

V(A). Planned Program (Summary)

Program # 12

1. Name of the Planned Program

Life Skills for Youth (includes Character Education and Leadership)

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	0%	40%	0%	0%
806	Youth Development	100%	60%	0%	0%
	Total	100%	100%	0%	0%

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	65.0	7.0	0.0	0.0
Actual Paid Professional	197.3	9.0	0.0	0.0
Actual Volunteer	0.0	114.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
2701597	542330	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
2701597	306994	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
22167803	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

AgriLife Extension

This program is based on five learning experiences, of a minimum of 30 minutes each, tied to the work of the project for which they participate. Each project is experientially focused. Examples of activities include workshops, demonstrations, and hands-on experiences.

Numerous materials and support is provided by the Texas 4-H faculty to agents and specialists. These items are used for implementation of projects and for professional development of staff. Use of volunteers is significant in enhancing and extending efforts to reach and provide youth with positive experiences.

Cooperative Extension Program

4-H Youth development takes place in 29 Texas counties facilitated by extension agents with the Cooperative Extension Program in partnership with community volunteers and agencies. There were outreach activities such as speeches, presentations, experiments on wind energy and water conservation as well as literature dissemination at local health fairs and other community events. Demonstrations and educational enrichment were provided to youth in schools and afterschool programs in life skills, healthy living, workforce development, and science exploration and discovery. Community clubs developed and promoted life leadership skills and service to others in a context with caring adults. There were special interest project clubs in areas such as gardening and robotics. Youth maintained record books and practiced in order to participate in contests such as food shows, soil judging, archery, public speaking, and livestock shows on the county, district, state, and national levels. Special events like camps, conferences, and project-oriented days were also sponsored. The university and county extension websites, blogs, local newspapers, radio, Twitter, Facebook, newsletter, and reports were used to promote and highlight program successes.

2. Brief description of the target audience

AgriLife Extension

All youth of 4-H age are targeted for programs depending on location, issues identified by the local communities, and programs of interest.

Cooperative Extension Program

Limited-resource youth, ages 9-19, and caring adults in urban and rural communities of 29 Texas counties throughout the State were targeted for this program. Special recruitment efforts were marketed to parents, adults and other agencies for support and collaboration to meet expected goals.

3. How was eXtension used?

eXtension was not used per say. We do offer some volunteer development trainings on this topic and some introduction 4-H Youth Development Program overviews on the site. Specifically, the South Region 4-H Leaders have placed some information on this site for new employees and volunteers on the following topics:

- * Overview of 4-H Youth Development
- * Ages and Stages of Youth Development

- * Volunteer Management
- * Youth Protection Standards

eXtension was used by CEP agents to answer questions from constituents in subject areas where they lack knowledge, particularly when specialists lack expertise to support them or they were responsible for covering a program area that was not their primary responsibility due to a position vacancy in the county office.

V(E). Planned Program (Outputs)

1. Standard output measures

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	176169	2664999	516712	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2013
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2013	Extension	Research	Total
Actual	20	0	20

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- # of group educational sessions conducted.

Year	Actual
2013	21953

Output #2

Output Measure

- # of youth that participate in educational activities and programs.
Not reporting on this Output for this Annual Report

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	% of youth who increase knowledge of life skills concepts and practices.
2	% of youth who report they have adopted life skills concepts and practices.
3	% of youth who plan to pursue higher education interest or career interest as a result of their project work.
4	% of youth who report abilities (skills) changed as a result of participation in character education programs.
5	% of youth who plan to adopt character practices as a result of participation in character education programs.
6	% of youth who report an increased knowledge of character education principles.
7	% of 4-H club participants increasing knowledge of leadership skills.
8	% of 4-H club participants applying leadership skills.
9	# of new 4-H clubs established.
10	# of outcome plans conducted by agents in leadership.
11	% increase in competencies in job skills among limited resource youth.
12	% increase knowledge of and inspiration to pursue entrepreneurship, green jobs, and/or STEM careers among limited resource youth.
13	% improvement in STEM skills and climate change mitigation practices among limited resource youth.
14	% increase in knowledge and skills necessary to practice health eating activity and healthy levels of physical activity.
15	% increase in application of life skills, life leadership skills, and livelihood skills in and outside of 4-H context.

