University of Virginia & Southwest Virginia Economic Development Partnership

A Collaborative Model for Advancing Education, Health and Economic Prosperity in Southwest Virginia



Action Plan Progress Report FY11



Table of Contents

Background	3
Overview	4
Quick Facts	5
Highlights	6
Key Initiatives:	
New Models of Health Care	9
Entrepreneurship	11
Early Language & Literacy	16
Place-Based Economic	
Development	17
World-Class Executive Education	19
List of Programs:	
K-12 Education	21
Business Support	25
Access to Health Care	29

Economic Development Action Plan - Annual Report FY11

BACKGROUND

As part of the restructuring management agreement with the Commonwealth, the University of Virginia (UVa) is required to establish a formal partnership with an economically distressed region in Virginia, and to "work meaningfully and visibly" to stimulate economic development in that region. UVa has selected the Coalfield region and is partnering with the University of Virginia's College at Wise and the Virginia Coalfield Economic Development Authority (VCEDA) in this effort.

The Coalfield region is defined as the area encompassed by VCEDA (Planning Districts 1 and 2). It includes the city of Norton and the counties of Lee, Scott, Wise, Dickenson, Russell, Tazewell, and Buchanan.

REPORTING REQUIREMENTS

The University submitted an economic development action plan to the Governor and General Assembly on December 20, 2006. In accordance with Article 2, Section 2.2.1, Part 3, UVa is required to submit a report to the Governor and General Assembly by September 1 of each year, outlining its progress in implementing the action plan during the prior fiscal year. This report covers activities for July 1, 2010 – June 30, 2011 (FY11). It is the fifth annual progress report submitted to date.

ACTION PLAN SUMMARY

Leaders in Southwest Virginia are focused on transforming their economy from one centered mainly on tobacco, coal, and timber harvesting to one that includes information technology, education, health care, and energy. Citizens of this "e-region" (energy, education, electronic information technology) have made notable progress. To attract companies, local leaders recognize that they must have an infrastructure that includes an educated workforce, business acumen, and widespread access to medical care.

This context was used in developing UVa's action plan. The three main categories for collaboration between UVa and Southwest Virginia include Access to Health Care, K-12 Education Support, and Business Support. A website dedicated to this collaboration can be found at: <u>http://www.virginia.edu/vprgs/industry/Southwestva.html</u>

OVERVIEW

The UVa & Southwest Virginia Economic Development Partnership is a collaborative, multidisciplinary model for stimulating economic development in the Coalfield region of rural Southwest Virginia by simultaneously advancing the inextricably linked fields of education, health, and prosperity.

Whether it is bringing world-class executive education to Coalfield business leaders, piloting an innovative early language literacy intervention, or providing new pathways for engineering education, this multi-faceted partnership produces results. The partnership is unique and powerful because it widely encompasses disparate stakeholders while remaining coordinated and focused. Issues are viewed from many perspectives by convening public, private, and government agencies that are not often at the same table. The partnership provides the infrastructure to transform those conversations into initiatives today while maintaining a longterm commitment to the overall mission.

This mutually beneficial alliance applies academic rigor to UVa's outreach projects, expands student experiences both in Southwest Virginia and in Charlottesville, encourages the exchange of ideas with people inside and outside academia, and creates new knowledge that will inform future community- and university-based shared research and partner activities.

Key Initiatives New Models of Health Care Entrepreneurship Early Language & Literacy Place-Based Economic Development World-Class Executive Education

Our vision is to ensure regional collaboration, generate new ideas, and establish a process to engage the social, economic and scientific issues that exist at the interface of health, education, prosperity and Appalachian culture. Our collective mission is to position the region in the global economy while honoring the traditions and culture of the area, leveraging local assets, engagement by all partners, and true collaboration.

QUICK FACTS 2011

- We helped to secure \$3.9 million in new funding to bring programs and services to the residents of Southwest Virginia, a 55% increase over funding secured in FY10. Over the past three years the total is \$9.4 million. This includes funding for a nurse-managed health clinic, an extensive professional development program for history teachers, strategic planning sessions for place-based economic development, and an in-region engineering degree program for both traditional students and working adults.
- UVa clinicians provided more than 1,600 direct, in-person patient encounters in the region and 5,000 patient encounters via the Office of Telemedicine with physicians representing 12 different medical specialties and subspecialties. In addition, we saw over 1,000 patients at the July 2010 Remote Area Medical Clinic in Wise.
- Almost 1,000 teachers participated in UVa-designed and -delivered professional development courses in the region. Sample survey results indicate that 85% of the registered students in Southwest Virginia view UVa's School of Continuing and Professional Studies as their "preferred education provider," and 82% believe the course changed the way they conduct their daily work. Approximately 9,300 pre-school and elementary school students were assessed and monitored using UVa literacy screenings and database resources.
- Twenty-two companies in the region sent 90 employees from six states to the Southwest Virginia Technology Development Center in Russell County for the Darden/UVa-Wise Partnership in Leadership Development, delivered by award-winning faculty from the UVa Darden School of Business.
- The Center for the Liberal Arts at UVa helped secure an additional \$1 million from the Department of Education for the third grant in a series of *Teaching American History* professional development programs now totaling \$3.6 million. Over 300 history teachers from the Southwest Virginia region participated in workshops, conferences, field experiences, credit courses, and research in FY11, including 125 teachers from the Coalfield region.
- AccessUVa, the University of Virginia's financial aid program, is committed to meeting 100% of demonstrated need for every admitted undergraduate student. During FY11 52% of students from the Coalfield region received financial support from AccessUVa.
- Over the last three years the Healthy Appalachia Institute Fellowship program has mentored 11 student fellows who have a strong interest in solving health care challenges in the region. More than 50% of the students are now in medical school, graduate nursing education, or practicing health care.

Ніднііднтя 2010-2011

NATIONAL RECOGNITIONS

- The UVa & Southwest Virginia Economic Development Partnership was identified by the Association of Public and Land-Grant Universities as an "exemplary project," and will be recognized during the annual National Outreach Scholarship Conference in October 2011.
- Ann Duesing, a UVa Health System Outreach Librarian based at Wise, is the 2011
 recipient of the National Library of Medicine Michael E. DeBakey Library Services
 Outreach Award. This award was established to recognize outstanding service and
 contributions to rural and underserved communities by a practicing health sciences
 librarian. Most notably, Ms. Duesing was instrumental in developing "TechWorld," a
 program that instructs teenagers in methods for teaching computing skills to caregivers
 of Alzheimer's patients.

HEALTH

- The Healthy Appalachia Institute, in partnership with the UVa-Wise Department of Nursing and the UVa Office of Telemedicine, received a \$20,000 grant from the Verizon Foundation to develop one of the first telehealth nursing curricula in the nation. The funding will enable nursing students to develop skills in tele-nursing, an important emerging resource for specialty care for patients in rural communities. It will also fund a regional forum on telemedicine for health care providers.
- A National Cancer Institute study identified five geographical clusters in the United States with elevated levels of cervical cancer morbidity and mortality; one cluster is in far Southwest Virginia. The UVa Health System, the Healthy Appalachia Institute, and the Virginia Department of Health have created a partnership championing cervical cancer screenings in the region. A newly created video-colposcopy program has already provided over 100 women with a telemedicine connection to specialty care. It has also resulted in colposcopy training for five nurse practitioners in the area, increasing the number of local health care providers qualified to perform this procedure by a factor of five.
- Substance abuse in Central Appalachia has resulted in a mounting death rate from the unintentional, fatal overdose of prescription drugs, an escalating number of children in foster care, and an increasing level of drug-related crime. UVa worked in partnership with the region under the leadership of One Care of Southwest Virginia, Inc., to construct a coordinated approach to end substance abuse and misuse. This effort focuses primarily on prevention and a recovery- oriented system of care.

