Small Town, Big Talent

Identifying and Supporting Academically Promising Students in Rural Areas

Randy Lynn, Ph.D. and Jennifer Glynn, Ph.D.
Jack Kent Cooke Foundation
September 2019
Research projects conducted by the Jack Kent Cooke Foundation examine issues that affect high-achieving students with financial need. The views expressed in this report are those of the authors, and do not necessarily reflect the opinions of other Foundation staff members or the Board of Directors.
FOREWORD

With advances in technology, students across the world have access to a range of educational opportunities unthinkable even a decade ago. But even as global connections and new modes of teaching proliferate, place still matters.

This is particularly evident in America’s rural communities — where students are more likely to graduate from high school, but less likely to go to college than their counterparts in the nation’s cities and suburbs. This disconnect between K-12 achievement and postsecondary achievement further disadvantages communities that are already struggling to attract industry and talent. It also is a complex situation — with rural students more likely than nonrural ones to have some postsecondary education but no degree. We must work to better understand these complexities and to support more rural students in attaining postsecondary credentials with real value in the communities where they live.

If we ignore this challenge — amid greater workforce demand for higher education and advanced skills — we run the risk of losing still vibrant communities to economic isolation and decline. And 1 in 5 Americans live in those communities.

Fortunately, rural areas have plenty of strengths to marshal in addressing this challenge. They have no shortage of high-achieving students, and educators are deeply attuned to the needs of their communities and students. But their schools often lack both the resources of suburban ones, and the attention given to urban ones.

They need greater focus from policymakers, philanthropists, and others who care deeply about expanding opportunities for disadvantaged students while they are still in high school. In this new report, the Jack Kent Cooke Foundation draws on its experience supporting students in rural communities, along with lessons from others doing on-the-ground work, to both draw attention to this challenge and highlight promising approaches to addressing it.

It features Boone, N.C., an Appalachian town I know well — where the Young Eisner Scholars program is providing year-round services, including academic enrichment, standardized test preparation, and career development, for dozens of scholars from middle school through college. Importantly, YES has prioritized getting to know the community well and working alongside local educators to integrate the program into the school experience — and that effort has been critical to the program’s success.

During my time as governor, as we invested in Rural Economic Development Centers, we learned that deep involvement in local communities and robust wrap-around supports were critical to any effort to improve education and training in rural areas. The Cooke Foundation, too, highlights this important lesson: what works in one place may not be ideal for another. There is only one Boone, even in North Carolina. If we are to better serve students in the thousands of rural communities across the country, we will need to get to know their own unique cultures.

And, as this new report makes clear, those students deserve greater attention from government, philanthropies, and nonprofit programs. It’s critical for the health of the places they call home, and for the economic diversity and vibrancy of the country we all call home.

Bev Perdue
Governor of North Carolina, 2009-2013
INTRODUCTION

High school students from James Madison University’s Valley Scholars Program engage in a lesson.
In every school in the nation, there are students who excel at learning, possess a thirst for knowledge, and thrive on intellectual stimulation. To reach their full potential, these academically talented students require advanced support, opportunities, and resources. Yet many schools lack the resources needed to realize their highly capable students’ full potential. Often, educational offerings and classes are organized by students’ age, rather than ability. “For countless highly able children, the pace of their progress through school is determined by the rate of progress of their classmates,” conclude the authors of *A Nation Deceived: How Schools Hold Back America’s Brightest Students.*

The consequences are stark: according to the most recent (2017) results of the National Assessment of Educational Progress, only four percent of grade 8 students scored at an “Advanced” level in reading, and only 10 percent earned an “Advanced” score in math. These scores are even lower among groups facing additional obstacles to receiving a high-quality education. In grade 8 math, for example, only three percent of students receiving free or reduced price lunch subsidies scored at the “Advanced” level, compared with 16 percent of other students. If, indeed, the U.S. educational system is plagued by millions of children left behind, it is also a serious problem that the progress of millions of academically talented children is unnecessarily curtailed.

Recognizing this problem and the additional barriers faced by students from economically disadvantaged communities, the Jack Kent Cooke Foundation is dedicated to advancing the education of exceptionally promising students who have financial need. Since 2000, the Foundation has awarded over $200 million in scholarships to over 2,600 students from 8th grade through graduate school, along with comprehensive educational advising and other support services. The Foundation has also provided $110 million in grants to organizations that serve such students.

Properly supporting academically talented students is difficult in any setting, and rural schools, with smaller enrollments and fewer resources, face additional challenges providing for their brightest students. Since 2012, the Jack Kent Cooke Foundation has supported educational enrichment in rural areas by awarding over $3.3 million in grants to six outstanding organizations operating in Iowa, Indiana, Mississippi, North Carolina, Tennessee, and Virginia. Table 1 summarizes the services of these organizations, with further information available in Appendix A.

In this report, we combine the experiences of these organizations with findings from the research community to offer 14 recommendations of best practices for identifying and educating exceptionally promising rural students. The authors conducted extensive interviews with each organization on the best ways to identify academically talented students in rural areas, provide academic enrichment, and help these students navigate their unique social, cultural, and emotional landscape. We then supplemented these findings with a review of already existing literature, distilling the major conclusions into actionable recommendations.

This report is written for a wide range of organizations, educators, and policy makers. First, K-12 educational enrichment providers working in rural areas will find practical advice on expanding learning opportunities for academically motivated youth. We also anticipate that these results will be of interest to teachers and administrators working in rural schools; parents and guardians of academically promising K-12 students in rural areas; rural community leaders seeking to maximize the potential of their brightest youths; and even concerned citizens in states with large rural populations, since many of the recommendations we propose can be supported by policies at the state and local levels. Ultimately, the entire nation will benefit from developing its young rural talent, and it is our hope that this report provides a useful blueprint with which to do so.
Advanced Placement Access Pilot Program

Mississippi Public School Consortium for Educational Access

The Consortium is comprised of school districts serving rural, high-poverty communities that joined together to provide promising students access to Advanced Placement (AP) STEM courses that their schools otherwise could not offer. Now in its second year, the AP Access Pilot Program has served approximately 170 talented students from 14 high schools in a blended format that combines classroom and online learning, with support from faculty and tutors from well-known universities, including Yale, Stanford, and MIT.

Project HOPE+

Gifted Education Resource Institute, Purdue University

Talented Diné, Lakota, and Ojibwe Native American students from rural communities in grades 5-12 participate in a two-week summer residential camp on the Purdue University campus. While at Purdue, students participate in advanced coursework not available to them in their general schooling experience. Since 2011, Project HOPE+ has provided 395 scholarships to 255 unique students from six rural reservation communities in Arizona, New Mexico, South Dakota, and Minnesota.

Saturday and Summer Academies

Programs for Talented Youth, Vanderbilt University

Vanderbilt’s Programs for Talented Youth provides accelerated courses taught by Vanderbilt’s faculty and scholars for gifted children in grades K-12 during the school year and the summer. Between 2012 and 2015, the Acorn Scholars program funded by the Cooke Foundation supported the participation of 121 high-achieving students with financial need in these courses.

STEM Excellence and Leadership Program

Belin-Blank Center for Gifted Education and Talent Development, University of Iowa

Serving ten rural Iowa school districts, this program identifies talented rural students in grade 5 and provides them with intensive extracurricular math and science programming during grades 6 through 8. Once in high school, students participate in a STEM research conference and have access to advanced coursework through the Center’s Online Advanced Placement Academy.
Valley Scholars Program

James Madison University (JMU)

Now in its fifth year, the program has delivered five years of comprehensive year-round programming and academic support to students in grades 8 through 12. Students who complete program requirements receive guaranteed admission to JMU with four years of paid tuition and fees. To date, 188 talented students in Shenandoah Valley public school districts have been served.

Young Eisner Scholars (YES): Appalachia

Boone, North Carolina

YES is a national organization with branches in Los Angeles, New York, and Chicago. In 2014, it opened a site in rural North Carolina, where it currently serves 64 talented students. YES provides comprehensive, year-round resources and support for its scholars from grade 5 through college, including daily academic enrichment programs, standardized test preparatory courses, and career development.
Student participating in the Mississippi Public School Consortium for Educational Access completing AP Physics problems.
Rurality is an “essence,” according to rural education scholars Mr. Zachary J. Richards and Dr. Tamra Stambaugh: one characterized by a deep attachment to place and the value of tradition, family, and religion. Rural places are not simply those that are neither urban nor suburban. They are extremely diverse across dimensions of economic vibrancy, political ideologies, and social norms. As Dr. Stambaugh, director of Vanderbilt University’s Programs for Talented Youth and assistant professor of special education, emphasizes in her interview with us: “When you know one rural area, you [only] know one rural area.” Some rural communities are adjacent to outer suburbs, while others are hundreds of miles away from the nearest town or city. Some have differentiated economies, while others are dependent upon a single industry, such as farming, fishing, mining, logging, or tourism.

According to 2016 data from the Rural School Community Trust, there are nearly 9 million students in rural K-12 public schools, comprising 18.7 percent of all K-12 students in the United States. In some ways, talented students may benefit from their location in a rural setting. Small community sizes, for instance, may make it easier to spot exceptional talent, while small class sizes may enable more individualized educational attention.