Outcome #1

1. Outcome Measures

% of youth who increase knowledge of life skills concepts and practices.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The country's future rests with the youth of today. Our role is develop these youth into responsible citizens. The background of the 4-H youth Development Program is developing youth leaders of tomorrow through life skill development. This continues to happen through 4-H community clubs and 4-H project clubs.

What has been done

Texas 4-H Youth Development includes over 55,000 youth in over 2000 clubs in Texas. Through this experience, youth learn leadership, citizenship, and life skills through club meetings and project experiences. Moreover, camps and additional leadership opportunities are provided to youth develop life skills throughout the year.

Results

- * 81% said they know how to work on their attitude.
- * 72% said their knowledge increased on understanding the differences in others
- * 72% said their knowledge increased on how to respect others
- * 65% said their knowledge increased on goal setting
- * 64% said they understand how to better accept criticism

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #2

1. Outcome Measures

% of youth who report they have adopted life skills concepts and practices.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	80

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

AgriLife Extension

The country's future rests with the youth of today. Our role is develop these youth into responsible citizens. The background of the 4-H youth Development Program is developing youth leaders of tomorrow through life skill development. This continues to happen through 4-H community clubs and 4-H project clubs.

Cooperative Extension Program

Life skills are central to CEP 4-H programming as they have been identified as a key resource for positive, productive development of youth because it addresses what they must have to function well in society as they find it. In The Jacobs Foundation Guideline on Monitoring and Evaluating Life Skills for Youth Development (2011), life skills is presented as a set of core adaptive and positive attitudes, knowledge, and behaviors that enable young people to navigate the societal challenges encountered in everyday living and deal adequately with developmental tasks. More and more youth have to deal with bullying. The 2009 National Youth Risk Behavior and Indicators of School Crime and Safety found that 20-33% of teens and nearly 50% of middle school students had been bullied at school in the last year. The issue is so critical in Texas that through two bills state legislatures mandated school districts to train students and school personnel in bullying prevention as well as implement a dating violence and discipline management policies.

What has been done

AgriLife Extension

Texas 4-H Youth Development includes over 55,000 youth in over 2000 clubs in Texas. Through this experience, youth learn leadership, citizenship, and life skills through club meetings and project experiences. Moreover, camps and additional leadership opportunities are provided to

youth develop life skills throughout the year.

Cooperative Extension Program

CEP provided education to Youth and adults in nine counties on the subject of bullying centered on five lessons from the the Take A Stand curriculum. Youth were taught how to positively resolve conflict and stand up against bullying. Parents were taught how to recognize signs of bullying in their children. Teachers and after school providers were trained in how to implement the curriculum.

Results

AgriLife Extension

An evaluation study of 4-Hers was conducted and yielded the following: 4-Hers was conducted to determine their career development and interest based on their 4-H experience.

* 96.0% agreed or strongly agreed that through 4-H, they have learned how to set goals.

* 95.0% agreed or strongly agreed they have developed new skills and abilities through 4-H and can apply them.

* 96.0% agreed or strongly agreed that they can make better decisions with greater confidence.

Cooperative Extension Program

CEP observed results as following:

Of the 1218 survey respondent across 8 counties , many of the respondents changed their behavior or took action. After the program, 75% could control anger, 73% could accept the consequences of violence, 65% can explain their point of view to others, 76% can listen to other points of view, 60% can compromise to solve a conflict, 83% can respect others, 73% can practice good manners, 80% are good team members, 71% can work with others to make decisions, and 80% can respect the customs and traditions of others.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #3

1. Outcome Measures

% of youth who plan to pursue higher education interest or career interest as a result of their project work.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	90

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Career development and workforce development have been a significant priority for the Texas 4-H Youth Development Program. Over the last year, several research studies have been conducted to determine where 4-H is regarding career development. This is a very important topic for the Program to ascertain and further develop for better retention and preparing youth for the future.

