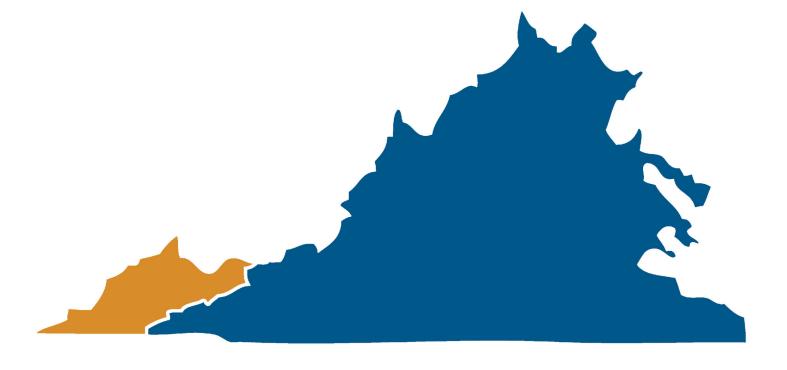
# Partnership with Southwest Virginia



**Annual Report** 

**Economic Development** 

Action Plan - FY09



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# August 11, 2009

### BACKGROUND

As part of the restructuring management agreement with the Commonwealth, the University of Virginia (U.Va.) 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. U.Va. 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 & 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, U.Va. 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, 2008 – June 30, 2009 (FY09). It is the third annual progress report submitted to date.

### **ACTION PLAN SUMMARY**

Southwest Virginia is 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. The launch of the Commonwealth's only undergraduate degree in software engineering and the creation of several energy research centers are only two examples of this economic shift. To attract companies, local leaders recognize that they must have an infrastructure that includes an educated workforce, strong schools, and widespread access to medical care.

This context was used in developing U.Va.'s action plan. The three main categories for collaboration between U.Va. and Southwest Virginia include access to health care, support for K-12 education, and business support. A website dedicated to this collaboration can be found at: http://www.virginia.edu/vpr/industry/southwestva.html.

# **OVERVIEW**

Our goal is to identify opportunities that leverage the assets of the University to advance the economic health of far Southwest Virginia. We launched a number of new initiatives this year, all of which build upon current and developing relationships between Charlottesville and the Coalfield region. This partnership is truly one of equals. We strive to ensure that our efforts have a positive impact on the region; at the same time we recognize that our faculty and students derive equal benefit from this rural outreach as new experiences and interactions inform their work and generate new ideas.

For each initiative we have assembled project teams with collaborators as appropriate from U.Va., U.Va.'s College at Wise, federal and state agencies, non-profits, and the private sector. This public-private approach to community-based participatory engagement creates sustainable, comprehensive solutions that are aligned with regional efforts and make best use of each participant's unique capabilities.

During the past year we have sharpened our focus in key areas that have been determined by the community. We are encouraged by the progress we have made with our partners to refine our goals and methods, connect people and resources, and secure additional funding for the region.

In FY09 we secured over \$3.5 million in new funding to bring programs and services to the residents of Southwest Virginia. U.Va. clinicians provided more than 6,500 direct patient encounters, in addition to the 5,600 patient encounters at the Remote Area Medical Clinic in Wise. Thirty-six residents of Southwest Virginia earned advanced degrees this year from U.Va. without leaving home. Over 1,500 teachers participated in professional development courses in the region. Our *Engineers PRODUCED in Virginia* program, another outreach degree initiative, was kicked off in Southwest Virginia in cooperation with four area community colleges. We brought the first of an ongoing series of Darden management education programs to the Southwest Virginia Technology Development Center, providing advice and guidance for new ventures. It has been a year of meaningful and measured progress.

We are committed to this economic development partnership and will continue to bring the resources of the University to bear on challenges that exist in the Coalfield region. We do so in full coordination with the many indomitable public and private sector agencies whose good work both energizes and humbles us. Only by working together can we revolutionize rural economic development and ensure equal access and opportunity for all citizens.

# **HIGHLIGHTS**

### **ENERGY**

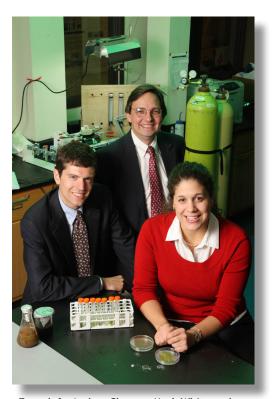
### **Energy Research Centers**

The Virginia Tobacco Indemnification and Community Revitalization Commission recently established five energy research centers, two of which are located in Southwest Virginia. The University is taking a leading role in supporting these centers by identifying research that can be extended to Abingdon and Wise, involves corporate partners, and has promising commercialization potential. We held a workshop for interested faculty and invited the center directors to share their priorities and critical project elements. It is our intention to propose applied research projects that are: relevant to the area and energy-based, address a business concern, engage area students, consider workforce training, leverage other funding mechanisms, and have the potential to lead to new job creation. We have been working with our community partners extensively on several of these projects, including three described here:

### Algae Research

Energy has long been an integral part of the Southwest Virginia economy. U.Va. researchers Lisa Colosi and Andres Clarens (Civil and Environmental Engineering) and Mark White (Commerce) are investigating how algae can be used to address two energy problems of national significance: sequestering carbon from coal-fired power plants and producing a new source of fuel. Developing Southwest Virginia-based solutions to these problems will support existing companies and stimulate the development of new enterprises. One distinctive aspect of this team is the pairing of business and technology expertise to examine the investigation's financial feasibility during each stage of research.

Coal has long been an economic driver for Southwest Virginia and will continue to play a major role for decades. Energy companies in the region are looking for ways to reduce harmful CO<sub>2</sub> emissions. One method is to use algae to sequester, or trap, carbon emissions. The U.Va. algae research team has been working with a number of companies operating in the Coalfield region and they have plans to set up a demonstration project in cooperation with a corporate partner.



From left: Andres Clarens, Mark White and Lisa Colosi are exploring algae as a source of biofuel and as a means of trapping carbon emissions

Algae offer a number of advantages over other plants. They are highly efficient photosynthesizers, generating 30 times more oil than comparable amounts of crop-based biofuel feedstocks like corn or soybeans. In addition, algae don't need arable land to grow and will not compete with food crops.

Algae as a biofuel has generated significant interest across the nation. U.Va. researchers are also investigating approaches for dewatering algae and converting it to a biofuel. Their methods have garnered the attention of a mid-Atlantic biofuel refinery with an interest in establishing a Virginia base of operations. Additionally, power plants committed to using biofuels as a percentage of their feedstock are carefully considering algae as an alternative fuel source.

Exxon Mobil Corp. will invest \$600 million in algae biofuel research over the next five to six years.

Algae could become a new "cash crop" for Southwest Virginia. It grows quickly and can be cultivated on otherwise marginal land so as not to compete with food crops. We are working with a number of partners to commercialize the technology, develop alternative energies, and eventually create new "green" jobs. To help train this new workforce we will invite students from U.Va.'s College at Wise to be part of the demonstration project. Their specific activity will be to learn to cultivate and separate algae samples under a variety of conditions; the long-term impact will be a new generation of leaders who can build upon their experiences to help solve complex problems in their home region.



ecoMOD engages students in designing, building and evaluating affordable, modular homes that use green building technology. ecoMOD is now developing prototypes that may ultimately expand affordable housing options in Southwest Virginia.



### ecoMOD

Much focus has been placed on developing hybrid cars to increase our energy independence, but having more energy-efficient homes will go even further in reducing our energy consumption. Combining two distinct but synergistic disciplines, faculty members John Quale (Architecture) and Paxton Marshall (Engineering & Applied Science) have teamed together to radically transform the way we build affordable housing in the U.S. They have created ecoMOD, which is a series of designs for energy-efficient, sustainable, affordable modular housing. It also includes related wireless monitoring systems to rigorously assess the effectiveness of passive and active systems in reducing operating costs and improving environmental performance.

U.Va. has been working with Southwest Virginia housing authorities, the Department of Housing and Community Development, and non-profits like People, Inc. to implement new ecoMOD prototypes and progressive green building techniques. We are currently identifying modular building manufacturers to produce these residential units in Southwest Virginia for use within the Coalfield region and for shipment to other parts of the country. We will also include workforce training through existing agencies (such as community colleges) to educate a new generation of homebuilders as construction moves from traditional "stick-built" to more efficient modular methods. Blending these design, monitoring, and training elements will ideally establish Southwest Virginia as a nucleus for progressive green building techniques.

The overall green building market (both non-residential and residential) is predicted to more than double from today's \$36-49 billion to \$96-140 billion by 2013.

Source: McGraw Hill Construction (2009). Green Outlook 2009: Trends Driving Change.

Through the newly created Jefferson Public Citizens outreach program at U.Va., we are funding a team to work with People Incorporated of Southwest Virginia in 2009-10 to bring the green designs of ecoMOD to the region. Once an appropriate design is created, this group will work with modular builders to certify the quality, affordability, and sustainability of its construction. Additionally, we supported a Darden student intern during summer 2009 to further develop alliances with housing authorities throughout the Coalfield region.



### In the United States alone, buildings account for:

- 72% of electricity consumption, 39% of energy use, 38% of all carbon dioxide (CO<sub>2</sub>) emissions,
- 40% of raw materials use, 30% of waste output (136 million tons annually), 14% of potable water consumption.

Source: U.S. Green Building Council

Interior of first ecoMOD project

### **Energy Storage Systems:**

All current alternative energy sources (e.g., wind, solar, geothermal) require a place to store the energy that they harvest either before it is used locally or added to the national grid. Batteries are the most efficient means of storing electrical energy in a rapidly accessible way. The increasing demand for cost-effective, reliable batteries has driven the desire for more effective rechargeable (also known as secondary) batteries. Improving the cycle life performance of such battery systems not only reduces the direct costs to the users, but also reduces the environmental impact of disposal.

The Center for Electrochemical Science and Engineering (CESE) at the University of Virginia has a well-established, internationally recognized group of leaders in electrochemistry working to develop a new generation of energy storage. Working in concert with companies in Southwest Virginia presents a unique opportunity for developing and commercializing battery technologies in the region.

### BUSINESS EDUCATION AND ENTREPRENEURSHIP

Established companies and entrepreneurial start-ups benefit from ongoing educational programs that address their professional development and business growth needs. U.Va. is uniquely positioned to provide this type of training, and we are doing so in conjunction with the Southwest Virginia Technology Development Center in Russell County. Together with U.Va.'s College at Wise, and in direct response to corporate input, we developed course curricula and content and delivered both open and customized classes. Some of these were: The Effective Supervisor, Business Fundamentals, and Workforce Development Competencies.

