FEATURE

Reducing Excellence Gaps

A Research-Based Model

Jonathan A. Plucker, PhD[1], Scott J. Peters, PhD[2], and Stephanie Schmalensee, MA[1]

Abstract: As the awareness of the existence and negative effects of excellence gaps has grown among educators and policy makers, so too has a desire for research-supported interventions to reduce these gaps. A recent review of research related to promoting equitable outcomes for all gifted students identified six specific strategies for reducing excellence gaps. This article describes those components, along with a strategy of frontloading that should serve as the foundation for any comprehensive intervention efforts.

Keywords: excellence gaps, underserved populations, at-risk students

As awareness of excellence gaps has grown, both within the United States and internationally (Plucker, Hardesty, & Burroughs, 2013; Rutkowski, Rutkowski, & Plucker, 2012), many educators and advocates have moved from raising awareness of these gaps to actively trying to reduce and eliminate them. For example, policy makers in several states, supported by a broad coalition of advocates and stakeholders, are considering specific policy interventions to help reduce excellence gaps, and rarely a week goes by when we do not hear from a principal or teacher interested in the latest research on excellence gap interventions. The purpose of this article is to review recent research on interventions to shrink these gaps at various levels and share a model to guide those interventions.

> "Being challenged and learning new things in school must be seen as the overarching philosophy of K-12 education"

Although excellence gaps are caused by many factors, a major factor is that talent development and educational excellence come with opportunity, psychological, and financial price tags. Because advanced education has generally been either an afterthought or very low priority in K-12 education, families that seek to challenge their academically talented students have to pursue options outside of the public system—private schools, afterschool and weekend programs, summer experiences, and more recently Internet-based options. If the family is aware of the other opportunities (opportunity), believes their child is worthy of them (psychological), and can afford them (financial), then the student is in pretty good shape.

And there are other, hidden costs. But they are "hidden" only in the sense that the affordability of these aspects of talent development are taken for granted by some families, but the accessibility of these options are either very limited for many students, or the options simply are not known to them. For example, if the single parent of a talented student does not own a car, taking the student on public transportation to a distant afterschool or weekend enrichment program may mean working fewer hours or missing an entire shift of work. Or consider the role of unpaid internships for high school and college students: Students in economically secure families often have the professional connections to learn about such opportunities, and they can afford to take an unpaid (or poorly paid) internships. But a poor, loan-strapped college student may not be able to learn about internship opportunities, and even if they do, the lost income from not having a summer job may be too high a cost to bear. If we layer geographical concerns on top of all these other factors (How many good unpaid internships are located in low-income, urban and rural communities?), something that seems attractive to many families becomes a wedge that drives the ends of the excellence gap further apart.

DOI:10.1177/1076217517723949. From [1]Johns Hopkins University and [2]University of Wisconsin–Whitewater. Address correspondence to: Jonathan A. Plucker, PhD, Center for Talented Youth, Johns Hopkins University, 5801 Smith Avenue, Suite 400, Baltimore, MD 21209, USA; email: jplucker@jhu.edu.