However, there are impediments to supporting academically talented students in rural settings. Some of these impediments are comparable or more extreme variations of challenges that also occur in suburban or urban settings, such as:

- Educators may fail to identify talented students due to behavioral problems, lack of teacher training, or discrimination.
- Educators or other stakeholders may opt not to invest in talent development due to competing priorities or a lack of school resources.
- Educators may lack the necessary training, experience, or expertise to fully develop the potential of academically talented students.
- Parents may resist placing talented students in advanced programs due to concerns that removing them from their peer groups will lead to social or emotional maladjustment.
- Educators or other stakeholders may mistakenly believe that academically talented students do not need any additional support and can manage their education on their own.
- Educators may resist differentiating instruction or making special accommodations within their classrooms.

Other obstacles, however, are more commonly faced by students in rural communities. These include:

- With fewer academically talented students spread across grade levels in smaller schools, rural districts often cannot justify investment of extra resources in educating high-ability students.
- Fewer teachers in rural areas are trained to educate talented students, and the geographic isolation can make it difficult to provide such training.
- Because of their location, many rural areas lack access to college or university partnerships and resources which may help develop talented students.
- Similarly, many rural areas lack access to basic educational resources taken for granted in urban or suburban areas, such as libraries or museums.
- Many rural areas have more limited access to internet resources or digital technologies.
• Stress, anxiety, perfectionism, social maladjustment, and other emotional problems are common among academically talented students. Rural areas may have fewer resources to treat these conditions.

• In many rural areas, long distances and limited transportation options limit students’ ability to participate in enrichment activities outside of school hours.

As a result, there are numerous potential impediments which may hinder the development of academically talented rural students:

• Talented rural students may confront a lack of community emphasis on education relative to other pursuits, such as ranching, farming, fishing, hunting, or sports.

• Cultural ethics of independence and modesty may prevent academically talented students or their parents from advocating for additional support.

• Talented rural students may lack diverse professional role models, especially if they live in a rural area dominated by one industry.

• Parents or educators may actively discourage talented rural students from leaving the community or aspiring to careers not found in their community.

• Talented rural students may feel “trapped” in an under-stimulating environment, while also desiring to maintain loyalties to family, community, and place.

• Because their exceptional talent is “known” to everyone, talented rural students may feel additional pressure to succeed — or conversely, not to stand out or be perceived as trying to be “better” than everyone else.

• Finally, skepticism or distrust of outsiders — especially experts or scholars from urban areas — may inhibit rural inhabitants’ willingness to learn from the broader educational community regarding the most innovative ways to develop academically talented students.

In the following sections, we outline the best ways to overcome these barriers so that even rural students with exceptional promise in the most isolated, disadvantaged communities can be identified, encouraged, and developed to reach their full potential.
Young Eisner Scholars in rural North Carolina line up before engaging in an organization-led activity.
Before academically talented students can receive appropriate educational offerings, they must be identified for services. This can be extremely challenging. Competitive admission to exclusive programs can lead to teachers advocating for their favorite students, schools attempting to placate the most aggressively promotive parents, or students admitted on the basis of their socioeconomic advantages rather than their talents. Meanwhile, otherwise worthy candidates — especially if their talent does not manifest in typical ways in the classroom — may be excluded.

There is no perfect way to identify academically talented rural students. But all of the organizations interviewed for this report advocated an inclusive, mixed-method identification procedure, with special attention to common pitfalls that can cause underrepresented students to slip through the cracks. In this section, we share their advice in four recommendations.

Recommendation 1: Use quantitative testing appropriately

Standardized test scores are, for many organizations, the starting point for identifying exceptional talent — and for good reason. Initially designed to assess readiness for college-level coursework, their standardization and ready availability have led many educational providers to employ them as a valuable metric in identifying academic talent in younger students.

But these same organizations are also quick to caution that such data should not be the only standard for inclusion. When using standardized test scores to inform admission to a program for exceptionally promising students, Dr. Marcia Gentry, director of the Gifted Education Resource Institute and professor of educational studies at Purdue University, is quick to counsel against using low scores to prevent participation. “I never advocate using a cut[off] score,” she says. “What I do say is: ‘If your score is this, you’re automatically in.’ Then we go back, and we say, ‘Who have we missed?’”

In addition to eschewing fixed cutoffs, Dr. Gentry and other experts also advocate using appropriate comparisons for evaluating test scores. Rural students may be less likely to score highly on standardized tests than their better-resourced urban and suburban peers, and this observation was echoed by the experts we interviewed. Mr. Matthew Dolan, CEO of the Global Teaching Project and consultant to the Mississippi Public School Consortium for Educational Access, for example, remarks that he has “dealt with students in the [Mississippi] Delta who clearly are very bright, but that aptitude is not evident in their test scores. We find, however, that their test scores can rise rapidly once these talented students get additional academic support.”

For this reason, Dr. Susan G. Assouline, professor of gifted education and director of the University of Iowa’s Belin-Blank Center for Gifted Education and Talent Development, argues that student test scores need to be evaluated based on how they perform relative to their local peers, not national averages. “Well-designed standardized tests are rarely biased today,” she asserts. “But the bias against certain groups does happen in the way the scores are used and interpreted. We know that rural students tend to be under-identified by traditional measures. We also know, from running summer programs for 30 years [. . . that if] you don’t have cutoff scores or require gifted and talented identification, [. . . students] can do a lot more than people expect of them.”

Dr. Gentry of Purdue’s Gifted Education Resource Institute also advocates casting a wide net, even if the data seem to suggest a lack of talented students. “Rather than comparing kids who go to a poor, rural school with the national norm, and then saying ‘There are no gifted students here,’” she contends, “I think you have to say: ‘Within this context, who are our superstars and how can we develop them?’ [. . .] Say: ‘We have gifted kids here
— they’re just not performing at their potential because of barriers. Dr. Gentry’s dissatisfaction with the under-identification of rural talented students led her to create the HOPE scale: a short, 11 question assessment with academic and social components that emphasizes how students perform relative to their peers. 

“Rather than comparing kids who go to a poor, rural school with the national [testing] norm, and then saying ‘There are no gifted students here,’ I think you have to say: within this context, who are our superstars and how can we develop them?”

— Marcia Gentry, Gifted Education Resource Institute, Purdue University

Dr. Assouline (University of Iowa’s Belin-Blank Center) uses a different but similarly inclusive method. Applicants to the Belin-Blank Center’s STEM Excellence and Leadership Program are assessed through above-level testing (i.e., giving younger students a standardized test designed for older students). But instead of only taking the top two percent of applicants, as most gifted and talented programs would, the Belin-Blank Center accepts the top 15 percent of test-takers. Furthermore, the Center also has students complete a social and behavioral assessment. This way, students who may not have good grades due to boredom or lack of stimulation can also be identified. “Test scores, when used broadly and in the appropriate context, can provide one source of information about academic readiness,” Dr. Assouline emphasizes. “That’s all the tests were designed to do, and that’s all they should be expected to do.”

These inclusive approaches work well for identification. However, some of the experts we interviewed also cautioned that the use of local norms can cause distress for rural students in certain programming contexts. Dr. Stambaugh of Vanderbilt’s Programs for Talented Youth is an enthusiastic proponent of using local norms, but she emphasizes that they can be counterproductive as well. “The drawback of local norms,” she states, “is when they come to pre-collegiate programs, and they are now here with students from all over the world, some of whom have had every opportunity available.” In such contexts, these talented rural students might be distressed to find themselves far behind their more advantaged peers.

“Eventually they can do it, once they’ve had a bit more exposure,” Dr. Stambaugh attests. “But it will throw them off guard, especially if they were identified locally — [. . . if] maybe they were in the top 20 percent in their district, and then they’re put up against students who are in the top one percent in the nation.” Casting a wide net, in short, should be supplemented with additional support for rural students if they will be working alongside more advantaged urban and suburban peers.

**Recommendation 2:**

Use educator and community feedback

Quantitative data should not be the sole determinant of which students are academically talented. This is especially the case in rural areas, where talent does not always manifest in the classroom or on an assessment test. A student with exceptional talent in engineering, for example, may not excel in his or her science courses but might exhibit remarkable skill as a mechanic. “One of the things that we know about rural students in particular is that sometimes their priorities aren’t always the mainstream priorities,” says Dr. Stambaugh (Vanderbilt’s Programs for Talented Youth). “Maybe there are students not doing as well in school, but they’re involved in their church group and community plays, or working in their family business. So how can we incorporate what they’re doing outside of school into the classroom, or use their problem-solving skills in real life as part of [talent] identification?”

The experts we interviewed had a straightforward answer to this question: take advantage of the small size and cohesion of rural communities (where school personnel usually know each student personally) and listen closely to the recommendations of local educators and other
community members. Mr. Dolan of the Global Teaching Project recounts his experiences introducing their program to superintendents of school districts in rural Mississippi: “Always, early on in the discussion, the superintendent would turn to the person seated with them, and say: ‘You know who would be good for this [program]? Joey, and Jamal, and Suzie, and this person.’ Because they know these kids. Not only do the teachers know them, but the superintendents know them. They’re small districts. Most of our districts have one high school [. . .] Most everyone in these communities have lived there all their lives. They’ve known these students since they were in first grade, or kindergarten, or preschool. [. . .] By the time they get to high school, they know who the good students are.”

“Most everyone in these communities have lived there all their lives. They’ve known these students since they were in first grade, or kindergarten, or preschool. [. . .] By the time they get to high school, they know who the good students are.”