ENTREPRENEURSHIP

- A regional blueprint for creating a vibrant entrepreneurial community in Southwest Virginia was initiated using input from 50 people representing 37 organizations during a series of workshops. The goal is to identify strategies that will accelerate growth for both new ventures and established companies and to lay the groundwork for future investments by external agencies.
- The Tayloe Murphy Center (TMC) at the UVa Darden School of Business recognized the success of local architecture and engineering firm Thompson and Litton by naming them as one of 12 finalists out of 106 applicants statewide in the first annual Resilience Award competition. In addition to providing the firm with prominent statewide exposure, TMC developed a case study on Thompson and Litton that will be available globally through the Darden case collection and used in Virginia in a series of locally-delivered entrepreneurship classes so that other new business leaders can learn from their experience.
- The Thompson and Litton case study was taught for the first time in Wise in December 2010 to an audience of 60 local business leaders, economic development professionals, and community members. The TMC also hosted a public event in Wise for 40 young professionals to discuss the economic future of their community and met with the Downtown Wise Revitalization committee to discuss opportunities to help foster entrepreneurship.

EARLY LANGUAGE AND LITERACY

• In FY11 UVa and UVa-Wise collaborated with Kids Central, Incorporated to provide home visiting services to families in the Wise County area. In total, more than 30 families have been served, receiving home-based intervention and print materials to increase the quantity and quality of language interaction in the home and improve the literacy environment.

PLACE-BASED ECONOMIC DEVELOPMENT

- The Institute for Environmental Negotiation, based in UVa's School of Architecture, convened a series of meetings with 75 stakeholders from over 30 organizations to explore new ideas for commerce that leverage the region's unique assets. Four action groups have emerged that will look at ways to create new ventures connected to downtown revitalization and outdoor recreation on the Clinch River.
- A formal connection between Southwest Virginia and the Commonwealth Center for Advanced Manufacturing (CCAM) was established with support from the Tobacco Indemnification and Revitalization Commission. CCAM received \$1.5 million to develop an economic development and workforce training program that will help communities in Southwest and Southern Virginia capture capital investment related to the Rolls-Royce Crosspointe operation in Prince George County.

WORLD CLASS EXECUTIVE EDUCATION

 UVa's Darden School of Business, through its globally recognized Executive Education, delivered four advanced business classes to 90 managers at the Southwest Virginia Technology Development Center in Lebanon. In April 2011, participants who completed all four of the delivered courses received a certificate from Darden in Leadership Management.

JEFFERSON PUBLIC CITIZENS ACADEMIC-BASED PUBLIC SERVICE

- UVa's Jefferson Public Citizens (JPC), a comprehensive academic public service program that integrates students' service and research, funded both a student project and a faculty course in Southwest Virginia.
 - In the student study touchscreen tablets are used for health information assessments that evaluate diabetes knowledge. The participant responses determine the content for tutorials administered following the quiz. Participants can access video-on-demand programs as an incentive for completing the tutorial. Results from quizzes can be used to focus health education interventions.
 - During spring 2011 JPC funded a course to examine the relationship between Appalachian culture, economic development, education, and health in far Southwest Virginia and to explore the process for the design and implementation for collaborative, community-based research.



Clinch River Place-Based Economic Development Meeting Jeff Cochran (The Lane Group), Josh Larsen (Upper Tennessee River Roundtable) and William Ickes (Southwest Virginia Community College)

KEY INITIATIVES

Working Together to Pioneer a New Model of Health Care

To really move health care forward in Southwest Virginia, you need a lever that already has some purchase in the region's rocky soil. That's clearly what a team from the University of Virginia's Department of Public Health Sciences, the Health Wagon, the Healthy Appalachia Institute, and UVa-Wise demonstrated in securing a \$1.5 million grant from the federal Health Resources and Services Administration. The joint proposal was one of just ten selected from approximately 400 applicants nationwide vying for funds to strengthen nurse-managed health clinics.



Co-Directors, Healthy Appalachia Institute David Cattell-Gordon (UVa) and Marcia Quesenberry (UVa-Wise)

Certainly, the three groups have a long record of supporting health in the region. For more than 30 years, the Health Wagon's mobile clinic has logged hundreds of thousands of miles delivering free health care to people in Buchanan, Dickenson, Russell, and Wise counties and the City of Norton. Through its mobile clinic and its office in Clintwood, nurses at the Health Wagon treat more than 3,000 people each year.

Over the last decade, the University of Virginia and the Health Wagon have become close collaborators. They first worked together at the Remote Area Medical expedition, the annual three-day event that

attracts thousands of area residents each summer, and later launched a series of initiatives including endocrine and renal clinics--designed to translate the initial contact at RAM into a sustained program of care for residents. The University's mobile digital mammography van now makes regular trips to Southwest Virginia, and the Health Wagon site is one of the busiest in UVa's Telemedicine Network. "UVa has been a wonderful partner," says Teresa Gardner, the clinic's executive director, "Its commitment to reach the underserved runs deep."

At the same time, the Health Wagon has welcomed students from UVa's School of Nursing and the Department of Nursing at UVa-Wise, helping these institutions meet their educational objectives by providing their students the opportunity to gain clinical experience in a rural setting.

The new grant builds on this well-established partnership, funding initiatives that will help the Health Wagon reach more people with more effective care. "We knew this grant was a great fit

for us," says Gardner. "The support we got from UVa in writing the grant proposal was critical to its success."

The grant has already made a difference. It has enabled the Health Wagon to install an electronic medical record system, a critical component in its transition from an illness model of care, which treats patients when they are sick, to a wellness model that provides a medical home for patients and engages them to lead healthier lives through health promotion, screening, and self-management education. The grant has also enabled the Health Wagon to hire a social worker and nurse educator and will permit it to visit additional sites, all steps that will ultimately enable it to increase its capacity by 25%. Elizabeth McGarvey, associate professor of public health services in UVa's School of Medicine, will help provide ongoing evaluations that will keep the Health Wagon on target as it meets these goals.

For UVa, the grant will also have an impact on nursing education, both at UVa and at UVa-Wise. "The exposure to a nurse-managed clinic in a rural setting is a real eye-opener for our students," says Audrey Snyder, an assistant professor in UVa's School of Nursing and nurse coordinator for Health System community outreach. "Cultural awareness and identification of barriers to health are integral to a successful nurse practitioner practice."

A New Model for Developing Local Health Care Providers

Healthy Appalachia seeks to encourage more young people to consider careers in health care and return to the region to serve their community. Rachel Belcher is a good example of how UVa and UVa-Wise programs are supporting her aspirations to do just that. Rachel, a native of rural Wise County, traveled to Africa under the auspices of UVa's Center for Global Health, conducted a research study on breast cancer care in Southwest Virginia, and completed a pre-med program at UVa-Wise. She will enter medical school at UVa in 2011.



Rachel Belcher (UVa-Wise '11) Limpopo, South Africa

The Healthy Appalachia Institute Fellowship, a

program now in its third year and available to students both at the College and the University, provided Rachel with a transformative experience during eight weeks in Limpopo, a province in northern South Africa, where the UVa Center for Global Health has a joint project with the University of Venda. She was part of a team documenting every aspect of the water usage in two rural villages. "Learning to operate in a different culture was a huge experience for me," she says. "At the same time, I realized that people in Southwest Virginia faced similar challenges in accessing services that could improve their health."

On her return to UVa-Wise from Africa, Belcher decided to act on this insight and explore local health access issues. With her second HAI student fellowship, she analyzed the availability of

breast cancer support programs in Southwest Virginia. She concluded that there were programs available, but that not every woman had access to these programs. She presented her findings at a number of community forums and at the annual Healthy Appalachia Institute Research Symposium.

