

**Development and Progress  
of the  
Appalachian Higher Education Network**

**A Project of the  
Appalachian Regional Commission**



**Jeffrey H. Schwartz, Ed. D.  
ARC Education Program**

**May 2004**

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## **Executive Summary**

### **Appalachia Lags in Postsecondary Education**

Appalachia is catching up with the nation as a whole on many socioeconomic indicators—even surpassing the national averages in some areas—but the Region still lags in postsecondary education. The U.S. Department of Education estimates the college-going rate of high school graduates nationwide at 63.3 percent; for Appalachia the rate is between 35 and 55 percent, according to Commission data. And only 17.7 percent of the population age 25 and older in Appalachia has a college degree, compared with 24.4 percent of the population in the nation as a whole. While this gap may not appear large, it is growing. Because at least some college or postsecondary training is now necessary to obtain jobs that pay a livable wage, it is critical that we close the college-going gap between Appalachia and the nation.

### **The Appalachian Higher Education Network Seeks to Increase Educational Attainment**

Increasing the college-going rate and raising educational attainment levels is the mission of the Appalachian Higher Education (AHE) Network. The Network is based on a successful college access program in Appalachian Ohio—the Ohio Appalachian Center for Higher Education (OACHE)—which was established in 1993 by the Ohio Board of Regents. Since 1998, the Appalachian Regional Commission has helped establish centers in Alabama, Kentucky, Mississippi, North Carolina, Tennessee, Virginia and West Virginia. Consortia of two- and four-year institutions of higher education and community-based nonprofit organizations run each center. In 2003, the original center in Ohio won the “Innovations in American Government Award” from the Harvard University John F. Kennedy School of Government.

### **Network Centers are Models of Success**

All centers have achieved high rates of success. The key to their success? The director of OACHE attributes it to total school buy-in, with all teachers and administrators participating in and “owning” the program. Schools served by OACHE and the West Virginia Center (the first site to replicate the OACHE program) have shown consistent, sustained gains in their college-going rates. AHE Network centers now report several high schools with college-going rates well above the national average of 63.3 percent, with some schools in Mississippi and Alabama reporting 100 percent of their 2003 graduating seniors continued their education. Annual

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increases of 25 to 30 percentage points in college-going rates are common in the first years of implementation.

Network centers offer competitive grants, training, and technical assistance to high schools to sponsor college visits, mentoring programs, and career exploration programs. Centers also help students identify and apply to colleges, and address the emotional and social barriers to attending college that students face.

ARC is working with the state governments, foundations, and corporations in the Region to establish more centers.

### **Commission Support of AHE Network Centers**

ARC provides training and support services to center directors. Sarita Gattuso, director of the West Virginia Center, coordinates these services. Gattuso and Wayne White, director of the original center in Ohio, mentor new directors and provide consultative services and training to new sites. New directors attend the Ohio and West Virginia conferences for participating high schools to learn more about the process. White and Gattuso also travel to new sites to observe and assist with implementation.

ARC also provides training and helps to obtain other sources of funding for centers. After two years of support from ARC, each center is expected to have helped increase the college-going rates of high school graduates and to be able to attract adequate funding to maintain services.

Since 1998, ARC has provided \$982,405 to establish and expand the AHE Network. Nineteen percent (\$184,787) of that amount has been spent on support activities, including training and mentoring for directors of new centers. The remaining 81 percent of ARC funding has been provided directly to the centers to support start-up and initial operating costs. Commission investment in the AHE Network, which includes \$75,000 from a W.K. Kellogg Foundation Grant, has leveraged over \$1.1 million in state and local funds.

### **More Research on the Region and about Individual Students is Needed**

Research on the long-term impact of the AHE Network and similar programs on Appalachian students is scant. Though the increased number of students attending some form of postsecondary education has been carefully documented, we do not know what happens to students after they enter college.

Another area requiring more research is “brain drain” from Appalachia. Census data shows that many parts of Appalachia are losing people—particularly young people and those in the prime earning years of 25 to 50. Formal research is not available on whether the AHE Network and similar programs have an impact on migration patterns.

### **More Centers are Needed to Serve All States**

ARC’s goal is to have AHE Network centers in all 13 Appalachian states serving all Appalachian counties, beginning with counties and areas identified as economically distressed.

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The existing eight centers have the capacity to serve only 60 to 75 high schools in a given year, out of more than 300 in ARC-designated economically distressed counties alone. And not all states or distressed counties are currently served. Given that Network centers work with each school for at least two to three consecutive years, it would be at least 10 years before these eight centers reached all high schools in economically distressed counties for an initial round of assistance—and that does not include the high schools in distressed areas of other counties.

### **A Discussion of the Development and Progress of the AHE Network**

This report discusses the critical need for postsecondary education, and for the AHE Network itself. It also discusses the history and effectiveness of the AHE Network model and how ARC has grown the Network, and provides preliminary data on the impact and success of individual centers. Future directions for the Network and the need for further research on the impact of these, and similar, programs on individual students and the Region itself are also presented.

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In 1998, the Appalachian Regional Commission (ARC) began developing what is now the Appalachian Higher Education (AHE) Network. The AHE Network, currently composed of eight centers, has the mission of increasing the college-going rate in Appalachia, the numbers of students who continue their education directly after graduating high school. This paper discusses why a postsecondary education is so critical and the need for the AHE Network in the region. It then describes the history and effectiveness of the AHE Network model and presents preliminary data on the impact and success of individual AHE Network centers. The paper concludes with a discussion of future directions for the Network and the need for research on the long-term impact of these and similar programs on individual students.