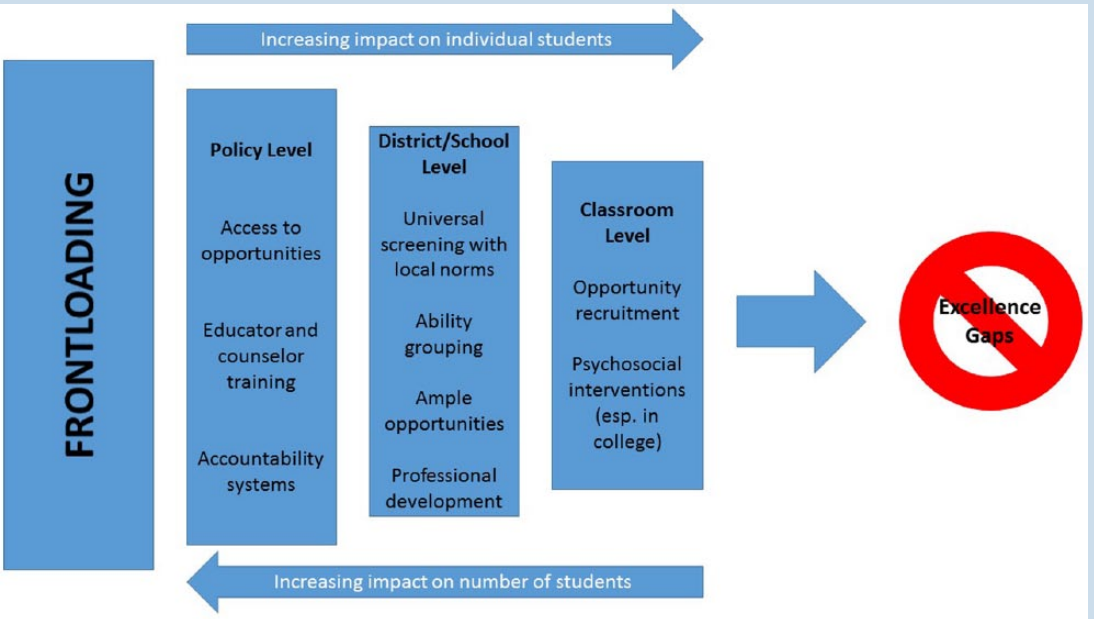

Figure 1. A model for addressing excellence gaps.

We (Plucker & Peters, 2016) recently reviewed existing empirical studies to identify the most promising practices for reducing excellence gaps. We generally found promising avenues but few empirically supported interventions. In other words, plentiful room for optimism but not quite the level of supporting research that one would hope for. In this article, we highlight areas where advanced education—and the racial, ethnic, and income inequality that often comes with it—has seen greater attention or appears to be on the verge of some positive change. We also offer several recommendations that should have a positive effect on the number of advanced achievers who come from low-income or racial/ethnic minority families. If educators, families, and communities want to take a big swing at excellence gaps, the following suggestions represent the research community's best evidence for a path forward.

A Plan for Addressing Excellence Gaps

After reviewing the available research and model programs around the country, Plucker and Peters (2016) recommend the following approach (see Figure 1), which reflects the current state of the art for addressing and eventually eliminating excellence gaps. The model consists of six different interventions: providing and facilitating realistic opportunities, use of universal testing and local norms to identify talented students, use of ability grouping to facilitate differentiation and advanced learning, creating K-12 accountability systems that reward schools that close excellence gaps, provide extensive educator preparation and support, and use psychosocial interventions (especially in college). The foundation of all six interventions is frontloading—the process of ensuring students are prepared to meet the demands of rigorous, challenging curriculum and instruction. These interventions, which cross levels of education and policy and are not meant to be exhaustive, are the best bet for shrinking excellence gaps while educators wait for comprehensive childhood poverty measures to be put in place.

An important note: We do not mean to imply that either childhood poverty reduction *or* the following educational and policy interventions are needed, but rather that we need *both*. Most educators and advocates cannot tackle the poverty reduction part of the equation by themselves, but we believe they can affect the following issues directly in their own school districts or indirectly by working with state-level policy makers.

Realistic Opportunities

Opportunities can be complicated

The three keys to opportunity for advanced learning are successful communication, belief and acceptance, and low barriers to access. If an opportunity for developing the talents of students exists, the students and their caregivers need to know the opportunity exists, they need to believe they should be taking advantage of the opportunity, and they need a realistic chance of accessing the opportunity. Each of these three criteria is necessary but not sufficient for an opportunity to move from being a nice idea to a real benefit for a talented student.