Belcher is leaving Southwest Virginia to go to medical school at UVa, but she ultimately plans to return home to practice. "I'm like most other people who grow up in Pound," she says. "I love it and want to come back."

Over the past three years the Healthy Appalachia Fellowship has selected and mentored eleven student fellows. These students, from UVa-Wise and UVa, engaged in a variety of research projects in the region and presented their findings at a research symposium in Wise. Topics included: water quality, breast cancer outcomes, innovative diabetes education, and the efficacy of video-colposcopy in reducing cervical disease.

From this cohort of fellows, four are now in medical school, one is in graduate nursing education, and one has returned to the region to work as an advance practice nurse.

Creating an Entrepreneurship Blueprint in Southwest Virginia

Recruiting companies to an area is one strategy for creating jobs, but it is not the only one. The Small Business Administration estimates that small businesses have generated 64% of net new jobs over the past 15 years and pay 44% of total U.S. private payroll.¹ Area leaders have long recognized the importance of local initiatives to create and retain jobs and the increased need to encourage and support entrepreneurs.

UVa is partnering with the Virginia Coalfield Coalition Authority to promote entrepreneurial growth and economic prosperity in the Coalfield region. The goal is to develop a blueprint for creating a vibrant entrepreneurial community in Southwest Virginia that will accelerate growth for both new ventures and established companies. Many agencies and groups have been providing important components necessary for developing an entrepreneurial ecosystem, but there needs to be an overarching and



¹ SBA website <u>http://www.sba.gov/advocacy/7495/8420</u> (April 2011)

coordinated plan for driving innovation.

The blueprint will:

- serve as a comprehensive plan for the region to define priorities and guide actions;
- leverage existing programs and resources and outline plans to fill identified gaps and capitalize upon current strengths;
- leverage the expertise and experience of local and regional business leaders and citizens;
- demonstrate vision and collaboration;
- enhance chances for successful funding;
- emphasize place-based assets (sustainable farming/local food, energy/innovation clusters/research centers, health care, technology, tourism, outdoor recreation, arts, etc.).

The planning process will:

- involve current and future support service providers through a multi-stakeholder inclusive approach;
- be community-led, with support from strategic planning professionals and facilitators;
- establish an asset-based entrepreneurship strategy in rural communities;
- be documented and serve as a replicable model for other rural areas.

A kick-off event was held on March 22, 2011. This facilitated forum with engaged stakeholders explored what entrepreneurship means to the region and how to translate measurable outcomes into a regional strategic plan. The group was asked to think about how the region's strengths, opportunities, and assets can be leveraged to promote entrepreneurial growth and economic prosperity.



Senator William Wampler makes a point at the March 22, 2011 kick-off.

Measureable outcomes of the blueprint:

- The region will have a sustainable framework that provides a direct, comprehensive plan and referenceable document to support and guide entrepreneurial business growth;
- K-12 students will become more familiar with entrepreneurship as a career option;
- Existing companies will have workers and managers who think more entrepreneurially;
- Communities will value and support entrepreneurs who create and build homegrown enterprises;
- Ideas will be advanced beyond the concept stage, ultimately resulting in job creation;
- Scholarship will be advanced on the creation of an entrepreneurship strategic plan in rural communities, with case studies and teaching materials developed for use by other regions.

One of the key aspects of this blueprint planning exercise is the inclusion of a broad array of stakeholders from education, industry, government, and non-profit organizations. UVa, UVa-Wise, and the Virginia Coalfield Coalition have invited the following groups to join in the

planning: Virginia Coalfield Economic Development Authority, Planning Districts 1 & 2, School Superintendents, Small Business Development Centers, Incubators (Duffield, Norton, and Richlands), Mountain Empire Community College, Southwest Virginia Community College, Tayloe Murphy Center, Legislators, Virginia Tech Knowledge Works, USDA Rural Development, Economic Development Administration, Chambers of Commerce, Heartwood, Dominion Virginia Power, Virginia Economic Development Partnership, Weldon Cooper Center, Virginia Department of Business Assistance, People Inc., Virginia Community Capital, Center for



Entrepreneurship Blueprint LeadersSkip Skinner, PD 1Senator WamplerShannon Blevins, UVa-Wise

Economic Development-PTAC, Virginia Economic Bridge, Clean Energy R&D Center, Lonesome Pine Office on Youth, Health Districts, Virginia Cooperative Extension, SCORE, County IDAs, local entrepreneurs and companies.

Highlighting Successful Entrepreneurs

The Tayloe Murphy Center at UVa's Darden School is working with communities to cultivate the knowledge and specialized expertise they can use to spur economic investment and business growth. The center does this by conducting research on what makes communities globally competitive, by disseminating that knowledge to practitioners in the field, and by promoting interaction among community stakeholders. In essence, it is a resource that local communities can tap to catalyze change.

"The economic challenges facing Southwest Virginia and other areas of the Commonwealth are substantial but not insurmountable," says Marc Johnson, the associate director of the center. The center underscores this fact by awarding Tayloe Murphy Resilience Awards each year to businesses in such areas that show strong, sustained revenue and employment growth while contributing to their local communities. The awards are presented at a high-profile dinner at the Rotunda and are heavily publicized throughout the state. "Our hope is that the Resilience Awards shed a light on businesses doing successful and innovative things in parts of the state facing economic challenges," Johnson says.

One of the finalists for the 2010 Resilience Award, the Southwest Virginia architectural and engineering firm of Thompson & Litton, is figuring in a new outreach effort that the center is launching in Southwest Virginia. In conjunction with the UVa School of Continuing and



Tayloe Murphy Resilience Awards Dinner, September 1, 2010 (L to R): William (Bill) Thompson III, VP – Architecture, Thompson & Litton, Greg Fairchild, Executive Director, Tayloe Murphy Center, and Ron Helton, President, Thompson & Litton

Professional Studies, the center is developing a Certificate in Entrepreneurship program, which like all Darden programs is built around the case method. The first of approximately 15 cases to be written for the program is on Thompson & Litton's decision to move beyond engineering to become a full-fledged design-build firm. "The award made us aware of Thompson &

Litton's story," Johnson says. "Their experience raises a variety of issues associated with pursuing new lines of business and growth."

"We benefitted from the exposure we gained as a finalist for the Resilience Awards," says Ronald Helton, Thompson & Litton's CEO and president. "And it was helpful to our employees to learn more about our involvement in the community." Although Helton was at first hesitant to have his company be the subject of a case, the more he thought about it, the more willing he was to participate. "I'm hopeful that local entrepreneurs in the area can learn from our experience," he says.

Entrepreneurship Studies

A collaboration between the School of Continuing and Professional Studies and the Tayloe Murphy Center will bring the Darden case learning experience to entrepreneurs in Southwest Virginia. Scheduled to launch fall 2011, the five-day course examines successful Virginia-based businesses using Darden's case study method. The program teaches existing and aspiring business leaders, economic development officials, managers, and others how to start, grow and protect an entrepreneurial business.

A pilot program was launched in Danville earlier this year. Chris Moore is one of the first 19 individuals to earn a certificate. He is co-owner of Growing Virginia, a Danville-based start-up that will raise fish and grow organic vegetables indoors using hydroponic, aquaculture and aquaponic technology when it opens for business in the fall. "It was one of the best learning experiences of my life," says Moore. "I'll take away a lot that I can use in my own business, such as how to make decisions in a partnership or the fact that, sometimes, the best offense for a

business is a good defense. The class gives you a good, basic plan to formulate building blocks to go into business for yourself or to improve your existing business."

