VIRGINIA STATE College of Agriculture

VIRGINIA STATE UNIVERSITY

2016 Impact Statements

VIRGINIA COOPERATIVE EXTENSION

Virginia Cooperative Extension

Virginia Tech • Virginia State University

VIRGINIA STATE UNIVERSITY | COOPERATIVE EXTENSION

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Transforming African-American eating habits through Superfood Kale Salad demonstrations

Who cares and why?

According to Ewing (2015), typical African-American daily food preparation contains more meat rather than produce, and most often involves frying and serving foods with gravies and sauces containing high amounts of sodium, fat and sugar. Often referred to soul food, or comfort food, the typical African-American diet has resulted in poor health indicators. According to the National Centers for Disease Control, African-Americans are indeed suffering from their unhealthy diets: 37.6% of men and 56.9% of women 20 years or older are obese; 40.9% of men and 44.8% of women over 20 years of age have high blood pressure, or are currently taking blood pressure medication. The leading cause of death for African Americans is heart disease.

Pictured above: Kale salad demonstration

What has project done so far?

To address poor eating habits of African-Americans in Virginia, the VSU Cooperative Extension's Culinary Expert, Ms. Wanda Johnson, has developed an innovative nutritional outreach demonstration involving the following:

- Health-conscious eating with the USDA Plate nutritional guidelines;
- Heart healthy foods to enjoy; and
- 3) Incorporating superfood through a Kale Salad recipe.

Impacts

- 675 African-American participants raised awareness of the USDA Plate, where ½ of their meal plate must contain produce
- 450 African-American participants changed their weekly diet behavior by making the personal decision to prepare the superfood kale salad for weekly family meals
- 338 African-American participants who were concerned about their heart health believed that after the presentation eating the prepared superfood kale salad weekly would improve their overall good health
- Educational demonstrations at local farmers markets earned 12 small farmers $700 of additional income (a minimum of $8,400 or more) over the market season by having the superfood kale salad recipe card on their market display for customers.

VCE Planned Program Area	*Project support*
Food, Nutrition, and Health	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Nutrition & Health Youth, S-Family, & Communities	Wanda Johnson, wjohnson@vsu.edu

Developing an aquaculture and freshwater shrimp industry in Virginia

Who cares and why?

The National Restaurant Association gives "Local grown livestock and produce" top rank in the 2016 culinary food trends. Driven by the local foods movement, Virginia consumers are hungry for "local foods." With diverse food palates, consumers seek out unique locally produced products. Shrimp is highly desired by U.S. consumers and is the most popular of all seafood consumed in U. S. Shrimp comprises over 25 percent of the nation's annual per capita seafood consumption. Most of the shrimp consumed in the U.S. is imported. Introducing shrimp production techniques to small aquaculture farmers in Virginia may increase on-farm income due to the high retail price of shrimp.

Pictured above: Virginia raised aquaponic shrimp

What has project done so far?

Virginia Cooperative Extension has been involved with each step in the production process. Interest by prospective producers exists throughout the commonwealth from Tidewater to Western Virginia and from Northern Virginia to the tobacco growing southern counties. The Extension Office serves as a source of production information and communication between the Virginia based juvenile shrimp suppliers and farmers. Demonstrations of best management practices for shrimp producers are shown at VSU's Randolph Farm. Assistance is provided by accompanying new producers with their juvenile shrimp transportation and stocking.

Impacts

- 22 producers have adopted freshwater shrimp production
- 5 local market outlets established in conjunction with participating farmers includes:
  - Direct sales to consumers ($10.00 per pound) estimated total sales of $30,000.00
  - Wholesale to Virginia Aquaculture Marketing Network estimated total sales of $4,000.00
  - Value added Juvenile shrimp stock sales earned local nurseries over $15,000.00
  - Value added sales using shrimp boil events estimated total of $8,000.00
  - Value added frozen processed product via internet sales estimated total of $8,000.00

VCE Planned Program Area

Agriculture Profitability and Sustainability

Project support

1890 Extension Funding

USDA Primary (P) and Secondary (S) focus area

P-Agricultural Systems: S- Alternative Agriculture

Want to know more?