## **NEED FOR POSTSECONDARY EDUCATION**

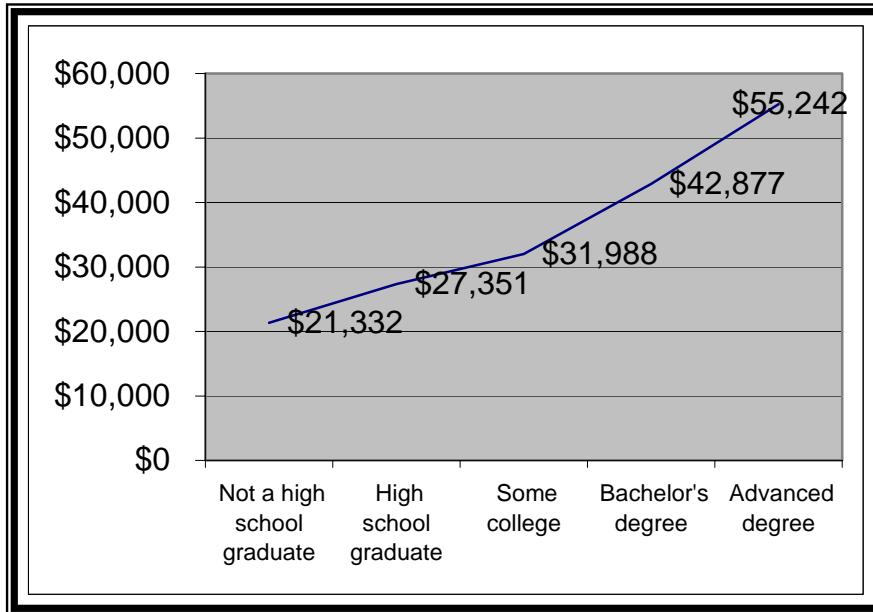
As the nation and the world move into the post-industrial era, the need for more workers in all occupations to have higher levels of both knowledge and skills grows. Postsecondary education<sup>1</sup> is quickly becoming a necessity for all and the level required is continuing to rise. A U.S. Department of Education commissioned paper on workforce and job-opening projections<sup>2</sup> readily demonstrates this. Between 1998 and 2008, 15 percent of the labor force aged 16 to 24 will be high school dropouts, but only 9 percent of new jobs and 12 percent of all jobs will be available to high school dropouts. At the other end of the spectrum, 61 percent of the labor force will have some postsecondary education or higher, but 64 percent of all jobs—including 69 percent of all new jobs—will require at least some postsecondary education. In other words, given the current projections, we are guaranteeing that we will have both unemployment and unfilled jobs, a situation that exists today in many regions and job sectors.

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<sup>1</sup> The terms “postsecondary education” and “higher education” are used synonymously in this paper. Similarly, “college” is used to refer to any postsecondary institution, including two-year colleges, four-year colleges, and postsecondary technical and vocational schools.

<sup>2</sup> Anthony P. Carnevale and Donna M. Desrochers. "The Missing Middle: Aligning Education and the Knowledge Economy." (Figure 9) Paper commissioned by the U.S. Department of Education, Office of Vocation and Adult Education and presented at "Preparing America's Future: The High School Symposium," April 4, 2002, Washington, DC. <http://www.ed.gov/about/offices/list/ovae/pi/hs/commisspap.html?exp=0>

**Figure 1 Average Earnings by Educational Attainment in 2000**



Pressing the point even further are the data gathered by the Census Bureau on incomes in 2000.<sup>3</sup> (See Figure 1.) The median income for all year-round full-time workers that year was \$32,717. High school dropouts earned an average of only \$21,332 per year while those with a bachelor's degree made twice as much, \$42,877. The income of a high school dropout is not sufficient to support a family of four

above the federal poverty line. In order to find a job that will enable an individual and his or her family to live independent of government support, at least some postsecondary education is now essential.

## EDUCATIONAL ATTAINMENT IN APPALACHIA

A survey of the literature on high school graduation rates shows that the United States has made tremendous progress in the past 100 years. In the early 1900s, approximately 8 percent of the population graduated from high school. In the early 2000s, that number is approaching 90 percent. In 1973, about one-third of Americans in skilled blue-collar jobs did not have a high school degree and only 17 percent had any postsecondary education. In 25 years those numbers more than reversed: in 1998, only 11 percent were high school dropouts and 48 percent had at least some postsecondary education or a degree.<sup>4</sup>

Commission analysis of 2000 Census data shows that while Appalachia is catching up with the nation as a whole on some indicators, the region still lags the nation in the critical postsecondary education rates. The percent of the population age 25 or older in the Appalachian region with only a high school diploma or the equivalent is 35.8 compared with 28.6 percent nationwide. (See Table I and Figure 2 on page 3.) While Appalachia having a higher percentage with high school diplomas looks favorable—and we have made strides in closing the high school

<sup>3</sup> Employment, Work Experience, and Earnings by Age and Education: Civilian Noninstitutional Population (Data from the 2000 Census.) <http://www.census.gov/hhes/income/earnings/call1usboth.html>

<sup>4</sup> Scott Loftus, "Every Child a Graduate," Alliance for Excellent Education, September 2002. <http://www.all4ed.org/publications/EveryChildAGraduate/index.html>

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graduation gap—the data shows that not only does a larger share of the Region’s population than the nation’s not have a high school diploma but that many more high school graduates are remaining at that level instead of continuing their education. Indeed, the postsecondary educational attainment gap between the Region and the nation is widening and is now over ten percentage points with only 41.0 percent of the Appalachian population having some postsecondary education or higher compared with 51.8 percent of the nation’s. And given the current college going rates of 63.3 percent<sup>5</sup> nationwide while only 35 to 55 percent of Appalachian high school students go directly into postsecondary education—a significant difference even at the higher end of the spectrum—the gap is growing. This trend is not likely to change without a strong region wide intervention.

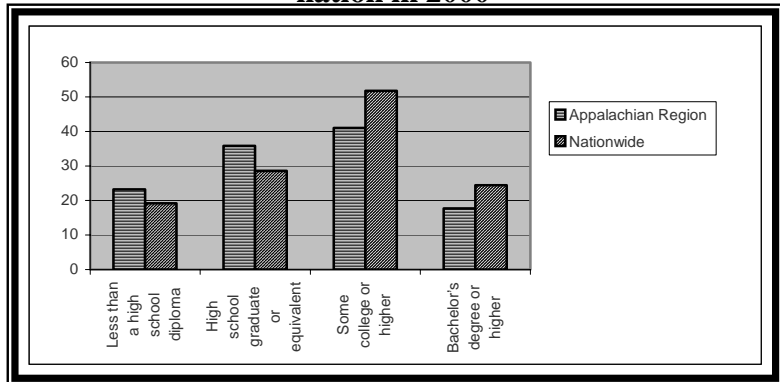
**Table I  
Educational attainment levels in Appalachia and the nation in 2000<sup>6</sup>**

Percent of population with:	Appalachian Region	Nationwide
Less than a high school diploma	23.2	19.2
High school graduate or equivalent (but no post secondary education)	35.8	28.6
Some college or higher (includes 2-year, 4-year, and graduate degrees)	41.0	51.8
Bachelor’s degree or higher	17.7	24.4

Levels of education are closely associated with several indicators of success in life.<sup>7</sup> Higher levels of educational attainment are associated with better health, healthier children, longer life expectancies and higher salaries.

