictions in their early entrance to kindergarten policy. Rather than help high-ability four year olds enter kindergarten early, the district's policy seems more geared towards helping parents of students who nearly missed the September 1 cutoff date to enroll their children in kindergarten.[30] In fact, the policy states that early entrance to kindergarten is only available for children who turn five between September 1 to November 1 of the year they are enrolling. This sort of age restriction defeats the policy's purpose, which is to allow intellectually, socially, and emotionally prepared students, regardless of age, to enter school early.

Most districts require parents to pay large fees up-front to initiate the early entrance process. Northbrook SD 28, for example, requires parents to pay a non-refundable $450 fee prior to the early kindergarten process beginning.[31] Most other district fees range from $200-$300.[32]

The major concern with requiring fees for parents to initiate the early entrance process is that it will preclude the parents of low-income children, who are ready for kindergarten, from requesting acceleration. Often, these

27. This figure is adjusted not to include districts that do not have elementary schools.

28. District does not have policy listed on website and did not respond to FOIA request.

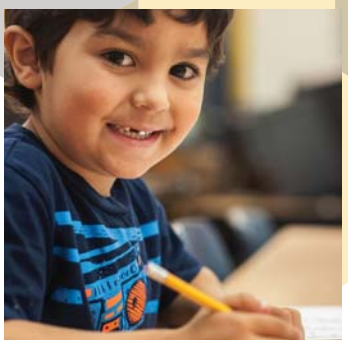
29. Northbrook SD 28, "Early Entrance", http://www.northbrook28.net/programs/gifted_and_talented/early_entrance/

30. Lake Zurich CUSD 95, "Early Admission", http://www.lz95.org/departments/curriculum/early_admission_to_kindergarten.aspx

31. Northbrook SD 28, "Early Entrance"

32. Based on UPP calculations.

are the students who would benefit the most from the policy, precisely because their parents are unlikely to have the ability to pay for supplemental educational services out of their own pockets.



Thankfully, some districts, like Freeport SD 145, do cover the assessment fees for student on free and reduced lunch programs.[33] Others, like Collinsville CUSD 10, are more generous, covering the assessment costs for all students who request acceleration.[34]

The problems with the early entrance to kindergarten policy are very similar to the problems associated with early entrance to first grade policy. But, unlike early entrance to kindergarten policy (which is left entirely up to the district to create), Illinois law specifically outlines under what conditions a student can qualify for early entrance to first grade. It does not, however, force all districts to have an early entrance to first grade policy.

For districts that choose to allow students to enter first grade early, there are very specific guidelines. First, the student must turn six years old between September 2 and December 31 of his first-grade year. Second, the child must have attended a non-public preschool and will complete kindergarten at the same facility. Lastly, the child had to have been taught by a teacher with an Illinois Professional Educator License endorsed to teach kindergarten.[35]

Early First Grade[36]

District Behavior	% of Districts
District has policy	44.39
District does not have policy	39.28
District does not have information on policy [37]	15.87

Illinois' early entrance to first grade policy is needlessly complicated and bars certain families from being able to benefit from acceleration.

First, it still requires students to turn six years old a few months into their first-grade year, even though students younger than that may be

33. Based on interview with superintendent.

34. Based on interview with superintendent.

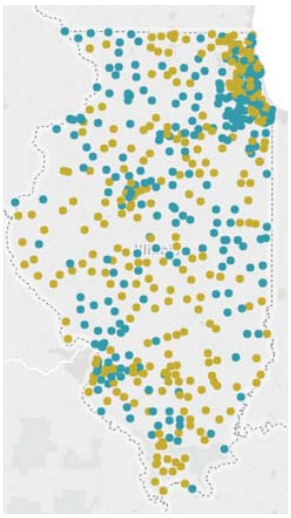
35. Illinois School Code, 105 ILCS 5/10-20.12, http://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=1005

36. This figure is adjusted to not include districts that do not have elementary schools.

37. District does not have policy listed on website and did not respond to FOIA request.

intellectually, socially, and emotionally prepared for first grade. Second, it requires students to have attended a non-public preschool and kindergarten program. Research shows no relationship between whether a child attended preschool and kindergarten and preparation for early entrance into first grade, much less specifically non-public preschools and kindergartens.

The policy seems to have been designed to address the specific circumstance of its chief sponsor, Rep. Mike Fortner (R - West Chicago). He had tried to enroll his daughter in first grade at his local public school after his daughter had attended pre-K and kindergarten at a nearby private school, but was barred from doing so because his daughter did not meet the age deadline.[38]



Blue dots indicate districts that have early entrance to first grade policies. Yellow dots indicate those that do not.

A more sound policy would ignore all of the qualifiers in the current law and instead determine whether the child is intellectually, emotionally, and socially ready for first grade.