We also hired a Technology Development Center Program Coordinator based on-site to warrant full coordination between resources in Charlottesville and course delivery at the Center in Russell County. This U.Va.-funded staff member is continually matching the needs expressed by business leaders with the expertise available in all schools and units at the University. Having this strong linkage enables us to provide rapid and targeted solutions to corporate training needs. Last year there were over 250 participants in U.Va.-supported professional development programs.

Ed Hess, a professor and Batten Executive-in-Residence at the Darden Graduate School of Business, led a full-day workshop based on his recent book, *So You Want to Start a Business?* Additionally he provided one-on-one consulting for entrepreneurs seeking advice on business growth and strategy. Professor Hess subsequently kicked off a new entrepreneurship program for Southwest Virginia Community College. A related four-day three-credit hour class was structured around principles in his book. High school students were able to take this course through dual enrollment, which is part of a larger strategy to instill a culture of entrepreneurship during K-12 grades.

Through the Batten Venture Internship Program U.Va. hired a Darden student intern to work with business support groups in Southwest Virginia in pursuit of an entrepreneurship education



Edward Hess provides entrepreneurship education in Southwest Virginia.

framework for the region. This included a gap analysis and a review of existing models. The resulting action plan guarantees that new and evolving education programs will address unmet needs and align with current resources. A solid entrepreneurship foundation is critical to nurturing new ventures and engaging the creative class. Having this in place addresses the ultimate goal of the Virginia Tobacco Indemnification and Community Revitalization Commission's energy research centers, which is to create new, energy-based jobs.

### How important are small businesses to the U.S. economy?

### **Small firms:**

- Have generated 60 to 80% of net new jobs annually over the last decade
- Represent 99.7% of all employer firms
- Employ about half of all private sector employees
- Pay more than 45% of total U.S. private payroll
- Create more than half of nonfarm private gross domestic product (GDP)
- Supplied 22.8% of the total value of federal prime contracts in FY 2006
- Hire 40% of high tech workers (such as scientists, engineers, and computer workers)
- Small innovative firms produce 13 times more patents per employee than large patenting firms, and their patents are twice as likely as large firm patents to be among the one percent most cited

Source: U.S. Dept. of Commerce, Bureau of the Census

### Engineers PRODUCED in Virginia

To meet the perpetual demand for engineers U.Va. developed a program that allows students to earn a bachelor's degree in engineering while staying in their home communities. The first two years of coursework are delivered by the local community college; the remaining coursework is offered through a blend of online and on-site classes. The program can be tailored to the needs of local industry, producing a workforce that is responsive to the region's targeted development areas and will have an immediate impact on growth and productivity.



William Elam of Appomattox with his family. He's a student in the Engineers PRODUCED in Virginia distance-learning program.

An initial pilot program in Lynchburg currently has 150 students working toward their degree at the community college level. The first cohort of students will begin their U.Va. coursework fall 2009. PRODUCED has been so well received by companies in Lynchburg and Danville that we are extending the model to Southwest Virginia. Community college course offerings begin in August 2009 in Big Stone Gap, Richlands, Abingdon, and Wytheville.

### K-12 EDUCATION SUPPORT

The economic health of a region is directly related to the education level of its citizenry. In today's knowledge economy companies place a high premium on the intellectual capital of a region. Advanced workforce capabilities have surpassed cheap land and low wage labor on the list of requirements mandated by firms launching new ventures or expanding existing operations.

U.Va. has a long history of offering professional development programs for teachers and administrators in the Coalfield region. This is an important resource for educators and we will continue to support their needs in the future. However, we believe that we must go even further and focus our efforts on school readiness so that when children come to kindergarten they are ready to learn.

# Early Language and Literacy

The years between birth and age two are critical for children. This creates a narrow window of opportunity for us to set the path for early language and literacy skills which are essential to the later success of children in school. Waiting until children reach kindergarten to teach these skills virtually guarantees that they will never catch up to their peers in reading and comprehension.

We have assembled a team to address this challenge, which includes early language and literacy experts from our Curry School of Education, KidCentral (the local Head Start program), UVa.'s College at Wise departments of education and nursing, and East Tennesee State University.

A unique and powerful aspect of this community-based initiative is that it addresses the inherent connection between health and education. Teachers often become frustrated that health issues limit students, and health care providers cannot deliver complete care if their patients are unable to read

and write. Our team of educators and nurses are very eager to be working together and tackling this problem in a comprehensive manner. Students from the departments of education and nursing will team up to regularly visit families and guide them in how to read, talk, and interact with their children and how to prepare nutritious food for better health. Based on this pilot we will be able to develop larger scale programs that tackle these root causes of poverty, resulting in a healthier population with an improved chance of success in school.

### Compare this:

Some parents spend 30 to 45 minutes a day reading to their children. This translates to 180 to 270 hours per year. Over six years this amounts to well over 1000 hours spent reading aloud (Adams, 1990).

Other parents spend less than 20 minutes per month, which translates to less than four hours per year. Over six years this amounts to less than 25 hours reading (Teale, 1986).



Paige Pullen, associate professor at the Curry School of Education and early language and literacy expert.

### Academic Community Engagement

Our new Jefferson Public Citizens program builds upon U.Va.'s notable public service and outreach efforts by formalizing community engagement pathways for faculty, students, and community members. Its aim is to integrate leadership and academic research to help solve complex self-identified community problems that require multidisciplinary solutions. To reaffirm our commitment to partnering with Southwest Virginia on economic development issues, we have given funding preference to those projects which are based in the Coalfield region.

During FY09 U.Va.'s Office of University Community Partnerships funded three Southwest Virginia-focused teams. Work will be conducted during the 2009-2010 school year on the following topics:

- Dental Health: A 3rd year human biology student will conduct a project during summer 2009 in conjunction with the Southwest Virginia Health Authority and the Healthy Appalachia Institute. The project is titled: "More than a Cavity: Utilizing Dental Hygienists to Improve Dental Health in Southwest Virginia."
- Affordable Housing: A faculty academic-community engagement fellow grant was awarded to John Quale, faculty member in the School of Architecture to teach a course titled, "Evaluating ecoMOD, ecoMOD Design Studio and ecoMOD Engineering class." The ecoMOD Project (http:// www.ecomod.virginia.edu) is focused on creating highly energy-efficient and prefabricated homes for affordable housing organizations and will collaborate with People Incorporated of Virginia.
- Green Building Design: Related to the project above, a Jefferson Public Citizens student group
  project entitled "ecoMod Project in Southwest Virginia" will also work with People Incorporated
  of Southwest Virginia to bring the green designs of the ecoMOD project to that region. Once an
  appropriate design is created, this group will work with modular builders to ensure the quality,
  affordability, and sustainability of its construction.

### **Graduate Degrees**

Thirty-six residents of Southwest Virginia earned advanced degrees this year from U.Va. without leaving home. We offered classes in the region because we understand the unique challenges for adult learners. Teachers face intense demands in the classroom. Trying to combine a day job with graduate school requires perseverance and dedication. Not many are able to leave family and work commitments behind and travel hundreds of miles to participate in an on-Grounds program.

Our School of Continuing and Professional Studies and Curry School of Education tailored two separate M.Ed. programs to the needs of area teachers, delivering instruction at locations throughout Southwest Virginia. This investment in future leaders will strengthen K-12 education by making certain that these committed professionals have the tools they need to build and maintain successful learning communities.

Twenty-one teachers graduated with an M.Ed. in Administration and Supervision and will now have the opportunity to become principals and superintendents in their home region. In fact, since graduating in May 2009 twenty per cent of this cohort has been hired into new administrative positions in Dickenson and Wise counties. Fifteen very motivated teachers graduated with an M.Ed. in Instruction, which will not only make them even better teachers but will allow them to support their colleagues in best practices. The positive impact these graduates will have on generations of students is immeasurable.

### **Teaching American History**

Effective teachers continually seek to increase their knowledge in content areas. We are leveraging the nationally and internationally recognized scholarship and teaching of our history department at the University of Virginia to help teachers in Southwest Virginia become even more informed on topics they cover in the classroom. The Center for the Liberal Arts (CLA) collaborates with the Southwest Virginia Public Education Consortium on a series of Teaching American History grants to provide K-12 teachers in 16 school divisions with subject matter expertise.

Currently, a cohort of 45 teachers from Southwest Virginia is participating in the most recent Teaching American History grant designed to immerse them in the major events of American history. During spring 2009 they participated in three one-credit courses: "Jamestown and its Legacy," "Eighteenth Century Virginia," and "The American Revolution: New Appraisals," all of which were taught in the region. Additionally, throughout the summer of 2009, U.Va. doctoral students are serving as research assistants for these teachers, using the resources of the University to delve into specific topics and provide background and analysis that can augment the K-12 curriculum and classroom discussions in schools across Southwest Virginia.

CLA and the Consortium collaborated on a proposal that was funded in July 2009 for \$1.6 million to create a cohort of history specialists, modeled on U.Va.'s successful math specialists program. This four-year sequence of intensive professional development activities will advance the cohort's knowledge of American history and their ability to communicate the content knowledge as effectively as possible. When the teachers return to their individual schools they will serve as powerful resources for their colleagues, building capacity in the region through a "train the trainer" model, or in this case, an "educate the educator" model. This is truly a broad partnership, including not only CLA and the Consortium, but also U.Va.'s College at Wise, Curry School of Education, School of Continuing and Professional Studies, Miller Center of Public Affairs, and the Corcoran Department of History.

### ACCESS TO HEALTH CARE

### A Persistent Regional Health Crisis

High levels of poverty, declining population, limited educational attainment and low per capita income are persistent social problems in Southwest Virginia. These issues are intertwined with significant health risk factors that contribute to high levels of heart disease, cancer, respiratory disease, diabetes, depression, and suicide. In addition, there are no large-scale population centers capable of financing a full spectrum of specialty medical practice as well as serious healthcare workforce shortages.

The consequence of these factors is that many residents of the region are frequently not healthy enough to work, attend school, or fully contribute to the community and are more likely to die prematurely. The region has an overall premature death rate from all causes that is 24 percent higher than the overall adjusted rate for Virginia.