Countries and regions with populations that have higher levels of education are clearly better positioned to develop economically, regardless of how the economy performs overall. Such areas will be able to attract higher levels of investment and jobs that pay higher salaries. They are likely to shrink more slowly in a recession and rise more quickly when the overall economy is strong. Likewise,

**Figure 2 Educational attainment in Appalachia and the nation in 2000**



<sup>5</sup> National Center for Educational Statistics, *Digest of Educational Statistics, 2001*. Table 184. <http://nces.ed.gov/pubs2002/digest2001/tables/dt184.asp>

<sup>6</sup> Data for Table I and Figure 2 were compiled by the Appalachian Regional Commission from US Department of Commerce, Census Bureau, 2000 Census of Population and Housing, Demographic Profile, Table 2

<sup>7</sup> Dan Goldhaber and Dan Player, *Analytical Framework for Assessing the Potential Return on a Federal Investment in the Alliance for Excellent Education’s “Every Child a Graduate”*.

[http://www.all4ed.org/publications/PotentialReturnOnAFederalInvestment\\_Goldhaber.doc](http://www.all4ed.org/publications/PotentialReturnOnAFederalInvestment_Goldhaber.doc) and Duncan Chaplin, *Public and Private Benefits of Education for At-Risk Youth and the Alliance for Excellent Education Framework*. [http://www.all4ed.org/publications/BenefitsOfEducationForAtRiskYouth\\_Chaplin.doc](http://www.all4ed.org/publications/BenefitsOfEducationForAtRiskYouth_Chaplin.doc)

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countries and regions with populations that have lower levels of education are poorly positioned to develop economically. This has been the case in Appalachia. When the national and world economies have been robust, growth in the Region has been considerably slower than growth in the nation as a whole. When the national economy has been in a downturn, the economy of the Region has tended to sink farther and faster.

### HISTORY OF THE AHE NETWORK MODEL: OHIO APPALACHIAN CENTER FOR HIGHER EDUCATION

The Ohio Board of Regents realized in the early 1990s that they had a problem. While 80 percent of the high school seniors surveyed in Appalachian Ohio indicated that they wanted to go to college, only about one-third did.<sup>8</sup> At the time, the statewide college-going rate was close to 54 percent. Spurred by regent and restaurateur Bob Evans, a long-time resident of the region, the board formed a consortium of two- and four-year colleges and universities in the region to investigate the problem. The consortium, funded at \$100,000 by the Ohio Board of Regents for two years, initiated the Access and Success Project. The first phase of the project, completed in 1993, was to conduct research to determine why such a discrepancy existed in the college-going rates between the state as a whole and the Appalachian portion of the state.

#### *Initial Study*

The Appalachian Access and Success Project identified several significant barriers to greater participation in higher education in Appalachian Ohio, which can be summarized as:

- Lack of information and misinformation
- Lack of informed guidance and assistance
- Lack of self-confidence and low self-esteem
- Lack of encouragement
- Lack of academic preparation

While the financial burden of participating in higher education is a primary concern for students and their families, the report noted that most of the high school students greatly overestimated the cost of attending postsecondary education. Furthermore, both parents and students indicated a lack of knowledge about financial opportunities and the process of applying for aid. Surveys of older, “non-traditional” students in college also indicated that high schools had not done an adequate job of informing the students about the need for continuing their education and what it would mean for their careers.

Parents surveyed by the project indicated that they would like their children to attend college, but most of the parents themselves had not. The process of selecting a college, applying to the school and for financial assistance, and making the transition from high school to college is a very

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<sup>8</sup> Tim Crowther, Dewey Lykins, and Karen Spohn, "Report of the Appalachian Access and Success Project to the Ohio Board of Regents," Athens/Portsmouth: Institute for Local Government Administration and Rural Development, Ohio University/Shawnee State University, 1992. <http://www.oache.org/A-Sstudy.html>



complex and difficult one. Many of the parents, not having had the personal experience themselves, may not have been able to provide the level of assistance needed.

When surveyed, only a very small portion of Appalachian Ohio high school seniors felt themselves to be of above average intelligence. One-quarter of the seniors rated themselves as not intelligent enough to be successful in college and another quarter thought that their poor school grades would be a barrier to attending college. This poor self-image and low self-esteem likely comes, at least in part, from not having their potential to succeed recognized.

Given the low level of participation in higher education in the region, the students most likely did not have any role models to follow or other sources of encouragement. At the time of the report, most of the high school seniors from Appalachian Ohio would have been the first in their families to go to college and many would have been among the first in their communities. The students did not have anybody to tell them stories about campus life, to demonstrate the benefits of continuing their education or to show them that they too could handle it.

Finally, many students in the survey reported not having taken a college-preparatory curriculum. Whether this was due to a lack of encouragement—or pushing—from teachers to take higher level courses, a lack of resources in the mostly rural, low-income schools to offer more academically challenging curricula, or a combination of both is not known. Nontraditional college students who participated in the survey were particularly critical of their schools and lack of academic preparation.

#### Common Elements of Effective Programs

“The programs that appeared to be most effective [at increasing the college-going rate] had the following elements in common:

- Providing a key person who monitors and guides the student over a long period of time—a ‘mentor,’ program director, faculty member, or guidance counselor....
- Providing high-quality instruction through access to the most challenging courses offered by the school (‘untracking’), through special coursework that supports and augments the regular curricular offerings (tutoring and specially designed classes), or by revamping the curriculum to better address the learning needs of the students.
- Making long-term investments in students rather than short-term interventions. The longer students were in the program, the more likely they were reported to benefit from it.
- Paying attention to the cultural background of students... [I]t is likely the background and expertise of the staff and directors helped them to make cultural connections with students.
- Providing a peer group that supports students’ academic aspirations as well as giving them social and emotional support.
- Providing financial assistance and incentives. Financial assistance is important for access to academic leveling experiences—college visits and SAT preparation courses—as well as monetary support to make college a realistic possibility for some students.... “

Patricia Gandara and Deborah Bial. (September 2001). *Paving the Way to Postsecondary Education: K-12 Intervention Programs for Underrepresented Youth*. Report of the National Postsecondary Education Cooperative Working Group on Access to Postsecondary Education. National Center for Education Statistics, U.S. Department of Education. Available at <http://nces.ed.gov/pubs2001/2001205.pdf> page 9.