Program instructor Greg Fairchild is executive director of the Tayloe Murphy Center, a Darden professor and one of the top 25 business leaders in the state to watch in 2011, according to Virginia Business magazine. "This program is one way for the University of Virginia, through this collaborative effort, to help foster entrepreneurial growth in communities around the commonwealth," Fairchild said. "We have the benefit of case studies about Virginia entrepreneurs who are located in challenging contexts, but have been very successful in their

businesses. For those running or thinking about starting a business, our hope is this program supplements existing educational opportunities with case study instruction. Case studies allow participants to learn from real-world situations and practice business decisionmaking."

The Certificate in Entrepreneurship complements other "It was one of the best learning experiences of my life. I'll take away a lot that I can use in my own business, such as how to make decisions in a partnership or the fact that, sometimes, the best offense for a business is a good defense. The class gives you a good, basic plan to formulate building blocks to go into business for yourself or to improve your existing business."

> Chris Moore Entrepreneurship Certificate, 2011

programs that focus on the specifics of launching a business offered by business incubators, chambers of commerce and small business development centers.

The course is not a traditional block-and-tackle "how to" lecture. Instead, participants learn key business concepts through case studies that reveal real-world business leaders facing key challenges and decisions. A description of these classes can be found online at: http://www.darden.virginia.edu/web/Tayloe-Murphy-Center/Programs/Course-Descriptions/

The program studies successful businesses from similarly economically challenged parts of Virginia, such as Petersburg-based BandyWorks, one of five Tayloe Murphy Resilience Award winners from 2010.

"The fact that they use businesses from right here in Virginia allows you to compare apples to apples and realize that you too can be successful," Moore said. "That's important, because we're not just trying to raise fish and grow organic produce, we're trying to grow jobs."

Preparing Children to Be Enthusiastic Readers

Studies have shown that a child's prospects in life are largely determined by the language skills he or she brings to kindergarten. A child's vocabulary in kindergarten is a robust predictor of reading comprehension in later grades. Reading comprehension, in turn, is a predictor of their success in school. And educational attainment is correlated with standard of living and health.

For parents and educators in Southwest Virginia, finding ways to provide that essential introduction to language and literacy has been a struggle. The problem is access, both to resources and knowledge. Not every community has a public library, so parents have difficulty finding books to read to children. There is also a shortage of professional development opportunities for preschool and kindergarten teachers to learn the most effective techniques to prepare children for reading.

With the support of the University of Virginia, Paige Pullen, an associate professor of special education, has launched a two-part program to better equip parents and teachers to guide children along the path to reading. "My goal is to develop a series of effective interventions that local groups can adopt and make their own," Pullen says.

The Southwest Virginia Early Language and Literacy (SWELL) project debuted in 2010. It is a collaborative effort. Working with Kim Austin, assistant director at Kids Central, which operates the Head Start and Early Head Start programs in several Southwest Virginia counties, Pullen identified a handful of Wise County families who agreed to participate in a three-month pilot program. She then trained education students at UVa-Wise to make weekly home visits, training parents to use the storybooks, puzzles, crafts supplies, and games they supplied to build language skills.

During the 2011-12 school year Pullen will be launching the second SWELL initiative, which focuses on professional development for preschool and kindergarten teachers. She is planning eight, daylong sessions for the participants, many of whom will come from the City of Norton public schools. The sessions will include techniques teachers can immediately put into practice to accomplish such goals as building vocabulary and increasing phonological awareness.

Once the first two SWELL initiatives are firmly established, Pullen would like to develop a third initiative in conjunction with the Healthy Appalachia Institute that would enable area pediatricians to build early language education into their practice. "Essentially, I'd like to surround parents with people who can help them build their children's readiness to read," she says.

Building a Place-Based Economy by Cultivating the Natural Environment

The magnificent landscape of Southwest Virginia is one of its most important resources, but is also a source of tremendous pride. For the people of the region, the long, rugged ridgelines that dominate the horizon and the scattered farms that dot its river valleys symbolize the perseverance and determination that distinguish their way of life. At the same time, they realize that used wisely the natural environment can be a source of economic development.

The challenge local leaders face is building consensus among the various stakeholders so they can tap its economic value while preserving its beauty. Accordingly, they turned to the Institute for Environmental Negotiation (IEN) in UVa's School of Architecture to convene a meeting in Southwest Virginia to find common ground. As part of its mission, the institute applies expertise in facilitation and mediation to help communities craft sustainable solutions to environmental issues.



Clinch River Community Session, May 2011, St. Paul.

Clockwise from Lower Left: Todd Christensen (Southwest Virginia Cultural Heritage Commission), Michael Wampler and Jack McLanahan (Southwest Regional Recreation Authority); Kathy Selvage (Citizen) and Nathaniel Brown (Graham Landscape Architecture); Lou Ann Wallace (St. Paul Tomorrow); Megan Liddle Gude (UVa Grad Student); Jorge Hersel (U.S. Forest Service) and Justin Altice (UVa Grad Student); Buzz Witt (Spearhead Trailblazers); Delegate Joe Johnson and Jackie Slump (Virginia Dept. of Housing and Community Development). The meeting in September 2010 attracted 60 participants from a range of community organizations, including public interests, business interests, environmental groups, and UVa-Wise. A follow up meeting was held May 2011 in St. Paul. Together, they assessed the

opportunities and considered a number of issues, including balancing all-terrain vehicle use with quiet recreation on the Spearhead Trail System, establishing a regional collaborative for local food systems planning, and developing a strategy for recreation along the Clinch River. "The participants spotlighted the issues," says Frank Dukes, IEN's director. "We facilitated the discussion."

"A new creative economy made up of tourists and families who appreciate natural beauty, cultural heritage and mountain music is the hope for dying communities in the Appalachian Mountains of Southwest Virginia. The region will be forever changed through the Clinch River Planning Initiative."

> Lou Ann Wallace St. Paul Tomorrow

This collaboration benefits the region, but also the University by

creating opportunities for our students to put into practice the knowledge they gain in the classroom. This is particularly true for students in Community Food Systems: Global-Local Connections, a course led by Tanya Denckla Cobb, IEN's associate director.



Kathlyn Terry, Appalachian Sustainable Development

One of the outcomes of the September meeting was that Cobb was asked if she could assign students in her class the task of mapping the infrastructure for food production, food distribution, and health in the region. "Food is as important a part of a community's infrastructure as housing and transportation," Cobb points out. "Students are identifying obstacles to a more comprehensive, equitable, and dynamic local food system while learning skills essential to the practice of planning."

Cobb hopes that her students' work will highlight steps needed to create a more fully articulated local food system, which will in turn contribute to the area's economic development in ways that are consonant with its natural beauty. The student reports can be found at: <u>http://www.virginia.edu/ien/foodplanningresources.htm</u>

Delivering World-Class Executive Development in Southwest Virginia

One of the biggest challenges George Owens faces as vice president of Nexgen and Leadership Effectiveness for Alpha Natural Resources is providing adequate, high-quality professional development opportunities for the company's managers. Alpha has experienced exponential growth since it was founded in 2002. After absorbing Pittston Coal Company's Clinchfield Division, Coastal Coal, and a number of other companies, it doubled its employee base in 2009 when it merged with Foundation Coal Holdings and it is set to double the number of its employees again when it combines with Massey Energy in 2011.

"We are in the people business first," Owens observes. "If we are to succeed in the coal business, we must create a unified culture around our Running Right philosophy and prepare our high-potential employees for leadership." To succeed in strengthening the company, Owens, like his counterparts at other employers in Southwest Virginia, requires additional local opportunities for executive development.

In 2009 David Newkirk, CEO of Darden Executive Education at the University of Virginia, and his colleagues traveled to Southwest Virginia to visit with local corporate executives, who reiterated their position that executive development was critical to their organizations' success.