One only has to look at the ten-year history of the Remote Area Medical (RAM) Expedition in Wise, Virginia as an example of the magnitude of need. The RAM-Wise expedition—reportedly the largest screening event in the United States—broke records in 2008 by providing free medical, dental and vision care to over 3,000 people in a 2½ day period. The University of Virginia Health System and its volunteer team of 217 had 7,160 patient encounters and contributed care valued at over \$1 million dollars.

While there have been many responses to this persistent crisis over several decades, they have had little ongoing impact on health outcomes. In addition, the health issues of the region have had a negative impact on economic development, creating a serious deficit in workforce availability.

# An Innovative Regional Approach

This difficult reality within the Coalfield region is now changing. There were two vital efforts launched in 2008-2009 that represent a watershed in the region's approach to seemingly intractable health problems:

- 1. The **Southwest Virginia Health Authority** created, adopted, and published the first comprehensive integrated strategic health plan for the region.
- 2. The **Healthy Appalachia Institute** was formally established as a vehicle for generating innovative ideas and resources to improve health outcomes.

This collaborative, dyadic model of a governmental-based health authority and a university-based idea and resource generator has been described as a seismic shift in the approach to health outcomes. This shift signifies awareness that the application of external resources to the health crises of the region is, by itself, not a sufficient solution. Innovation must come from plans generated within the region and be adopted by a broad-based partnership with support from critical surrounding resources such as the University of Virginia.

Southwest Virginians have a higher rate of health problems than the rest of the population. They are:

- 23% more likely to die from heart disease
- 44% more likely to die from chronic obstructive pulmonary disease
- 30% more likely to die from diabetes
- 54% more likely to die from chronic liver disease
- 70% more likely to die from unintentional injuries,
- 70% more likely to commit suicide

Data Source: Virginia Department of Health - Virginia Health Statistics Volume 1, 2000-2004

U.Va. has been a partner from the beginning in the development and implementation of this process. Faculty and staff have collaborated with key regional stakeholders to develop a regional strategic health plan, secure funding from state and federal sources, expand specialty field clinics, add telehealth sites and capabilities, train health professionals, and address future workforce shortages.

These efforts are all in alignment with the vision of the region to: achieve continuous improvement in the health and prosperity of the region.



"Critical scholars, system planners and leaders...are crucial to our efforts," says Gary Crum, who leads Healthy Appalachia in Wise. "Healthy Appalachia is building the capacity to assist the people of our region."

### Healthy Appalachia

The Healthy Appalachia Institute at the University of Virginia's College at Wise is a collaboration of critical thinkers, scholars, system planners and leaders in government, education, business and healthcare who are examining issues that exist at the interface of health and Appalachian culture. U.Va. is an active partner in this collaboration, providing resources, ideas, and strategies to foster a healthier population for Central Appalachia.

The vision of the Healthy Appalachia Institute is unique among university-based Appalachian studies programs in that it seeks to transform Central Appalachia into a leading model for health for rural communities throughout the world. This vision is moved forward through the mission of the Healthy Appalachia Institute to improve the health, education and prosperity for the residents of the region.

### **Healthy Appalachia Institute**

- Listens to the needs of communities and their citizens
- Ensures a continuous assessment of the region's health status
- · Supports ongoing strategic health partnerships and planning
- Designs innovative models of health education, workforce development and health care delivery
- Promotes service learning for undergraduate and graduate students on behalf of the residents
- Advances community-based participatory research opportunities
- · Provides evaluation expertise for health improvement projects in the region
- Develops resources to support the work of Healthy Appalachia Institute and its partners
- Explores the history of health in the mountains of Appalachia
- Fosters intellectual, artistic and emotional expressions of understanding at the interface of Appalachian culture and health
- · Serves as an incubator for new ideas

# Healthy Appalachia Works

In partnership with the Institute, Healthy Appalachia Works is a program of the U.Va. Cancer Center and the Office of Telemedicine to provide oncology services and build a stronger health care workforce. Healthy Appalachia Works is led by Michael Weber, PhD, and Karen Rheuban, MD and is generously funded by the Virginia Tobacco Indemnification and Community Revitalization Commission. U.Va. is partnering with local health care providers to increase cancer screening, improve cancer education, and provide more effective diagnosis and treatment. We are doing this while also helping to advance the skill and earning potential of healthcare employees, creating new health care jobs in the region.

### The Southwest Virginia Health Authority

The Southwest Virginia Health Authority was established in 2006 by the Virginia Legislature. It is governed by a board of directors that includes legislators, participating localities, health department directors, regional health systems, educators, and the business community. U.Va.'s

The Southwest Virginia Health Authority seeks to improve the quality of life in the region by enhancing, fostering and creating opportunities that advance health status and provide health-related economic benefits for people of all ages.

School of Medicine has an established seat on the Authority and is represented by Karen Rheuban, MD. U.Va.'s College at Wise is represented on the Authority by David J. Prior, PhD.

The Authority has been instrumental in the creation and adoption of the *Blueprint for Health Improve-ment and Health Enabled Prosperity*. This seminal document of the goals and objectives for improving health over the next ten years represents input gathered from key leaders and citizens from throughout far Southwest Virginia and the broader region. U.Va. helped develop the final plan with the Cumberland Plateau Health Planning District and the Southwest Virginia Graduate Medical Education Consortium.

The next twelve months will witness the first stages of the implementation of this blueprint and a broad sweep of initiatives designed to improve overall health through improving access to care and developing the region's health care workforce.



"The only way we can solve the region's health issues is to find a solution born of this region," says David Cattell-Gordon, director of Rural Network Development with the University of Virginia's Office of Telemedicine and Cancer Center.

# PROGRESS REPORT

We view our economic development partnership with Southwest Virginia as an ongoing, long-term commitment. Established goals and metrics enable us to measure progress and impact on the region. We include below a description of each of our active programs in the Coalfield region, all of which are accomplished in concert with engaged and dedicated partners. A tremendous number of people, both in Charlottesville and in Southwest Virginia, have devoted significant energy and time to make these programs effective and sustainable. We report this year's activities as a snapshot in time, and view each as a building block toward the ultimate goal of a vibrant economy and a healthy and educated citizenry.

# **ACCESS TO HEALTH CARE**

**Goal:** Improve access to health care in Southwest Virginia

### **Metrics:**

- Number of patient encounters
- Number of health education interactions (including patients, health care professionals, and students)

# **Primary partners:**

Southwest Virginia Graduate Medical Education Consortium, U.VA.'s College at Wise, Southwest Virginia Health Authority, Virginia Department of Health (LENOWISCO and Cumberland Plateau Planning Districts and Southwest Virginia Care Connection for Children), St. Mary's Health Wagon, 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.

# Access to Health Care Programs

# Healthy Appalachia Institute

In Partnership with the Southwest Virginia Health Authority

The goals of Healthy Appalachia are to develop a common understanding of the health status of Virginia's Coalfields, to craft and implement a single, integrated strategic health plan for the region in partnership with the Southwest Virginia Health Authority, and to operate an institute to conceive initiatives that ensure a healthier future for the residents of far Southwest Virginia.

Located at the University of Virginia's College at Wise, the Healthy Appalachia Institute is a collaboration between critical thinkers, scholars, system planners and leaders at the College, the University of Virginia, the Southwest Virginia Graduate Medical Education Consortium, the Southwest Virginia Health Authority, and key partners in government, education, business and healthcare. This coalition seeks to provide policy makers, healthcare systems, educators, the business community and the region's citizens the necessary tools, resources, ideas and strategies to foster a healthier population.

This collaborative planning process is funded in part through a grant from the Appalachian Regional Commission (ARC). The grant calls for the development of a strategic plan for improving the health of people in the Cumberland Plateau and LENOWISCO planning districts of Virginia and the creation of an institute charged with conceiving and planning initiatives to remedy persistent health problems in central Appalachia.

*U.Va. Contribution*: U.Va. has played a leadership role in the formation of Healthy Appalachia. Efforts in 2009 included:

- A formal partnership between Healthy Appalachia & the Health Authority
- Guiding community input into the regional strategic planning process
- An analysis of Health Care Resources in the region (a U.Va. East Tennesse State University partnership led by Tanya Wanchek, PhD, JD of U.Va.'s Weldon Cooper Center)
- Completion of http://www.healthyappalachia.org as a repository of resources
- A published strategic health plan for the region with established health outcomes
- Increased funding through the ARC for the Healthy Appalachia Institute to ensure sustainability
- The application of the Institute to be a member of the National Public Health Institutes
- Development of an undergraduate public health course at U.Va.'s College at Wise (in partnership with Ruth Gaare Bernheim, JD MPH, U.Va. Public Health Sciences)
- Support for the creation of a consortium of substance abuse programs in the region through One Care
- The establishment of four student fellowships within the region
- An analysis of the region's healthcare industry (with the Weldon Cooper Center.)
- An established outcomes evaluation process for initiatives (led by Elizabeth McGarvey, EdD, U.Va. Public Health Sciences)

Status: Ongoing

Health Authority Relationship: Healthy Appalachia was approved to serve as a consultant and resource for the formed Southwest Virginia Health Authority for the LENOWISCO and Cumberland Plateau planning districts. Population demographics and health data information and the results of Healthy Appalachia's strategic planning process are shared at Authority meetings. Of note in 2009 is the completion of the region's *Blueprint for Health Improvement and Health-Enabled Prosperity*.

Status: Ongoing

# Healthy Appalachia Projects

A critical component of the Healthy Appalachia Institute has been its partnership with the U.Va.'s Cancer Center and Healthy Appalachia Works project. Under the guidance of Michael Weber, PhD, director of the U.Va. Cancer Center, Healthy Appalachia Works is a \$1 million project funded through the Virginia Tobacco Indemnification and Community Revitalization Commission. The mission of

this project is to: help reduce lost productivity due to cancer through increased screening, education, and effective diagnosis and treatment, particularly for women of the region; advance the skill and earning potential of healthcare employees while creating new healthcare jobs in the region; and aid in regional business recruitment by ensuring an excellent foundation for healthcare delivery. The success of these efforts has been bolstered by their alignment with U.Va. School of Medicine and School of Nursing initiatives in the region.