CONTENT-BASED ACCELERATION

While all Illinois school districts are free to create their own content-based acceleration policies that apply to students from kindergarten to grade 12, most don't. Instead, they follow a 2015 law that allows seventh and eighth graders to take high school level courses, but only under very specific circumstances.

While there is no restriction on what type of courses the student can enroll in, if the student takes the course at their elementary school, it must be taught by a teacher who has a license that is endorsed for the grade level and content of the course. If the student takes that class at a high school, it must be the high school the student will eventually attend and the student's enrollment in the course must not prevent a high school student from being able to take the course.[39]

38. Kerry Lester, "Pending Law Could Allow Certain Children to Start First Grade at 5," Daily Herald, January 10, 2010.

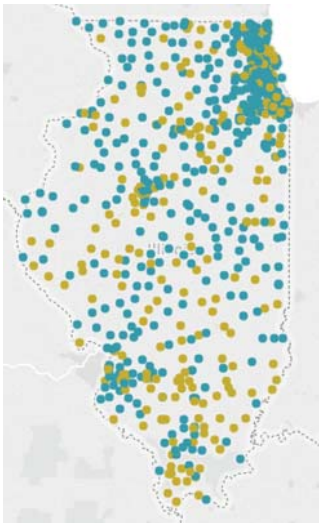
39. Illinois School Code, 105 ILCS 5/27-22.10, http://www.ilga.gov/legislation/ilcs/fulltext.asp?DocName=010500050K27-22.10

Content-Based Acceleration

District Behavior	% of Districts
District has policy	53.72
District does not have policy	31.16
District does not have information on policy [40]	14.65

Outside of these parameters, it is very rare for a districts to allow acceleration for students in kindergarten through sixth grade.

Those that do tend to have more comprehensive acceleration policies. Collinsville CUSD 10, which has subject-accelerated 50 students since adopting its acceleration policy in 2014, allows teachers and parents to recommend students for acceleration, requires that the decision to accelerate be made by an acceleration committee that includes the potentially accelerated student's principal, current teacher, potential future teacher, guardian, and school counselor, and that a peer-reviewed assessment be used to evaluate the student.[41] Other districts, like West Chicago ESD 33 and Mascoutah CUSD 19, have similar policies.



Blue dots indicate districts that have content-based acceleration policies. Yellow dots indicate those that do not.

Districts that are hesitant to subject-accelerate younger students are primarily concerned with the student's ability to interact socially with older peers, despite what research shows. They are much more comfortable adhering to Illinois law, not only because it has been passed by the legislature and signed by the Governor, but also because they believe that the social and emotional differencesb etween seventh and eighth graders and ninth graders is not as great the differences between third graders and fi fth graders, although there is no evidence to support this. For gifted coordinators and school counselors in districts that have limited or no acceleration policies, the battle against such beliefs has been a major source of frustration.[42]

40. District does not have policy listed on website, and did not respond to FOIA request.

41. Based on interview with superintendent.

42. Based on interviews with gifted coordinators and school counselors.

GRADE-BASED ACCELERATION

Research shows that about 1 percent of students grade-skip.[43] Though 9 percent of districts in Illinois allow grade-based acceleration, not all have had students that have taken advantage of the policy.

When grade-based acceleration is utilized, it's usually for students that test very high on both achievement and cognitive ability tests.[44] These students, commonly referred to as either "exceptionally gifted" or "profoundly gifted", are able to absorb new information at a rapid pace and develop a deep understanding of the subject they are studying. They are rare, however - fewer than 1 in 10,000 students fit the definition.[45] Statewide, approximately 250 to 300 students are likely to be good candidates for grade-based acceleration.[46]

Grade-based acceleration is used very conservatively. While most profoundly gifted students could reasonably succeed in grades 2 or 3 years higher than their current ones, they are typically only allowed to skip one grade level.[47]

Still, that doesn't mean the districts shouldn't be prepared in case one of these students decides to enroll in their schools.

GRADE-BASED ACCELERATION

District Behavior	% of Districts
District has policy	9.19
District does not have policy	59.53
District does not have information on policy [48]	30.81

43. Ryan Wells, David Lohman, Maureen Moran, "What Factors are Associated with Grade Acceleration: An Analysis and Comparison of Two U.S. Databases,"

44. These students usually score in the top 1 percent or .1 percent of achievement and cognitive ability tests.

.

45. Miraca Gross, "Exceptionally and Profoundly Gifted Students: An Underserved Population," Understanding Our Gifted, 2000.

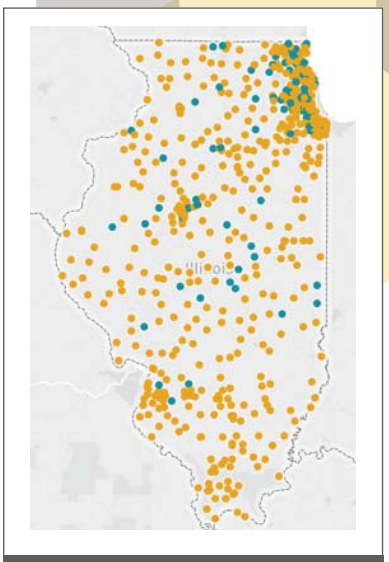
46. UPP staff divided the Illinois student population by 10,000.