Dr. Brian Nerrie, bnerrie@vsu.edu

CashCourse program for Virginia State University students

Who cares and why?

According to Institute for College Access & Success (2016), 92% of VSU graduates have debt when they graduate and the average debt of a VSU Class of 2015 graduate amounted to $28,250 per student. With uncertain employment after graduation, the importance of teaching financial management skills to VSU students is needed in order to train students to manage debt and create a habit of saving to prevent long-term negative financial results for VSU graduates. In 2015, the VSU CE Financial Management Specialist identified a lack of available financial programs to educate VSU students on debt management and budget planning.

What has project done so far?

To address the lack of available financial programs to educate the Virginia State University Students (VSU) the following activities were conducted:

- The CashCourse Program was enhanced on the University website for use by all VSU students
- A contest was created and implemented to introduce the CashCourse to the VSU students. Three prizes were awarded to students who used the CashCourse Program.
- The CashCourse Program was introduced into three classrooms within the College of Agriculture in 2016

Impacts

- 64 VSU students applied their skills learned to create a personal spending plan and reduced their monthly spending expenditures a minimum of 10% or more, resulting in a minimum monthly spending reduction of $50 or more per student ($600 less spent annually), through a combination of financial management practices acquired as a result of participating in the CashCourse program, such as 1) Reducing impulse purchases, 2) Use of VSU discounts they were not aware of, 3) Use of online coupons, and 4) Employing delayed gratification techniques, resulting in a class annual total spending reduction of $38,400 ($600 x 64 participants).
- 58 VSU students created a personal savings plan that they did not have prior to the classes and were able to commit to saving a minimum of $25 per month, or $300 per year, resulting in a class annual total savings of $17,400 ($300 x 58 participants).

VCE Planned Program Area	*Project support*
Strengthening Virginia Families	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Youth, Family, & Communities; S-Financial Management	Dr. Larry Connatser, lconnatser@vsu.edu

Providing sustainable integrated control strategies for small ruminant dewormer resistance

Who cares and why?

Infection with internal parasites, especially the barber pole worm (Haemonchus contortus), is the number one health problem affecting sheep and goats. Traditionally, producers relied on chemical treatments (dewormers) to control infections. However, due to misuse and over-use, internal parasites have developed resistance to multiple classes of available dewormers. There is now an urgent need for producers to adapt sustainable integrated control strategies for parasite control to reduce reliance on chemical dewormers and prolong their efficacy on farms. In order to do this, producers need training and on-farm dewormer resistance testing to determine the status of resistance on their farm.

Pictured above: Barber pole worm infection

What has project done so far?

To address this issue, the VSU CE small ruminant program has conducted workshops on internal parasite management, offered FAMACHA© certification training to extension agents and producers, conducted fecal egg counting training (to determine dewormer resistance, make selection choices and determine pasture infestation), assisted producers in determining the status of dewormer resistance on their farm, and conducted direct technical assistance for ANR extension agents in order to increase their awareness, knowledge, and skills in guiding small ruminant producers in Virginia.

Pictured left: Producer applying FAMACHA© technique

Impacts

- Extension programs conducted increased knowledge of 150 producers and agents on small ruminant internal parasite management
- 38 small ruminant producers received FAMACHA© certification
- 32 producers developed skills in conducting fecal egg counts
- One producer set up a fecal egg counting lab on farm to make selection choices based on counts to develop a more resistant herd
- Seven producers made of aware of dewormer resistance status on their farm and were provided with individualized treatment recommendations for controlling parasites in their flock

VCE Planned Program Area	*Project support*
Agriculture Profitability and Sustainability	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Agricultural Systems, S-Livestock Management	Dr. Dahlia O'Brien, dobrien@vsu.edu

Improving producer awareness of new local food marketing channels for small farms in Virginia

Who cares and why?