*U.Va. Contribution*: This past year saw substantial outputs including:

- Training two Nurse Practitioners (NP) in the region to be certified in colposcopy
- Establishing five new NP preceptor sites in the Coalfield region (these NP efforts led by Elke Zschaebitz, MSN FNP-BC). Fifteen NP students were sent to the region
- Instituting a patient navigator and travel fund for regional cancer patients coming to U.Va.
- Improving cancer support and education resources in the region
- Developing an onco-pharmacology practica with College of Pharmacy
- Screening 101 primarily uninsured working women for breast cancer
- Initiating NP guided video-colposcopy clinics in Wise and a subsequent pilot research study (Beth Merwin, PhD of the School of Nursing)
- Establishing new telemedicine sites in region (Johnston Memorial Hospital Cancer Center, Appalachian College of Pharmacy)
- Added curricula in telemedicine and Appalachian health issues to the NP program at the U.Va.
   School of Nursing
- Worked with the Denver Foundation to establish an advanced practice nursing scholarship for NP students from the Coalfield region
- Worked with the Southwest Virginia Higher Education Center to establish the Dishner Rural Health Care Scholarship and Loan Program which will provide need-based loans and scholarships for pre-med students planning to serve the mountain regions of Appalachia
- Presented on regional health issues at national and state meetings

Status: Ongoing

# **Adult Specialty Clinics**

One of the most complex healthcare problems for residents in far Southwest Virginia is gaining access to certain medical specialties. To address this limitation in the area's healthcare workforce the U.Va. Health System has continued its commitment to provide direct specialty clinical care in collaboration



Dr. Wende M. Kozlow, an assistant professor of medicine in the Division of Endocrinology and Metabolism at U.Va. consults with a patient in Southwest Virginia.



The University's digital mobile mammography van travels to Southwest Virginia to offer free screenings and follow-up for uninsured patients

with partners throughout the region. Clinics are currently located in Tazewell, Wise, Clinchco, and Bristol.

*U.Va. Contribution*: In FY2009 the U.Va. Health System offered on-site physician services in far Southwest Virginia through clinics in neurology, pulmonology, endocrinology, radiology (mammography) and gynecology.

### Specifically:

- a team of neurologists conducted monthly clinics for patients with epilepsy and seizure disorders;
- pulmonologists provided services to adult patients with cystic fibrosis;
- an endocrinologist offered quarterly visits with a focus on diabetes prevention, education and treatment;
- radiologists provided an expedited review of women receiving mammograms through the U.Va. digital mammography van;
- a gynecologist from the U.Va. Cancer Center provided diagnostic care and treatment on a quarterly basis to women with gynecological disease;
- a leading physician from the U.Va. Cancer Center served through the year to provide medical direction for the development of U.Va. efforts, ensuring the very highest quality of care.

Treatment for diabetes has continued to be a major need for the region. To address this need, U.Va. established an endocrine specialty clinic with the Health Wagon and the Wise County Health Department in 2009. U.Va. purchased clinic supplies and equipment to support this effort.

Status: The U.Va. 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 is provided through clinics in Wise and Clinchco Virginia.

NUMBER OF PATIENT ENCOUNTERS:	
Neurology	455
Pulmonary	46
Radiology (mammography)	187
Gynecology	27
Total	781

# Pediatric Subspecialty Clinics

The U.Va. Health System conducts pediatric subspecialty clinics across Southwest Virginia in partnership with Care Connection for Children, a program sponsored by the Virginia Department of Health.

*U.Va. Contribution*: U.Va. provides physicians, nurses, and other staff for pediatric subspecialty clinics at multiple Southwest Virginia sites. Clinics include: neurology, cystic fibrosis, cardiology, maxillofacial, neuro-developmental, orthopaedics, and genetics.

Status: Ongoing

NUMBER OF PATIENT ENCOUNTERS:	
Child Neurology	613
Cystic Fibrosis	108
Neurodevelopment	92
Orthopaedic	134
Peds Cardiology	53
Genetics	110
Total	1,120

### Telemedicine

For over a decade, the U.Va. 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, health departments, schools, free clinics, correctional facilities, and community health centers.

*U.Va. Contribution*: U.Va. Telemedicine continually and aggressively seeks funding to expand capabilities in Southwest Virginia. In 2009 U.Va. improved access to specialty medical care in the region by opening five new telemedicine sites. These include:

- The Federally Qualified Community Health Centers in Haysi and Tazewell
- The Program for All-Inclusive Care for the Aging at the Mountain Empire Older Citizens in Big Stone Gap
- The Crossroads Medical Misson Free Clinic serving residents of Lee, Scott and Wise Counties
- The Appalachian College of Pharmacy in Oakwood

Funding for these sites came through the U.S. Department of Agriculture, an appropriation directed through the Health Resources and Services Administration. The Verizon Foundation and the Tobacco Indemnification and Community Revitalization Commission also provided financial support.

Also included in this appropriation was funding for Healthy Appalachia Works and the Southwest Virginia Telemedicine Cancer Outreach Program, both of which extend access to cancer screening, education, prevention, and clinical trials throughout the region. One example is increased access to breast and cervical cancer screening using U.Va.'s digital mammography van and tele-colposcopy services. Follow-up care is provided in partnership with the Virginia Department of Health's *Every Woman's Life* program so that patients can receive follow-up care at no charge.

The U.Va. Health System also provides a tele-radiology link to Southwest Virginia at Buchanan General Hospital, with radiological reviews after-hours and for complex cases. This service allows patients to receive diagnosis and treatment in their home region, which is especially important when time response is critical.

Status: U.Va. currently connects with over 60 telemedicine sites across the Commonwealth. Over 28 sites serve residents in Southwest Virginia, including 17 sites located within the Coalfields. This establishes the Coalfield region as one of the most well-connected telemedicine regions in the country. In FY09 clinical specialty services were provided in dermatology, endocrinology, psychiatry, hepatology, infectious disease, nephrology, ophthalmology, pediatrics, and cardiology.

*Number of patient encounters (via telemedicine)*: 437. This is a 300% increase from FY08. Patient encounters occurred in the Coalfield region. An additional 284 patient encounters occurred through telemedicine in the surrounding counties of Bland, Carroll, Grayson, Smyth, and Washington and the city of Bristol.

*Number of patient encounters (via teleradiology)*: 1,126 teleradiology services were provided in the Coalfield counties.

U.Va. currently connects with over 60 telemedicine sites across the Commonwealth. Half are in Southwest Virginia, establishing the Coalfields as one of the most well-connected regions in the country.

### Federal Communications Commission (FCC) Award

Working with partners across the Commonwealth U.Va.'s Office of Telemedicine received an FCC pilot award to expand and enhance broadband access for rural healthcare providers. This \$2.7 million award, made in November 2007, can be expended over five years.

*U.Va. Contribution*: U.Va. is the legal and fiscal agent for this award for the Commonwealth of Virginia. U.Va. is leading the process to identify potential hospitals and health care centers for broadband access/expansion and is helping to refine the process for awards with the FCC.

*Status*: U.Va. is currently coordinating the process for deployment of expanded/enhanced broadband to designated sites, collaborating with health care providers and broadband service providers. This effort includes working with health care facilities in the Coalfield region. We are also exploring opportunities to leverage this award with Stimulus funds from the U.S. Department of Commerce and the USDA funds for broadband deployment.

Once deployed this award will enable qualified hospitals and healthcare centers to establish or improve broadband capabilities for telemedicine and other uses at reduced costs.

### Cancer Outreach - Virginia Cancer Plan Action Coalition

The Virginia Cancer Plan Action Coalition (CPAC) is a public-private partnership which engages key stakeholders in cancer prevention and control in Virginia. The Virginia Department of Health is a contributing member organization. The mission of the CPAC is to "join forces for cancer control…and eliminate preventable cancers and minimize the burden of cancer." CPAC helps write and implement the Virginia Cancer Plan.

*U.Va. Contribution*: The U.Va. Cancer Center plays a leadership role in CPAC, with staff serving on the executive committee, the advisory board, as co-chairs of two action teams, and in other support capacities. CPAC gives special attention to engaging Southwest Virginia partners; five members of the CPAC Advisory Board are from Southwest Virginia. The Office of Telemedicine has provided critical help to developing videoconferencing sites for the quarterly meetings, which includes an ongoing site in Big Stone Gap.

The September 2009 quarterly meeting will include a panelist from LENOWISCO Health District, participating from the Big Stone Gap videoconference site. The topic will be "Using Telehealth for Cancer Control" and the panel will include staff from the U.Va. Office of Telemedicine.

U.Va. contributed sponsorship and organizational leadership to the first CPAC statewide conference, which occurred in November 2008 and was attended by 150 people.

U.Va. staff provided leadership for completion, production and distribution of the Virginia Cancer Plan 2008-2012. In addition to being available on the CPAC website which is overseen by U.Va. staff members, the Plan was distributed at the CPAC conference. U.Va. staff members were also instrumental in organizing a regional forum in Big Stone Gap, funded by the Centers for Disease Control and Prevention (CDC), to connect local communities to the state cancer plan as well as to the state coalition. About 50 persons attended the regional forum in April; a U.Va. staff member will help present findings from the forum to a group meeting in August 2009 in Johnson City, TN.

Status: Quarterly meetings in FY10 will be broadcast to the Big Stone Gap site.

Number of health education interactions: 110

(50 people on-site at a forum in Big Stone Gap and 60 people attended videoconferences)

### Continuing Medical Education

The Office of Continuing Medical Education (CME) of the University of Virginia School of Medicine continues its long history of providing educational initiatives to physicians and health care professionals throughout Southwest Virginia. A wide variety of educational activities, including live conferences, ongoing lecture series, and telemedicine educational sessions, the Office of Continuing Medical Education provides physicians and health care professionals independent and evidence-based education that is awarded AMA Category 1 credit<sup>TM</sup>.

*U.Va. Contribution*: Over the past year the U.Va. CME office provided on-going continuing education through its affiliates in the region, including affiliates who serve patients in the Coalfields, even if not specifically located within Planning Districts 1 and 2, such as the Salem Veterans Affairs Medical Center. These ongoing programs include medical, pediatric, cardiologic, and psychiatric grand rounds. Specialized non-CME poison control programs were also offered in Buchanan, Tazewell, and Norton.

Status: Continuing medical and health care education is ongoing.

Number of physician credit hours awarded to participants in Southwest Virginia: 917

Number of non-physician health care professional credit hours awarded: 585

### Diabetes Tele-Education Classes for Persons with Diabetes and Their Families

Three U.Va. programs partnered with the Virginia Department of Health's Office of Minority Health and Public Policy to provide diabetes education classes to patients with little or no access to diabetes education in rural southwestern Virginia.