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### *Formation of Ohio Appalachian Center for Higher Education*

These barriers remained “remarkably consistent” across all groups in the survey. Identification of the barriers by the Access and Success Project presented the Ohio Board of Regents with an opportunity: address and eliminate them. Thus the Ohio General Assembly established the Ohio Appalachian Center for Higher Education (OACHE)<sup>9</sup> under the leadership of Wayne White, a retired school superintendent and native of the region. OACHE, run by the same consortium of two- and four-year institutions of higher education that conducted the “Access and Success” study, began operating in 1993. The program offers competitive grants of \$5,000-\$10,000 to high schools in Appalachian Ohio and has recently begun funding middle and elementary schools to get their students thinking about college as well. These grants, supported by training and technical assistance from OACHE, provide the funds for the schools to sponsor college visits, mentoring programs, career exploration, and assistance in identifying and applying to colleges. The OACHE mission is to get the students to continue their education beyond high school, whether at a technical school, two-year college, or four-year college—it does not matter where the students go.

### *Model Program*

Newcomerstown High School in Tuscarawas County was one of the first applicants in 1993. Pat Cadle, a guidance counselor at Newcomerstown developed what is now called the “model program”. Using this program, Newcomerstown High School increased its college-going rate from 28 percent to 72 percent in only three years. The model has been successfully replicated in numerous other schools including Southern Local High School in Meigs County, Ohio, where the college-going rate exceeded 90 percent in 2001. The model is built on involving the total school, not just selected students or teachers, infusing career exploration throughout the curriculum, and holding monthly parent meetings. Parents are provided training on how to help their children select and apply to colleges, and apply for financial aid. Students learn about career options, take interest and ability tests, travel to worksites and college campuses, and meet with current college students and successful adults who have completed a degree or certificate program.

Schools applying for an OACHE grant may submit a proposal based on the model program or an “innovative” program. By submitting a model proposal, schools are committing to implement all of its components and timeline. An innovative proposal may use some or all of the components with adjustments to the timeline as necessary and add components to meet the unique needs of that school.

OACHE is currently funded by the Ohio General Assembly and receives numerous grants and gifts from other governmental agencies, foundations, private corporations and individuals. In May 2001, the Public Employees Roundtable named OACHE top public-service initiative in the State category. In May 2003, OACHE received the prestigious 2003

“The key to the success of the model program has been total school buy-in with all of the teachers and administrators participating and having ownership.” Wayne White, Executive Director. OACHE

<sup>9</sup> (<http://www.oache.org/>)

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“Innovations in American Government” Award from the Harvard University John F. Kennedy School of Government. To date, OACHE has given over \$1 million to 61 schools in Appalachian Ohio. While not all of the schools have seen a tripling of their college-going rates, most have been extraordinarily successful. (See Table II on page 14 for pre- and post-intervention college-going rates of high schools funded by AHE Network centers in 2002-2003.)

### *First Replication: West Virginia Access Center For Higher Education*

In 1998, the Community Colleges of Appalachia, an association of two-year colleges in the Appalachian region, approached ARC about replicating OACHE. The Community Colleges of Appalachia had heard from its Ohio members about the success OACHE was having and knew the importance of raising the levels of educational attainment to the region. With \$144,000, including \$35,000 from ARC, and training from Wayne White of OACHE, the North Central Appalachian Center for Higher Education (NCACHE) opened at Bluefield State College. NCACHE, directed by Sarita Gattuso, a native of McDowell County, West Virginia, was to serve the entire state of West Virginia and the three western counties that make up Appalachian Maryland. Opening its doors on September 1, 1998, NCACHE had the additional mission of proving the replicability of OACHE.

Following the OACHE model, NCACHE issued a Request for Proposals (RFP) in West Virginia and Appalachian Maryland. That first year, NCACHE awarded \$10,000 to each of six schools in West Virginia. (Schools in Maryland chose not to apply for this funding.) The following year, NCACHE sent an RFP to 135 high schools, received 18 proposals, and made eight new awards. With training and mentoring from White and assistance from the Community Colleges of Appalachia and ARC, Gattuso and NCACHE appeared to be off to a good start. ARC thus provided a second year of funding at \$35,000.

“Students are making better quality decisions. They are researching their options, getting more financial aid information, allowing more to attend private schools.” Richard Duffield, Counselor, Valley High School, Pine Grove, West Virginia.

In 2000, “because of the tremendous critical need in West Virginia and the enthusiasm of schools in that state,” NCACHE shifted its focus entirely to West Virginia and was renamed the West Virginia Access Center for Higher Education (WVACHE).<sup>10</sup> With the support of Bluefield State College, Gattuso established WVACHE as a tax-exempt corporation to allow it to solicit donations and apply for a wider variety of funding. Sizable grants from Bob and Jewell Evans (\$150,000) and the Benedum Foundation (\$110,000) have been major sources of funding since.

### *West Virginia Results*

WVACHE soon proved both its worth and the replicability of OACHE. Wirt County High School, one of the first to be funded, increased its college-going rate from 47 percent to 72 percent in just two years. Other high schools were seeing similar success rates. (See Table II on page 14 for all pre- and post-intervention college-going rates of currently funded high schools.)

<sup>10</sup> ([http://www.oache.org/wvache\\_history.htm](http://www.oache.org/wvache_history.htm))

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Since opening its doors, WVACHE has provided over \$290,000 to 17 schools throughout West Virginia.

### APPALACHIAN HIGHER EDUCATION NETWORK

ARC closely watched the early successes of both OACHE and WVACHE. Having demonstrated the replicability of the OACHE model of seeding college access projects, ARC started the Appalachian Higher Education (AHE) Network in 2000. The mission of the AHE Network is to raise the levels of educational attainment in the region.