According to the 2017 USDA local foods database, there are currently 10 existing food hubs located in Virginia. Food hubs are a potential market outlet accessible to small and beginning farmers in Virginia. Food hubs are emerging as an alternative market outlet for small and mid-sized farm and ranch operations who lack the ability to sell to retail and institutional markets on their own. Due to this inability to produce and deliver high volumes of a given product, these small and mid-sized operations end up missing local food marketing opportunities. The food hub concept offers small farmers assistance in product aggregation, distribution, and marketing, so they can enter confidently into high-volume markets which may increase their on-farm income and long-term farm viability. To take advantage of the emerging food hub market outlet, training is necessary to inform producers and agriculture extension personnel on the market potential of selling to local food hubs. Lack of producer awareness of food hubs, coupled with lack of local county agriculture extension agent working knowledge of training farmers to be market ready for new local food marketing channels such as food hubs is an educational gap that should be addressed to increase on-farm income in Virginia.

Pictured above: Food hub assembly line, local strawberries

What has project done so far?

In response to the lack of producer awareness of potential local food marketing channels, the following activities were conducted:

- 3-county agents supported in local food market outlet development and/or establishment (City of Suffolk, Surry County, Mecklenburg County)
- 20-county agents attended trained in local food market outlet development and/or establishment
- 300 small farmers increased awareness of food hubs as a potential market outlet

Impacts

- 44 limited resource producers made aware of and participated in new direct markets (such as food hubs), earning a total minimum gross income of $913,400.00
- 1 food hub planned in South Hill, VA
- 1 food hub restructured in Richmond, VA

VCE Planned Program Areas	*Project support*
Community Viability; Food, Nutrition, and Health; Agriculture Profitability and Sustainability	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P- Agricultural Systems; S-Local Foods	Dr. Theresa Nartea, tnartea@vsu.edu

Securing the financial health of at-risk military veterans

Who cares and why?

Many US military veterans lack effective financial management skills. Heavy reliance on military pay structures that cover housing, food, and healthcare during their active duty period have left many soldiers unprepared for the harsh financial realities of leaving the military. Common sense financial practices such as saving, and debt management must be taught to military veterans. Currently 1.4 million US military veterans are financially insecure and living payday to payday. Remedying this dire financial situation requires educational support for US military veterans. Currently, there is a lack of financial management educational programs in Virginia to assist US military veterans in overcoming financial challenges.

What has project done so far?

To address the lack of financial programs in Virginia to assist US military veteran, the following activities were conducted:

- Existing Master Financial Education Volunteer (MFEV) Program curriculum was revised and updated to address financial issues unique to US military veterans. Three new sections of the MFEV materials were added: 1) Principles of Adult Education, 2) Individual Learning Styles, and 3) Basic Financial Coaching Instruction.
- Four VCE Agents and 27 VCE volunteers completed the 20 hour trained on the revised MFEV program content.
- Five MFEV programs were conducted in Virginia

Impacts

- 27 MFEV trained volunteers are able and ready to assist VCE Agents in their financial management educational programs
- 110 US military veterans increased their understanding and practice of debt management
- 110 US military veterans created personal spending plans
- 110 US military veterans created personal savings plans
- A new financial coaching segment was added that provided three to six months of free coaching if desired by the veterans.
- 33 financially at-risk veterans believed the training they received enabled them to reduce their debt burden a minimum of $5,000 by December 2017
- 27 financially at-risk veterans believed the training they received will enable them to contribute a minimum of $100 into a savings account each month, thereby increasing their personal savings a minimum of $1,200 per year
- 33 financially at-risk veterans believed the training they received will enable them to improve strained family relationships due to lack of financial management skills

VCE Planned Program Area

Strengthening Virginia Families

Project support

1890 Extension Funding

USDA Primary (P) and Secondary (S) focus area

P-Youth, Family, & Communities;
S-Financial Management

Want to know more?

Dr. Larry Connatser, lconnatser@vsu.edu

Virginia small farmers marketing together for "berry" big profits

Who cares and why?

Small growers in Virginia are searching for alternative crops with market potential. In the United States, consumers are more aware of the health benefits of eating berries. Berries contain antioxidants that research has proven to reduce cancer risk, lower cholesterol, and improve heart health. Increased demand for locally produced berries is boosting grower interest in growing berry crops in Virginia. Extension field and high tunnel demonstrations have determined berry crops such as blackberry, blueberry, raspberry, and strawberry can be successfully grown in Virginia by small, limited resource growers.