Do not be afraid to use Title I funds for advanced learners

The Every Student Succeeds Act (ESSA) also opened up Title I funds as being eligible for use for the identification and education of advanced learners. A state could bring together a virtual

library of interventions that a district could use to target a specific subgroup of advanced learners. For example, a district could use part of the load of one of its Title I staff to focus on supporting teachers in how to tier lessons to a higher level for advanced learners or how to modify advanced options to appeal more to underrepresented populations. Without proactive support of this new flexibility in Title I, districts are likely to continue to use the funds solely for struggling learners. If, instead, a state encourages districts to pay attention to advanced learners and provides ideas and suggestions for what that may look like, these efforts could be used to address excellence gaps. State education agencies can also modify their application processes for Title I funds to make it clear that such funds can be used for advanced learners, especially those from underrepresented populations.

Principals, teachers, and counselors can play a major role in ensuring all students can take advantage of opportunities for advanced learning. Devoting building-level resources, including Title I funds, to advanced learning is an important step for administrators, and teachers can play a key role (probably the most significant role) in sharing advanced learning opportunities with their students and—perhaps more importantly—encouraging the students and their families to participate in the special programs.

Universal Testing and Local Norms

Nonuniversal screening for talent will leave many students out, and those students will be disproportionately from underrepresented populations (e.g., Grissom & Redding, 2016; McBee, 2006). A clear implication is that whenever possible, assessments or systems used to identify talent should be administered universally to all students under consideration. This could take the form of testing or observing all second-grade students instead of only those who received a teacher recommendation. This will involve some increased time and money, but it will also mean the fewest students from low-income or minority families are overlooked. This is one of the clearest action steps that gifted or advanced programs should take. If addressing underrepresentation is truly a goal, then moving toward universal assessment is a must.

A benefit to universal screening is that it would make the application of local norms very easy, because data would be available on all students. In basic terms, using local norms during identification processes is a matter of seeking to identify the most talented students within each school, putting aside any need to compare student results with state or national norms. Implementing local norms should increase the number of identified advanced learners in schools with the largest numbers of low-income and minority students. Of course, simply identifying them is not likely to have much of an effect on their learning, but if they are identified and then provided with additional support, local norms could have an effect on excellence gaps.

Principals and teachers play a critical role in identifying talented students to close excellence gaps. This role goes beyond ensuring that universal screening and local norms are being used: Teachers are important role models and motivators for their students, and they need to seek out students of potential who also come from low-income or minority families. Universal screening and local norms can help in this regard, but additional efforts are often needed such as group-specific comparisons and allowing teachers to recommend students into certain programs even if the student's test scores are not particularly high. Readers should note that the model differs from other recent recommendations that teacher recommendations should rarely if ever be used to identify talent. We are sympathetic with the recommendation to avoid using teacher recommendations as an initial talent screen, but we see tremendous value in having teachers nominate students after screening that district's or school's identification process may have overlooked. That said, students who are identified via alternative criteria need to be provided additional support in order to be successful. Mentoring, tutoring by older peers from similar communities, or additional support from school staff all need to be considered when students are identified for advanced learning opportunities via alternative pathways.

Ability Grouping

Although often unpopular because of its association with tracking, ability grouping has been shown to increase the number of underrepresented students identified as high achieving over time (Gentry, 2014). What can be said for sure is that "grouping" is a very generic term that can be used to refer to a range of options. What can also be said is that some applications of grouping have been shown to be very effective at both increasing student achievement and increasing the number of students from minority populations identified as high achieving over time see (Plucker & Peters, 2016; Steenbergen-Hu, Makel, & Olszewski-Kubilius, 2016). For example, consider the Firmender, Reis, and Sweeny (2013) research providing evidence of nine to 11 grade levels of reading ability in late elementary classrooms. If that result generalizes broadly, is it any surprise that differentiation appears to be very difficult for most teachers? (Hertberg-Davis, 2009). We see great promise in trying to narrow the range of achievement that any single teacher is expected to instruct in a general classroom setting. We also believe there are ways to do this that are flexible and do not set up students for low expectations. Flexible between- and within-class grouping has considerable benefits for all of our students, and recent research suggests that educators should consider grouping as part of any initiative to reduce excellence gaps.