The result was the Darden/UVa-Wise Partnership

Darden Executive Ed Participants

- Alpha Natural Resources, Inc.
- American Drew, Lea, Hammary
- Brooks Run
- Clean Energy R&D Center
- Crutchfield Corp.
- Data Ensure, Inc.
- DMME Division of Gas and Oil
- Eastman Chemical Co.
- Kincaid Furniture Co., Inc.
- Kingston Resources, Inc.
- K-VA-T Food Stores, Inc.
- Maxim Shared Services
- Quesenberry's Inc.
- SW Virginia Higher Ed Center
- UVa-Wise
- Wellmont Health System
- AMFIRE
- Brooks Run
- Kingston Resources
- MSS-VA/KY
- Pioneer Fuel Corporation
- Rockspring Development

for Leadership Development, which includes more than a dozen companies in Southwest Virginia. The partnership hosts three executive education modules each year on topics like Managing Individual and Organizational Change, Negotiating Success, and Leading a Lean Transformation. These modules are more concentrated versions of the courses Darden Executive Education offers in Charlottesville, according to Colin Winter, one of the program's directors. Students who complete four modules in a four-year period receive a Certificate in Leadership Development. "This program meshes perfectly with Darden's mission of improving 'society by developing principled leaders for the world of practical affairs," Winter says. "It's also an expression of the University's commitment to Southwest Virginia."

David J. Prior, chancellor of UVa- Wise makes a similar point: Southwest Virginia's leaders deserve the best executive education in the marketplace. "UVa-Wise and the Darden School of Business are bringing a stellar program to our region, saving our executives, businesses, and organizations time and money, while providing unparalleled learning and networking opportunities."

Now in its second year, the program has been received enthusiastically. "We're benefitting from one of the premier executive education programs in the world," Owens says. "It couldn't have come at a better time."

Students in the program are equally complementary. Barry Tate, information systems manager in the Database Administration group at Crutchfield, has only praise for the course content and the faculty leaders. "Thanks to Darden's case method, I was able to gain new perspectives that made an immediate difference in how I do my job. I believe that Darden's commitment will greatly enhance opportunities in this area."



Darden Executive Education Class, "Strategic Thinking and Action," held spring 2011, Lebanon, Virginia.

Clockwise from Lower Left: Darden Professor Jay Bourgeois, Shannon Blevins (UVa-Wise) and Jamie Wills (Darden), Case study discussion, David Asbury (Virginia Department of Mines, Minerals, and Energy), Professor Bourgeois, Barry Tate (Crutchfield Corporation), Darden Professor Sam Bodily, and Barry Compton (Alpha Natural Resources).

LIST OF PROGRAMS K12 Education

Primary partners:

Center for Teaching Excellence, UVa-Wise, Wise County Public Schools, Russell County Public Schools, "Pathways" Governor's Regional Career and Technical Academy, Southwest Virginia Higher Education Center, Kids Central

Southwest Virginia Early Language and Literacy (SWELL)

In FY11 UVa and UVa-Wise collaborated with Kids Central, Incorporated to provide home visiting services to families in the Wise County area. In total, more than 30 families have been served, receiving home-based intervention and print materials to increase the quantity and quality of language interaction in the home and improve the literacy environment.

New to SWELL this year is the addition of a professional development component. Given the rural location of the districts, high quality professional development is not easily accessible. Faculty from UVa will provide ongoing professional development to Head Start and preschool teachers beginning in the summer of 2011 and continue during the academic year. Planning is underway to include K-12 schools in the professional development plan. This professional development will help to increase the knowledge and skills of teachers in preschool and primary grades in effective early literacy instructional strategies. It will also provide a link for preschool programs to school age programs, easing the transition to school for young children in the region.

SCOPE Southwest (Statewide Communities of Practice for Excellence)

This program is designed to develop advanced leadership skills for intact cohorts of school leaders from participating school divisions. It provides continued professional growth for administrators while establishing communities of practice to support an ongoing network of K-12 colleagues in varied roles at sites throughout the region.

UVa's School of Continuing & Professional Studies (SCPS) continues to engage the cohorts through seminars and other professional development activities for practicing school administrators. A seminar, "A Practical Guide to Differentiating Instruction," was held on March 30, 2011, at the Bristol City, VA school board office. It served 21 individuals including 11 Coalfield professionals. Each person who attended received materials to share with educators at their school location as part of the SCPS effort to maintain and expand the SW community of best practice in leadership and instruction.

Teaching American History

UVa, UVa-Wise, and the Southwest Virginia Public Education Consortium (comprised of 16 school systems) are implementing several grants from the U.S. Department of Education to enhance elementary, middle and high school efforts to teach American history. This program provides history teachers with in-depth courses, materials, mentoring, and other support to allow better teaching of the Colonial, Civil War, and Cold War periods of American history.

UVa's Center for the Liberal Arts (CLA) provides leadership and coordination among University groups and offers guidance on program development and implementation.

The three currently active grants are:

- 1. Immersion in Traditional History
- 2. American Crises, American Solutions: A History Specialists Model for Traditional American History
- 3. My History Partner: Adapting a Proven Method of Professional Support

The third of these three Teaching American History grants, "My History Partner," was awarded in August 2010 for \$1 million. The goal of this grant is to improve instruction in American history in Southwest Virginia school systems by adapting a successful program of continuous, practice-focused support for teachers. "My History Partner" will modify the successful "My Teaching Partner" Consultancy

(<u>http://www.myteachingpartner.net/about/about_consultancy.php</u>), an evidence-based program for professional development with established means of improving instruction by incorporating powerful content support for the subject of American history: distinguished historians, assistance by doctoral students, and work in nationally known archives.

The CLA is an integral partner in all three of the grants mentioned above. CLA helped plan the annual Southwest Virginia history conference, sponsored by funding from the Immersion in Traditional History grant; the conference was attended by over 140 education professionals. CLA helped recruit faculty for the programs sponsored by the three grants, which include a field experience, seven one-credit graduate courses, and three full-day workshops.

Approximately 85 teachers attended programs presented by faculty from UVa's Miller Center for Public Affairs, the Corcoran Department of History, and UVa-Wise. Faculty from the Curry School of Education offered courses on leadership, history, and the classroom. The School of Continuing and Professional Studies offered credit for the graduate courses and UVa's Center for the Advanced Study of Teaching and Learning (CASTL) provided guidance regarding evaluation and research for the grant.

UVa doctoral students in history were available as research assistants to those participating teachers who sought to obtain additional content-related information, particularly primary source materials, and develop classroom materials.

Graduate Courses for Teachers

In collaboration with UVa-Wise, UVa offered two graduate classes for teachers in the Wise County School System. Twenty-five teachers completed EDIS 7700 Foundations of Reading Instruction (spring 2011) and another 20+ are completing EDIS 5410 Young Adult Literature (summer 2011).

Phonological Awareness Literacy Screening (PALS)

PALS - I. State Initiative: Early Intervention Reading Initiative (EIRI)

Virginia's Early Intervention Reading Initiative (EIRI) serves K-3 students in Virginia public schools. All students in participating divisions are assessed with the Phonological Awareness Literacy Screening (PALS), developed by Dr. Marcia Invernizzi (Curry School of Education) and colleagues at UVa. The PALS assessment provides screening, diagnostic, and progress monitoring information to guide effective literacy instruction. Students not meeting the PALS benchmarks are provided one hundred fifty minutes of additional literacy instruction each week under the initiative.

PALS is the state-provided assessment for Virginia's EIRI. The PALS Office supports over 14,000 Virginia teachers by providing the following resources at no charge: assessment materials, an online score entry and reporting system, interpretive reports to help teachers drive instruction and monitor student progress over time, and storage of student assessment scores for school divisions. In addition, the PALS office responds to questions from educators on a daily basis via a toll-free hotline and email.