Pictured above: Greeting growers at VSU berry field day

What has project done so far?

Pictured above: High tunnel raspberries

The Small Fruits and Vegetable Program at VSU-COA conducted research in identifying raspberry, blackberry and blueberry varieties with a higher yield and better fruit quality. Production management techniques were developed. Through grant funding, a total of $720,000.00 has been obtained. In collaboration with Virginia Cooperative Extension Agents and Extension Specialists the production and marketing of berry crops is being promoted among small Virginia growers as a potentially profitable alternative enterprise.

Impacts

- 50 participating small farmers are growing and marketing locally produced berry crops in Virginia
- One local berry food hub established to market Virginia grown berries
- Annual sales of Virginia grown berries through direct and wholesale markets is $500,000

VCE Planned Program Area	*Project support*
Agriculture Profitability and Sustainability	USDA 1890 Capacity Building Grant Virginia Tobacco Indemnification Community Revitalization Grant
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Agricultural Systems; S-Alternative Agriculture	Dr. Reza Rafie, arafie@vsu.edu

Reaching out to Virginia small, limited–resource, and socially disadvantaged producers

Pictured above: Producers attending Small Farm Outreach Program field day

Who cares and why?

Small farmers in Virginia have been faced by several barriers that limit their ability to successfully operate a profitable farm business. Such barriers are, but not limited to,: 1) Lack of knowledge of USDA programs and services, 2) limited access to credit and capital, 3) lack of skills in farm business and financial planning, 4) lack of knowledge of improved production practices and 5) limited access to existing and viable markets.

What has project done so far?

In order to address these issues, VSU-SFOP collaborated with USDA agencies, Virginia Cooperative Extension, other service providers, and community leaders to plan and conduct the following activities:

- Over 100 educational outreach events informing producers about the following topics:
  - USDA programs and services
  - Farm business planning and financial management workshops
  - Improved production systems for high value and profitable crops and livestock
  - Hands-on demonstrations with appropriate small farm tools and equipment
  - Marketing strategies to enhance their farm profits

Impacts

In June 2016, VSU-SFOP Conducted a progress evaluation survey of 1000 small farmers based on the above activities conducted. The results were: 79% of the respondents indicated that VSU-Small Farm Program has helped them to gain a better understanding of operating and maintaining a small farm. 62% of them indicated that the knowledge gained from VSU hands-on demonstrations, field days, workshops and other activities has improved profits in the farm business. 42% of them reported an increase in farm incomes by at least 10% from the previous three years. As a result of attending VSU SFOP trainings, 420 small farmers in Virginia reported a 10% increase in farm income from the previous three years.

VCE Planned Program Area	*Project support*
Agriculture Profitability and Sustainability	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Agricultural Systems; S-Alternative Agriculture	Mr. William Crutchfield, wcrutchfield@vsu.edu

Virginia small farmers find a market niche with high tunnel grown ginger and turmeric

Who cares and why?

Ginger and turmeric roots are culinary and medicinal ingredients treasured by many ethnic cultures worldwide. Due to the anti-inflammatory properties of both ginger and turmeric, as well as their use as highly valued aromatic spices, market demand is growing for locally grown product. Market studies determined fresh baby ginger grown locally can sell up to four times as much as retail mature ginger sold in store. Local fresh baby ginger and turmeric sales in Virginia range from $5.99 to $16.00 per pound. Virginia small farmers may be able to take advantage of year-round consumer demand by growing ginger and turmeric under high tunnels.

Pictured above: Fresh Virginia grown turmeric root

What has project done so far?

The Virginia State University College of Agriculture Small Fruits and Vegetable Program provides training and consultation to small farmers who are interested in growing and marketing ginger and turmeric. At VSU Randolph Farm and on participating grower operations, we conduct educational programs to teach how to grow and market locally produced ginger and turmeric grown under high tunnel culture.