At the Governors' Quorum Meeting on February 27, 2000, the Appalachian Regional Commission approved the establishment of Appalachian Higher Education Network centers throughout the region focusing on the economically distressed counties. Up to four centers were approved for funding of \$50,000 per year for two years; the centers would be supported with training and mentoring by White and Gattuso. ARC approved \$200,000 for the first year, which was to be a "challenge grant," with additional funding to be sought from other sources both public and private.

AHE Network Centers address emotional and social barriers to college. This strategy is based on research conducted in Ohio by the Appalachian Access and Success Project and supported by studies around the country, including the work of the Harvard University College Opportunity And Career Help (COACH) program;<sup>11</sup> *Expanding College Access, Strengthening Schools: Evaluation of the GE College Bound Program*;<sup>12</sup> *Paving the Way to Postsecondary Education: K-12 Intervention Programs for Underrepresented Youth*;<sup>13</sup> and "Who Should We Help? The Negative Social Consequences of Merit Scholarships."<sup>14</sup>

Increased levels of financial aid alone are not sufficient to raise college-going rates in economically distressed communities. Programs must be developed that help students realize that higher education is a realistic option for them and that it can open the door to far more opportunities. Typical activities funded by AHE Network grants to high schools include but are not limited to the following:

#### **COACH Mission Similar to AHE Network**

"COACH empowers Boston Public School students to make informed decisions about their futures. Harvard students work in the schools to provide information and instruction on how to navigate the college application and financial aid process. We encourage students to explore educational opportunities as they develop and pursue long-term career goals."

From the COACH Web site

<sup>11</sup> See <http://www.ksg.harvard.edu/coach/index.htm> for program details.

<sup>12</sup> Lawrence Neil Bailis, Alan Melchior, Andrew Sokatch and Annabel, Sheinberg. January 2000. Center for Human Resources, Heller Graduate School, Brandeis University, Waltham, Massachusetts. Available at: [http://www.ge.com/community/fund/GEFund\\_CollegeBound.pdf](http://www.ge.com/community/fund/GEFund_CollegeBound.pdf)

<sup>13</sup> Report of the National Postsecondary Education Cooperative Working Group on Access to Postsecondary Education. Patricia Gandara and Deborah Bial. September 2001. National Center for Education Statistics. Available at <http://nces.ed.gov/pubs2001/2001205.pdf>

<sup>14</sup> Civil Rights Project of Harvard University, August 23, 2002, Donald E. Heller and Patricia Marin, editors. Available at: <http://www.civilrightsproject.harvard.edu/research/meritaid/fullreport.php>

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- campus visits to colleges, universities, and technical schools;
- parental involvement pertaining to college selection, costs, and financial aid;
- active participation in college and career fairs;
- career exploration and investigation;
- motivational speeches by college students;
- teacher and staff visits to schools and industry;
- networking with business alliances and partnerships; and
- guest speeches by respected, well-known, successful adults who have overcome barriers to post-secondary education.

The centers provide funding, training, and assistance in implementing programs to high schools in their service areas. They hold annual or more frequent meetings of high school grantees and help individual schools build the capacity to maintain their programs beyond the life of the grant. Preintervention college-going rates at participating high schools are often as low as 30 or 35 percent with some considerably lower. (See Table II on page 14.) Upon initial implementation of the Access Projects, high schools typically see 50 percent or more of their students going on to college. After two to three years of implementation, the college-going rate is consistently at a par with the national average of 63.3 percent and frequently 70 percent or higher.

### *Forming the Network*

In April 2000, ARC issued an RFP for new centers. The competition was open to all “institutions or agencies with demonstrated ability to operate and manage grant funds,”<sup>15</sup> except for high schools, local education agencies, and for profit businesses.<sup>16</sup> To help assure local ownership, each \$50,000 grant was to be matched at least one- or two-for-one. The centers were to be faithful replications of OACHE and WVACHE and would work closely with high schools, community groups, other agencies, and the institutions of higher education that most frequently receive students from their self-defined regions. The RFP required that contracts be awarded to those entities that had the most viable plans and that would serve “a predominance of high schools in [economically] distressed counties (as designated by the Commission).”<sup>17</sup>

ARC received five proposals. Gattuso, White, Nancy Brooks Smith, Appalachian Regional Commission Liaison Office, US Department of Education, and Jeffrey H. Schwartz, ARC Education Program, reviewed the proposals and recommended to ARC Federal and State Co-Chairs funding two of them. Centers were thus established in Kentucky and Alabama.

Having been authorized by the Governors and Federal Co-Chair to fund up to four centers, ARC released a second RFP in January 2001, and intensified its search for a funding partner. While two very strong proposals were received, one from Mississippi and one from Tennessee, without additional funding only one of them could be funded. In September 2001 the site in Mississippi

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<sup>15</sup> Request for Proposals by The Appalachian Regional Commission for Appalachian Higher Education Network Centers, April 28, 2000.

<sup>16</sup> Restrictions were due to a statutory prohibition against making grants to for-profit enterprises and to avoid any conflict of interest between ARC’s grantee and subgrantees.

<sup>17</sup> Given the diversity of the region and its school systems, ARC wanted to assure that all distressed counties would have equal opportunity, regardless of student population or the number of schools.

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was funded. The Mississippi site was funded first as it proposed to serve a greater number of economically distressed counties. ARC sought and, in February 2002, received a grant of \$75,000 from the W. K. Kellogg foundation to support the two centers in Mississippi and Tennessee. Thus, the Tennessee center was funded and became operational in June of 2002.

As a part of its Distressed Counties program, ARC again appropriated funding for the AHE Network in fiscal year 2003. Thus a third solicitation of centers was issued in May 2003. Both proposals, one from North Carolina and one from Virginia, were strong. Both were funded and the centers began operating in September of 2003.

Currently, AHE centers operate in Alabama, Kentucky, Mississippi, North Carolina, Ohio, Tennessee, Virginia and West Virginia. Figure 3 on page 11 shows the service areas of the eight centers.