47. Karen B. Rogers, "The Academic, Socialization, and Psychological Effects of Acceleration: Research Synthesis", 2016.

48. District does not have policy listed on website, and did not respond to FOIA request.

Like districts with content-based acceleration, districts that allow grade-based acceleration are those that are the most likely to have a comprehensive acceleration policy. Berkeley SD 87, for example, allows students to grade-skip, but only under certain circumstances. Students must:

- Earn consistent grades of "A' in Reading, Language Arts, Mathematics, Science, and Social Studies;
- Score the equivalent of a 98/99 percentile ranking on the Reading and Mathematics portions of the NWEA MAP test;
- Obtain a cognitive skills index score of 125 or above the mean for the grade he or she wants to enter; and
- Demonstrate a "high degree of pesistence and motivation for learning" and be socially and emotionally ready to interact with older students.[49]



Blue dots indicate districts that allow grade-based acceleration. Yellow dots indicate those that do not.

The district also has a process in place for identifying students for acceleration, evaluating whether acceleration is the right fit, and ensuring that acceleration will be successful.[50] This is very similar to other districts that allow grade-based acceleration.

EARLY GRADUATION

The most popular form of acceleration used by Illinois school districts is early graduation. Approximately 57 percent of districts allow students to graduate early, as long as they have satisfied state graduation requirements. These include:

- 4 years of English language arts;
- 2 years of writing-intensive courses, one year of which must be offered as an English language arts course;
- 3 years of mathematics, one of which must be Algebra I and one of which must include geometry content;
- 2 years of science;
- 2 years of social studies, of which at least one year must be U.S. History of a combination of U.S. History and Government; and
- 1 year chosen from any of the following: art, music, foreign language, and vocational education.[51]

49. Berkeley SD 87, Policy Manual, http://www.berkeley87.org/vimages/shared/vnews/stories/4e08a67342611/POLICY-BOOK%209-14-16.pdf

50. Ibid.

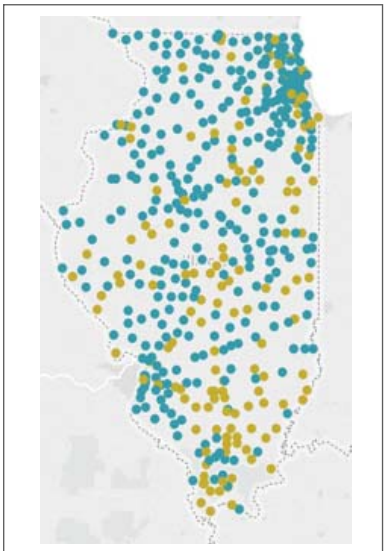
51. Illinois State Board of Education, State Graduation Requirements - 2016, http://www.isbe.net/news/pdf/grad_require.pdf

While some allow students graduating early to receive their diploma as soon as they earn enough credit, other districts' early graduation policies are unnecessarily burdensome. Marshall CUSD 2, for example, only allows early graduation for "extenuating circumstances" and requires all early graduation decisions to be made by the school board, rather than an acceleration committee. The same holds true for Geneva CUSD 40 and Ramsey CUSD 204, both of which require extenuating circumstances to graduate early, even if a student has enough credits to satisfy state graduation requirements.

Early Graduation[52]

District Behavior	% of Districts
District has policy	57.45
District does not have policy	25.18
District does not have information on policy[53]	16.84

Despite being the most popular form of acceleration in Illinois, it's surprising that more districts do not allow early graduation, especially when it can save the state and district money. Some states, like Indiana, actively encourage early graduation. In fact, students who graduate a year early there can apply for a Mitch Daniels Early Graduation Scholarship, which can provide them up to a $4,000 grant for college.[54]



Blue dots indicate districts that have early graduation policies. Yellow dots indicate those that do not.

52. This figure is adjusted not to include districts that do not have high schools.

53. District does not have policy listed on website, and did not respond to FOIA request.

54. Indiana Commission for Higher Education, "Mitch Daniels Early Graduation Scholarship", http://www.in.gov/che/4508.htm.

ACCESS TO ADVANCED COURSEWORK

If schools are going to allow students to take advantage of content-based acceleration, they need to be able to offer advanced coursework to those students. Unfortunately, for many students in Illinois' high schools, the opportunity to access advanced coursework is rare.

This is especially true for students who excel in science. Even for the most popular Advanced Placement courses, such as AP Biology, AP Chemistry, and AP Physics, only about one-third of Illinois schools give students an opportunity to enroll.