Pictured above: Ginger workshop at VSU Randolph Farm

Impacts

- 110 small farmers educated on growing high tunnel ginger and turmeric
- 30 participating small farmers are commercially growing ginger and turmeric in Virginia
- Participating farmer reported sales of locally grown ginger and turmeric exceeded $30,000.00

VCE Planned Program Area

Agriculture Profitability and Sustainability

Project support

1890 Extension Funding

USDA Primary (P) and Secondary (S) focus area

P-Agricultural Systems; S-Alternative Agriculture

Want to know more?

Dr. Reza Rafie, arafie@vsu.edu

Improving the productivity of Virginia farm ponds

Who cares and why?

Virginia has over 80,000 farm ponds. Many farm pond owners use their ponds for recreational fisheries and some for cage aquaculture. For many of these ponds, water quality parameters are not suited for sustainable recreational fisheries. In fact, many of these farm ponds water quality parameters are below the recommended levels needed for having a productive pond.

What has project done so far?

Pond management workshops were developed with Extension Agents in response to growing issues that farm pond owners were calling about to get answers. These workshops focused on three primary concerns: aquatic weeds, water quality, and management of the fish population. As an integral part of farm pond management workshops with Extension Agents in their county, the program covers the importance of water quality of ponds.

Farm pond owners are educated on the methods that will improve water quality for the fish ponds to be productive and create conditions for proper aquatic ecology to have a good fish population once certain water quality parameters are reached. At every farm pond workshop, pond owners were asked to bring in a water sample of their pond for testing.
All samples were tested on site at the workshops and an overall report given to the participants with individual reports sent a letter with specific actions to take based on their pond water quality.

Pictured above: Sampling farm pond water quality

Impacts

- 110 pond water samples were tested
- 110 Virginia pond owners received a written report and recommendation on improving the water quality of their pond
- 28 of pond owners receiving recommendation report improved the water quality of their pond
- 28 of pond owners reported higher productivity of the fish population, larger fish and higher biomass per acre

VCE Planned Program Area

Agriculture Profitability and Sustainability

Project support

1890 Extension Funding

USDA Primary (P) and Secondary (S) focus area

P-Agricultural Systems; S-Environmental Stewardship

Want to know more?

Dr. David Crosby, dcrosby@vsu.edu

VSU Sustainable and Urban Agriculture Program enhances community access to fresh produce

Who cares and why?

A food desert is defined as an area where residents do not have access to affordable and nutritious food. Food deserts are often located in low income areas of a city and lack major grocery stores, farm markets, and healthy food retailers. Within food deserts, residents are considered food insecure meaning they are not sure where their food will come from. In Virginia, approximately 17.8 percent of the population lives in a food desert, many of these areas exist in Southside region, but also in the Central, West Central, and Hampton Roads regions of Virginia.

What has project done so far?

To respond to the food desert situation the VSU Sustainable and Urban Agriculture Program conducted intensive educational activities within Virginia food desert communities to teach how to grow, prepare, and market fresh produce. Examples of training events offered are:

- Educational workshops
- Field days
- In-service trainings
- Hands-on experiential learning
- Field demonstrations
- Community garden establishment

Pictured above: Establishing a food desert community garden

Impacts

- 250 individuals were made aware of the VSU sustainable and urban agriculture program
- 150 participants received in-class training in sustainable urban agriculture practices
- 100 participants have received hands-on training in sustainable urban agriculture
- 50 participants had a change behavior towards sustainable and urban agriculture
- 30 participants made make decisions to start urban agriculture projects
- Six faith and community based organizations started educational gardens
- Four schools established school gardens

Potential impacts estimated from program activities may result, such as:

- A minimum of 25% increase in fruits and vegetable production within Virginia food deserts
- A minimum 20% reduction in cost of fruits and vegetables
- A minimum 15% increase in local income for market gardens in food deserts
- A minimum 10% increase in urban food security

VCE Planned Program Area

Community Viability

Project support

1890 Extension Funding

USDA Primary (P) and Secondary (S) focus area

P-Food Security; S-Youth, Family, & Communities

Want to know more?