### AHE NETWORK CENTERS

#### *Kentucky*

The Institute for Regional Analysis and Public Policy at Morehead State University in Morehead, Kentucky, established the Kentucky Appalachian Higher Education (Kentucky AHED) Center in August 2000. The Kentucky AHED Center is a collaborative effort with Hazard Community and Technical Colleges, Southeast Community College and the Kentucky Department of Education. On the Board of Directors are Rowan Technical College, Cumberland Valley Technical College and the University of Kentucky. With Morehead State College almost equaling the initial ARC grant of \$50,000 and Hazard and Southeast contributing about \$20,000 each, the center was able to fund and provide technical assistance to four high schools during its first full year of operation. The second and third years of operation saw the same levels of funding and was able to provide grants to additional schools each year. Over those three years, the college-going rates of the schools receiving grants from the center have gone up an average of almost 20 percentage points (see Table II on page 14) with most schools at or above the national average college-going rate in 2003.

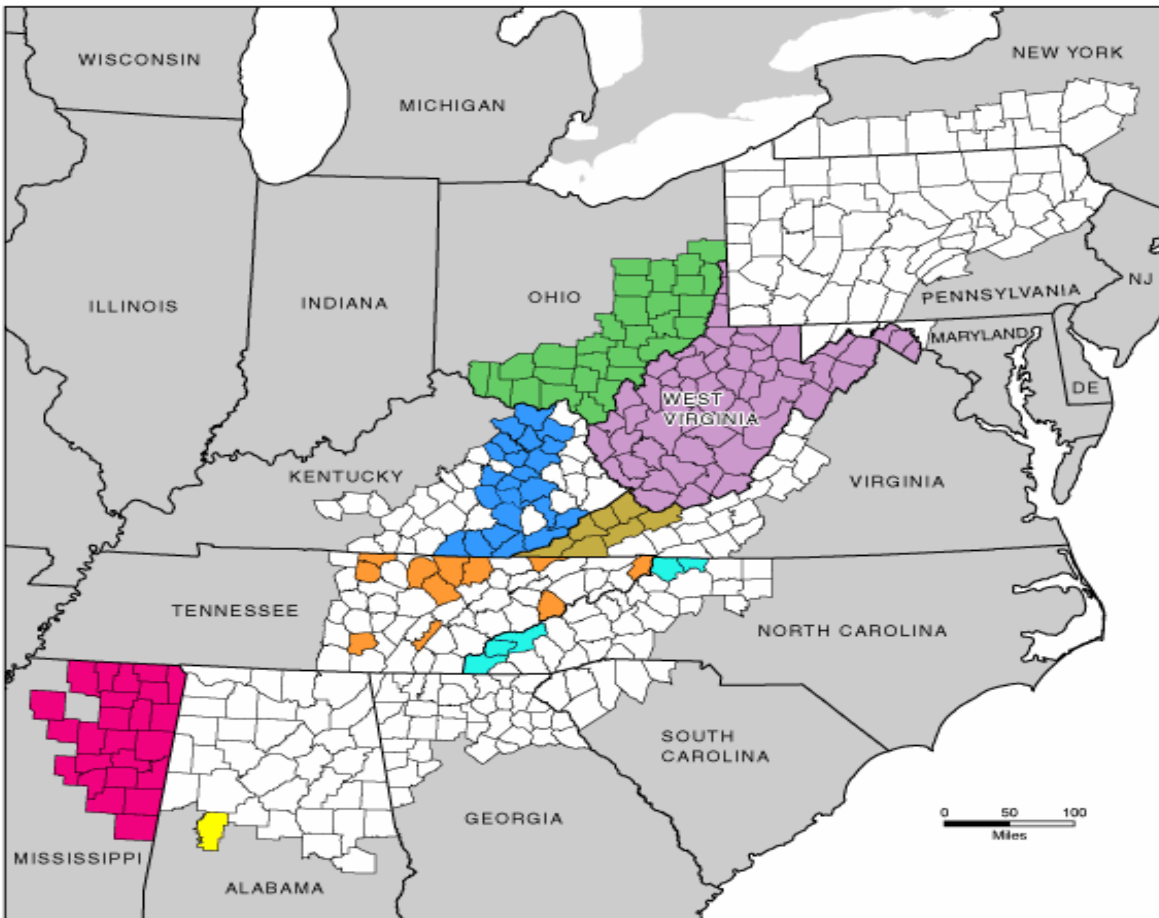
Kentucky AHED works closely with the statewide and local GEAR-UP<sup>18</sup> and other college access programs, both supporting and complementing their efforts. The center serves 38 high schools<sup>19</sup> in 23 Appalachian Kentucky counties. Morehead State University currently supports the center while it searches for additional sources of funding to continue making grants to high schools and to expand operations to all of Appalachian Kentucky.

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<sup>18</sup> Gaining Early Awareness and Readiness for Undergraduate Programs: A college access program funded by the U.S. Department of Education that focuses on an entire cohort of students and follows them from grades 7 through 12. While GEAR-UP has an emphasis on providing a more challenging middle and high school curriculum, the AHE Network emphasizes overcoming the social, cultural, and emotional barriers to attending college.

<sup>19</sup> While only four high schools receive grants and intensive support, information on applying for college and financial aid and college and career fairs are offered to their self-designated 23-county region.

Figure 3 Appalachian Higher Education Network Service Areas



CENTERS FOR HIGHER EDUCATION IN THE APPALACHIAN REGION

- Ohio Appalachian Center for Higher Education (OACHE) (Original Program)
- West Virginia Access Center for Higher Education (WVACHE)
- Kentucky Appalachian Higher Education Center (KYAHED)
- Hale County Appalachian Center for Higher Education
- Mississippi Appalachian Higher Education Center
- Tennessee Appalachian Center for Higher Education (ARC distressed counties as designated in Fiscal Year 2002)
- North Carolina Appalachian Higher Education Access Network
- Virginia Appalachian Center for Higher Education

Map produced by the Appalachian Regional Commission, April 2004.

*Alabama*

Hale County Appalachian Center for Higher Education (HCACHE) also opened in September of 2000. Run by the Hale Empowerment and Revitalization Organization (HERO) Family Resource Center in partnership with Shelton State Community College, HCACHE serves only a single county with five high schools. While the grants to the schools are not competitive in that all five schools can—and did—receive awards, the schools must submit acceptable proposals indicating how they intend to manage and use the funds. HERO equally matched Commission funding of \$50,000, enabling them to fund and support all five high schools in the county. College-going

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rates in the five high schools have increased between 22 and 50 percentage points. All five now have higher college-going rates than the national average, with Greensboro West High School achieving a 100 percent rate in 2003.