Another area of concern is the low percentage of students that have access to advanced computer science coursework. As jobs become more service-oriented and manufacturing becomes more automated, knowing how to code will be a skill that is in high-demand. The fact that only 12.8 percent of students have access to an AP Computer Science course is troubling.

Advanced Science Course Availability Statewide[55]

Course	% of High Schools Offering Course
AP Biology	34.5
AP Chemistry	31.1
AP Physics I	20.2
AP Physics II	8.6
AP Physics C: Electricity and Magnetism	10.1
AP Physics C: Mechanics	13.6
AP Environmental Science	15.5
AP Computer Science A	12.8

55. Data provided by the College Board.

For students with minds that can easily learn foreign languages, many lack access to the coursework they need to reach their potential. Astonishingly, 59 percent of Illinois school districts only offer one foreign language - Spanish. Of these districts, 80 percent only offer Spanish for two years, meeting the minimum requirement for high school graduation.

Even if these students live in a district that offers more than one foreign language, it is unlikely that school they attend offers the advanced coursework they need to thrive. The most popular course, AP Spanish Language and Culture, is only offered at 28.1 percent of schools statewide. And, despite China's rising power internationally, AP Chinese Language is offered at only 3.8 percent of schools statewide.

World Language Course Availability Statewide[56]

District Behavior	% of Districts with High Schools
Offer 1 World Language	59
Offer only 2 Years of World Language Coursework	48

Advanced World Language Course Availability Statewide[57]

Course	% of High Schools Offering Course
AP Spanish Language and Culture	28.1
AP Spanish Literature and Culture	7.6
AP French Language and Culture	13.1
AP Latin	2.2
AP German Language and Culture	7.8
AP Chinese Language and Culture	3.8
AP Italian Language and Culture	1.7
AP Japanese Language and Culture	1

56. Based on superintendent responses to FOIA request.

57. Data provided by the College Board.

While Social Science, Humanities, and Fine Arts courses are more available to students than foreign language courses, high-ability students in these subjects are more likely than not to have them offered at their school.

AP US History and AP World History - a staple at many public schools nationally - are only offered at 42 percent and 13.3 percent of schools, respectively. The percentage is even smaller for students interested in political science - AP US Government and Politics is only offered at 24.4 percent of schools statewide while AP Comparative Government and Politics is only offered at 4.7 percent of schools.

Advanced Social Science Course Availability Statewide[58]

Course	% of High Schools Offering Course
AP US History	42
AP European History	16.2
AP World History	13.3
AP US Government and Politics	24.4
AP Comparative Government and Politics	4.7
AP Human Geography	15.9
AP Macroeconomics	14
AP Microeconomics	12.4
AP Psychology	27.4

58. Ibid

The same is true for AP English Language and Composition and AP English Literature and Composition. They are only offered at 37.6 percent and 43.3 percent of schools, respectively.

Course	% of High Schools Offering Course
AP English Language and Composition	37.6
AP English Literature and Composition	43.3

For students talented in the arts, course offerings are also limited. Less than a quarter of schools allow students to enroll in Advanced Placement Drawing, 2D Design, and 3D Design classes.

Advanced Fine Arts Course Availability Statewide[60]

Course	% of High Schools Offering Course
Studio Art: Drawing	21.5
Studio Art: 2-D Design	23.9
Studio Art: 3-D Design	14.8
Art History	3.5

Most concerning, though, is the lack of advanced level math courses. Amazingly, only 21.7 percent of high schools statewide offer advanced math courses, which include pre-calculus, calculus, and statistics. Additionally, only 44.7 percent of Illinois high schools offer the first AP Calculus course and 26.5 percent offer AP Statistics. For students who need a more challenging course, AP Calculus BC is only offered at 19.1 percent of Illinois high schools.

59. Ibid

60. Ibid

Advanced Math Course Availability Statewide[61]

Course	% of High Schools Offering Course
Advanced Math[62]	21.7
AP Calculus AB	44.7
AP Calculus BC	19.1
AP Statistics	26.5

The picture these data paint is problematic. Even for the most popular AP courses nationwide, only one-third of Illinois high schools, on average, offer the class. Only six courses tracked in this report reach the 30 percent threshold, while only three exceed the 40 percent mark.

BEST PRACTICES IN ACCELERATION

Most Illinois school districts don't have policies for early entrance to kindergarten and/or first grade, content-based acceleration, grade-based acceleration, and early graduation.

For those that do, most are haphazard. Some allow the superintendent or principal to decide if a student should be accelerated, while others rely on the student's current teacher or the school counselor.

To ensure that schools start providing the proper educational environments for their high-ability students, and to bring some uniformity to the fragmented acceleration policies of districts, Illinois should implement a statewide acceleration policy.

61. Advanced Placement data provided by the College Board..

62. Advanced math data provided by the U.S. Department of Education - Office of Civil Rights. "Advanced math" includes trigonometry, elementary analysis, analytic geometry, statistics, pre-calculus, etc. classes.