Dr. Leonard Githinji, lgithinji@vsu.edu

Aquaponics education to small-scale farmers, extension agents and agriculture teachers

Who cares and why?

Aquaponics is the production of fish in a recirculating water system in conjunction with plant production. Aquaponic systems use farmed fish waste to supply nutrients for plants grown hydroponically. Small farmers and hobbyists seek reliable information about aquaponics to begin and maintain their aquaponics operations. Limited information and resources are available for Extension Agents and Agriculture Teachers. Training is needed for individuals interested in starting an aquaponics business enterprise.

What has project done so far?

To address the educational needs of individuals interested in starting an aquaponics operation, the VSU Aquaponics Team developed training and assistance to facilitate quick utilization of aquaponics technology.

Training and assistance conducted included tours of the existing aquaponics operation at VSU Randolph Farm, presentations, planning meetings, seminars, displays, hands-on workshops and on-site production assistance to Virginia aquaponics operations.

Pictured above: Aquaponics training at VSU Randolph Farm

Impacts

- 200 growers and hobbyists participated in hands-on training in construction, set-up and operation of a typical aquaponics system
- 20 individual planning meetings were provided to agriculture educators to help with their specific systems
- 20 aquaponic systems were either newly constructed or improved
- 10 extension agents were trained in aquaponics set-up and management
- 3 schools adopted aquaponics best management practices
- 60 agriculture and horticulture high school students learned to grow fish, lettuce and tomatoes
- 10 culinary students learned how to prepare and serve aquaponic grown produce and fish

VCE Planned Program Area	*Project support*
Agriculture Profitability and Sustainability	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Food Security; S-Youth, Family, & Communities	Mr. Chris Mullins, cmullins@vsu.edu

Improving small farm Good Aquaculture Practices (GAqPs) for fish health

Who cares and why?

Seeing fish die in a pond or cage or tank on your farm is a very scary sight and in some case a real nightmare. These fish are the profits for the farm. A fish farmer never wants to see this happen on their farm. Keeping fish healthy and alive is a challenge that fish farmers face every day. Many farmers don't have any written plans to deal with fish dying or other fish health issues. The lack of Good Aquaculture Practices (GAqPs) for fish health on a fish farm increases the risk of potential disease outbreaks and poor water quality. The farmer needs to know what GAqPs (best management practices) are required to prevent diseases and poor water quality that would result in a massive die-off of fish on fish farms.

Pictured above: GAqP workshop at VSU Randolph farm pond

What has project done so far?

A series of workshops were developed to provide training on Good Aquaculture practices known as GAqPs. Various GAqPs were developed for various subject areas – pond culture, aquaponics and etc. – a series of topics in aquaculture were incorporated into the workshops including Fish Health which was considered a critical element in the GAqP training of the participants. Farmers, potential farmers, ANR Agents, government personnel and NGO's were invited to these workshops on good aquaculture practices. Workshops were hosted at Virginia Beach, Northern Virginia, Blackstone Virginia, FDA Maryland and North Carolina.

Impacts

- Over 150+ participants (Farmers, Government officials, and Extension Agents) were trained in Good Aquaculture Practice (GAqPs)
- Improved biosecurity at Virginia aquaculture facilities resulted in prevention of disease outbreak
- Reduced disease outbreak reduced the use of chemicals and antibiotics in participating GAqP operations
- Improved consumer food safety due to reduction of chemical and antibiotic residue levels in aquaculture raised fish
- Increased economic value for producers who produce chemical and antibiotic residue free fish available to local customers

VCE Planned Program Area

Agriculture Profitability and Sustainability

Project support

1890 Extension Funding

USDA Primary (P) and Secondary (S) focus area

P-Agricultural Systems: S-Reduced Chemical Use

Want to know more?

Dr. David Crosby, dcrosby@vsu.edu

Raising awareness of STEAM related careers in agriculture through hands-on experiences

Who cares and why?

The continual growth of global agricultural production and simultaneous pursuit of improved efficiency has fueled the growing demand for high-skill agriculture-related jobs in science, technology, engineering, art and mathematics (STEAM) disciplines. The increased need for educated scientists, engineers, economists, analysts, computer programmers, medical professionals and communication specialists trained and familiar with agricultural concepts represents a phenomenal and secure opportunity for young people to pursue for employment.