— Matthew Dolan, Global Teaching Project

Ms. Rebecca Tucker, executive director of Young Eisner Scholars (YES), an organization serving students with financial need in Los Angeles, New York, Chicago, and, most recently, rural North Carolina, is similarly emphatic about the importance of educator recommendations when we asked her to reflect on the major differences between the YES inner-city programs and the YES program in Appalachia. “We really lean even more heavily on the administrators, the community members, [and] the teachers [for identification], she says. “Because they don’t just know the kids. They know the families.” Ms. Tucker cites a recent example in which this community knowledge was especially useful. “For instance, we had one child who suddenly decided he was really interested in looking into boarding school for high school. And so Susan [the program manager] and his mother took him to visit a boarding school about an hour away. And before they left, one of the teachers at the school approached Susan, and said, ‘Do you know this about their family and the grandmother, and [how] this could be a problem?’ It doesn’t necessarily change the scenario, but it’s more information for us to work with. And it educates us more on the community.”

Of course, subjective recommendations are not a perfect indicator of who belongs in an enrichment program. But then again, neither are standardized test scores. That’s why Dr. Gentry (Purdue’s Gifted Education Resource Institute) advocates for “multiple pathways to get into a program: teacher nomination or test scores.” She elaborates: “If you use an ‘or’ rule, you’re more likely to identify kids. Some kids will have both, and some kids will only have one. We all know kids who don’t test well, but who are bright. [. . .] Well, if she has the ability to do the work, put her in the program!”

Recommendation 3: Use student interviews

Among the organizations we interviewed, the most comprehensive identification process was used by the Valley Scholars Program sponsored by James Madison University — and for good reason. Successful participants in their grade 8 through 12 program, which serves districts of the rural Shenandoah Valley in Virginia, earn four years of paid tuition and fees at JMU. With such high stakes, it’s hardly surprising that the Valley Scholars Program uses a detailed application, test scores, academic records, and teacher recommendations to determine which students to accept.

But, according to Mr. Shaun Mooney, director of the Valley Scholars Program, perhaps the most valuable information gained by the application process is through student interviews: “Every student who applies, we interview. [. . .] We ask a very standard set of about ten questions of all students — in person, at the school, without their parents — to get a sense of the personality of the student.”
“[Some] students really stand out as a superstar [. . . while] for other students, they have those advanced track classes on their 8th grade schedule, but they don’t demonstrate grit and resilience in the personal interactions you have with them. Those students are the ones, personally, I find the most interesting, because those are the ones who show the greatest gain ultimately by being involved in the program”

— Shaun Mooney, Valley Scholars Program, James Madison University

According to Mr. Mooney, the value gained by talking to students directly is immense. “If you’re looking at quantifiable pieces,” he explains, “you can look at: (1) Are they taking a foreign language going into 8th grade? [. . .] And (2) What level math are they in? [. . .] That will give you a sense of whether the student has demonstrated an accelerated ability academically.” But it is through interviews that Mr. Mooney is able to develop a sense of which students may have been overlooked and would most benefit from participating in James Madison University’s Valley Scholars Program. “Some of those students really stand out as a superstar,” he observes, “[while] for other students, they have those advanced track classes on their 8th grade schedule, but they don’t demonstrate grit and resilience in the personal interactions you have with them. Those students are the ones, personally, I find the most interesting, because those are the ones who show the greatest gain ultimately by being involved in the program.

Recommendation 4: Pay special attention to underserved populations

Rural students, in general, are an underrepresented group in academic talent development. But the risk of failing to be identified and developed is compounded when academically talented students belong to other underserved groups as well. Nearly half (48 percent) of all rural students, for example, are eligible for free or reduced school lunch. Due to a lack of educational opportunities at home, studies have shown that gaps in academic performance between higher- and lower-income students appear as early as grade 1. In addition, Dr. Stambaugh at Vanderbilt’s Programs for Talented Youth has noted several additional traits often found in rural students from low-income families that may cause their talents to be overlooked. These include a limited or unconventional vocabulary, less classroom participation, less urgency to complete schoolwork on time, and poor grammar coupled with strong writing content.

How can more talented, economically disadvantaged rural students be identified? Dr. Gentry suggests a simple solution practiced by her colleagues Dr. Tonya R. Moon and Dr. Catherine Brighton at the University of Virginia: ask educators directly to focus on these groups. “We just tell the teachers we’re looking for more low-income students who have the potential to be successful in college,” she says. But this focus on underserved students must not be limited to rural areas. According to Mr. Mooney, “just have to have really good staff who have experience working with different types of children in different types of settings,” he says, “and when they come across a talented student, they know it.”
Students from low-income families, of course, are not the only group under-identified for academically advanced services. Dozens of studies have concluded that academically talented students belonging to other groups are also more likely to be overlooked: including girls (especially in STEM fields), racial and ethnic minorities, English language learners, and “twice-exceptional” students who have considerable talent and one or more physical, psychological, behavioral, or learning disabilities. Evaluators should be educated about these underserved groups, including the behavioral, cultural, and social impediments that may lead educators to fail to recognize exceptional talent among these students, and actively seek to include these marginalized students.
Faculty in the Mississippi Public School Consortium for Educational Access program assist students with an AP physics experiment.
The organizations funded by the Jack Kent Cooke Foundation provide a wide variety of academic services, from residential summer programs and in-school tutoring to Advanced Placement coursework and educational field trips. Each site’s programming is carefully designed to meet the unique needs of exceptionally promising rural students, combining basic skills training, academic enrichment, and exposure to opportunities not commonly available in rural areas. From these programs’ experiences, we offer six recommendations of best practices when providing services to academically talented rural students.

Recommendation 5: Expose promising rural students to people and opportunities outside their home communities

The low population density, long distances, and limited transportation options prevalent in rural areas diminish the opportunities available to talented students. “Half of our students live out in county areas where you’re not going to see your friends, or you’re not going to be able to go back and interact with students of your own age, unless your parent drives you,” explains Mr. Mooney at James Madison University’s Valley Scholars Program. “There is no opportunity to walk down the street or hang out with the neighborhood kids, because there is no neighborhood. And so for many of our students, that isolation certainly has an impact on them. They don’t really have the opportunities to have the experiences and/or access to the knowledge, or cultural or social capital that would lead them to consider what all the possibilities of life can be. [. . .] They’re isolated, their families are isolated, and so they have a set view of what [their academic and career] opportunities and pathways are.”

Expanding the horizons of promising rural students so that they and their families are aware of the educational and career options available to them, in the opinion of Mr. Mooney, is among the most important benefits academic service providers can offer. Ms. April Rosner, the college to career director of Young Eisner Scholars, echoed a similar refrain that exposure is the most essential component of their rural programming. “In [YES Los Angeles], we do a lot of academic prep, and a lot of it is preparation for exams our students need to take to get into specific schools. We do exposure as well; that’s very important to us. But in Appalachia, I think the primary focus is on exposure,” she states. “Obviously, we do high-level academics with them [too]. But the focus is on making the outside world more familiar and accessible, and less scary, both for students and their families. So there’s a lot of outreach work — and a lot of slightly different outreach work — than we do in LA.”

“I’ve seen a kid go from ‘I never want to leave my hometown’ to making one friend in Chicago, and saying, ‘Hey, you know what? Maybe I want to go to a summer program in New Orleans,’ based on nothing more than that one friendship.”

— Rebecca Tucker, Young Eisner Scholars, Appalachia

Another way to accomplish this goal is to bring students to urban centers directly, where museums and other enrichment opportunities not present in their home communities exist. Mr. Mooney recounts a field trip he and his rural Virginia students took to Washington, DC. While riding the subway, one student was so anxious that he clung tightly onto the safety bar for the entire duration of the ride. For students like this, such real-world experience can be invaluable. But even smaller forms of outreach can be impactful. “It doesn’t have to be a giant leap from ‘We’ve never left the county line’ to ‘We’re going to send our kid to New York City because he’s not being challenged
at home.” Ms. Tucker of Young Eisner Scholars observes. “It can be as small but as significant as finding another kid with similar interests in a neighboring county school, and having them collaborate on a science project. Safe, comfortable steps can be as effective — and lead to the same goals — as the giant leaps.”

Ms. Tucker notes that if exposing rural students to new environments or opportunities proves to be too challenging, sometimes the exposure can be brought to them. It was for this reason that Young Eisner Scholars hosted their inaugural Adventure Academy in summer 2017 in Appalachia, knowing that a trip to New York, Los Angeles, or Chicago would be too great of a leap for many of their rural families. The academy brought students from all four YES locations together in North Carolina. “To be honest, I was a little nervous about how the kids were going to mix, [given their] very, very, very different demographics,” Ms. Tucker recalls. “But it was incredible. [. . .] They lived [in dorms]. Each was assigned a roommate from a different city. So you had rural kids — conservative Southern Baptists — with a Muslim inner-city kid from Los Angeles. [. . .] And now, the North Carolina kids are saying, ‘When are we going to get to go visit them in other cities?’ [. . .] I’ve seen a kid go from ‘I never want to leave my hometown’ to making one friend in Chicago, and saying, ‘Hey, you know what? Maybe I want to go to a summer program in New Orleans,’ based on nothing more than that one friendship.”