Thankfully, the state's policymakers don't have to reinvent the wheel. There's a great model to work from two states to Illinois' east.

Adopted in 2006, Ohio's acceleration policy requires every district to implement an acceleration policy, use a peer-reviewed assessment process for determining whether a student should be accelerated, and create personalized learning plans for every accelerated student.

The policy requires the creation of a committee to evaluate students for possible acceleration. Its members include:

- A principal or assistant principal from the child's current school
- A current teacher of the referred student
- A teacher at the grade level to which the student may be accelerated
- A principal or assistant principal from the child's future school, if applicable
- A gifted education coordinator, gifted intervention specialist, a school psychologist, or guidance counselor with expertise in the appropriate use of academic acceleration

It also requires the use of a peer-reviewed assessment process. Currently, the Iowa Acceleration Scale (IAS) 3rd Edition is the only approved process in Ohio for evaluating students. The IAS is a rubric that allows administrators, teachers, counselors, and others involved the acceleration conversation to make an objective decision based on a variety of factors, including the student's intellectual ability, social and emotional maturity, and physical size - to name a few.[63] Districts have the opportunity to use another assessment process, but it has to meet the same high academic standards as the IAS.

While it will help school boards, administrators, teachers, and counselors begin the conversation about the value of acceleration in their districts, the implementation of a statewide acceleration policy like Ohio's - in and of itself - will not solve the problem.

Illinois also should require all administrators, teachers, and counselors to receive basic instruction about appropriate strategies to meet the needs of gifted students, including but not limited to acceleration before earning their licenses. This includes how to identify students for acceleration and current research about its academic and social-emotional impacts. This requirement,

63. Susan G. Assouline Ph.D., Nicholas Colangelo Ph.D., Ann Lupkowski-Shoplik Ph.D., Jonathan Lipscomb Ph.D., and Leslie Forstadt Ph.D., "Iowa Acceleration Scale 3rd Edition", Great Potential Press - 2012.

plus the adoption of an Ohio-style acceleration policy, will ensure that the thousands of Illinois students who can benefit from acceleration will finally receive the educational experience they are guaranteed under the Illinois Constitution.

ADDRESSING ADVANCED COURSEWORK ACCESS GAPS

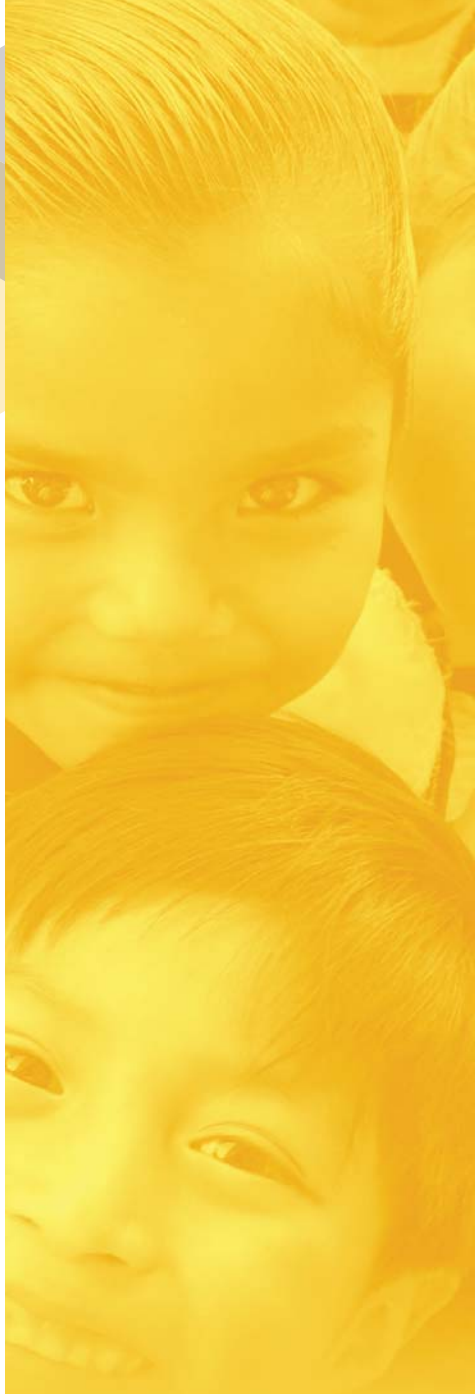
It's clear that many high-ability students in Illinois' less well funded districts don't have access to the advanced coursework they need to intellectually flourish. For these high school students, subject-based acceleration is not an option, at least not at their current school.