These programs were:

- 1. The Virginia Center for Diabetes Professional Education
- 2. The U.Va. Diabetes Education and Management Program (DEMP)
- 3. The Office of Telemedicine

*U.Va. Contribution*: U.Va. broadcast live education classes taught by certified diabetes educators. Classes included a basic overview of diabetes and an introduction to nutrition.

Status: Both classes were offered May and June 2009 and education classes will be broadcast again in September and October 2009. Sites participating included Lenowisco Health District (Wise County Health Department), Mount Rogers Health District, Southwest Virginia Community Health Systems (Tazewell Community Health, Whitetop Community Health, and Troutdale Medical Center), and the Health Wagon in Clinchco.

Number of health education interactions: 49

- May 4 (Wise, Mt. Rogers, Tazewell Community Health)
- May 18 (Wise, Mt. Rogers, Health Wagon)
- June 1 (Wise, Whitetop)
- June 15 (Wise, Whitetop and Troutdale)

Hours of educational broadcasts: 8

Person-hours of education provided: 392

### **Outreach Librarian Services**

U.Va. Health Sciences offers access to quality health information through an outreach program based at the University of Virginia's College at Wise.

During FY09 U.Va.'s outreach librarian led the TechWorld Project which helps teens train Alzheimer's caregivers to access the Internet for communication and health information resources. This was an extension of two previous programs and provided advanced computer skills training and enhanced access approaches to Internet resources for health information. The program was held at Mountain Empire Community College and was completed during five Saturday sessions.

The outreach librarian is also involved with the Southwest Virginia grassroots Mountain Laurel Cancer Coalition (MLC) and the Appalachian Community Cancer Network (ACCN). In FY09 those programs were presented at the ACCN June Conference providing a historical overview of the development of MLC, its focus on storytelling, and U.Va.'s Health Sciences Outreach Program partnerships with the Coalition.

This work with the cancer organizations has led the outreach librarian to statewide participation in cancer projects through membership in the Virginia Cancer Plan Action Coalition (CPAC). She has served as the CPAC Treatment Action Team Co-Chair and will be serving on the CPAC Executive Committee during 2009-2011. A project of major interest is identifying cancer patient navigation programs statewide and regionally and creating a directory to be placed on the CPAC website. The goal is to provide better access to resources for the Commonwealth's cancer patients and families, which will assist them with cancer diagnosis, treatment and survivorship.

*U.Va. Contribution*: A professional librarian position located at U.Va.'s College at Wise is fully funded by the Claude Moore Health Sciences Library at the University of Virginia. The goal 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 U.Va.'s College at Wise.

Status: Program has been funded since 1995 and is ongoing.

Number of health education interactions: 1013

### Tobacco Use Prevention Project

U.Va.'s School of Nursing is conducting a study on tobacco use and prevention as part of an evolving collaborative, interdisciplinary, and multi-institutional research program focused on protective factors and adolescent non-smoking in order to design/test interventions for youth tobacco use prevention.

*U.Va. Contribution*: A pilot study of male adolescent non-smokers and non-users of smokeless tobacco and their parents in two tobacco-producing countries in Virginia (Charlotte County and Dickenson County) is being funded by the NIH-funded Rural Health Care Research Center at U.Va.

Status: Clintwood and Dickenson County interviews are in process.



U.Va. associate professor of nursing Pamela Kulbok and her collaborators aim ultimately to develop unique interventions that will reduce mortality and morbidity from tobacco use.

### Remote Area Medical (RAM) Clinic in Wise

The RAM-Wise clinic, held in Wise County, is the nation's largest mobile free health care clinic. This represents only a part of U.Va.'s major initiative to create accessible sustainable health care programs for uninsured and medically underserved residents of far Southwest Virginia. Throughout the year scores of U.Va. clinicians travel to the region to conduct specialty care clinics for children and adults or provide consultation and training programs via the U.Va. Health System's numerous telemedicine sites in the area.

*U.Va. Contribution*: U.Va. sponsored 217 volunteers at the 2008 RAM clinic, a 31% increase from 2007 and the event's largest medical team. The volunteers included staff physicians, nurses, social workers as well as pharmacy and lab employees, patient registration and general volunteers.

U.Va. provided medical care to 1,133 individual patients, a 10 percent increase over last year. Some patients were unable to receive all the care they needed in one day and returned the next morning, bringing the total number of patient visits provided by U.Va. volunteers to 1,846, up 15% from 2007.

Patients received a full range of medical services from U.Va. at RAM 2008, including ear, nose and throat (ENT), endocrinology, audiology, obstetrics/gynecology, nephrology, mammography, gastroenterology, HIV/infectious disease and primary care. For the first time patients had access to ultrasound exams, which were performed by two U.Va. sonographers. U.Va.'s patient care services also included a fully functional pharmacy, lab and emergency room. Its on-site medical records office registered attendees on the CareCast database to facilitate follow-up care by physicians at U.Va. and elsewhere.

The total value of care provided by U.Va. at RAM 2008 was \$1,048,942, a record amount. The sum includes volunteer time/salary expense (\$143,854) and patient services (\$905,088). Additionally, the U.Va. Health System spent \$28,985 on medical supplies and volunteer housing and travel.

*Status*: Completed July 25-27, 2008. The U.Va. Health System Community Outreach received the Virginia Hospital and Healthcare Association (VHHA) 2008 Community Benefit Award in recognition of U.Va.'s contributions to RAM.

Number of patients treated: 1,133 Number of patient encounters: 6,195

Number of prescriptions filled: 1,331

Number of prescription vouchers distributed: 640

Note: This is an ongoing activity. It serves to demonstrate need, but is not viewed as a long-term solution for access to health care in Southwest Virginia.

# **K-12 EDUCATION**

### Goal:

Support teacher and student development in grades K-12

### **Metrics:**

- Number of teacher interactions
- Number of student interactions

# **Primary partners:**

Center for Teaching Excellence, U.VA.'s College at Wise, Wise County Public Schools, Russell County Public Schools, "Pathways" Governor's Regional Career and Technical Academy, Southwest Virginia Higher Education Center

# K-12 Education Programs

### Southwest Virginia Early Language and Literacy (SWELL)

Faculty from U.Va. and U.Va.'s College at Wise are teaming up to tackle the problem of school readiness at the very earliest stages. By working with parents of at-risk children age 0-3 we hope to address the root causes for low literacy and language skills, which are essential for learning to read. In partnership with the Wise area Head Start, Kid Central, we will build on their current efforts to reach families and provide evidence-based guidance on how they can improve their home environment and parent-child interactions. Faculty from East Tennessee State University will also be part of this effort.

This study is unique in that we are combining education and health components, recognizing that the two are inextricably enmeshed. Nursing and education students will work directly with families twice a week and offer suggestions on how they can help their child be successful in school and maintain a nutritious diet and healthy lifestyle.

*U.Va. Contribution*: Nationally recognized expert in early language and literacy and Curry School of Education faculty member Paige Pullen, PhD, is designing a pilot program to test the efficacy of joint education-health home visits on developing reading skills. We are identifying sources of funding for this pilot and looking for opportunities to replicate this on a larger scale.

*Status*: Collaborators met several times and designed the pilot study. Funding has been identified for the initial stages. Materials and methods were field tested in Charlottesville before launching this in the Coalfield region fall 2009.

### Project LEAD (Leadership Enhancement and Development)

Project LEAD is the overarching title of a major grant effort designed to build a solid infrastructure for K-12 education instruction and leadership. This fully integrated initiative encompasses both degree and non-degree programs. The degree programs include M.Ed. and Ed.S. level coursework in administration and supervision. The non-degree component includes leadership development and provisions for developing a community of practice that will be sustained long after involvement by any one institution. The components of Project LEAD are described below:

• SCOPE Southwest (Statewide Communities of Practice for Excellence)

This program is designed to develop effective leadership skills for intact cohorts of individuals from participating school divisions. It provides continued professional growth for administrators while establishing communities of practice for excellence.

*U.Va. Contribution*: School of Continuing and Professional Studies (SCPS) co-planned the program with Southwest Virginia superintendents and wrote the technical portion of the grant (rationale, content of seminars, schedule, and demonstration of coherence with formal master's degree program). SCPS faculty and distinguished practitioners from across Virginia are part of the teaching team and provide academic and administrative coordination.

Status: Program design was completed and course was launched September 2007. There were 26 members of this cohort from Southwest Virginia, all of whom completed the program spring 2009. Classes were taught in Abingdon and the counties of Wise, Russell, Smyth, and Washington.

In 2008-09 we combined the second year of the practicing administrator cohort (26 persons) with the persons completing the master of education in administration and supervision degree (21). We offered six days of training to the combined group. This model built mentor relationships between outstanding practicing school leaders and persons training to become school leaders.

*Number of teacher interactions*: 26 participants in cohort

M.Ed. and Ed.S., Administration and Supervision

This degree program is designed for individuals seeking pre K-12 endorsement in school administration and supervision, or an advanced degree, with or without endorsement. In brief, it prepares teachers for administrative roles.

*U.Va. Contribution*: School of Continuing and Professional Studies provided program design and implementation, as well as academic and administrative coordination. U.Va. faculty from the Curry School of Education taught selected classes.

*Status*: Program is complete. Nineteen students graduated in May 2009 and two graduated in August 2009. Classes were taught in Abingdon and Wise County. As of July 2009 four graduates had new administrative jobs with schools in the Coalfield region.

Another grant has been submitted requesting additional funds to create new cohorts for this program and SCOPE (see below).

*Number of teacher interactions*: 47 participants (26 administrators and 21 master's degree students).

### M.Ed., Instruction

This degree program is designed primarily for individuals who want to broaden their knowledge of instructional practices. In brief, it takes good teachers and makes them better.

*U.Va. Contribution*: Curry School of Education and the School of Continuing and Professional Studies provided program design and implementation, as well as academic and administrative coordination. U.Va. faculty members taught selected classes while outstanding senior regional educators taught others. U.Va. subsidized this program so that it could be offered in the Coalfield region.

*Status*: Program had 15 participants. All graduated August 2009. Classes were taught in Abingdon and Wise, and were also open to teachers looking for professional development opportunities.

Number of teacher interactions: 15 participants in cohort

### Special Education Endorsement

By nature, rural regions are sparsely populated. To meet company demands for a skilled workforce rural areas especially need as many students as possible to graduate from high school with at least a baseline set of skills in reading, writing, and math. Students with special education requirements may not always have access to teachers who have received adequate or appropriate training to meet their needs. In the majority of the Coalfield region, the percentage of teachers who are teaching with a provisional license (i.e., not a 5-year renewable license) meets the federal government's grant definition for *high-need for fully licensed teachers*. Special education students who are not receiving adequate services are at risk of dropping out of school, which reduces the number of skilled workers available for high paying jobs.