HCACHE is now finishing its fourth year, with a grant from the state of Alabama and one-third of its support coming from the Hale County Board of Education. The Hale County Board has been picking up an increasing share of the costs each year and HERO is reaching out to corporations and foundations to help provide long-term support.

### *Mississippi*

The North Mississippi Education Consortium based in Tupelo, Mississippi, opened the North Mississippi Appalachian Center for Higher Education (NMACHE). The consortium is a collaborative of the University of Mississippi School of Education, Northeast Mississippi Community College, Northwest Mississippi Community College, Itawamba Community College and 41 public K-12 school districts located in North Mississippi. NMACHE serves the entire Appalachian Mississippi region with a particular emphasis on serving high schools located in economically distressed counties. During its two years of operation, NMACHE was able to fund and provide assistance to six high schools. The gains in college-going rates in those schools ranged from 2 to 55 percentage points with an average gain of close to 29 percentage points. Three schools now have college-going rates over 90 percent and in one school, Jumpertown High School, 100% of its senior class graduated and then continued their education.

In 2004, NMACHE plans to move to Itawamba Community College. Itawamba Community College will house NMACHE with similar college access programs that will be able to support and complement one another. NMACHE will continue to work throughout northeastern Mississippi in collaboration with other postsecondary institutions and local school districts. The goal will remain getting more students to continue their education beyond high school without a focus on any one particular school.

### *Tennessee*

The University of Tennessee operates the Tennessee Appalachian Center for Higher Education (TnACHE) in partnership with Roane State Community College, Walters State Community College, the Appalachian Rural Systemic Initiative (ARSI), the Southeastern High School Equivalency Program, America's Promise of Campbell County, the Tennessee Career Information Delivery System and several local school districts. The TnACHE service area includes all economically distressed counties of Appalachian Tennessee (as designated by ARC in FY 2002) with an initial emphasis in Campbell, Cocke, Fentress and Scott Counties. These four counties already had GEAR-UP and other programs in place with which the TnACHE projects can collaborate, thus facilitating start up of the center. TnACHE funded four high schools in its first year. These schools showed an average gain of 16 percentage points in their college going rates. TnACHE is currently funding and providing intensive assistance to four high schools, three continuing from last year and one new.



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### *North Carolina*

Appalachian State University in Boone, North Carolina, built on existing partnerships with Western Carolina University, the University of North Carolina Office of the President, and Southwestern Community College to establish the Appalachian Higher Education Access Network of North Carolina. Other community colleges, the Western North Carolina Community Development Association, and the association of North Carolina Independent Colleges and Universities provide additional operating support. The center operates out of Appalachian State University and is coordinated with federally funded TRIO<sup>20</sup> and GEAR-UP programs and the state-funded New Century Scholars program. The North Carolina center currently funds and works programs in with two high schools.

### *Virginia*

Southwest Virginia Community College and Mountain Empire Community College jointly operate the Virginia Appalachian Center for Higher Education (VACHE). VACHE is based at the Educational Opportunity Center at Southwest Virginia Community College. In addition to coordinating with the outreach efforts of the Educational Opportunity Center, VACHE also works with the federally funded Upward Bound, Talent Search (both part of the TRIO program) and GEAR-UP programs. High school partner programs form organizations to connect the schools with area businesses and corporations to improve school-business communications. This school-business partnership sponsors job fairs for students, provides career information, and assists the students in identifying their postsecondary educational needs and options. VACHE has funded and begun to work with six high schools in their service area.

## AHE NETWORK IMPACT AND STATUS

The replication sites are now achieving success rates similar to those of the original site in Ohio. High schools funded by the first replication site in West Virginia have shown consistent, sustained gains in their college-going rates and many are now approaching or have surpassed the national average. In Hale County, Alabama, one of the poorest counties in the nation, all five participating high schools have reported college-going rates well above the national average of 63.3 percent, with two schools well into the 80s one school in the 90s and one school reporting 100 percent of all high school graduates going on to some sort of post-secondary training. Participating schools in Kentucky have shown increases of 20 to 30 percentage points, with one school reporting 92 percent of all graduates continuing their education. Of the five participating high schools in Appalachian Mississippi, all are now near or above the national average, with 56 to 100 percent of graduates continuing their education. The Tennessee center is working with six high schools and has seen college-going rates increase almost 16 percentage points on average in their first full year of operation. The centers in North Carolina and Virginia are just starting up.

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<sup>20</sup> TRIO refers to a set of federally funded college access programs administered by the U.S. Department of Education. TRIO programs emphasize identifying specific students or groups of students for participation, while the AHE Network centers work with entire cohorts and, in many cases, entire schools.

**Development and Progress of the Appalachian Higher Education Network**

**Table II**  
**Percent of high school graduates entering two or four year institutions from high schools participating with the Appalachian Higher Education Network Centers in 2002**

Center Year began operation	OH 1993		WV 1998		KY 2000		AL 2000		MS 2001		TN 2002		NC 2003		VA 2003	
	Pre <sup>21</sup>	2003 <sup>22</sup>	Pre	2003	Pre	2003	Pre	2003	Pre	2003	Pre	2003				
Data provided for individual schools participating during the 2003-2004 academic year.	58	74	46	80	47	63	48	84	66	94	29	55	No data available at this time. Initial schools to be selected in the spring of 2004.		No data available at this time. Initial schools to be selected in the spring of 2004.	
	47	55	31	55	62	62	57	87	89	91	42	37				
	43	48	41	60	57	71	52	100	37	92	24	59				
	46	58	56	58	43	97	44	94	39	56	43	50				
	32	44	43	61	64	92	50	72	56	100	27	N/A				
	64	62	36	66	50	66	/	/	59	85	/	/				
	30	46	54	47	40	64	/	/	/	/	/	/				
	53	68	49	67	73	89	/	/	/	/	/	/				
	47	56	47	64	48	49	/	/	/	/	/	/				
	45	71	57	N/A <sup>23</sup>	26	53	/	/	/	/	/	/				
	39	56	49	N/A	/	/	/	/	/	/	/	/				
	44	74	33	N/A	/	/	/	/	/	/	/	/				
	39	39	68	N/A	/	/	/	/	/	/	/	/				
	68	81	/	/	/	/	/	/	/	/	/	/				
	48	68	/	/	/	/	/	/	/	/	/	/				
Average percentage-point gain		<b>13.1</b>		<b>17.2</b>		<b>19.6</b>		<b>37.2</b>		<b>28.7</b>		<b>15.8</b>				

<sup>21</sup> Pre-intervention college-going rates reported as a percentage of the high school senior class. Dates of initial intervention may vary.