“Typically, you [might] have two or three percent of students for a general gifted education class, and that might be one or two 45-minute sessions per week,” observes Dr. Assouline at the University of Iowa’s Belin-Blank Center. “It’s typically not very long, and the dosage is likely problematic.” The Center’s STEM Excellence and Leadership Program, by contrast, engages students four hours per week throughout the year — which, in combination with the program’s inclusion of the top 15 percent of applicants, generates lots of excitement, anticipation, and stimulating engagement among students.

“We’ve created a program where every student that we work with has some kind of weekly contact with someone affiliated with and/or associated with this program. And that’s very intentional [. . .] reaching out and touching that student through some sort of communicated message to ensure that the student doesn’t lose sight of what the goal here is.”

— Shaun Mooney,
Valley Scholars Program,
James Madison University

Recommendation 6:
When possible, provide consistent engagement throughout the year

Recognizing the financial and logistical difficulties of coordinating regular activities during the school year, many programs for promising rural students take advantage of the summer break to offer programming. These programs are typically immersive and last a week or more on a college campus. Participants are often provided a small stipend to alleviate any financial hardship which may occur from not working a summer job. Such programs, our experts agree, are an excellent opportunity to bring talented students together, expose them to the collegiate environment, and provide them with rigorous academic enrichment.

In addition, several grantees report that when service providers are capable of providing year-round programming, there are numerous additional advantages.

Mr. Mooney from James Madison University’s Valley Scholars Program also stressed the benefits of regular, year-round engagement. “What we learned in that first year, is that if we’re going to be successful, our program needs to run year-round,” he explains. “I think if you average it out, it’s about every three weeks where they come to campus, but then we also do a week-long summer program as well. In addition to that, if you look at the structure of the program, essentially what we’ve done is we’ve created a program where every student that we work with has some kind of weekly contact with someone affiliated with and/or associated with this program. And that’s very intentional [. . .] reaching out and touching that student through some sort of communicated message to ensure that the student doesn’t lose sight of what the goal here is.”
Recommendation 7:
Encourage professional development in schools

Rural schools may face shortages of well-qualified teachers due to their isolation, their difficulty attracting talented teachers to move to remote areas, and the likelihood that their best teachers will be lured away to larger, better-funded schools. Mr. Dolan of the Global Teaching Project, whose program in rural Mississippi offers Advanced Placement classes in some of the most impoverished districts in the nation, spoke at length about this difficulty. “It is virtually impossible for these schools to get AP certified physics teachers in their schools,” he explains. “It’s an issue. But the teachers they do have nonetheless may have important skills that we can build upon.”

For this reason, Mr. Dolan’s program focuses extensively on providing curricular support, lesson plans, and college-age tutors to support the in-school teachers. “What we do require is teachers with a decent math foundation, and teachers experienced in running a classroom,” he describes. “[And] the good news is, we’ve found in some cases these schools had teachers with talent that the schools did not appreciate. And they just took this ball and ran with it, and they did wonderful work.”

Many teachers — regardless of rural, suburban, or urban setting — are not likely to have been trained in how to address the unique needs of exceptionally promising students. According to a 2018 Jack Kent Cooke Foundation report, only five states — California, Iowa, Nevada, New York, and Oklahoma — currently require coursework on gifted and talented learners in their state-mandated, pre-service teacher trainings. As a result, service providers to exceptionally promising rural students should encourage schools to make this training part of their in-service professional development, and they should strive to communicate the best practices of identifying and educating talented students to teachers whenever possible.

These unique needs are not all academic. Vanderbilt’s Programs for Talented Youth, for instance, pays particular attention to training teachers to teach students how to be resilient so they can be prepared in the event they decide to move away from home to further their education or act contrary to family or community expectations. “What happens sometimes,” says Dr. Stambaugh, “is teachers have to become counselors [to gifted and talented students] too, and they’re not equipped.” She emphasizes, however, that it’s not necessary for teachers to become professionally trained counselors in order to have a positive impact on high-achieving students. An English teacher, for example, can teach resiliency by assigning a short story in which the main character exercises that trait and asking her high-achieving student to reflect upon the skills and characteristics employed by that character.

“You have to address the needs of teachers in identifying and working with more high achieving students. There’s no shortcut, no substitute for trying to adjust the culture and thinking of teachers.”

— Susan Assouline, Belin-Blank Center for Gifted Education and Talent Development, University of Iowa

Training teachers to identify and serve academically talented students is a particular point of emphasis at the University of Iowa’s Belin-Blank Center and Vanderbilt’s Programs for Talented Youth. The Belin-Blank Center, for instance, runs a two-day program during the summer in which experts on gifted and talented learners teach teachers the best practices for identification and enrichment. “You have to address the needs of teachers in identifying and working with more high achieving students,” insists Dr. Assouline. “There’s no shortcut, no substitute for trying to adjust the culture and thinking of teachers.” Vanderbilt’s Programs for Talented Youth offers similarly intensive professional development programs during the summer.

Encouraging teachers to participate in such programs — or, if resources permit, offering them in-house — is one way enrichment providers can support rural teachers, even when their school or district lacks the capacity to offer their own professional development. As Dr. Gentry of
Purdue’s Gifted Education Resource Institute reminded us, “For some of these kids, their only way [to succeed] is having a teacher who believes in them.” Ensuring that teachers know how best to translate their faith in their students into the most effective academic interventions is vitally important.

Recommendation 8: When possible, take advantage of digital technologies

Internet connections are ubiquitous in suburban and urban areas, but not always available in rural areas. This was a challenge confronted by several of the organizations we interviewed. Mr. Dolan of the Global Teaching Project reported that only 33 percent of homes in one of the rural Mississippi districts served by his program had internet access, while Ms. Tucker of Young Eisner Scholars emphasized that some of the rural North Carolina counties served by her program even lacked cellular telephone service.

Nevertheless, where technological capabilities are available, these educators spoke enthusiastically about the potential of technology to expand students’ horizons, provide access to rigorous academic content, and enable collaborations among similarly talented students. “We had one student in Appalachia last year who took an online writing class through Northwestern University. [...] She’s now interacting with students in her class who are in Chicago,” Ms. Tucker relates. She also cited a new initiative to involve Young Eisner Scholars from Appalachia and their other inner-city locations to collaborate on a year-long project. “[The students are] utilizing Google Chat or Facetime, having a weekly meeting to discuss what each group will be working on, and then coming together. So they’re working as a team using nothing more than a basic cell phone app — and yet they’re collaborating with kids from all over the country,” she enthuses. “And that, in itself, is a model that can be replicated.”

One of the most innovative uses of digital technologies among the organizations we interviewed is the Iowa Online AP Academy: a state-subsidized platform administered by the University of Iowa’s Belin-Blank Center, which provides free Advanced Placement courses for high school students and honors courses for middle school students. In rural areas, Dr. Assouline notes, there may not be enough qualified students to justify offering these courses in their home schools. She and her colleagues designed the academy so that on-site mentors would facilitate the delivery of the digital content, which would then permit rural students to take AP classes remotely with in-person support. Thanks to their efforts, approximately 500 Iowa students annually are provided access to advanced coursework they would not otherwise have been able to gain. This, too, is a model that can be — and is being — replicated in other states: in 2018, neighboring state Illinois launched its own, similarly designed pilot program for providing online access to AP courses for rural students.

“In some schools, the [digital] connections are excellent, picture quality is excellent, the graphics are seamless, and it goes as well as it would in [a more resourced place]. [But] in some schools, [technology] is always an issue.”

— Matthew Dolan, Global Teaching Project

While the potential upside to such digitally mediated initiatives is tremendous, it should also be stressed that an overreliance upon educational technology in rural areas can yield mixed results. Mr. Dolan’s Global Teaching Project AP courses in Mississippi, for instance, rely heavily upon remote college professors and tutors to videoconference regularly with the students and in-class teachers. “In some schools, we’ve had very good success. In some schools, the connections are excellent, picture quality is excellent, the graphics are seamless, and it goes as well as it would in [a more resourced place],” he says. “[But] in some schools, it’s always an issue.”

These difficulties are not limited to poor internet connectivity or insufficient hardware. Even where rural areas have access to the necessary technological infrastructure, there may be a lack of familiarity, skills, or knowledge to use the technologies properly, perform necessary repairs, or train teachers and students. “[Sometimes] I’ll see an adult hovering in the background
who I don’t recognize,” Mr. Dolan explains. “And I’ll say, ‘Who’s that?’ And they’ll say, ‘Oh, that’s Mr. Smith. He’s our English teacher. He kind of knows how to work these machines.’ That’s their ‘IT department.’” Furthermore, even when students and teachers have the necessary technological aptitude, there is no guarantee that the learning outcomes will be identical. “We know not all kids are online learners or learn in that way,” remarks Dr. Stambaugh of Vanderbilt’s Programs for Talented Youth. “And especially [. . .] some of our rural kids, they do tend to be more relational, and that [learning] community piece is really important.”

One potential solution, if technological access or skills are lacking in a rural area, is to creatively use less advanced — but equally effective — technologies. Dr. Stambaugh, for instance, proposed that universities partnering with rural schools could conduct video demonstrations, create kits for schools to use with instruction, or even send educators to rural schools to provide demonstrations. “Many grants in STEM require an outreach component,” she notes. “[Universities] could include rural schools in outreach initiatives that support STEM and STEAM pipelines.”