Thankfully, the State Board has taken small steps to ensure that more high-ability students have access to Advanced Placement courses. Under the College and Career Success for All Students Program, school districts where 40 percent or more of the students are from low-income families can apply for up to $50,000 in grants from the State Board to start or expand AP courses in the district. Grant funds can be used on teacher training, promotional materials, course materials for students and parents, student assistance eff orts to prepare students to enroll in AP courses, and to ensure students currently enrolled in AP courses successfully complete those courses and take the corresponding exams.[64]

40% *of students are from low-income families*

Unfortunately, only $500,000 was appropriated to the program in 2016, meaning only 10 districts can win grants. And, while $50,000 is a good start, especially when a district has limited or no AP courses, it is not a long-term solution. Increasing financial support for this program, as well as increasing the maximum grant a district can receive, is a step in the right direction. But, with more than 70 percent of districts - on average - not offering core AP courses in English Language Arts, Mathematics, Science, Social Science, and Foreign Languages, it is not enough.

Of course, funding isn't the only reason a district decides to not offer a course. Sometimes a district cannot find a qualified instructor to teach it. A report by the Illinois Association of Superintendents in Schools (IARSS) found that 60 percent of Illinois district superintendents indicated they had trouble finding qualified instructors to teach courses at their schools. More startling was the



64. Illinois State Board of Education, Request for Proposals - FY16: College and Career Success for All Students Program, http://www.isbe.net/advanced-placement/pdf/ap-rfp-fy16.pdf

fact that 16 percent of superintendents said they had to cancel class that otherwise would have been offered to students because they couldn't find qualified personnel.[65] IARSS blames a number of factors for the teacher shortage: qualified educators leaving the state and profession, fewer students enrolling in teacher-training programs, out-of-state educators unwilling to relocate to Illinois, and out-of-state educators who would be willing to relocate, but are unable to meet the state's licensure mandates without substantial delays and meeting additional requirements. They recommend streamlining and expediting the hiring process, expanding reciprocity so that teachers from other states with similar licensure requirements can teach in Illinois, enhancing Illinois' recruitment of in and out-of-state candidates, modifying regulations to support educators as professionals, and exploring possible alternative routes to licensure and/or obtaining endorsements not currently available.[66]

These reforms make sense. The State Board already allows out-of-state teachers to gain a Provisional Educator license as long as they meet a few specific requirements and agree to get an official Illinois license within two years, but it could do even more by loosening these restrictions for hard-to-staff positions.

What are more immediate steps to give high-ability students access to the advanced coursework they need?

Illinois could allow all students to access advanced coursework not available at their school via a Course Access program. Under the program, ISBE would create a marketplace where students could enroll in courses that otherwise aren't offered at their school. The Department would also be tasked with evaluating and authorizing providers. Providers can be other public or private schools, a state virtual school, or a number of other non-profit or for-profit entities that can offer courses in-person, in a blended environment, or online.

The State could pay for it with funds available through the recently passed federal Every Student Succeeds Act (ESSA). Embedded in ESSA is a provision that allows states to devote 3 percent of Title I funding to provide direct student services, including helping students gain access to courses not otherwise available at their school. Districts would also be able to use Student Support and Academic Enrichment Grants under Title IV to pay for student enrollments in courses. Finally, ISBE could also access up to 1 percent of direct student service funds to pay the administrative expense of evaluating and authorizing providers.

65. Illinois Association of Regional Superintendents in Schools, "Illinois Educator Shortage Crisis: Survey Conducted by the IARSS", http://iarss.org/wp-content/uploads/2016/01/IllinoisTeacherShortage_12-10-15_kd-2.pdf

66. Ibid.

FURTHER RESEARCH

While this report represents the first analysis of the availability and use of acceleration policies and advanced coursework in Illinois, it is by no means complete.

Further research should try to determine the number of students that currently benefit from acceleration and their demographic characteristics. This information will reveal which districts actually accelerate students as well as any disparities that exist between different groups of students.

Previous research on enrollment trends in gifted education in Illinois showed that low-income, Hispanic, and African American students are under-enrolled in gifted programs. One of the reasons was that many school districts rely on parents and teachers for referrals.

Research shows that parents of low-income and minority students are less likely to advocate for their children to enter gifted programs, not because they aren't passionate about their children's education, but oftentimes because their work schedules, lack of institutional knowledge, or strained financial resources preclude them from doing so.

Research also shows that teachers can be affected by their implicit biases when recommending students for gifted programming. A recent study examining teachers' views on high school students' future education attainment found that when students were assigned to a teacher of a mismatched race or gender, that teacher was significantly more likely to perceive the student as being frequently disruptive, frequently inattentive, and less likely to complete homework. They were also less likely to believe the student would graduate high school and successfully enroll in and complete college.[67]It would not be surprising if these same issues exist when it comes to acceleration.