K-12 Accountability Systems

Most states are currently rethinking their K-12 school accountability systems. They generally tinker with their systems routinely, but ESSA has important implications for those systems that will encourage and allow for major retooling. Accountability systems have a demonstrable effect on education policy and

student outcomes, yet few states have much in the way of excellence indicators in their systems' data points (Plucker, Giancola, Healey, Arndt, & Wang, 2015). Adding such indicators would send an important message that advanced learning and growth for all students is important and obtainable for all K-12 public school students (Neal & Schanzenbach, 2010). Educators should actively discuss the need for excellence and excellence gap indicators with their state representatives and state school board members.

Some states, such as Wisconsin, now include points derived from schools' ability to "close gaps" on their school report cards. Unfortunately, in very few states can schools earn credit for closing excellence gaps. Changing state policies to allow for excellence gap closure to be included on school report cards would allow schools to devote resources (such as the Title I funds now allowed to be used for advanced learners thanks to ESSA) to receive credit for their work toward greater equity in this area. It is not clear to us why any one "gap" closure would be preferred over another. If a local school community is seeing talents in their low-income, African American, Native American, or Hispanic students going underdeveloped, they should not be penalized for devoting money and effort to this goal.

Of course, districts could create district-level or school-level goals for closing excellence gaps on their own. Many teachers now craft Student Learning Outcomes/Objectives (SLOs) as a form of goal setting and personal evaluation. District or building leadership could encourage or mandate that these goals include the closing of excellence gaps, the identification of larger numbers of advanced learners from underrepresented populations, or the growth of advanced learners beyond grade-level proficiency. In addition to crafting a plan for how a building will close minimum proficiency gaps, they could be required to also include a plan for how they will close excellence gaps related to target populations.

Better Educator Preparation and Support

The federal Higher Education Opportunity Act (HEOA), signed into law in summer 2008, made three substantive changes regarding teacher training: It required teacher education programs to instruct their students in the identification of student learning needs (including gifted students), it required that teacher education programs instruct their students in how to differentiate instruction for advanced, and it required state report cards to include information on how the first two requirements were being addressed and evaluated by teacher education programs. This would have meant every teacher who completed his or her program over the last 5 to 8 years would have received some training regarding how to challenge advanced learners. Unfortunately, there is little evidence these requirements have been implemented in most states, meaning that principals should assume early-career teachers have had little—if any—coursework on the needs of advanced students, the existence of excellence gaps, and strategies for both promoting advanced learning and shrinking excellence gaps.

The lack of information on advanced learning in educator preparation programs has two major implications for closing the excellence gap. First, principals should make preparation programs and state officials aware of the need for novice teachers to have coursework and preservice experiences that address working with advanced learners and closing excellence gaps. As the primary employer of preparation program graduates, K-12 superintendents and principals often have the ear of administrators and faculty in teacher education programs. This access can be used to push for more comprehensive training of novice teachers and school counselors.

But those changes will take time to implement, which leads to the second implication: Most teacher and counselor education on this issue needs to be done through in-service professional development. Fortunately, new resources are available for purpose: ESSA requires that any state and district that accepts Title II money must report on how those funds were used to increase the capacity of teachers to reach all students (Plucker & Peters, 2016). Importantly, the definition of "all students" specifically includes gifted and talented students.

Educators should seek out support or teacher training that will help general educators increase their capacity to challenge an even wider range of students. How do I differentiate for an elementary student who is reading at the high school level? What materials are best for a middle school student who is ready for trigonometry? How can we decide how and whether or not to accelerate a child to the next grade level without missing important content? What does supporting African American students look like in advanced education? These questions and many more can be addressed via proactive attention to advanced learners within a single district. Districts tend to have extensive control over which in-service training and conferences their educators attend, and topics related to advanced learning should be in the rotation just like any other topic of need.