Status: All eight school divisions in the Coalfield region have participated in the EIRI since 1997 and have signed on to participate for the 2011-2012 school year. These divisions are the counties of Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, Wise and the City of Norton.

Number of teacher interactions: 528 teachers supported by PALS Office Number of student interactions: 8408 students assessed using PALS

PALS - II. Early Intervention Reading Initiative (EIRI) Symposium

The PALS Office sponsors an annual EIRI Symposium with the Virginia Department of Education. This year, focus of the symposium was the PALS Electronic Lesson Plan. The purpose of the Symposium is to assist school divisions in planning effective reading intervention services for students in kindergarten through the third grade who demonstrate reading deficiencies. Teams of three participants from each school division were invited to attend, including the PALS division representative, elementary school principals, and elementary school reading teachers.

Curry faculty members from the PALS Office conducted small group sessions on the Emergent, Beginning, and Transitional Reader Electronic Lesson Plans. This event was held in Richmond, and teachers and administrators from throughout the Coalfield region attended.

Status: The EIRI Symposium was held in March of 2011. The response to the symposium was very positive. Next year the event is scheduled for the sixth consecutive year in March 2012.

Number of teacher interactions: 21 participants from the Coalfield region attended the 2011 EIRI Symposium

PALS – III. – PALS Regional Training

Each year the PALS Office sponsors regional training sessions throughout the Commonwealth of

Virginia. During the 2010-2011 school year, six regional trainings were held, four of which attracted teachers from the Coalfield Region. The trainings were held in Roanoke, Abingdon, Dickenson County, and Martinsville. The PALS Office develops strong ties with educators in the region and maintains these relationships in part through consistent travel to the Coalfields.

Number of teacher interactions: 71 participants from the Coalfield region attended the 2010-2011 Regional Training Sessions

PALS - IV. PALS-PreK: Virginia Preschool Initiative

The Virginia Preschool Initiative (VPI) provides quality preschool programs for at-risk four-yearold children. VPI programs are required to screen children with the Phonological Awareness Literacy Screening for Preschool (PALS-PreK), developed by Dr. Marcia Invernizzi (Curry School of Education) and colleagues at UVa. PALS-PreK is a measure of young children's knowledge of important emergent literacy fundamentals.

PALS-PreK is the state-provided assessment for VPI programs and the PALS Office at UVa supports over 1200 Virginia preschool teachers by providing the following resources at no charge: assessment materials, an online score entry and reporting system, interpretive reports to help teachers drive instruction and monitor student progress over time, and storage of student assessment scores for school divisions. In addition, the PALS office responds to questions from educators on a daily basis via a toll-free hotline and email.

Seven school divisions in the Coalfield region had at least one VPI classroom this school year.

Number of teacher interactions: 64 teachers supported by PALS Office Number of student interactions: 892 students assessed using PALS

Undergraduate Admissions Outreach

UVa's Office of Undergraduate Admissions is committed to ensuring that high school students from across the Commonwealth have access to information about the UVa admissions process. This initiative includes efforts to encourage residents from Southwest Virginia to apply to UVa.

During FY11 the deans from the Admission office attended Virginia Association of Collegiate Registrars and Admissions Officers (VACRAO) college fairs in Southwest Virginia and invited counselors from the region to the annual fall meeting for college counselors. UVa attended college fairs in the city of Norton and in the following counties: Buchanan, Floyd, Dickenson, Russell, Radford, Lee, Tazewell, Galax, Giles, Carroll, Grayson, Bland, Scott, Smythe, Wythe, Washington, Wise, Montgomery, Pulaski and Franklin. They also attended fairs at the following community colleges: New River, Wytheville, Southwest Virginia, Mountain Empire, and Patrick Henry.

Science, Technology, Engineering, and Math (STEM) Program for Sixth Grade Girls

A full-day program for 6th grade girls was held to encourage them to think about careers in STEM. Over 700 participants engaged in seminars, workshops and hands-on activities. The

event was held at the Southwest Virginia Higher Education Center. UVa faculty member and former astronaut Kathryn Thornton gave the keynote speech. Three faculty members from UVa's School of Engineering and Applied Science led workshops.

Business Support

Primary partners:

Virginia Coalfield Economic Development Authority, UVa's College at Wise, Southwest Virginia Higher Education Center, Mountain Empire Community College, Southwest Virginia Community College, Virginia Highlands Community College

Darden Executive Education

Through exploratory discussions with business leaders from the Southwest Virginia region, the idea of a concentrated effort of high-level education was formed and cultivated in the Darden/UVa-Wise Partnership for Leadership Development. This partnership offers six key courses from which participants will select four to complete the full program. Rooted in an expressed need for focus on, and development of, management skills, influence, and strategic and functional acumen, participants can build an excellent learning portfolio through which they will grow, and ultimately, help their businesses and the region grow.

The Darden/UVa-Wise partnership will:

- Help develop managers in Southwest Virginia and create a network among the next generation of community leaders.
- Strengthen UVa -Wise's promise of management development, and deepen relationships with their client organizations.
- Connect Darden Open-Enrollment and Custom programs to businesses and organizations in the region.

The Certificate in Leadership Development will be awarded to participants who complete four of the available six programs offered in this partnership. These courses are two to three days in length and span the areas of negotiation, financial excellence, change management, and strategy. Since its inception 22 companies in the region sent 90 employees from 6 states to the Southwest Virginia Technology Development Center in Russell County for the Darden/UVa-Wise Partnership in Leadership Development, delivered by award-winning faculty from the University of Virginia Darden School of Business.

Management Training

UVa-Wise established the Southwest Virginia Technology Development Center (SVDTC) in Lebanon, VA to support the management development and technical training needs of Northrop Grumman, CGI, and other regional companies. These companies, which employ highly technical workers, want to ensure that there is a steady pipeline of management talent available to keep their operations competitive. UVa has supported the delivery of both open and customized classes to meet the stated needs of industry.

Approximately 200 individuals in the region have participated in management and community development programs offered through the SVTDC. These program offerings included seven customized courses which were tailored to meet specific employers' specifications. These customized training solutions included topics such as Business Intelligence, Software Testing Fundamentals and Managing in a Virtual World.

Entrepreneurship

In December 2010 the Tayloe Murphy Center (TMC) at UVa's Darden School of Business, in partnership with the UVa Office of Engagement and UVa-Wise, hosted a series of public discussions in Wise focused on ways to foster community growth through entrepreneurship. Over 60 people came to these events, including local business leaders, government officials, economic development professionals, and members of the public. The events included the inaugural teaching of the Darden case study on Wise-based firm Thompson and Litton, one of the finalists in the 2010 Tayloe Murphy Resilience Awards. The case will be used in the future as part of the new Certificate in Entrepreneurship. This Certificate will be offered in Southwest Virginia by the School of Continuing and Professional Studies in partnership with TMC.

TMC Executive Director Greg Fairchild led a discussion with young professionals and other business leaders about the future of the region and the challenges and opportunities facing the area. Participants considered the potential for starting and growing a business in the region and how they could help foster a climate that would support these individuals. Discussion included consideration of opportunities for those who grew up in the region to return home and pursue the creation of new ventures. The TMC also met with the Downtown Wise Revitalization Committee to discuss their current and future efforts to promote business growth.

Place-Based Economic and Community Development

UVa's Institute for Environmental Negotiation, along with project partners, is leading a consensus-based regional planning effort to articulate and prioritize goals for connecting downtown revitalization, outdoor recreation, entrepreneurship and environmental education along the Clinch River.

Strategies are being identified to connect downtown revitalization with outdoor recreation along the Clinch River, particularly in the towns of Honaker, St. Paul, Dungannon, and Cleveland. The plan will leverage cultural assets in the Southwest Virginia region and networks including Heartwood: Southwest Virginia's Artisan Gateway, Round the Mountain, Crooked Road, and other artisan networks.