<sup>22</sup> College-going rates reported for high school seniors in the spring of 2003; some high schools may have had funding for multiple years.

<sup>23</sup> School is in its initial year of funding, individual school data not yet available.

**Development and Progress of the Appalachian Higher Education Network**

*Appalachian Regional Commission Role*

ARC provides training and support to the center directors. Sarita Gattuso, director of the West Virginia Center, coordinates these services, which she provides along with Wayne White, director of the original center in Ohio. Together they mentor new directors and provide consultative services and training to the new sites. New center directors attend the Ohio and/or West Virginia grantee conferences to learn more about the process, and White and Gattuso travel to new sites to observe and assist with their implementation. ARC also provides training and assistance in obtaining other sources of funding. It is expected that after two years of support from ARC, each center will have demonstrated its effectiveness at increasing the college-going rates of high school students and will be able to attract adequate funding to maintain services.

From FY 1999<sup>24</sup> through FY 2003, ARC provided \$982,405 (includes a grant from the W.K. Kellogg Foundation of \$75,000) to help grow and expand the AHE Network and has budgeted another \$200,000 for FY 2004. (See Table III below.) Nineteen percent of the funding is used for support activities, including training and mentoring for the new centers. The remaining 81 percent is provided directly to the centers to support start-up and initial operating costs. As of September 2003, ARC investment had leveraged over \$1,108,540 in state and local funds.

**Table III  
Appalachian Regional Commission Financial Support of AHE Network Centers  
by Fiscal Year in Dollars**

<b>Fiscal year of Funding</b>	<b>Training &amp; Support</b>	<b>WV</b>	<b>AL</b>	<b>KY</b>	<b>MS</b>	<b>TN</b>	<b>NC</b>	<b>VA</b>	<b>Total</b>
1999		31,500							35,000
2000	57,337	38,500	50,000	50,000					192,337
2001	50,450		50,000	49,455	50,000				199,905
2002	28,000		50,000		31,163	61,000			170,163 <sup>25</sup>
2003	49,000	75,000	50,000		30,000	61,000	60,000	60,000	385,000
<b>Total</b>	<b>184,787</b>	<b>145,000</b>	<b>200,000</b>	<b>99,455</b>	<b>111,163</b>	<b>122,000</b>	<b>60,000</b>	<b>60,000</b>	<b>982,405</b>

<sup>24</sup> ARC follows the federal October-September fiscal year. For example, FY 1999 began October 1, 1998, and ended September 30, 1999.

<sup>25</sup> Amounts include partial funding for the training and support and for the centers in Mississippi and Tennessee from a \$75,000 grant from the W.K. Kellogg Foundation in FY 2002.

## FUTURE DIRECTIONS

There is great need throughout the entire Appalachian Region for additional AHE Network centers. The eight existing centers are doing an excellent job of raising the college-going rates. These centers, though, only have the capacity to serve up to one-fourth, between 60 and 75, of the more than 300 high schools in the 91 Commission-designated economically distressed counties in any given year. Given that the centers work with each school for at least two to three consecutive years, it would be at least 10 years before they could reach all schools for an initial round of assistance. And that does not include the number of high schools in “economically distressed areas” of non-distressed counties or any other high school in need of assistance. ARC’s goal is to eventually have centers in all states serving all counties, beginning with those counties and areas identified as economically distressed.

ARC is working with state governments, foundations and corporations in the region to add more centers to the network. As funding permits, ARC will periodically issue RFPs to establish new centers. The centers will implement the proven model from OACHE and center directors will be trained and mentored by the current Network support team, the founders and current directors of OACHE and WVACHE. The Network will continue to be supported by the Education Program manager at ARC headquarters who manages the RFP process and the grants to the centers, assists in providing technical assistance, and actively seeks new partners for both ARC and the individual centers.

### *Research Needed*

Studies are needed to document the long-term impact of the AHE Network centers on the individual students and on the region. While the increased number of students attending some form of postsecondary education has been carefully documented—and we believe that is a good thing for both the individuals involved and the region—we do not know what happens to the students after they enter postsecondary education institutions. Research on the impact of these and similar programs on individual students is scant; studies with a focus on Appalachian students are virtually non-existent. What little research there is, along with anecdotal evidence, indicates that Appalachian students tend to drop out of two- and four-year programs at somewhat higher rates than the national average. The U.S. Bureau of Labor Statistics show that employment and salary benefits increase as years of college attendance increases. Thus, while students are likely to be considerably better off financially with even just “some college”, if they are indeed dropping out at a higher rate, this is an area that should be addressed. When it comes to obtaining employment and higher salaries, the statistics on years of college attendance show that this is truly an instance of where “if a little is good, more is better.”

To assure that the centers are working as well as they can and to assist with future replications, an independent evaluation and study of the centers needs to be done. This study needs to document the implementation of the programs as well as the changes in the college-going rates at participating high schools. This evaluation and study will prove useful in building and strengthening the program as well as gathering support for the network and individual centers.

## **Development and Progress of the Appalachian Higher Education Network**

Another area for concern is “brain drain”. Census data shows that many parts of the region are losing population, particularly young people and those in their prime earning years. Formal research is not available to see if the AHE Network and similar programs are impacting migration patterns. Anecdotal data from high schools in Ohio that have been funded for a number of years, however, appears to show that those who attend college do not appear to leave the Region at higher rates than their peers who do not attend college. In other words, whether they go to college or not, it appears that some young people will leave the region and others will stay. Hard evidence proving this, however, is needed.

These are serious issues that need to be studied and, if necessary, addressed. The amount of time, effort and money put into the schools, the centers and the network is not trivial. It is imperative that we use all of our resources in the most effective and efficient means possible. The research to be undertaken will help ensure this by guiding the growth and work of the AHE Network and facilitating development of networks and centers in other parts of the country and the world.