What has been done

A research study conducted with almost 700 high school aged 4-Hers was conducted to determine their career development and interest based on their 4-H experience.

Results

* 97.3% agreed or strongly agreed that the 4-H learning experiences provided have made them successful.

* 96.0% agreed or strongly agreed the importance of making a career choice.

* 96.0% agreed or strongly agreed that it is important to explore careers are an early age.

* 94% agreed or strongly agreed that 4-H experiences have benefited them in future career decisions.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #4

1. Outcome Measures

% of youth who report abilities (skills) changed as a result of participation in character education programs.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	70

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

How others are treated, character education, ethical decisions, and anti-bullying are all significant programs in Texas 4-H Youth Development. Currently, this topic is one of the three most important educational content areas the Texas 4-H Program addresses.

What has been done

Character education is significant part of our youth livestock program. A statewide assessment is conducted on every 4-Her and FFAer that participates in the program. In addition, Take a Stand, an anti-bullying program targeting 3rd graders is conducted in schools statewide.

Results

In two years, the quality counts test (measuring knowledge and skills of ethics and character) has been passed by 129,000 youth (4-Hers and FFAers).

* Quality Counts - 4-H Juniors - 85% testing score on questions regarding knowledge of six pillars of character, decision making, and helping others.

* Quality Counts 4-H Seniors - 74% testing score on questions regarding knowledge of six pillars of character, decision making, and helping others.

Take a Stand - Qualitative Assessments with elementary youth have revealed strength in understanding differences in others.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #5

1. Outcome Measures

% of youth who plan to adopt character practices as a result of participation in character education programs.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	70

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

How others are treated, character education, ethical decisions, and anti-bullying are all significant programs in Texas 4-H Youth Development. Currently, this topic is one of the three most important educational content areas the Texas 4-H Program addresses.

What has been done

Character education is significant part of our youth livestock program. A statewide assessment is conducted on every 4-Her and FFAer that participates in the program. In addition, Take a Stand, an anti-bullying program targeting 3rd graders is conducted in schools statewide.

Results

In two years, the quality counts test (measuring knowledge and skills of ethics and character) has been passed by 129,000 youth (4-Hers and FFAers).

* Quality Counts - 4-H Juniors - 85% testing score on questions regarding skills regarding teamwork, applying the six pillars of character, and completing a decision making tree.

* Quality Counts 4-H Seniors - 74% testing score on questions regarding skills regarding teamwork, applying the six pillars of character, and completing a decision making tree.

Take a Stand - Qualitative Assessments with elementary youth have revealed changes in teamwork and group orientation.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #6

1. Outcome Measures

% of youth who report an increased knowledge of character education principles.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

How others are treated, character education, ethical decisions, and anti-bullying are all significant programs in Texas 4-H Youth Development. Currently, this topic is one of the three most important educational content areas the Texas 4-H Program addresses.

What has been done

Character education is significant part of our youth livestock program. A statewide assessment is conducted on every 4-Her and FFAer that participates in the program. In addition, Take a Stand, an anti-bullying program targeting 3rd graders is conducted in schools statewide

Results

Quality Counts behavior changes noted:

- * 99% said they will respect others in the show ring.
- * 98% will look for health problems in their projects
- * 98% will set personal goals for themselves
- * 97% will help others in the show ring
- * 97% will follow the directions on medication labels.

Take a Stand Pilot

- * Almost all indicated Take A Stand K-2 positively changed youth who participated.
- * Almost all educators indicated students learned the difference between telling and tattling.
- * More than half indicated students began to use proper manners & show respect more often towards their fellow classmates and teachers.
- * More than half indicated Take A Stand K-2 students applied the teamwork, good sportsmanship, and sharing concepts more with their peers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #7

1. Outcome Measures

% of 4-H club participants increasing knowledge of leadership skills.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	25

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

AgriLife Extension

Leadership is critically important to the future. In addition to life skill development, leadership development is the next step in developing our youth.