Pictured above: Conducting a science experiment

What has project done so far?

To address the issue, the VSU 4-H/STEM program is providing hands-on experiences, activities and demonstrations at various Virginia State University venues to inform and expose young people to specific agricultural career opportunities available in the fields of science, technology, engineering, art and mathematics (STEAM). Connections between individual student interests and STEAM concepts were identified and highlighted prior to each activity to introduce learner specific opportunities and stimulate discussion and curiosity.

Pictured above: Learning about drone technology

Impacts

As a result of VSU 4-H STEM educational activities and events conducted in 2016, the following impacts occurred:

- 214 youth increased awareness of potential career and educational opportunities available in agricultural STEM areas.
- 214 youth participants indicated they would be likely to consider a future career in agriculture

VCE Planned Program Area	*Project support*
4-H Youth Development	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Youth, Family, & Communities; S-Agricultural Systems	Dr. Charlie Nealis, cnealis@vsu.edu

Educational support for grandparents raising grandchildren in Virginia

Who cares and why?

There is a new reality in the 21st Century – that is grandparents raising grandchildren. Virginia has nearly 180,000 children under the age of 18 residing with a grandparent or relative as the primary caretaker/parent, with 16 % of these grandparents living at 100% of the poverty level. This is often because of parental situations involving incarceration, joblessness, drug involvement, child abandonment, and child abuse and neglect. This new situation of grandparents raising grandchildren comes with many worries, disappointments, and hardships for the family. Some grandparents have to delay retirement and work long past what was expected to be a normal retirement age. In addition to financial challenges, worries about their own aging and medical issues threaten their ability to provide a stable and nurturing environment for the grandchildren. Grandparents are often faced with legal issues, questions, and concerns about parental rights, support, and custody or legitimate interest. There is a need for an educational support network.

What has project done so far?

To address the issue, a Grandparents Raising Grandchildren (GRC) Support Group was developed to provide an opportunity for grandparents who are in the primary parenting role to identify information and supports that they need and want, empower their resourcefulness, and to share and support each other's challenges and successes in the rearing, understanding, nurturance and management of grandchildren. Grandparent participants were recruited in collaboration with the Crater District Area Agency on Aging Foster Grandparent Program and Petersburg Public Schools Early Childhood Education Center at Westview Elementary School. The group meets once monthly on the 3rd Tuesday of each month during the convening months of the public school year (September – June). The GRG Support Group celebrated victories and successes without judgment of the value to the other; and engaged to support, and advise participants to study and accept resolution of their issue. A GRC facilitator conducted home visitations, consultations with public schools and support agencies, and counseling referrals were provided to families, thereby alleviating and preventing child and family risks and dramatically cutting medical and legal costs for child abuse and neglect.

Pictured above: Raising a grandchild

Impacts

- 40 consultations and home visitations
- 28 Grandparents raising grandchildren provided educational support and engagement
- 28 grandparent participants practiced skills in assertive, and effective communication
- 28 grandparent participants practiced skills in positive behavior management
- A minimum of 28 grandchildren benefited from their grandparent's improved parenting skills

VCE Planned Program Area	*Project support*
Strengthening Virginia Families	1890 Extension Funding
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Youth, Family, & Communities; Child Family Resilience	Dr. Novella Ruffin, nruffin@vsu.edu

Addressing a Critical Need for Diabetes Self-Management Instruction in Virginia

Who cares and why?

Diabetes is the seventh leading cause of death in the US, and the leading cause of kidney failure, lower-limb amputations, and adult-onset blindness. More than 20% of health care spending is diabetes related, and the prevalence of diabetes has increased at an alarming rate, soaring by 45% between 2001 and 2010. Currently there are 29 million U.S. adults living with diabetes, and 86 million with pre-diabetes. Diabetes is a National priority, and significant efforts are being made to prevent diabetes and help those with the disease live healthier lives. Over half a million Virginia adults were living with diabetes in 2013, with an annual diabetes related death rate of 18.8%. The primary driver of diabetes, overweight/obesity, is found in 62% of Virginia adults. At the same time, only 20% of adults eat the recommended 5 daily servings of fruits and vegetables, and only half meet exercise guidelines. There is a critical need for accessible, effective lifestyle change programs for people with diabetes to change the trajectory of these statistics

Pictured above: Self-monitoring diabetes

What has project done so far?