One interesting (but not surprising) result of the FOIA requests was the number of districts with formal acceleration policies that have never accelerated a student. This mirrors the findings of a study conducted on behalf of the Ohio Department of Education prior to the adoption of a statewide acceleration policy in 2006. Researchers found that a majority of school districts did not accelerate a single student by early admission to Kindergarten or whole grade acceleration in the 2004-2005 school year, even though some districts had formal acceleration policies.[68]

This report also raises important questions about the efficacy of "soft mandates" - instances when the state leaves it up to a LEA to implement a policy. A future study comparing Illinois to another state that has a statewide acceleration policy could reveal how well school districts serve subsets of students if they are not compelled to do so by state law.

67. Seth Gershenson, Stephen B. Holt, and Nicholas Papageorge, "Who Believes in Me? The Effect of Student-Teacher Demographic Match on Teacher Expectation", W.E. Upjohn Institute for Employment Research - 2015.

68. Southern, W.T. and Jones, E. (2005) Acceleration Policy Study. Columbus, OH: Ohio Department of Education.

A serious conversation needs to take place about whether Illinois should move away from age-based grades and instead group students by ability. This is true if up 20 to 40 percent of elementary and middle school students in Illinois perform at least one grade level above their current grade in reading and 11 to 30 percent score at least one grade level above in math, as the recent Johns Hopkins report indicates. But, it's especially true if another 25 percent students perform below grade level.

Acceleration is a band-aid on a system that teaches almost exclusively to the median student. In a system that recognized that each student develops at a different pace, students would be grouped with intellectually similar peers, regardless of age, and would only be able to proceed when they master a concept.

Illinois' Postsecondary and Workforce Readiness Act is a step in the right direction in this regard. It allows select districts to pilot competency-based high school graduation standards instead of traditional seat time standards. But, more of a discussion needs to take place about how to expand it to elementary and middle school, as well as how to combine it with ability-grouping.

Unfortunately, this report does not investigate course quality. Even when districts offer courses, they are not necessarily successful at helping students grow academically. The most immediate demonstration of low course quality is Illinois' remediation rate. According to the State Board, almost half of all Illinois community college students are remediated in some subject.[69] Students who are remediated in community college have graduated from high school, but do not have the skills to succeed in a post-secondary academic environment.

An acceleration policy, combined with increased funding for advanced coursework, increased teacher training, certification reforms, and a Course Access system, would go a long way towards addressing the needs of Illinois' high-ability students. Let's hope - despite the budget impasse - that legislators in Springfield recognize this important fact and work together to make these policies a reality. High-ability students, and the state - as a whole - will be better off for it.

69. http://illinoisreportcard.com/State.aspx?source=Trends&source2=PostSecondaryRemediation&Stateid=IL

APPENDIX

ACCELERATION STUDY DETAILS[1]

Study	Program	Comparison Groups	Outcome Measure	Effective Size[2]
Arends & Ford, 1964	Acceleration in Math in Grades 7-8	2 classes of academically talented students compared to 2 classes with similar students in different schools	Standardized math achievement test given at beginning of Grade 9	+1.14
Enzmann, 1961	Acceleration in Math in Grades 9-12	94 students who accepted an invitation to enroll in special school matched individually in sex, aptitude, and achievement to students who declined invitation	Standardized math achievement test given in Grade 12	+.30
Fox, 1974	Summer Algebra program for Grade 7	26 program participants matched in aptitude and SES with 26 qualified students who were not invited to participate in the program	Standardized algebra test given in mid-year of Grade 8	+.46
Justman, 1953	Completion of Grades 7-9 in 2 years	95 accelerated students matched on grade, sex, age, and IQ to 95 normal-progress students	Standardized math, science, social studies, study skills, and language arts tests given at end of Grade 8	+.54
Ludeman, 1969	Completion of Grade 7-8 Math in one year	98 accelerated students compared to 98 normal-progress students with statistical control for IQ	Grade-12 exams in algebra, trigonometry, and analytic geometry	+.85
Montgomery, 1968	Accelerated program in Grade 8-12 Math	42 accelerated students matched to normal-progress students on IQ, sex, and completion of math analysis	Math sections of standardized aptitude and achievement tests given in Grades 11 and 12	+.84
Passow, Goldberg, & Link, 1961	Acceleration in Grade 7-8 Math	28 accelerated students matched to control students on IQ, achievement, age, teacher rating, and sex	Standardized and teacher-made math tests given at end of Grade 9	+1.34
Ripple, 1961	Movement of bright older pupils from Grade 2 into Grade 4 after one summer session	26 pairs of superior pupils randomly assigned to accelerated and normal-progress group	Standardized achievement tests in seven subjects given one year after start of program	+.80
Rusch & Clark, 1963	Completion of Grades 5-8 in 3 years with 4 summer sessions	30 accelerated students matched individually to normal progress students on physical, social and emotional, academic, and intellectual develop-ment	Standardized achievement tests in reading, arithmetic, and spelling given 4 years after start of program	+.80
Simpson & Martison, 1961, Study I	Completion of Grades 1-2 in 1 year	43 accelerated students individually matched on age, IQ, sex, and socioeconomic status to 43 normal-progress students	Standardized reading and arithmetic tests given 1 year after start of program	+2.68

1. Ibid.
2. An effect size of 1 is equal to 1 additional year of learning.

ACCELERATION STUDY DETAILS (CONT.)