Cooperative Extension Program

Since its inception, 4-H has placed emphasis on the importance of young people being engaged, well-informed citizens. The core areas of citizenship are civic engagement, service, civic education, and leadership. Youth voice and self-determination are essential elements of positive youth development. Civic engagement provides a foundation that helps youth understand the "big picture" of life and find purpose and meaning. By connecting to their communities and community leaders, youth understand their role in civic affairs and expand their role in decision making processes.

What has been done

AgriLife Extension

Texas 4-H Youth Development aims to teach leadership concepts through club and project work. Clubs have elected officers that all have responsibility and roles regarding parliamentary procedure, teamwork, relationship building, and communicating (to name a few). This is also done by programs like Leaders 4 Life.

Cooperative Extension Program

In Dallas County, 206 youth participated in a teen leadership development program to develop the social skills, leadership abilities, and service to the community.

Results

AgriLife Extension

- * 29% increase in understanding of my strengths and things I need to work on to be a better leader.
- * 23% increase in understanding responsibilities of being a leader.
- * 22.7% increase in understanding of public speaking
- * 22.3% increase in understanding of teamwork.
- * 18.7% increase in understanding of how to cooperate with others while working on a team.

Cooperative Extension Program

There were 80 of the 206 (39%) youth that completed the pre and post test. The results were as follows: 96% agreed they were able to promote their own self-determination through the various activities and field trips offered (an increase from 38% pretest) and 88% agreed or strongly agreed they were able to set goals and develop a plan (increase from 59% pretest). Some comments from youth were, "I enjoyed being able to leave outside my zip code. If not for the program I probably never would have" and "The best part of the program was going to see the farm animals down south. Who would have thought straight urban kids would play with farm animals and like it."

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #8

1. Outcome Measures

% of 4-H club participants applying leadership skills.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

AgriLife Extension

Leadership is critically important to the future. In addition to life skill development, leadership development is the next step in developing our youth.

Cooperative Extension Program

Since its inception, 4-H has placed emphasis on the importance of young people being engaged, well-informed citizens. The core areas of citizenship are civic engagement, service, civic education, and leadership. Youth voice and self-determination are essential elements of positive youth development. Civic engagement provides a foundation that helps youth understand the big picture of life and find purpose and meaning. By connecting to their communities and community leaders, youth understand their role in civic affairs and expand their role in decision making processes.

What has been done

AgriLife Extension

Clubs have elected officers that all have responsibility and roles regarding parliamentary procedure, teamwork, relationship building, and communicating (to name a few). This is also done by programs like Leaders 4 Life.

Cooperative Extension Program

Students worked the Soup Mobile to perform community service for the homeless, volunteered at the Food Bank of North Texas, and planned a community festival in Dallas County. Community service in other counties included clearing a cemetery in Brazos County, rebuilding and painting a playground in Bexar County, donating over 60 pairs of shoes to Edgewood ISD in Bexar County, cleaning an animal shelter in Cass County.

Results

- * 89.2% said, I am more comfortable working in a team because of what I have learned.
- * 88.2% said, I am more confident in my abilities as a leader because of what I have learned.
- * 88.0% said, I am more confident in making decisions because of what I have learned.
- * 87.3% said, I have learned information that will help me make better leadership decisions.
- * 86.1% said, I plan to implement any of the activities or ideas I learned at Leadership Lab in my county.
- * 84.8% said, I am more comfortable speaking with others because of what I have learned.
- * 73.0% said, I am more confident with public speaking because of what I have learned.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #9

1. Outcome Measures

of new 4-H clubs established.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	53

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Youth today have many opportunities to participate in activities in their community. Our traditional 4-H club experience can take almost all the time of youth that make the decision to be in the program. So, the Texas 4-H Youth Development Program implemented a new effort to promote a shorter-term experience to get more kids involved.

What has been done

Texas 4-H Youth Development implemented a new initiative to try and promote and develop new shorter-term clubs that would allow youth to participate in the 4-H experience and then move on to other activities. The concept was called SPIN (Special Interest Clubs)

Results

53 new clubs have been started with SPIN in their club name for this 4-H year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #10

1. Outcome Measures

of outcome plans conducted by agents in leadership.