Recommendation 9:
Provide acceleration and enrichment opportunities

A focus on developing strengths, interests, and talents is essential, and there are literally dozens of ways to encourage talented students to progress academically when they’re insufficiently challenged in their schools. Dr. Assouline of the University of Iowa’s Belin-Blank Center and her colleagues, for instance, have identified no fewer than 20 ways to accelerate academic progress (see Table 2). Some of these practices occur in school; others occur outside of school. Some are subject-specific, such as Advanced Placement or dual enrollment courses, while others involve early admission or whole-grade skipping. Other methods involve individualized instruction within a traditional classroom setting, such as curriculum compacting or self-paced instruction.

The appropriate form of acceleration or enrichment for a given student depends upon a variety of factors, including the students’ particular talents and interests, as well as the ability or willingness of teachers and schools to make accommodations. But certain forms of acceleration are especially well suited to rural environments. Multi-age groupings with independently paced progress, for example, may work well due to small class sizes. “[Having] a critical mass [of students] is important,” Dr. Assouline of the University of Iowa’s Belin-Blank Center advises. “If you try to find the top three percent in a class of 15 — I mean, you can do the math, that’s not even a full student.”

Dr. Stambaugh at Vanderbilt’s Programs for Talented Youth agrees: “I’ve seen several rural school systems that have all grade levels on one campus, or have an elementary, middle and high school within walking distance from each other. These arrangements allow opportunities for more flexible approaches in lieu of a critical mass. For example, students from the middle school could walk to the high school for some courses in their area of strength.” Ultimately, Dr. Stambaugh concludes, “At the building and district level, [schools] need to have policies that are more flexible, that allow for more flexible groupings, that might be more multi-age, that are more flexible in terms of pacing, that are more flexible in terms of even who teaches the students and what credit they can get for prior knowledge.”

“[Schools] need to have policies that are more flexible, that allow for more flexible groupings, that might be more multi-age, that are more flexible in terms of pacing, that are more flexible in terms of even who teaches the students and what credit they can get for prior knowledge.”

— Tamra Stambaugh,
Programs for Talented Youth,
Vanderbilt University

One way to ensure that programming is well-suited to student capabilities is to offer a pre-assessment. “Find out what they already know,” Dr. Gentry (Purdue’s Gifted Education Resource Institute) encourages educational providers. “If they know something already, teach
| 1. Early admission to kindergarten | Students may enter kindergarten before the stated age requirement, if they are academically and socially ready. |
| 2. Early admission to first grade | Students may enter grade 1 before the stated age requirement, if they are academically and socially ready. |
| 3. Grade-skipping | Students may skip one or more grades, moving to the grade most appropriate for them academically and socially. |
| 4. Continuous progress | Student are given content progressively as prior content is completed and mastered. |
| 5. Self-paced instruction | Students proceed through learning and instructional activities at a self-selected pace. |
| 6. Partial / subject-matter / content-based acceleration | Students are given advanced content in areas where they are advanced and/or have progressed past their grade-level peers. |
| 7. Combined classes | Students of multiple ages are combined in the same classroom. While not in and of itself a practice designed for acceleration, in some instances this placement can allow younger students to interact academically and socially with older peers. |
| 8. Curriculum compacting | The curriculum is adjusted so the student’s instruction entails reduced amounts of introductory activities, drill, and practice. |
| 9. Telescoping curriculum | The student is provided instruction that entails less time than is normal (e.g., completing a one-year course in one semester). |
| 10. Mentoring / tutoring | A student is paired with a mentor or expert tutor who provides advanced or more rapid pacing of instruction. |
| 11. Extracurricular programs | Outside of the standard classroom, students enroll in coursework, after-school programs, or summer programs that confer advanced instruction or credit. |
| 12. Distance learning courses | The student enrolls in coursework offered by a distant outside-of-school organization. Traditionally called correspondence courses and offered by mail, these courses are increasingly offered online by a number of university-based and for-profit entities. |
| 13. Concurrent / dual enrollment | The student takes a course at one level and receives concurrent credit for a parallel course at a higher level (e.g., taking algebra at the middle school level and receiving credit at both the middle school and the high school level). |
Table 2: 20 Types of Academic Acceleration

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td><strong>Advanced Placement (AP) courses</strong></td>
<td>The student takes a course that may confer college credit or placement upon successful completion of a standardized examination.</td>
</tr>
<tr>
<td>15.</td>
<td><strong>International Baccalaureate (IB) program</strong></td>
<td>Students who successfully complete an IB high school diploma may receive advanced standing at selected universities worldwide if they perform well on the IB exams. Students may also select key courses for IB credit at some schools.</td>
</tr>
<tr>
<td>16.</td>
<td><strong>Accelerated / Honors high schools or residential high schools on a college campus</strong></td>
<td>Students attend a selective high school program designed specifically for gifted students, which may be provided as a residential program on a college campus or as a Governor’s School.</td>
</tr>
<tr>
<td>17.</td>
<td><strong>Credit by examination</strong></td>
<td>The student is awarded advanced standing credit (e.g., in high school or college) by successfully completing some form of mastery test or activity.</td>
</tr>
<tr>
<td>18.</td>
<td><strong>Early entrance into middle school, high school, or college</strong></td>
<td>The student is provided an advanced level of instruction at least one year ahead of normal via dual enrollment and credit by examination, or by determination of teachers and administrators.</td>
</tr>
<tr>
<td>19.</td>
<td><strong>Early graduation from high school or college</strong></td>
<td>The student graduates from high school or college in three-and-a-half years or less.</td>
</tr>
<tr>
<td>20.</td>
<td><strong>Acceleration in college</strong></td>
<td>The student completes two or more majors in a total of four years and/or earns an advanced degree along with or in lieu of a bachelor’s degree.</td>
</tr>
</tbody>
</table>

them something else!” This is especially important for extracurricular enrichment providers seeking to accelerate students outside the school. “We really have to capitalize on their strengths,” argues Dr. Stambaugh (Vanderbilt’s Programs for Talented Youth). “That has to be the priority, because that’s what’s going to move them ahead.” At the same time, however, Dr. Assouline of the University of Iowa’s Belin-Blank Center advises that providers should take care not to accelerate precocious students too quickly. For students used to effortlessly mastering educational content, being placed in an environment with equally talented students and given challenging assignments can easily lead to feelings of frustration, discouragement, or inadequacy. It is important to find the middle ground between the lack of challenging content that these students may encounter in their schools and too-challenging material that creates an aversion to further development.

Not all enrichment must be strictly focused on academic content. Navigating the labyrinthine college application process and providing additional support in the form of college campus visits, standardized test preparation, financial literacy workshops, and career development events is another focus of Cooke Foundation grantee programming. “One of the things we learned in that first year,” Mr. Mooney from James Madison University’s Valley Scholars Program recalls, “is that [for] the programming to be most impactful [it] needed to be on our campus. The students needed to be in the culture, and have the [experience] of being on the university’s campus, so they more fully soak in and understand how their academic performance and choices that they made in those areas would eventually lead to these tremendous pathways that open up for them on a college campus. They need to see it, and they need to experience it for themselves.” Talented rural students who wish to attend selective institutions must have first-hand experiences on those campuses — and then must be provided with the requisite information and support that their more advantaged peers may take for granted as they apply to those selective institutions.

**Recommendation 10:**
Identify and address deficits in basic skills

Given the formidable challenges faced by rural schools and teachers, it’s not surprising that some academically talented rural students may have gaps in basic skills and knowledge when compared to similarly talented urban and suburban students with greater enrichment opportunities. When they also have financial need, as nearly half of all rural students do, the likelihood of such deficits is even greater. These students may be erroneously identified as poor candidates for advanced coursework or enrichment opportunities — when, in fact, with a little supplemental instruction to address these deficits, they are fully capable of excelling. “I really believe it’s a matter of how we view the kids, and what we expect from them,” Purdue’s Gifted Education Resource Institute’s Dr. Gentry insists. “So for me, it’s really [not] about what curricular materials we use, but it’s about the attitude — the belief that if I work with this child, and [I] have high expectations, [they will succeed].”

The experts we interviewed offer several suggestions for addressing these disparities — starting with frank acknowledgement when they exist. “You can’t just identify them and drop them into the gifted program [without any additional support] and let them be at the bottom,” Dr. Gentry advises. Pre-assessments can not only reveal what students already know; they can also be valuable for identifying where supplemental instruction is necessary. Ms. Tucker of Young Eisner Scholars encourages academic enrichment organizations to familiarize themselves with the strengths and weaknesses of the schools with whom they partner, so that they can tailor their offerings appropriately. In Appalachia, for example, Young Eisner Scholars puts a greater emphasis upon reading, writing, and literacy than they do in their urban, inner-city programs because they have found this to be a particularly common area requiring additional support among their talented North Carolina students.
“Use their strengths to remediate their weaknesses, always. We only have so much time, [so] we really have to capitalize on their strengths. [. . .] But then we also have to take into consideration: is what they’re not strong in hurting them, such that their strengths can’t develop in even more important ways? And then you [can] go back and you focus on that as necessary.”