The Virginia Cooperative Extension has formed a unique collaboration with diabetes educators, healthcare organizations, local departments of health, and community organizations to bring evidence based diabetes self-management education to resource limited rural counties in Virginia. The Balanced Living with Diabetes Program, is a five session lifestyle change program that spans 3 months, and leads participants through a process of developing healthy diet and activity behaviors that result in improved diabetes management.

Impacts

- 16 Balanced Living with Diabetes programs were conducted in 15 rural counties
- 141 individuals received health information on living with Diabetes
- 94 participants were diabetic
- 22 participants were diagnosed as pre-diabetic
- 25 participants were individuals who were concerned about taking care of a diabetic family member and wanted to learn how to help them cope with Diabetes diagnosis
- After program participation, participants provided follow-up information, as follows:
  - 15 had clinically significant improvement of their blood sugar, measured by a reduction in hemoglobin A1c of ≥ 1.0
  - Six participants with an A1c greater than 7%, considered poor blood sugar control, improved their A1c to below the recommended 7%
  - 11 participants with A1c between 5.7 - 6.4 saw a reduction into the normal range (< 5.7)
  - 41 participants lost an average 6.9 pounds with a reported range of 0.2 pounds to 45.3 pounds
  - 84 participants increased their fruit and vegetable consumption
  - 73 participants increased their weekly exercise activities

VCE Planned Program Area

Food, Nutrition, and Health

Project support

1890 Extension Funding

USDA Primary (P) and Secondary (S) focus area

P-Nutrition & Health S-Youth, Family, & Communities

Want to know more?

Mrs. Debbie Jones, dsjones@vsu.edu

Encouraging low income minority participation in 2016 4-H Citizenship Washington Focus (CWF)

Who cares and why?

Pictured above: 4-H CWF participants standing proudly in front of our nation's capital

Each day, national governance touches the lives of American citizens. However, without personal understanding of the political workings of national governmental processes, citizens may not know they can make a difference in their communities by influencing the decisions of governmental officials. Learning the governmental system of checks and balances at an early age, may improve their lifelong interest and involvement in the administration of governmental processes from voting to volunteering. One experiential learning event conducted annually by 4-H in collaboration with US governmental partners is Citizenship Washington Focus (CWF). The CWF event is a life-changing week-long 4-H citizenship program for youth (ages 14-19). Through the CWF experience, 4-H youth travel to the nation's capital in Washington, DC learning first-hand how government works for the people. Throughout the CWF 4-H event, youth delegates enjoy a behind the scenes look at our nation's capital and meet with members of Congress. Youth participants receive needed motivation to become future government leaders through educational workshops and assemblies that increase their individual commitment to citizen involvement in the communities they live in.

What has project done so far?

In order to participate in this premiere 4-H citizenship and leadership experience, the fee of $800 was too much for low-income, minority families to shoulder. Realizing this economic barrier, the Virginia State University Cooperative Extension 4-H program stepped up and aggressively sought and obtained program scholarships from community partners to assist deserving minority youth overcome the economic burden of participating in the CWF event.

Impacts

- $20,000 in scholarship funds provided to low-income, minority 4-H youth
- 25 low-income 4-H youth participated in CWF event
- 25 low-income 4-H youth increased their interest in governmental processes
- 12 low-income 4-H youth increased their involvement in leading community based projects,
- 22 low-income, minority youth desired to be involved in government as a future career path

VCE Planned Program Area	*Project support*
4-H Youth Development	1890 Extension Funding; Farm Credit of VA
USDA Primary (P) and Secondary (S) focus area	***Want to know more?***
P-Youth Development and 4H; S-Leadership	Mr. Bert Reid, areid@vsu.edu

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