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Leadership development happens best locally. Youth leadership programs that are conducted and evaluated locally provide the most meaningful outcomes because this development is happening on-going throughout the year vs one shot camps and statewide programs.

What has been done

Leaders 4 Life, a new program that has been implemented statewide focused on teaching leadership principles to youth through local 4-H county councils. This program is now four years old and has reached the highest totals regarding educational reach.

Results

- * 97.5% believe that what they learned has given them the ability to make better leadership decisions.
- * 97.5% are more confident in serving in a leadership role.
- * 92.5% have developed or improved their teamwork skills.
- * 90.0% know how to be an effective communicator and good listener.
- * 87.5% can effectively participate in a business meeting using correct parliamentary procedure.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

Outcome #11

1. Outcome Measures

% increase in competencies in job skills among limited resource youth.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	81

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Employment trends in the 21st century are in Science, Technology, Engineering, and Math (STEM) careers and green jobs as indicated by the Workforce Investment Act. Findings from the first report of the STEM Workforce Data Project confirm there have persistently not been enough people to fill these positions in the United States, called the skill gap or broken worker pipeline. So even though unemployment is extremely high, these positions remain vacant. Their third report finds, during the last decade, there has been limited improvement of minorities in STEM occupations.

Engagement of minorities and limited-resource individuals in these careers is critical to the nation's success and sustainability. Failure to do so is creating a national crisis that will eventually have a crippling effect on the Texas economy- which leads the nation cattle and goat production, aeronautics, defense, healthcare, energy or oil, and computer technology. Youth, particularly those who are minority and/or in limited-resourced communities, have not been adequately exposed and equipped to fill that gap and that is reflected in the extremely low employment rates. Therefore, it is important to provide youth with opportunities for early exposure, skill development, and practical application or mastery in science and related fields.

What has been done

The Cooperative Extension Program in Harris County (Houston, TX) conducted workforce preparation and youth development training offer strategies for employability that includes six lessons. They cover the use of The Workforce solutions One ?Stop Web site that provides employment, business, education, legislative, and financial information for all Texas residents. All youth are provided an employment hunting kit to aid them in learning how to properly prepare an application (paper and electronic) as well as write a cover letter and resume. Last participants participate in mock interviews and dress for success workshops.

Results

All 210 participants were evaluated at the conclusion of each session. The following questions were placed on a five point Likert scale which consists of before and after knowledge based questions. The ten questions were rated from 1-5 knowledge bases before and after retro respective survey questions. Participants experienced the most growth in learning to have good working relationships with supervisors and coworkers and how to greet people/customers at work. Of the 210 participants, 170 (81%) students were placed and currently hold employment in the fields of dental technicians and medical assistances according to the placement director.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

Outcome #12

1. Outcome Measures

% increase knowledge of and inspiration to pursue entrepreneurship, green jobs, and/or STEM careers among limited resource youth.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	60

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The nation is facing declining proficiencies in science, engineering, and technology (SET) as well as significant workforce shortages in these critical fields. The Nation's Report Card revealed that only 18% of US high school seniors were deemed proficient in science in 2005, representing a 0% proficiency growth since 2000. Statistics for minority students show an even more dramatic disparity. Too many of our nation's young people do not have the science, engineering and technology skills needed for careers in the 21st century. Informal community based education programs can be utilized to address the emerging issues of youth science literacy crisis.

What has been done

The Cooperative Extension Program facilitated demonstrations, experiments, field trips and other

hands-on learning in science in Dallas and Harris Counties. More than 360 youth participated in robotics and food science. In the robotics program, teams of youth applied math, technology, and problem solving skills to address the issue of food deserts in competition. The other science program focused on developing the science literacy of participants through experiments.