— Tamra Stambaugh, Programs for Talented Youth, Vanderbilt University

When these deficits are properly addressed, however, promising rural students can make staggering progress in a short period of time. Mr. Dolan’s Advanced Placement Access Pilot Program, for instance, begins with an intense, immersive, two-week summer program at Mississippi State University to prepare selected students for the AP coursework they will take in the coming year. Even though many students enter the summer program with significant deficits, most depart ready to tackle the rigors of an AP course. “[It is an] almost unqualified success,” he effuses. “We have metrics to show how quickly students pick things up. [. . .] Obviously, they don’t close the whole gap in two weeks. But they make remarkable gains, [in] just over two weeks.”

While some supplemental instruction may be necessary to close the gap between promising rural students and their better-resourced urban and suburban peers, our experts emphasized that this should not be the primary curricular emphasis. “Use their strengths to remediate their weaknesses, always,” Dr. Stambaugh of Vanderbilt’s Programs for Talented Youth counsels. “We only have so much time, [so] we really have to capitalize on their strengths. That has to be the priority, because that’s what’s going to move them ahead. But then we also have to take into consideration: is what they’re not strong in hurting them, such that their strengths can’t develop in even more important ways? And then you [can] go back and you focus on that as necessary.” Dr. Gentry agrees that remediation should not impede the development of student strengths. “[Focus] on strengths, interests, and talents, as opposed to what they can’t do. [Focus] on what they can do,” she urges. “Kids get sent to summer school to study what they don’t do well — and then we wonder, why do kids hate school? Why don’t we take those kids who [are poor in] reading, and let them do art or music or math or science in the summer, so that they can develop what they are good at?”
AP Physics students in Mississippi interact during a summer academy.
Identifying capable candidates and providing them with appropriate academic development is the core work of any program that successfully serves academically talented rural students. But the organizations funded by the Jack Kent Cooke Foundation emphasized that their work is not simply limited to academics. According to staff at the University of Iowa’s Belin-Blank Center, aggregate analyses of students taking the ACT Engage assessment found that 82 percent of high-achieving, highly engaged middle school students ultimately enrolled in college. However, among equally high-achieving middle school students with low levels of academic engagement, only 30 percent went on to college.16

There are, in short, many social, cultural, and emotional considerations which must be addressed in order for academically talented rural students to truly thrive. Some of these considerations are obstacles that can prevent participation or increase dropout rates; others, however, present opportunities to dramatically increase the effectiveness of programming.

Recommendation 11: Cultivate a robust peer community

“All the data says that in high school, the peers are the most influential group,” observes Mr. Mooney of James Madison University’s Valley Scholars Program. In high school and in earlier years, peer groups can be either a positive or negative influence. As a result, these organizations are particularly attentive to a student’s peer group. “We ask a lot of questions about who their friends are,” Mr. Mooney explains. “Sometimes we’ll [even] call home to family members when we may observe or we get other information that says maybe this student isn’t hanging out with the right group, [or] maybe [their] peer group is not the best influence.”

Of course, it’s not always possible to steer a willful adolescent away from a peer group exerting a negative influence on their academic performance. But it’s certainly possible — and very much recommended — to expose academically talented rural students to other, similarly talented peers. This is why many organizations, including the Mississippi Consortium for Educational Access, prioritize the establishment of intense, immersive residential summer programs, where students are together all day for several days in a row. In a rural area, Mr. Dolan explains, “There may be [only] a handful of kids like you — meaning: bright kids, academically focused, wanting to get ahead — and it can seem sometimes a little bit lonely for a high school kid. But when we put them in this [immersive, residential] environment with kids from all over the state just like them, it’s an exhilarating experience for them. They know, ‘I’m not a weirdo. The fact that I want to do well in school is something to be celebrated.’” Connecting talented rural students with similarly talented peers, in other words, is both socially and academically stimulating: it alleviates social isolation, provides crucial validation of their academic pursuits, and encourages students to strive for loftier college and career goals.

“There may be [only] a handful of kids like you — meaning bright kids, academically focused, wanting to get ahead — and it can seem sometimes a little bit lonely for a high school kid. But when we put them in this [immersive, residential] environment with kids from all over the state just like them, it’s an exhilarating experience for them.”

— Matthew Dolan, Global Teaching Project

Frequent face-to-face interactions are best. But even when circumstances only permit a few such encounters each year, the social benefits of bringing academically talented students together are enormous — especially
when students have the ability to stay in touch on social media afterward. “In Holmes County, [Mississippi], only 33 percent of homes have internet,” Mr. Dolan says. “But they do have access to smart phones [. . .] Once these [social] connections are made among teenagers, those connections are maintained through social media. [It’s] one of the most heartening parts of this experience, to see the students when they get back together — they were really excited to see each other.” In short, providing talented rural students with opportunities to connect with similarly talented peers is one of the simplest, most impactful things an academically-oriented organization can do to help those students fulfill their academic potential.

**Recommendation 12:**
Connect talented students with older, near-peer role models

A peculiar feature of the American educational system is its lack of opportunities to socialize with near-peers: middle school students rarely encounter high school students, high school students rarely interact with college students, and so on.

But for academically talented rural students, such exposure — particularly to slightly older students who can function as near-peer role models — is especially important. At James Madison University, undergraduate students help provide the programming to Valley Scholars. “To me, that’s critically important, that your young folks are the ones really out front leading,” says Mr. Mooney. “Because the Valley Scholars, in our case, can see themselves as that person in just a few years. It’s attainable. It’s something they can see themselves doing and/or being. [Scholars] like working with [JMU] faculty, but they don’t like working with faculty as much as they do [with JMU] students.”

Mr. Dolan and the Mississippi Consortium for Educational Access find themselves similarly reliant on, and effusive about, using college students to support their programming. A key component of their services is the selection of tutors attending top universities such as Yale, MIT, or the University of Virginia to provide assistance via videoconferencing two times per week in the Advanced Placement courses they offer. “The tutoring piece was not something starting out that we really were focused on,” Mr. Dolan admits. “[But] as the program evolved, it became evident that it was an absolutely central component of what we were doing.”

“[Students benefit from seeing] mirrors of people like themselves, as well as windows to the outside world. That becomes even more important for rural students. We need to help them see other individuals from areas where they are, and what they’re doing, and how they’re using their intelligence in ways that are important for them.”

— Tamra Stambaugh, Programs for Talented Youth, Vanderbilt University

Partly this was due to the selection of extremely knowledgeable tutors with excellent communication skills. And according to Mr. Dolan, it’s invigorating for these talented, rural high school students to interact with talented, successful college students. “Who are the biggest heroes to a teenager?” he asks rhetorically. “A college student — they walk on water. When I’m in Mississippi, they don’t say, ‘Mr. Dolan, how was your week?’ They say, ‘How’s [that college student]?’ They ask about all those tutors.” This galvanizing effect of near-peer role models — even though most of their interactions occur through digital media — is crucial to the success of their program.

Ms. Tucker of Young Eisner Scholars also testified to the great benefits of near-peer exposure — not just for its impact upon the students, but also their families. “We’re dealing with really insular communities [in rural North Carolina] that are not as eager to push their kids outside of the comfort zone,” she claims. “Finding local students who had graduated from these same high schools but left the county, and using that familial connection to make it safe” has been crucial to the growth of their program, she contends. Such small initial steps making use of existing role models can then pave the way for bigger steps, such as college visits.

Dr. Stambaugh at Vanderbilt’s Programs for Talented Youth elegantly summed up the unanimous emphasis
upon providing access to role models both near and far by invoking Rudine Sims Bishop’s metaphor of “mirrors and windows: mirrors of people like themselves, as well as windows to the outside world.” “That becomes even more important for rural students,” she contends. “We need to help them see other individuals from areas where they are, and what they’re doing, and how they’re using their intelligence in ways that are important for them — whether it’s leaving and coming back, or whether it’s staying there and really making major changes that what they want. It all links back to their own goals. But also thinking about looking at others within their area that they can emulate.”

Recommendation 13: Work closely with families

Families, like peer groups, can have a wide range of influence upon the talent development of promising rural students. This is especially the case in rural communities, where smaller social networks, a cultural emphasis on tradition and obedience, and logistical constraints can all combine to give families considerable sway over student participation in enrichment programs. “[This is] a community that really values family and adhering to a code of moral values,” says Ms. Tucker, speaking about the counties Young Eisner Scholars serves in Appalachia. First and foremost, she advises, is to ensure that these programs and their staff are not presumptuous, arrogant, or condescending. Ms. Rosner, college to career director at YES, agrees. “All of the decisions we make [in Appalachia] have to do with making sure that what we’re doing fits, that we’re not trying to impose our ideologies onto them,” she adds. “Just pure and simple try to increase opportunities for higher education. Expand their worldview. Let them make those choices themselves.”

In her interview, Dr. Stambaugh of Vanderbilt’s Programs for Talented Youth addresses another cultural concern that can reduce participation: humility. “[In] rural families, humility is valued: ‘We don’t want to put our child above anyone else,’” she observes. “A lot of times you hear the phrase: ‘People like us don’t do things like this.’ [. . .] So helping the families understand what giftedness means, and also helping them understand that being provided services doesn’t necessarily mean that their child will now want to move the big city and will never be seen or heard from again — which seems to be a huge fear for some families. Parents need to know that the services provided can support their child’s growth and what is important within the community and their family as well.” Working to demystify the designation of “gifted” or “talented” and emphasize programmatic congruence with other community values, in short, can alleviate concerns about participation stemming from humility.