In response to a keen demand from administrators and teachers, U.Va. has been working with local school districts and U.Va.'s College at Wise to meet this need for properly trained and certified special education teachers. We have begun planning a new degree and licensure program in special education that can be delivered in Southwest Virginia through a blend of classroom and distance learning. The teachers entering this program will receive the option of taking Graduate Record Exam (GRE) preparation classes sponsored and delivered by the University. Admission requirements for Curry's graduate program are rigorous; this test preparation will give applicants the tools they need to successfully matriculate into the program.

*U.Va. Contribution*: U.Va.'s Curry School of Education, School of Continuing and Professional Studies, and College at Wise teamed up to confirm the need with area school systems, design a program that meets the unique needs of fully employed adult learners, and begin to offer GRE preparation classes.

We will work closely with school division personnel and special education directors to make sure that applicants take full advantage of Virginia Department of Education tuition support for those candidates who meet the requirements.

Status: We offered the GRE Verbal preparation course in Southwest Virginia using digital video connections to Danville and Charlottesville. We plan to offer the class again in 2009. This thoughtfully developed course draws on the experience of several seasoned instructors from U.Va.'s College at Wise who also offer in-person one-on-one support that supplements the distance education component. We are also offering a GRE Math preparation course online on a statewide basis this summer.

We will encourage school system special education directors and personnel directors to pinpoint teachers in their systems who would benefit from the program. Based on the success of recruiting efforts and GRE preparation, we hope to have students apply spring 2010 and to begin delivering graduate special education classes in fall 2010.

Number of teacher interactions: 6 teachers enrolled in GRE Verbal preparation course

### 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.

*U.Va. Contribution*: U.Va. helped design and develop some of the STEM workshops. Four faculty and graduate students from the School of Engineering and Applied Science led workshops and introduced the sixth grade girls to specific STEM studies and reinforced the importance of enrolling in core classes during the middle and high school years.

Status: STEM Program completed December 2008.

Number of student interactions: 725

### Classroom Assessment Scoring System (CLASS)

U.Va.'s Center for Advanced Studies in Teaching and Learning (CASTL) developed CLASS, an observational measurement tool that can be adapted to deliver a targeted program of professional development for teaching quality, integrated with early childhood curricula. The CLASS-based professional development approach has been used by dozens of school systems across the nation. Several states are using CLASS as part of their Quality Rating System (QRS) for observing classroom quality. This professional development model provides a formative evaluation of social/emotional teacher-child interactions, classroom management techniques, and instructional strategies.

*U.Va. Contribution*: In 2008 a Curry faculty member met with the Wise County Public Schools instructional leadership team to discuss the CLASS model for professional development and how it might be effectively used by resource teachers to support elementary school teachers.

As a follow up to that session, in February 2009 a Curry faculty member conducted a Principals' Workshop in Wise for elementary and middle school principals. This program provided an overview of the CLASS model including the evidence-based research upon which it is based. School administrators were given manuals and access to Video Library accounts at no charge. They also received guidance on using CLASS-based professional development to improve teacher interactions with students, which in turn will lead to increased learning.

*Status*: CASTL offered this workshop in February 2009 to school administrators from the Coalfield region.

*Number of teacher interactions*: 35 school administrators participated in the workshop and received CLASS resource materials.

# Teacher Workshop: Foreign Language

Foreign language faculty from the Curry School of Education conducted a workshop, ¡Cine Con Clase!, for middle and high school foreign language teachers in Wise during the spring 2008 semester, The workshop received very positive reviews and teachers enthusiastically requested continuing professional development opportunities. In response to this need and in collaboration with U.Va.'s College at Wise Center for Teaching Excellence (CTE) we offered a follow-up program this year to middle school and high school foreign language teachers.

During spring 2009 a workshop entitled, "Winning Ways with Games and Technology for Foreign Language Teachers" was developed and delivered by the U.Va. Center for the Liberal Arts. It focused on games and simulation to increase student engagement with and mastery of foreign language content. In addition, the teachers learned appropriate use of technology and internet-based resources. The workshop provided teachers with classroom activities and exercises to support foreign language education. This class was incorporated into a three-credit hour Spanish Immersion recertification class offered by the Center for Teaching Excellence.

*Status:* Workshop was conducted by U.Va. faculty in April 2009. It was offered in alignment with a U.Va.'s College at Wise recertification class so that teachers could receive credit toward their continuing education requirements. Teachers have expressed a desire to make this an annual event and proposed topics for next year's session.

*Number of teacher interactions*: 17 workshop participants

*U.Va. Contribution*: U.Va. Curry School of Education faculty member Ruth Ferree, PhD, conducted an all-day hands-on workshop in Wise at no cost for middle school and high school Spanish and French foreign language teachers from throughout the Coalfield region. The workshop focused on research supporting peer interaction as part of language development and strategies for encouraging those interactions, such as small group games.

In addition to the day's activities, teachers who had not attended last year joined the U.Va.-initiated Southwest Virginia Foreign Language Teachers Wiki and have used it to share teaching resources and strategies.

# Teaching American History

U.Va., U.Va.'s College at Wise, and the Southwest Virginia Public Education Consortium (comprised of 16 school systems) continue to apply for a series of grants from the U.S. Department of Education to enhance middle and high school efforts to teach American history. This program provides history teachers with in-depth courses, materials, and other support to allow better teaching of Colonial, Civil War, and Cold War periods of American history.

*U.Va. Contribution*: U.Va.'s Center for the Liberal Arts provides leadership and coordination among University groups and offers guidance on program development.

Quotes from Southwest Virginia teachers who participated in U.Va.-led foreign language workshops.

"I know that on Monday I will be a better teacher...and as time progresses I will continue to improve using this information."

"A great workshop! It's refreshing to have this in our area!"

U.Va.'s Miller Center will offer courses on the Cold War period and the School of Continuing and Professional Studies will offer credit for these courses. U.Va. doctoral students in history serve as research assistants for participating teachers. The Center for Advanced Study of Teaching and Learning (CASTL) is conducting the program evaluation to determine the impact of the grant on teachers and students.

*Status*: A grant was awarded April 2008 for \$1 million, for a three-year period beginning July 1, 2008. During FY09 three one-credit hour classes were taught in Southwest Virginia for a cohort of 45 K-12 teachers.

Additionally, U.Va. doctoral students provide in-depth research and analysis for this cohort to use in their individual classrooms. As part of these research duties the graduate research assistants are tracing three areas of Southwest Virginia over the 18th, 19th, and 20th centuries. This information will be widely disseminated through a website and at a history conference scheduled September 2009 at the Southwest Virginia Higher Education Center.

A larger Teaching American History grant for \$1.6 million was awarded July 2009. This will create a cohort of history specialists who can serve as a powerful resource for all teachers in their respective schools and districts.

Number of teacher interactions: 45 teachers in the cohort

### Professional Development Course in Astronomy

U.Va.'s Department of Astronomy, the Curry School of Education, and the Virginia School-University Partnership at the University of Virginia collaborated with school divisions in Central and Southwest Virginia to develop and offer the "Space Science for Teachers" professional development class during the 2008-2009 academic year. The course covered all astronomy, space science, and nature of science SOLs for grades 4-9 and served 29 teachers.

Participants learned how to address the Virginia Science SOLs using hands-on, inquiry based approaches to space science instruction. The participants also developed skills and pedagogical approaches to using innovative technologies in the classroom, such as an inflatable planetarium, astronomy planetarium software, and computer-driven telescopes. The class was taught as a blend of face-to-face meetings in Central and Southwest Virginia and online lessons and assignments using an online course management system.

*U.Va. Contribution*: U.Va. faculty helped to develop the course and write the grant. The Astronomy Department hosted a visit to McCormick Observatory by the teachers, and eight small telescopes from the Astronomy Department were employed to show the teachers how to use a small telescope and how to locate objects in the sky.

Status: Grant was awarded spring 2008, and classes began January 2009. Completed May 2009.

*Number of teacher interactions*: 29

### 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 the University of Virginia. The PALS assessment provides screening, diagnostic, and progress monitoring information to guide effective literacy instruction. Students not meeting the PALS benchmarks are provided 90 minutes of additional literacy instruction each week under the initiative.

*U.Va. Contribution*: 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 districts in the Coalfield region have participated in the EIRI since 1997 and have signed on to participate for the 2009-2010 school year.

*Number of teacher interactions*: 638 teachers supported by PALS Office *Number of student interactions*: 10,760 students assessed using PALS

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

The PALS and Reading First in Virginia offices collaboratively sponsor an annual EIRI Symposium with the Virginia Department of Education. This year, the goal of the symposium was to assist school divisions in planning effective reading intervention services for students in kindergarten through the third grade who demonstrate reading deficiencies. Teams of five participants from each school division were invited to attend, including the PALS division representative, elementary school principals, and elementary school reading teachers.

*U.Va. Contribution*: Curry faculty members from the PALS and Reading First offices conducted small group sessions on issues related to planning intervention services for reading. This event was held in Charlottesville, and teachers and administrators from throughout the Coalfield region attended.

*Status*: The EIRI Symposium was held in March of 2009. The response to the symposium was very positive. Next year the event is scheduled for the fourth consecutive year in March 2010.

Number of teacher interactions: 29 participants from the Coalfield region attended the 2009 EIRI Symposium

### PALS - III. PALS-PreK: Virginia Preschool Initiative

The Virginia Preschool Initiative (VPI) provides quality preschool programs for at-risk four-year-old children. VPI programs are required to screen children with the Phonological Awareness Literacy

Screening for Preschool (PALS-PreK), developed by Marcia Invernizzi, PhD, (Curry School of Education) and colleagues at the University of Virginia. PALS-PreK is a measure of young children's knowledge of important emergent literacy fundamentals.

*U.Va. Contribution*: PALS-PreK is the state-provided assessment for VPI programs and the PALS Office at U.Va. 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.

*Status*: All eight school districts in the Coalfield region had at least one VPI classroom this school year, and all are expected to participate in the 2009-2010 school year.

*Number of teacher interactions*: 85 teachers supported by PALS Office *Number of student interactions*: 1,246 students assessed using PALS

### Financial Aid Awareness Workshop

U.Va.'s dean of admissions joined his counterparts from Harvard and Princeton for a national recruiting tour that focused on efforts to make their universities more accessible for all families, especially those with modest incomes. At U.Va. this program is called AccessU.Va. This recruiting trip was one of the many ways U.Va. is reaching out to a broader pool of students.