In addition, many of the programs and examples described in the excellence gap intervention model could be implemented under Title II. For example, a district could train its teachers in the use of the Mentoring Mathematical Minds curriculum for high potential English Language Learners (Cho, Yang, & Mandracchia, 2015; Gavin et al., 2007). Similarly, a district could seek to expand the pre-AP programs for low-income students in order to close excellence gaps and increase overall rates of achievement.

Psychosocial Interventions in College

Psychosocial interventions, which are generally cost-effective and rarely time intensive, focus on constructs such as grit, mindset, and stereotype threat reduction. Their low barrier to implementation and initially positive results help them become quite popular at both the K-12 and college levels. In our work, we have found little evidence that psychosocial interventions can play a meaningful role in closing K-12 excellence gaps (Plucker & Peters, 2016), the research on the impact of

stereotype threat interventions on *college excellence gaps* is convincing (e.g., Good, Aronson, & Harder, 2008; Walton & Cohen, 2011). For K-12 educators, we recommend that these popular interventions be used only with very modest expectations.

Frontloading

The foundation of the entire excellence gap intervention model is frontloading. Briggs, Reis, and Sullivan (2008) discuss that within gifted education, frontloading means preparing students for advanced programs before they even have the chance to be identified or to enroll. Even though the goal is to close the excellence gap for underprivileged students, just placing more underprivileged students into AP courses will not work of and by itself. The goal for closing the excellence gap is to address the foundational framework that goes into the creation of the gap in the first place. Once the foundation creating the excellence gap is addressed, our educational system will be most prepared to shrink the excellence gap and best serve underprivileged students. As a result, and turning back to the AP example, an intervention to increase the performance of poor students in AP U.S. History courses should not begin when students start that course. Rather, the students should be exposed to more rigorous curriculum, instruction, and assessment leading up to that course, helping ensure that they have the intellectual skills and academic habits allowing them to thrive when they enter those courses.

Eliminating the Talent Underclass

The United Nations's (n.d.) 2030 Agenda for Sustainable Development lists major challenges for humankind, such as eliminating poverty and hunger, strengthening innovation, and creating just and peaceful societies through rule of law, among many others. Despite the diversity of these challenges, they have one clear, common thread: A great deal of talent will need to be brought to bear if we are to address any of them successfully, and success will be dependent on developing talent regardless of where one lives, the color of their skin, or their family wealth.

We believe there is a path forward for increasing the number of talented students in the United States and, perhaps more importantly, shrinking excellence gaps and eliminating, once and for all, the country's talent underclass. In this article, we summarized what we have learned and proposed a set of steps for educators, advocates, and policy makers. Some of these recommendations, from our perspective, are low-hanging fruit; other items are somewhat idealistic. But all would help, and we strongly believe that all are attainable.

All recommendations presented in this article stem from a larger philosophy that one must adopt before these ideas can be considered valid or important: Every child deserves the opportunity to be challenged. Being challenged and learning new things in school must be seen as the overarching philosophy of K-12 education. The pressing challenges facing the world will not be solved by armies of minimally proficient drones who were able to coast through formal education. Instead, every child deserves to learn something new every day, and the economic future of the United States depends on the acceptance of this belief. Second, as schools move to implement needs-based, personalized learning for all students, additional consideration should be paid to excellence gaps. This should not result in programs being eliminated or cut back just so some students do not learn too quickly. Instead, consideration of excellence gaps should take the form of providing additional support and resources, such that lack of educational opportunity and access do not prevent low-income or racial/ethnic minority students from achieving at advanced levels.

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Bios

Jonathan A. Plucker, PhD, is the Julian C. Stanley professor of Talent Development at Johns Hopkins University, where he works in the Center for Talented Youth and School of Education.

Scott J. Peters, PhD, is an associate professor of Educational Foundations and the Richard and Veronica Telfer Endowed faculty fellow at the University of Wisconsin–Whitewater where he teaches courses related to educational measurement, research methods, and gifted and talented education. His primary research area involves gifted and talented student identification and talent development with a focus on students from underrepresented populations.

Stephanie Schmalensee, MA, is a research assistant at Johns Hopkins University.