Project Goals:

• Through a strategic planning effort, identify current opportunities, challenges, gaps and ideas for strengthening the connection between downtown revitalization and enhanced

outdoor recreation along the Clinch River.

- Connect outdoor recreation efforts with the Southwest Regional Recreation Authority and the proposed Spearhead Trail.
- Identify entrepreneurs to engage in additional outdoor recreation and sustainable economic development opportunities along the Clinch.
- Collaborate with Heartwood: Southwest Virginia's Artisan Gateway, Southwest Virginia Tourism and other economic development activities along the Clinch River as part of entrepreneurship, educational and other activities.
- Identify marketing and public relations strategies to enhance tourism along the Clinch River, promote downtowns (including lodging, dining, retail and other opportunities), and increase outdoor recreation offerings.

Towns of Honaker, St.	Lenowisco and	Members of Tourism and
Paul, Dungannon, and	Cumberland Plateau	Economic Development
Cleveland and other	Planning District	groups
towns	Commissions	U .
Friends of Cleveland	VA State Parks	Clinch Valley Outfitters
St. Paul Tomorrow	VA Main Street Program	Heartwood: Southwest
		Virginia's Artisan Gateway
Estonoa St. Paul High	Southwest Regional	Heart of Appalachia
School Project	Recreation Authority	Tourism Authority
Department of Housing	Department of	Southwest Virginia
& Community	Conservation and	Cultural Heritage
Development	Recreation	Commission
The Nature Conservancy	Virginia State Legislators	U.S. Department of
		Forestry
		·

Project Partners include:

Engineers PRODUCED in Virginia (Providing Undergraduate Connections to Engineering Education in Virginia)

Engineers PRODUCED in Virginia is an academic outreach initiative of the UVa School of Engineering and Applied Science (SEAS). Through this program, students can earn a bachelor's degree in engineering science from UVa while staying in their home communities. UVa partners with local community colleges to satisfy preliminary course requirements.

UVa is providing the planning and coordination for this project, including curriculum development. UVa faculty will teach classes during the last two years of the program. The program goal is to allow students to fully immerse themselves in the University's academic environment, including career counseling and mentoring, without traveling to Charlottesville.

SEAS piloted the program in Lynchburg in 2007, and there are now over 600 students from across Virginia in the PRODUCED pipeline. PRODUCED is now in the early development stages in Southwest Virginia, and SEAS is working with UVa- Wise and the local community colleges to initiate the curriculum in the region. Approximately 80 students are enrolled in the required community college courses offered at the following schools: Mountain Empire Community College. Southwest Virginia Community College, and Virginia Highlands Community College.

UVa course offerings begin after students complete their initial two years of coursework. Completion of an Associate of Science program from a community college is a prerequisite for entry into the UVa portion of the program. The Associate of Science degree will normally take 2-3 years to complete, depending on the individual student's desired course load.

A National Science Foundation grant for \$2 million was awarded to help support this program in Southwest and Southern Virginia. This five-year grant, which began July 2008, will fund scholarships for potentially hundreds of students. The program also currently has significant support from the Virginia Tobacco Indemnification and Community Revitalization Commission.

Commonwealth Graduate Engineering Program

Via live, interactive class sessions delivered over the internet, the University of Virginia offers master's degrees in Chemical Engineering, Civil Engineering, Electrical Engineering, Materials Science and Engineering, Mechanical Engineering, and Systems Engineering to working engineers located across Virginia. The classes are conveniently available wherever a student has access to a computer and the internet. The course delivery technology allows students to hear class discussion and see class session content. Using voice over IP solutions, the course delivery technology also allows students to interact and ask questions during class sessions.

Southwest Virginia Technology Council Sponsorship

UVa sponsored the Southwest Virginia Technology Council's 4th Annual Energy Technology Summit, held in Wise on March 21. Panel discussions covered fossil fuel, solar energy, energy efficiency, and wind energy. Industry, government, and higher education participated.

Virginia Economic Development Partnership (VEDP) Rural Committee

UVa participated in the pilot program of VEDP's Rural Committee initiative to identify opportunities for increased recruitment activity in Southwest Virginia. A kick-off session was held with members of VCEDA, aCorridor, UVa, UVa-Wise, Virginia Tech, and local economic development professionals, with the goal of identifying specific strategies and a 6-month action plan.

Access to Health Care

Primary partners:

Southwest Virginia Graduate Medical Education Consortium, UVa-Wise, Southwest Virginia Health Authority, Virginia Department of Health (LENOWISCO and Cumberland Plateau Planning Districts and Southwest Virginia Care Connection for Children), The Health Wagon, the Virginia Health Care Association, Southwest Virginia Community Health System, Stone Mountain Health Services, Mountain Empire Older Citizens, the Appalachian College of Pharmacy, Appalachian Regional Commission, and regional healthcare systems and physicians.

Healthy Appalachia Institute

The Healthy Appalachia Institute was founded on the conviction that the health crisis in Central Appalachia is neither inevitable nor irreversible and that overcoming these health burdens that weigh so heavily on Southwest Virginia will require a broad, carefully coordinated effort, one that advances educational opportunity and encourages prosperity through economic development in addition to promoting health. The institute was formed specifically to energize this regional collaboration.

The goal is to bridge the gap between communities and organizations, to generate, coordinate, and implement new ideas, and to engage the social, economic, and technological resources needed to build momentum for positive change.

Key activities over the past year include developing a process to further refine and implement the region's strategic health plan, leadership in the creation of a regional blueprint to address substance abuse and misuse, the continuation of a fellowship training program for students, and facilitation of the regional entrepreneurial planning process.

Nurse-Managed Health Clinic

UVa's School of Nursing and Public Health Sciences collaborated with the Health Wagon to secure a \$1.5 million grant from the Health Resources and Services Administration (HRSA) for a nurse-managed health clinic in Clinchco.

Other partners include UVa-Wise and Mountain States Health Alliance. Teresa Gardner, DNP, is the Principal Investigator. The grant also includes funding for students to do preceptorships at the Health Wagon, as well as for an evaluative component for the program.

Southwest Virginia Cancer Patient Navigation Services

A patient navigator service was established to help support cancer patients from far Southwest Virginia who must travel to receive access to cancer care. The program is sponsored through support from the Tobacco Indemnification and Revitalization Commission and the UVa Cancer Center.

The Southwest Virginia Patient Navigator primary goals include:

- Contacting patients and offering services prior to traveling to UVa for an initial appointment.
- Meeting with patients and family members in the clinic prior to their appointment.
- Serving as point-of-contact from the time of diagnosis and throughout treatment at UVa.

In 2011, 372 patients traveled from the Coalfield region to the UVa Cancer Center, representing a total of 863 appointments. Of these appointments, 197 were for initial visits. Not surprisingly the two most significant challenges to seeking care at UVa are travel/lodging and lack of financial resources including insurance.

Academic-Based Public Service

UVa's Jefferson Public Citizens (JPC), a comprehensive academic public service program that integrates students' service and research, funded a project in Southwest Virginia during the 2010-2011 academic year to examine the use of Touchscreen Tablet Technology for health information dissemination. During spring 2011, JPC funded a course to examine the relationship between Appalachian culture, economic development, education and health in far Southwest Virginia and explore the process for the design and implementation for collaborative, community-based research.

Adult Specialty Clinics

One of the most complex healthcare problems for residents in far Southwest Virginia is achieving access to certain medical specialties. To address this limitation in the area's healthcare workforce, the UVa Health System has continued its commitment to provide direct specialty clinical care with partners throughout the region in clinics located in Tazewell, Wise, Clinchco, and Bristol.