Sometimes familial concerns are also practical. “These kids [. . .] do not often have their own transportation. They’re reliant on bus schedules,” notes Mr. Dolan of the Global Teaching Project. “And the bus leaves when it leaves. And if you live 15 miles away in a rural area, you’ve got to get on that bus.” Mr. Mooney of James Madison University’s Valley Scholars Program identifies additional practical constraints: “For our students, the family can be a barrier or an obstacle. Generally not in the first year, but especially sophomore or junior year in high school, where hard choices have to be made.” These can include additional investments of time and money as students start taking Advanced Placement or dual enrollment courses requiring more complicated arrangements. “Kids [may] need to stay after school and work with the teachers,” Mr. Mooney notes. “You’ve got to arrange work schedules, [and] especially with shift work for [many] rural folks, that doesn’t work well.”

“We rely very heavily on [parents of former participants] talking to the parents of younger kids about their experience, to talk about both the positive and negative, so that no one family or kid feels like they’re in this alone. [So] that they have a support system there: not just from YES, but also from the other community members who are involved.”

— Rebecca Tucker, Young Eisner Scholars, Appalachia
The experts we interviewed provided several recommendations for strong family partnerships. Mr. Mooney of James Madison University’s Valley Scholars Program recommends communicating frequently, providing as much information as possible, and ensuring that there are no surprises. Delivering high-quality content is paramount as well, as parents in these smaller communities are likely to rely upon word-of-mouth recommendations. One negative experience can spread like wildfire — but, at the same time, so too can positive experiences. “If we have success dealing with child ‘A,’” Mr. Dolan of the Global Teaching Project relates, “[because] the cohort immediately behind them and their moms and families want their kids to be like child ‘A,’ they say, ‘We heard about this thing at the high school, and we want to be a part of it.’”

Positive experiences by students are not the only way to boost enrollment. Making an effort to connect parents of children currently in the program with parents whose children might enter the program — and letting these parents provide essential validation — is a useful step. “As our kids grow in this program — and we now have 10th graders — those parents have now been through those initial steps with their kids: letting them leave, letting them have meetings about boarding schools, going and having an out-of-state adventure,” explains Ms. Tucker of Young Eisner Scholars. “We rely very heavily on [parents of former participants] talking to the parents of younger kids about their experience, to talk about both the positive and negative, so that no one family or kid feels like they’re in this alone. [So] that they have a support system there: not just from YES, but also from the other community members who are involved.”

A final piece of advice offered by Dr. Gentry at Purdue’s Gifted Education Resource Institute is to team up with parents to hold schools accountable. “Help the parents understand that they have a right and an obligation to be involved in their children’s education, and that they shouldn’t be intimidated by the system,” she says. “Every school has a goal of partnering with the parents, so let’s make that happen! I think they have to be their child’s number one advocate.” Service providers should look for opportunities to support and encourage parents in this endeavor.

**Recommendation 14:** Encourage investment in local communities

“The reality,” observes Mr. Mooney of James Madison University’s Valley Scholars Program, “is for many of our students, they’re becoming something that’s going to set them apart from their family identity or their community identity.” The fears associated with this transformation — particularly the fear that talented students will leave, become unrecognizable and estranged from their communities, and never return — can be a powerful impediment to broader participation.

Encouraging exceptional talent in a student, however, does not need to be regarded negatively. “In many ways, it is more difficult to work in these [rural] areas than the inner city,” Mr. Dolan of the Global Teaching Project remarks. “But one positive dynamic that makes our work easier is [that] the high-achieving kids [in rural areas] stand out in a positive way. They are esteemed by their community in a way that they wouldn’t be in [an urban or suburban area]. [. . .] In Meridian, Mississippi, they have a billboard with these pictures of students, six feet high, saying: ‘Congratulations to our students who scored 30 [or over] on the ACT.’ [. . .] Communities really take pride in these kids.”

This civic pride can deepen into a community-wide passion for education and learning, if the community feels they will experience local benefits from these efforts. For this reason, the organizations we interviewed all advocate deep, sustained community engagement. “There is absolutely no substitute for physically being there, and dealing with these folks, and building the relationships,” Global Teaching Project’s Mr. Dolan summarizes. Ms. Tucker of Young Eisner Scholars echoes this sentiment: “Make sure you listen to the community [. . .] rather than shoving what [you] think is best on the community. Really [learn] about what matters to them, what’s important [to them, and] how we can work together to achieve the goal of higher education for all involved.”
“Work with the community on how to build infrastructure and create entrepreneurial [opportunities]. If rural areas are going to remain vibrant, you’ve got to have people who are movers and shakers and go-getters [in those communities].”

— Marcia Gentry,
*Gifted Education Resource Institute,*  
*Purdue University*

This emphasis can be integrated into programming directly. “Here [in our Los Angeles program], we have an academic program, and an ‘Exposure to LA’ program. They’re related, but mostly separate endeavors.” explains Ms. Rosner of *Young Eisner Scholars.* “With Susan [the program manager], in Appalachia, they’re combined. Almost everything she does academically ties back to the community.” This integration between place and academic content can yield great benefits for all involved. “Let’s look at what our community offers,” advises Dr. Stambaugh of *Vanderbilt’s Programs for Talented Youth.* “What are our community’s strengths? How can we use our community advantages and assets to give students [positive] experiences in their own backyard, providing them local opportunities that play to their strengths and things they already know a lot about or want to know more about? It’s a win-win for the students and the community — especially if these types of place-based lessons allow for service-learning opportunities or involve other community members in student education.”

Particularly in economically struggling rural areas, creating and communicating links between the programming offered and the economic and social well-being of the community is paramount. Dr. Gentry of *Purdue’s Gifted Education Resource Institute* encourages enrichment providers to “work with the community on how to build infrastructure and create entrepreneurial [opportunities].” After all, as she reminded us, “If rural areas are going to remain vibrant, you’ve got to have people who are movers and shakers and go-getters” in those communities. Organizations that help to fulfill the potential of academically talented rural students are essential to the growth, viability, and sustainability of rural areas — and, if they do their job successfully, can become well-regarded cornerstones of the community.
A Young Eisner Scholar in rural North Carolina walks to a study session.
There is no shortage of talented rural students; only shortages of opportunities and resources to identify that talent and support its development. Reflecting after the first year of programming in rural Mississippi, Mr. Dolan of the Global Teaching Project says, “The premise of what we are doing here has been rather emphatically affirmed. Every one of these districts has smart kids. And every one of these districts has kids who are capable of excelling.” The organizations featured in this report have uncovered exceptional talent in some of the most isolated, impoverished, rural school districts in the nation — and there are surely many more promising students in rural areas capable of excelling.

To increase the development of talented students in rural settings, this report makes 14 recommendations, summarized below. It is our hope that these recommendations will guide academic service providers, educators, and anyone who seeks to fulfill the potential of the many academically talented rural students across the nation.

Identifying Promising Rural Students

1. Use quantitative testing appropriately. Standardized test scores should not be used in isolation, but in combination with other measures. Consider using local norms or broadened guidelines to identify talent potential.

2. Use educator and community feedback. In small communities, educators will be familiar with talented students and their families, and community members will be familiar with other candidates whose exceptional talent manifests outside the classroom.

3. Use student interviews. Conversations with students uncover useful information not attainable through quantitative data or recommendations, such as personality traits or feelings of under-stimulation in school.

4. Pay special attention to underserved populations. The talents of students with financial need — as well as students in other marginalized groups — are more likely to be overlooked. Understand which groups are at risk and why, and actively seek to include these students in advanced programming and screening efforts.

Providing Academic Services to Promising Rural Students

5. Expose promising rural students to people and opportunities outside their home communities. Bring them to college campuses and suburban and urban centers so they can experience these settings for themselves. If this is too challenging, start small — with regional visits, for example — or bring the exposure to them through visitors or online interactions.

6. When possible, provide consistent engagement throughout the year. Summer programming is extremely valuable, but year-round engagement deepens learning, strengthens relationships with students and their families, and keeps students focused on their college and career aspirations.
7. **Encourage professional development in schools.** Many teachers have not been trained in identifying exceptional talent or meeting the unique needs of academically talented students. Devoting professional development to these topics is a worthwhile investment.

8. **When possible, take advantage of digital technologies.** Reliable technologies (e.g., fast broadband connections) are not available in all rural areas. Where available, however, they have enormous potential to expand students’ horizons, provide access to rigorous academic content, and enable remote collaborations among similarly talented students.

9. **Provide acceleration and enrichment opportunities.** Use a pre-assessment to determine students’ strengths and weaknesses, and provide opportunities for them to further develop their strengths and passions.

10. **Identify and address deficits in basic skills.** When rural students have gaps in necessary skill areas, they are fully capable of excelling with supplemental instruction. Tailor programming to strengthen areas that may have been neglected.

---

**Meeting the Social and Emotional Needs of Promising Rural Students**

11. **Cultivate a robust peer community.** Especially in rural areas, academically talented and driven students may feel lonely. Provide face-to-face opportunities for them to engage with other motivated, talented students, and encourage them to connect via social media.

12. **Connect talented students with older, near-peer role models.** Exposing talented rural students to successful, slightly older students generates excitement, provides a model for further development, and allows talented students to imagine future opportunities for themselves.