Study	Program	Comparison Groups	Outcome Measure	Effective Size
Simpson & Martison, 1961, Study II	Completion of Grades 7-9 in 2 years with 3 summer sessions	42 accelerated students individually matched to 42 normal-progress students on age, IQ, sex, and socioeconomic status	Standardized tests in arithmetic, reading, writing, listening, science, and social studies given in Grade 8	+.16
Adler, Pass, & Wright, 1963	Completion of 5-year program in 4 years	431 program participants matched on IQ to students admitted 1 year before start of program	Externally prepared Grade-13 final exam and a Grade- 13 reading test	+.11
Culbertson, 1963	Completion of Grades 7-9 in 2 years	250 accelerated students individually matched to 250 normal-progress students on school location, sex, IQ, reading, and arithmetic level	Standardized tests in four areas: algebra, science, reading, and vocabulary given after 3 years	-.08
Fredstrom, 1964	Completion of Grade 7-8 Math in 1 year	340 accelerated students similar in arithmetic level and IQ to a group of 360 normal-progress students	Arithmetic test given after 1 year; algebra, after 2; geometry, after 3	-.30
Herr, 1937	Completion of Grades 7-9 in 2 years	97 accelerated students individually matched to normal-progress students on IQ, achievement, teacher ratings, sex, and curriculum	Tests given in Grades 10–12 in history, geometry, chemistry, English, and general information	+.12
Janos & Robinson, 1985	Early entrance into the University of Washington	24 early entrants (aged 14 and younger) compared to 23 National Merit Scholars	College GPA	-.05
Justman, 1954	Completion of Grades 7-9 in 2 years	95 accelerated students matched to 95 normal-progress students on high school, sex, and IQ	Final marks in 32 Grade-10 and 11 courses	-.04
Khausmeier, Goodwin, & Ronda, 1968	Placement of bright older pupils from Grades 2-3 into Grades 4-5 after summer session	22 superior accelerated students compared to 22 same-grade students below and 22 same-grade students above the median age for their grade	Six subtest scores on a standardized achievement test given near the end of Grade 9	-.15
Matlin, 1965	Completion of Grades 4-6 in 2 years	59 accelerated students matched to 59 normal-progress students on IQ, sex, race, SES, and school grades	Standardized achievement tests in reading, language, and arithmetic	-.01
Mikkelson, 1962	Completion of Grade 9 math during Grade 8	35 students compared to 35 controls randomly selected from the same pool of high-ability students	Standardized test in algebra given 1 year after start of program	-.83

ACCELERATION STUDY DETAILS (CONT.)

Study	Program	Comparison Groups	Outcome Measure	Effective Size
Morrison, 1970	Completion of Grades 5-6 in 1 year	63 accelerated students matched to 63 normal-progress students on IQ, sex, and reading scores	Standardized achievement and aptitude tests given in Grades 10–12	-.07
Pennau, 1981	Early entrance into kinder-garten	28 early entrants matched to 51 other entrants in sex and IQ	Standardized tests in read-ing, math, and language arts given in Grade 3	+.13
Pevec, 1965	Grade skipping	90 accelerated students compared to 90 similar students who declined offer of acceleration	Total score on a standard-ized achievement test given in Grade 11	+.10
Rusch & Clark, 1963	Completion of Grades 5-8 in 3 years with 4 summer sessions	30 accelerated students matched individually to normal-progress stu-dents on physical, social and emotional, academic, and intellectual develop-ment	Standardized achievement tests in reading, arithmetic, and spelling given 4 years after program start	.00
Unzicker, 1932	Completion of Grades 7-8 in 1 year	22 accelerated students compared to 22 top students in the regular class	Tests given in Grade 9 in En-glish, algebra, social studies, and Latin	-.03

ACCELERATED VS. NON-ACCELERATED SMPY STUDENT PROFESSIONAL OUTCOMES[3]

Cohort	Number of Students	Doctors	STEM PhDs	STEM Publications	Patents
1972					
Non-Accelerat-	358	15.1	3.6	6.4	2.2
Accelerated	179	27.4	10.1	12.8	4.5
1976					
Non-Accelerat-	231	23.8	14.3	21.2	8.2
Accelerated	116	31.0	18.1	25.9	9.5
1980					
Non-Accelerat-	68	33.8	17.6	23.5	10.3
Accelerated	68	45.6	29.4	38.2	17.6
All					
Non-Accelerat-	657	20.1	7.9	13.4	5.2
Accelerated	363	32.0	16.3	20.9	8.5

3. Jonathan Wai, "Long-Term Effects of Educational Acceleration," A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students, Belin-Blank Center, 2016.