In FY2011, the UVa Health System offered on-site physician services in far Southwest Virginia through clinics in neurology and pulmonology with specialized women's health services in mammography (radiology) and gynecology. A team of neurologists conducted monthly clinics for patients with epilepsy and seizure disorders, pulmonologists provided services to adult patients with cystic fibrosis, radiologists provided an expedited review of women receiving mammograms through the UVa digital mammography van and Peyton T. Taylor, MD, a gynecologist from the UVa Cancer Center, provided diagnostic care and treatment to women with gynecological disease. Dr Taylor continued to provide medical direction for the development of UVa efforts.

The UVa neurology clinic continues to provide services in the region on a monthly basis in sites in Tazewell, Wise, and Bristol. Pulmonology continues to provide services in Washington County for cystic fibrosis patients from throughout the region. Mammography and gynecologic care was provided through clinics in Wise and Clinchco Virginia.

Number of patient encounters:	
Neurology	483
Pulmonology	87
Radiology (Mammography)	196
Gynecology	52
Total	818

Pediatric Subspecialty Clinics

The UVa Health System conducts field clinics in Southwest Virginia in collaboration with Care Connection for Children with Special Health Care Needs. SWVA Care Connection for Children is funded by Title V funding and sponsored by Virginia Department of Health (VDH). UVa provides physicians for the clinics, one RN (50% of salary) and one clerical (25% of salary) and VDH supplies nurses, support staff and the facilities for the field clinics.

Pediatric subspecialty clinics were in neurology, cystic fibrosis, cardiology, neurodevelopmental, orthopedics, genetics, metabolic and telemedicine. UVa, in partnership with Care Connection for Children, saw 819 pediatric patients in FY11:

Total	819
Orthopedic	53
Neuro-Developmental	1
Telemedicine:	
Maxillofacial	44
Metabolic	24
Genetics	76
Orthopedic	55
Neuro-Developmental	105
Cardiology	23
Cystic Fibrosis	79
Child Neurology	359
Number of Feulatile Fatient Encounters	

Number of Pediatric Patient Encounters

Telemedicine

For over 15 years, the UVa Office of Telemedicine has provided specialty clinical services and health education to the residents of far Southwest Virginia through an extensive network of telemedicine sites within rural hospitals, schools, free clinics, health departments, correctional

facilities, and community health centers. UVa has now spared the burden of travel for Virginians amounting to over 6.5 million miles.

In 2011 UVa continued to improve access to specialty medical care in the region by opening a new site at the Program for All-Inclusive Care for the Aging in Richlands and expanding video-colposcopy capability to Clintwood. The UVa Health System also provides a tele-radiology link to Southwest Virginia to support radiology at Buchanan General with radiological reviews after-hours and for complex cases and services to the Southwest Community Healthcare System.

UVa currently connects with over 85 telemedicine sites across the Commonwealth with over 30 sites serving the residents in Southwest Virginia and with 18 sites located within the Coalfields. This establishes the Coalfield region as one of the most well-connected telemedicine regions in the country. In FY2011, clinical specialty services were provided in dermatology, endocrinology, psychiatry, hepatology, infectious disease, nephrology, ophthalmology, gynecology, pediatric and cardiology.

Number of patient encounters (via telemedicine):

In 2011, 504 patient encounters occurred in the Coalfield counties and the city of Norton (up from 111 in FY2008); In additional 36 video-colposcopy were performed as well as 196 mammographic screenings.

Number of patient encounters (via teleradiology): 2, 716 teleradiology reads were provided in the Coalfield counties.

Total Telemedicine Encounters: 3,220

Outreach Librarian Services

UVa Health Sciences offers access to quality health information through an outreach program based at UVa-Wise. A professional librarian position located at UVa-Wise is fully funded by the Claude Moore Health Sciences Library at the University of Virginia. Ann Duesing, who currently holds this position, was recipient of the National Library of Medicine Michael E. DeBakey Library Services Outreach Award. This award was established to recognize outstanding service and contributions to rural and underserved communities by a practicing health sciences librarian. Most notably, Ms. Duesing was instrumental in developing "TechWorld," a program that instructs teenagers in methods for teaching computing skills to caregivers of Alzheimer's patients.

The goal of the outreach program is to help local health care providers, community agencies, and the general public access quality health information while also supporting the health information needs of nursing and science students at UVa-Wise.

During FY11, the Outreach Librarian has continued to work with the Virginia Cancer Plan Action Coalition (CPAC) serving as Chair of the Treatment Action Team and as a member of the Executive Committee. The Treatment Action Team special project this year focused on an educational program: Clinical Trials Communication 101. The March 2011 education program featured Margo Michaels, executive director of ENACCT (Education Network to Advance Cancer Clinical Trials), who spoke about dispelling myths, breaking down barriers, stimulating community engagement in research and promoting inquiry about clinical trials.

Eight videoconference sites were located throughout the state. About 125 community members and healthcare professionals attended. Facilitators (including the outreach librarian) were trained to lead off-line discussion groups at each site and report back to the main program. There was an average 10% improvement in correct answers between the pre- and post-test and program evaluations were very positive. Most importantly 91% of attendees indicated that they would change their behavior to increase promotion of clinical trials participation.

Along with three other CPAC members, the outreach librarian received funding from East Tennessee State University, the Centers for Disease Control and Prevention (CDC) and Appalachian Regional Commission, to explore Cancer Patient Navigation Models in Appalachia. Information about navigation programs was gathered from Pennsylvania, West Virginia, Kentucky, Tennessee, North Carolina, and Virginia. This data was compiled by the outreach librarian and a graduate student in library science.

Two meetings of the state representatives were organized and held at the Bristol Regional Hospital in Bristol, TN. Navigation programs and the collected information were discussed and shared. A final grant report was completed in May 2011. Next steps include organizing a formal navigation network and developing an evaluation model for cancer patient navigation programs.

Participation in the RAM free eye, dental and medical expedition remained a priority again. The partnership with the regional public library system outreach program provided the ongoing venue to provide health information resources awareness and access both through the Health Sciences Library and the Public Library. Approximately 940 patients and family members visited the Outreach booth for library and health information.

The Outreach Librarian has also remained involved with the southwest Virginia grassroots Mountain Laurel Cancer Coalition (MLC). This includes continued work with the Appalachian Community Cancer Network (ACCN) serving as a Community Advisor and attending the regional annual meeting and research seminar in Dublin Ohio.

Diabetes Tele-Education Classes in Southwest Virginia for Persons with Diabetes and Their Families

Three UVa programs—The Virginia Center for Diabetes Professional Education, the UVa Diabetes Education and Management Program (DEMP), and the Office of Telemedicine—partnered with the Virginia Department of Health's Office of Minority Health and Health Equity to provide diabetes education classes to patients with little or no access to diabetes education in rural southwestern Virginia.

UVa broadcast live interactive education classes taught by Certified Diabetes Educators. Classes included a basic overview of diabetes (2 hours) and an introduction to nutrition (2.5 hours). Both classes were offered in the months of September and October 2010, and May and June, 2011.

Participating sites:

- Wise County Health Department
- Lee County Health Department
- Washington County Health District
- Tazewell County Health Department
- Smyth County Health Department

Total class attendance: 64 Hours of educational broadcasts: 27

Marguerite B. Howard Fellowship

This award, initiated in 2009, was created with funding from the Alan B. Howard family to support the work of nurses in rural Virginia by bringing them to UVa for further education. It is anticipated that fellowship recipients will also help acquaint other UVa nursing students with the needs of the rural population. Financial support is given to graduate students in the Family Nurse Practitioner (MSN/FNP) program in the UVa School of Nursing. The student agrees to return to Southwest Virginia for at least two years of practice upon completion of their MSN/FNP degree.

For more information on the partnership please contact: Pace Lochte Director, Regional Business Development University of Virginia Lochte@virginia.edu 434-924-7566