*U.Va. Contribution*: U.Va. sent a team of admissions staff to 27 locations around the United States to host evening programs for parents and students, as well as morning breakfasts for guidance counselors from area high schools to spread the message of affordability and accessibility. The event which took place in Southwest Virginia was attended by the Dean of Admission.

Status: Completed October 2008.

Number of teacher interactions: 6 guidance counselors participated

Number of student interactions: 100 students and parents participated

# **Undergraduate Admissions Outreach**

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

*U.Va. Contribution*: During FY09, the AccessU.Va. Coordinator conducted 16 high school visits, held four evening information programs, and hosted guidance counselors from the region for dinner on two occasions. Invitations were sent directly to students and were also distributed through guidance counselors and area college guides.

Status: Completed fall 2008.

*Number of teacher interactions*: 16 guidance counselors

Number of student interactions: 320 students

Students from the Coalfield region who applied to U.Va. in 2009 had a 68% acceptance rate, compared to an overall acceptance rate of 28.9% and an in-state acceptance rate of 42.7%.

### Appalachian Writing Project, Summer Institute

Outstanding teachers in Southwest Virginia may apply to the Invitational Summer Writing Institute on the campus of U.Va.'s College at Wise. This month-long institute, led by a faculty member at U.Va.'s College at Wise, offers instruction in the teaching of writing and literacy issues. It also gives teachers the opportunity to grow as writers.

*U.Va. Contribution*: U.Va.'s School of Continuing and Professional Studies provides assistance with course registration and offers six graduate credits for completion of this program.

Status: Institute conducted June 2009.

Number of teacher interactions: 10 teachers in June 2009 Summer Institute

### Reading First in Virginia

Reading First in Virginia, the professional development office of the state Reading First grant located at the Curry School of Education, has served teachers in the state since the grant's inception in 2003.

*U.Va. Contribution*: We offer free professional development events to teachers in Reading First funded schools and others. Some of these activities include:

- K-3 Teacher Reading Academies
- follow-up workshops on phonological awareness, phonics and fluency
- an academy for teachers grades 4-12 who teach special education students and struggling readers in general
- five on-line academies including one designed especially for teachers of children who speak English as a second language, a comprehension institute
- selected topical conferences

U.Va. maintains the Reading First in Virginia website. It is available as a resource to educators and receives thousands of hits each day.

Reading First site:

http://www.readingfirst.virginia.edu

Professional Development site:

http://www.readingfirst.virginia.edu/prof\_dev/index.html

Since 2003, 572 teachers from Southwest Virginia have attended our academies (on-site and online), 185 have taken advantage of follow-up workshops, 199 have attended conferences, for a total of 956 SW teachers and administrators. In 2008-2009, records indicate that 41 teachers at tended academies, 70 came to follow-up workshops, and 2 traveled to state conferences. Last year, 113 teachers were served through grant funding.

Status: Five districts will continue to receive funding in this last year of Reading First (Dickenson, Grayson, Smyth, Tazewell and Wythe). We are serving them this year (2009-2010) through McGuffey/TEMPO Reading Outreach, with academies and workshops in some locales and in regional SCPS Centers; these non-credit events began in July 2009 and run through spring 2010. At that point, the grant professional development office will be closed.



A Reading First workshop participant

*Number of teacher interactions*: 113

### Office of Mathematics Outreach

In the fall of 2006, the Office of Mathematics Outreach was created within the School of Continuing and Professional Studies (SCPS) to ensure the long-term viability of mathematics outreach efforts. Graduate courses for in-service teachers are offered in collaboration with the Curry School of Education and the College of Arts and Sciences' Department of Mathematics. Ongoing partnerships with school divisions provide sustained and comprehensive mathematics education programs for in-service teachers throughout the Commonwealth.

U.Va. Contribution: The Office of Mathematics Outreach developed, administered, and coordinated the following classes in the Southwest Virginia region:

MATH 675 Measurement and Geometry for Middle School Teachers Abingdon (Fall 2008)

M.Ed. in Mathematics Education – Mathematics Specialist

*Status*: Math 675: Measurement and Geometric Concepts for Middle School Teachers completed, fall 2008.

Four teachers graduated with an M.Ed. in Math, May 2009.

*Number of teacher interactions*: 16 teachers enrolled in courses

# **BUSINESS SUPPORT**

### Goal:

Cultivate a strong base for Southwest Virginia's new economy

### **Metrics:**

- Number of students enrolled in U.VA.-sponsored engineering-related programs
- Number of participants in U.VA.-sponsored management training
- Number of participants in U.VA.-sponsored technical training

# Primary partners:

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

# **Business Support Programs:**

# **Energy Research Centers**

The Tobacco Indemnification and Community Revitalization Commission (TIC) established five energy research centers across the Commonwealth. Two are located in Southwest Virginia with foci on coal energy research and nanotechnology. These centers are intended to stimulate the expansion of energy-related job opportunities and economic development.

U.Va. Contribution: U.Va. provided support during the development of these centers, including assistance with the strategic planning, recruitment of a center director, construction and project management, and input on research funding criteria. We have identified research areas at U.Va. that could be extended to the Coalfield region and that have promising commercialization potential. We are working with the Virginia Coalfield Economic Development Authority and other partners to identify industry collaborators and sites for demonstration projects.

Status: U.Va. held a workshop spring 2009 to assess potential research projects. We will respond to requests for proposals issued by TIC and bring funded projects to the centers.

# Management Training

U.Va.'s College at Wise established the Southwest Virginia Technology Development Center 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.

*U.Va. Contribution*: In partnership with the Center we developed course curricula and content and delivered both open and customized classes to meet the stated needs of industry. We also funded a staff person to develop and coordinate programs that are in direct response to needs expressed by business leaders in the Coalfield region. This Program Development Coordinator is able to provide a strong linkage between resources in Charlottesville and targeted corporate needs in Southwest Virginia. We offer the full range of expertise available in all schools and units at the University.

Status: Over 250 individuals have participated in training programs, which include:

- The Effective Supervisor
- Facilitation Basics
- Web-Based Marketing
- Business Fundamentals
- Administrative Professional Program

Additional programs are being developed for FY10.

Number of participants in U.Va.-sponsored training: 250+

### Entrepreneurship

Entrepreneurship is a critical component for every vibrant community. Innovation occurs through new inventions and through new and valuable uses of existing knowledge. It is most likely to blossom when there are support systems in place, such as early exposure in K-12, educational programs, capital, and management talent. Southwest Virginia is examining how to best nurture entrepreneurial enterprises.

U.Va. Contribution: In partnership with U.Va.'s College at Wise we are supporting regional entrepreneurship through education and development activities. Professor Ed Hess from the Darden Graduate School of Business held a series of events focused on business starts-ups and entrepreneurship. He conducted one-on-one consultations with area businesses and facilitated a strategy session on increasing the level of activity in rural areas. He also held a public session on starting new ventures and worked with Southwest Virginia Community College to kick off their series in entrepreneurship.

U.Va. provided an MBA student summer intern to U.Va's College at Wise with the task of developing an Entrepreneurship Education Plan. Some of the intern's activities included interviews with stakeholders and research on demographics and current entrepreneurial activity. An action plan was developed summer 2009 and it will inform the College's approach to supporting entrepreneurship educational needs in the region.

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

Engineers PRODUCED in Virginia is an academic outreach initiative of the U.Va. School of Engineering and Applied Science (SEAS). Through this program, students can earn a bachelor's degree in engineering science from the University of Virginia without leaving their communities. U.Va. partners with local community colleges to satisfy preliminary course requirements.

*U.Va. Contribution*: SEAS is providing the planning and coordination for this project, including curriculum development. The School for Continuing and Professional Studies is providing administrative support. U.Va. faculty will teach classes during the last two years of the program. Building infrastructure and services, equipment, career counseling, and mentoring will be provided at each site.

*Status*: SEAS is now in the early development stages, and is working with U.Va.'s College at Wise and the local community colleges to initiate the curriculum. Community college course offerings are starting in August 2009 at the following schools:

- Mountain Empire Community College
- Southwest Virginia Community College
- Virginia Highlands Community College
- Wytheville Community College

U.Va. course offerings will begin in 2010. Completion of an Associate of Science program from a community college is a prerequisite for entry into the U.Va. 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 Southside Virginia. This three-year grant, which began July 2008, will fund scholar-ships for potentially hundreds of students. The program also currently has support from the Virginia Tobacco Indemnification and Community Revitalization Commission.

Number of students enrolled in U.Va.-sponsored engineering-related programs:

- Southside Virginia: 150 students enrolled in associate's degree science/engineering programs as a result of Engineers PRODUCED in Virginia. Six Lynchburg-based students have matriculated into U.Va. for studies that begin August 2009.
- Southwest Virginia: n/a (program will begin at the community college level in August 2009)

# LEAD Virginia

LEAD Virginia is a non-profit, non-partisan statewide professional development experience for proven leaders. This seven-month program offers a forum for deeper insight into complex regional and statewide issues, networking, resource exchange, etc.

*U.Va. Contribution*: U.Va. is sponsoring two residents from the Coalfield region for participation in the 2008-09 program. U.Va. also helped with the recruitment process, encouraging leaders in Southwest Virginia to apply.

*Status*: Two residents of the Coalfield region are attending LEAD Virginia with partial scholarships from U.Va.

Number of participants in U.Va.-sponsored management training: 2

### Workforce Development: Professional Competencies Course

U.Va.'s School of Continuing and Professional Studies (SCPS) offered the 18th cohort of the Workforce Development Professional Competencies course at the Southwest Virginia Technology Development Center (SVTDC). This one-week noncredit course was held June 15-19, 2009 in Lebanon. Eleven workforce development practitioners enrolled, representing community colleges, economic development, tourism, rehabilitative services, career and technical education, county government, and one-stop workforce centers. The areas represented were: Tazewell, Dickinson, Scott, and Washington counties, and Lebanon, New River, Abingdon, Big Stone Gap, Richlands, and Galax.

Each participant received a certificate of completion and transcript. Course content included six competencies, a case study featuring an area company, the executive director of the Southwest Virginia Alliance for Manufacturing, the local representative from the Department of Business Assistance, and the chair of the Virginia Workforce Council. A site visit to the CGI data center in Lebanon was also included.