13. **Work closely with families.** Communicate frequently, ensure programming is aligned with community values, and connect parents of prospective students with parents of current students. Be partners in fulfilling their child’s potential and holding schools accountable.

14. **Encourage investment in local communities.** Connect programming with the needs and values of the community. Cultivate leaders who will increase the economic and social well-being of the community. Strive to be a well-regarded cornerstone of the community.
Belin-Blank Center for Gifted Education and Talent Development, University of Iowa

http://belinblank.education.uiowa.edu

Among many excellent programs and services, the Belin-Blank Center has shown outstanding outcomes in its STEM Excellence and Leadership (SEAL) program, which provides talent identification for students in grade 5 and intensive extracurricular programming in mathematics and science to over 400 rural high potential students in grades 6 through 8.

With Cooke Foundation funding, the Belin-Blank Center recently expanded the SEAL program to support high-ability students’ transition to high school and their successful completion of higher-level courses. Serving talented students in grades 8 through 9 from ten rural districts, the expanded program offers students intensive math and science programming, participation opportunities in a research conference, and identification of appropriate advanced coursework, including coursework available through the Belin-Blank Center’s Iowa Online Advanced Placement Academy (IOAPA) for students in grades 9 through 12.

Furthermore, in addition to supporting educators and students through programming and services, the Center is engaged in research to identify practices that optimally support STEM achievement among high-potential, rural students as they navigate the educational pathways necessary for STEM academic and career success at the highest levels.

Gifted Education Resource Institute,
Purdue University

http://www.education.purdue.edu/geri

Centered at Purdue University, the Gifted Education Research and Resource Institute (GERI) is an innovative center dedicated to the discovery, study, and development of human potential. Founded by John Feldhusen in 1977, GERI’s mission is holistic development of giftedness, creativity, and talents among individuals throughout their life span. This is accomplished through enrichment programs for gifted, creative, and talented youth; graduate programs for future scholars and leaders; professional development and coursework for educators of gifted, creative, and talented students and cutting-edge research in psychology and education related to giftedness, creativity, and talent development.

In GERI’s Project Hope+ program, talented Diné, Lakota, and Ojibwe Native American students in grades 5 through 12 participate in a two-week summer residential camp on the Purdue University campus. While at Purdue, students participate in advanced coursework not available to them in their general schooling experience. Since 2011, Project HOPE+ has provided 395 scholarships to 255 unique students from six rural reservation communities in Arizona, New Mexico, South Dakota, and Minnesota.
Mississippi Public School Consortium for Educational Access

http://educationaccessms.org

The Mississippi Public School Consortium for Educational Access is a group of school districts that have joined together to provide promising high school students in rural and high-poverty communities access to the advanced STEM classes those students need to reach their full potential, but which their schools otherwise could not offer. The Consortium commenced operations in the 2017–2018 school year with its inaugural course, AP Physics 1. To date, 14 schools have participated in the Consortium, and other schools and subjects are being added.

The Consortium presents classes in a blended format, using multiple media to engage students. The lead instructor is a subject matter expert and renowned teacher who presents material largely through asynchronous video. Mississippi-based, AP-certified supervisory teachers create the curriculum, maintain an online course platform, and support in-class instructors with detailed lesson plans and pedagogical guidance. In-class teachers implement lesson plans and provide additional instruction. Students also receive substantial additional instruction at residential programs held in the summer, winter, and spring at Mississippi State University, Jackson State University, Millsaps College, and the University of Mississippi, which in-class teachers also attend. STEM majors from Yale University, Stanford University, MIT, the University of Virginia, and other top universities provide regular tutoring, both in-person at residential programs and by videoconference throughout the school year. In addition, students are provided physical textbooks and workbooks, as well as substantial online resources.

Programs for Talented Youth, Vanderbilt University

http://pty.vanderbilt.edu

Vanderbilt's Programs for Talented Youth provides accelerated courses taught by Vanderbilt's faculty and scholars for gifted children in grades K-12 during the school year and the summer. Content experts and master teachers trained in gifted education implement an accelerated curriculum for all courses, with additional opportunities for in-depth career exploration among older students.

The Saturday sessions for grades K-6 meets for three or six consecutive Saturdays in the fall and spring of each year, while the summer sessions consist of six different one-week sessions in which students focus on one topic in depth. The Weekend Academy for grades 7 through 10 incorporates accelerated laboratory courses led by professionals in their field and provides qualifying students with an in-depth look at contemporary careers in math, science, engineering, and the humanities. Finally, the Vanderbilt Summer Academy provides rising students in grades 7 through 12 with a taste of life on a college campus, accelerated coursework taught by Vanderbilt faculty and scholars, and the opportunity to live in a vibrant social community of intellectual peers.

Through the Acorn Scholars grant funded by the Jack Kent Cooke Foundation, Programs for Talented Youth identified and provided opportunities for students from low income households to participate in accelerated summer academic programs. Over 121 students were provided services for the purpose of increasing access, living and learning in an academic community, and developing their interests alongside talented and diverse peers. The target audience for the grant were students from some of the poorest counties in Tennessee, many of which were rural. Meetings and professional development for parents and guidance counselors in these counties were also provided.
Valley Scholars Program, James Madison University
http://www.jmu.edu/valleyscholars

The Valley Scholars Program serves Virginia students with financial need from 22 primarily rural middle schools and high schools who have demonstrated the ability to pursue rigorous academic work and who are deemed to have high potential for academic achievement and college success. Each year, the program selects 35 academically motivated grade 8 students, all of whom qualify for free or reduced lunch meals. Now in its fifth year, 188 talented students in Shenandoah Valley public school districts have been served.

The program provides students with intensive guidance in high school course selection, ensuring the students enroll in academically rigorous courses, and provides necessary post-enrollment support to ensure academic success. A full 96 percent of high school Valley Scholars are in honors programs, AP classes, or dual enrollment programs. In addition, students participate in career exploration, service projects, financial literacy sessions, summer enrichment courses at James Madison University, and a mentorship program with student mentors from the university. Valley Scholar participants have guaranteed admission and four years of paid tuition and fees to JMU if they meet all of the program’s academic benchmarks. They are also free to apply to any college of their choice.

Young Eisner Scholars (YES), Appalachia
http://www.yesscholars.org

Originating in Los Angeles, Young Eisner Scholars (YES) is a national education nonprofit with more than 18 years of community and education development experience. After successfully scaling their original program to New York (2012) and Chicago (2013), YES expanded its services to Boone, North Carolina in 2014, in partnership with Appalachian State University. Currently, YES Appalachia serves 64 students at five middle schools in Watauga and Ash Counties.

YES identifies talented students with financial need in grade 6 through a rigorous selection process including testing, grades, recommendations from teachers and administrators, and interviews. The organization then provides them with extensive services and supports, including: twice-weekly, school-day education enrichment, weekend sessions at the university with courses structured to address the interests of students, and a six-week summer program. YES also supports students as they apply for rigorous summer programs, such as Duke TIP, Exeter Summer Program, and the Loomis Chaffee Summer Program.

As students progress to high school, YES provides guidance on course selection, free professional SAT and ACT preparatory courses, internship opportunities, and personalized assistance through the college admissions process. While in college, YES scholars are provided with further career development activities, internship opportunities, and personalized college advising.
ACKNOWLEDGEMENTS

We gratefully thank the Jack Kent Cooke Foundation rural grantees who were interviewed for this report, both for taking time to share with us their insights and also for their exceptional efforts serving high-achieving students with financial need: Susan Assouline and Lori Ihrig from the Belin-Blank Center for Gifted Education and Talent Development at the University of Iowa; Matthew Dolan from the Global Teaching Project; Marcia Gentry from the Gifted Education Resource Institute at Purdue University; Shaun Mooney of the Valley Scholars Program at James Madison University; Tamra Stambaugh from Programs for Talented Youth at Vanderbilt University; and Rebecca Tucker and April Rosner from Young Eisner Scholars.

We thank our colleagues at the Cooke Foundation for their support of this project. In the grants department, Ricshawn Adkins Roane, Astrik Tenney, and Stacey DaBaldo provided insight into the Cooke grantees and offered feedback on various drafts of this report. Colleagues Cecilia Marshall and Amber Styles thought creatively of ways to communicate the report’s findings to a broad audience.

Finally, we thank graphic designer Brian Myers for his artistic layout of the final report and copy editor Caroline Henze-Gongola for her careful read of the text.
Declining investment in public education — even as the number and diversity of K-12 students has grown in recent decades — is well-documented. For an overview of this phenomenon in the years following 2008, see the nonpartisan Center for Budget and Policy Priorities report, “A Punishing Decade for School Funding,” https://www.cbpp.org/research/state-budget-and-tax/punishing-decade-for-school-funding.


The National Assessment of Educational Progress (NAEP) is a congressionally mandated project administered by the National Center for Education Statistics (NCES). Students receive one of three scores: Basic, Proficient, or Advanced. Data retrieved from www.nationsreportcard.gov.


See http://purduegeri.wixsite.com/instrument/hope for further information on how to purchase the HOPE scale.


Showalter et al.


The Jack Kent Cooke Foundation is dedicated to advancing the education of exceptionally promising students who have financial need. Since 2000, the Foundation has awarded $200 million in scholarships to nearly 2,600 students from 8th grade through graduate school, along with comprehensive counseling and other support services. The Foundation has also provided over $110 million in grants to organizations that serve such students.