*UVa Contribution*: U.Va. developed the curriculum, identified the subject matter experts, facilitated the course, and sponsored the presenters.

Status: Course completed.

Number of participants in U.Va.-sponsored management training: 11

# Nonprofit Management Professional Development

U.Va.'s School of Continuing and Professional Studies (SCPS) is partnering with the Southwest Virginia Technology Development Center (SVTDC) in Lebanon to offer nonprofit management training to meet the needs of the nonprofit sector in Southwest Virginia. An exploratory meeting was held with area leaders to present the idea and discuss next steps.

*U.Va. Contribution*: SCPS offers a noncredit Certificate in Nonprofit Management that will frame the initial training offered at the SVTDC. SCPS is involved in the brainstorming and need assessment strategies for this sector.

*Status*: Plans are underway to convene several focus groups to confirm need and to appropriately tailor the curriculum. U.Va. and SVTDC will identify relevant courses and adjunct faculty to deliver training at the Center in Lebanon.

# Office of University Community Partnerships

U.Va.'s Office of University Community Partnerships has continued its two programs started in 2008 and launched a third program in spring 2009. The programs provide competitive grants to students and faculty members who seek to connect public service to academic life through research and teaching. Community partners write letters of support endorsing the proposed research project and explaining how the results may further the organization's mission and strengthen the community.

*U.Va. Contribution*: The grants target projects that are geographically located in the city of Charlottesville or the Coalfield region of Virginia. The grants are internally funded by U.Va.. Students and faculty provide data collection, analysis, and recommendations.

*Status*: U.Va.'s Office of University Community Partnerships funded three grants based in Southwest Virginia:

- 1. A 3rd year human biology student will conduct a project during summer 2009 in conjunction with the Southwest Virginia Health Authority and the Healthy Appalachia Institute. The project is titled: More than a Cavity: Utilizing Dental Hygienists to Improve Dental Health in Southwest Virginia.
- 2. A faculty academic-community engagement fellow grant was awarded to John Quale, faculty member in the School of Architecture to teach a course titled, Evaluating ecoMOD, ecoMOD Design Studio and ecoMOD Engineering class. The ecoMOD Project (http://www.ecomod.virginia.edu/) is focused on creating highly energy-efficient and prefabricated homes for affordable housing organizations and will collaborate with Dr. G. Michael Rush, director of housing at People Incorporated of Virginia.
- 3. A Jefferson Public Citizens student group project entitled ecoMod Project in Southwest Virginia will also work with People Incorporated of Southwest Virginia to bring the green designs of the ecoMOD project to that region. Once an appropriate design is created, this group will work with modular builders to ensure the quality, affordability, and sustainability its construction.

Number of participants in U.Va.-sponsored management training: 24

# **NEXT STEPS**

This report is the third in a series of annual reports that will record progress on U.Va.'s economic development action plan for Southwest Virginia.

The focus for the upcoming year (FY10) will be to further develop our signature projects in early language and literacy, energy, and specialty health care. We hope to capture additional external funding to move these initiatives forward in a meaningful way. We will continue to work through public-private partnerships and look for opportunities to help build capacity in the region.

For more information on any of the initiatives included in this report, please contact:

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# **APPENDIX A**

# Southwest Virginia Higher Education Center, Abingdon, Virginia

The Southwest Virginia Higher Education Center (SWVHEC) was established in 1991 to strengthen the economy of Southwest Virginia through education and training of the current and future workforce. Through a partnership with eight colleges and universities, including the University of Virginia, the SWVHEC provides undergraduate and graduate degree programs and professional development courses primarily for adult learners. The SWVHEC promotes regional economic development through its conference facility, business support services, and technology applications.

The following U.Va. courses were offered in FY09, with a total enrollment of 472 students:

MATH 672	Number Systems for Middle School Teachers
MATH 675	Measurement and Geometry for Middle School Teachers
ChE 648	Bioseparation Engineering
MSD 602	Defects and Microstructure in Materials
MSE 714	Physics of Materials
ASTR 574	Astronomy Workshop
EVSC 606	Natural Resources: Balancing Needs
EDLF 714	Learning Communities
EDLF 786	Technology Applications in Instruction
EDLF 866	Policy in Curriculum Instruction
EDLF 589A	Introduction to Gifted Education
EDLF 785	Action Research in Education
EDLF 589	The Teacher as Adult Learner
EDLF 589B	Models & Strategies for Teaching Gifted Learners
EDLF 778	School and Community Relations
EDLF 786	Technology Applications
EDLF 793	Field Project in Teaching
EDLF 589C	Differentiating Instruction
EDLF 780	Emerging Issues in Teaching
PSED 610D	Theory Practice in Teaching Writing

# **APPENDIX B**

# Weldon Cooper Center for Public Service – Southwest Office

### **Products**

- LEAD VA class of 2008 packet, containing regional demographic data and background information about venues to be visited by the class on its September 2008 visit to Southwest Virginia.
   Mailed: August 2008. The same packet was also sent to state legislators from the region and Congressman Boucher's office.
- Served as board member and treasurer of the Coalfield Water Development Authority which provides final component funding to make potable water systems economically feasible.
- Report to Mayor Harris, by request, on elements of parliamentary procedure relevant to recurring issue on agenda of the Bluefield Town Council. Delivered August 12, 2008.
- Compilation of latest levels of compensation paid to town managers and county administrators
  within Southwest Virginia and administrators in selected other counties. At request of Wise County
  Board of Supervisors—delivered August 20, 2008.
- Compilation of latest stipends paid to town council members (excluding mayors) in the 21 Virginia towns with populations of 5,000 and above. Delivered to the requesting jurisdiction and the 20 other jurisdictions on September 10, 2008.
- Updated display of median household incomes in selected Virginia jurisdictions, featuring the
  disparity of Southwest Virginia with the eastern part of the state. Completed October 6, 2008 with
  assistance from Mike Spar in the Richmond office. The previous display from earlier years had
  been helpful in various presentations. This update was part of a project involving the Lee County
  Public Service Authority.
- Spreadsheet matrix displaying the customer fees charged by the five public service authorities in the counties of Buchanan, Dickenson, Lee, Scott and Wise for water and sewer at five levels of customer usage (part of project for Lee County PSA). Delivered to the five entities during first week of November 2008.
- Multi-page document displaying levels of compensation and tenure of the PSA employees in the
  counties of Buchanan, Dickenson, Lee, Scott and Wise. An analysis of how the relationship of
  compensation to employee retention compared between the five entities was added. A customized
  recommendation for how the Lee County PSA might modify its fee rate structure was also added.
  Lee County had made the request which initiated this effort. Product was delivered in January
  2009.
- Report to Pittsylvania County Sheriff (14 pages) regarding the February 26, 2009 planning session; summarizing the day, offering recommendations, and providing background information for archiving.

### **Projects**

- Provided consultation to member of news media from Washington County (D. Johnson) regarding Virginia state statutes; FOIA, conflict of interest and public procurement.
- Continued work with Northrop Grumman on integration in Southwest Virginia.
- Worked with the Wise County Board of Supervisors, Industrial Development Authority, and LENOWISCO on the continued development of the Wise County Technology Park.
- Provided facilitation between the Scott County Board of Supervisors and the Scott County Economic Development Authority to develop an economic strategy for the County, as well as the new incubator building.
- Performed a study of regional pre-K educational programs, their services and staffing costs.
- Hosted and facilitated a meeting of the Coalfield Region's Economic Development Directors.
- Performed a community assessment for Kids Central.
- Strategy development to assist the SWHEC International Education Grant.
- Coordinated and facilitated the Town of Coeburn Planning Process, with a focus toward economic renewal.
- Attended town of Pocahontas strategic meetings: August 4 & 18. Written response delivered at meeting on 18th // Management Team Meetings: September 22 & 30, (including review of RFP for consultant to assist in application for CDB Grant).
- As one of about three officials from Virginia, met with a citizen group exploring internet developments in Bluefield, West Virginia.
- Assisted Virginia Municipal League (VML) by co-serving as staff at the VA Mayors Institute in Norfolk on October 18-19, 2008. The Mayors Institute is co-sponsored by the VML and the Weldon Cooper Center, U.Va.
- Organized agenda, assisted with telephone notification, and accompanied delegation of Pocahontas, Virginia town officials for a one-day trip to meet with Fries town officials in Fries, Virginia.
   Fries has received the type of state grants that Pocahontas is seeking.
- Served as facilitator for a one-day retreat with the town of Pearisburg with the town council, town manager and town attorney at Mountain Lade, VA. Topics ranged from council/manager relations and town/county relations to questions of future use of town owned land, "out of town" user fees, construction of a new fire station, and general goals for future.
- Participated in Citizens Planning Education Association of Virginia, Inc. (CPEAV) board meeting
  and annual board retreat on January 16 2009 in the Richmond Dominion Resources complex. The
  board reviewed new 16 minute video production "Plan Virginia" and discussed potential strategies for distribution and addressed other operational issues.
- Organized Wise County meeting at the General Assembly Building in Richmond, on morning of January 29, 2009, with a delegation of about 12 people from Wise County, including a majority of supervisors. Met with ranking representative from the VA Department of Transportation, the Department of Housing & Community Development, and the Department of Corrections.
- Assisted with delivery and served as presenter with Mike Chandler, VA Tech Emeritus Professor and Larry Land, Virginia Association of Counties (VACo) director of policy development, at VACo's Virginia County Board Chairperson Institute program
- Served as facilitator for a day-long "strategic planning session" with the Sheriff, Commonwealth Attorney and ranking sheriff's department personnel from Pittsylvania County in Chatham, Virginia.
- Met with Grayson County committee in Independence about updating the county's comprehensive plan. March 2, 2009
- Participated in LEAD VA planning meeting for Southwest program in September at the Higher Education Center with Shannon Blevins, Skip Skinner, Rachel Fowlkes, and Marcia Quesenberry.

• Assisted the three Tazewell municipalities of Bluefield, Pocahontas, and Cedar Bluff by investigating the status of the distribution of the local share of state sales tax receipts in Tazewell County. It was found that the county treasurer had failed to make the normal adjustment at the time of the last triennial census of school age children in the county. Also the school had started using data from the county 911 system for greater accuracy in finding the geographic location of student homes. The county had lost 1.8 million dollars during the last six years as a result of the faulty distribution. The Weldon Cooper Center provided an analysis of general population data as a guide to whether the distribution of children seemed appropriate and distributed to all parties.