Results

Of the 150 participants in Dallas county, 78% agreed or strong agreed that a career in a STEM field was plausible or possible for them. After the program, 100% agreed or strongly agreed (a 22% increase). In the Harris county program, 123 of the 210 (60%) of the respondents indicated they were interested in a career in science during a post-test.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

Outcome #13

1. Outcome Measures

% improvement in STEM skills and climate change mitigation practices among limited resource youth.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	83

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The nation is facing declining proficiencies in science, engineering, and technology (SET) as well as significant workforce shortages in these critical fields. The Nation's Report Card revealed that only 18% of US high school seniors were deemed proficient in science in 2005, representing a 0% proficiency growth since 2000. Statistics for minority students show an even more dramatic disparity. Too many of our nation's young people do not have the science, engineering and technology skills needed for careers in the 21st century. Informal community based education programs can be utilized to address the emerging issues of youth science literacy crisis.

According to the Environmental Protection Agency website, climate change may negatively affect

coastal states like Texas in many ways as they sensitive to rising sea levels and atmospheric concentrations of carbon dioxide changes in the frequency and intensity of storms, increases in precipitation, and warmer ocean temperatures. Water conservation has been identified as an issue for Tarrant County (Dallas/Fort Worth) since 1999 through the Texas Community Futures Forum issue identification process. The continuing drought trends across the state of Texas have increased the need for citizens to be educated about water, where it comes from, its uses and how it can be conserved and protected.

What has been done

The Cooperative Extension Program facilitated demonstrations, experiments, field trips and other hands-on learning in science through robotics, food science, water education, and animal science programs in Harris, Dallas, Tarrant, and El Paso Counties. The Youth Water program used the stream trailer and Enviro Scape Watershed model to educate youth about water quality and conservation at school or community events. In the robotics program, teams of youth and applied math, technology, and problem solving skills to address the issue of food deserts in competition. Other science programs focused on developing the agricultural literacy of participants through animal and food science experiments.

Results

In Tarrant County's Youth Water education program, there was a 17.8% for 14 of the 32 respondents in belief among participants that water conservation should be practiced by everyone. Other changes were in knowledge of erosion and the earth's surface water and ways to prevent or protect it. In Dallas County's science program, of the 57 respondents there was a 29% in the youth's ability to understand how science affects their life. Behavior changes included increases in their ability to use observation skills, record data, and analyze results from a science experiment (46%) and ability to apply the scientific method to solve problems in and out of the classroom (77%). Findings from the 210 youth survey in the Harris County Agribotics programs indicate that there were 76.1% and 82.6% increases respectively in their ability to question things using the scientific method and to develop a hypothesis to test a theory or idea.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

Outcome #14

1. Outcome Measures

% increase in knowledge and skills necessary to practice health eating activity and healthy levels of physical activity.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	90

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

According to Feeding America, data from 2011 indicate that Texas (at 18.5%) is among the top three food insecure states in the nation. Twenty-two percent of Texas children under age eighteen are food insecure?the highest rate of any state in the country. Texas is also ranked seventh in the nation with a child obesity rate of 20.4 percent. According to the 2011 Youth Risk Behavior Survey, conducted by the Centers for Disease Control and Prevention, Texas youth continue to engage in behaviors that do not contribute to a healthy lifestyle.

What has been done

The Eat 4-Health program mobilized underserved youth and their adult leaders provide leadership and take action around nutritional deficiencies, healthy food choices, and physical activity in eight counties. A statewide training was provided for 132 youth participants and 32 adult leaders where participants were engaged in hands on learning experiences in leadership, curriculum facilitation, presentation skills, and program planning. Participants returned to their county to recruit and train additional youth and adult healthy living ambassadors, conduct events to kick off healthy living campaigns in their communities, and complete community service and educational sessions. Funding was provided by WalMart through the National 4-H Council.

Results

Healthy Living Common Measure surveys were administered as part of the Eat 4-Health grant. Those results have not yet been tabulated, but will be entered into a national database. There were 553 additional surveys collected. Based on 109 responses from youth ages 13 to 19 at the statewide healthy living ambassadors training, participants reported increased knowledge gains in all five areas measured. The greatest level of knowledge gains were made in the participants understanding of nutrition values (44.8%) and effects of sugary drinks (39.1%). The lowest area of knowledge gain occurred in understanding of physical activity importance (17.7%). In Cameron County, 319 respondents in grades 3 through 5 over 90% increased their knowledge of the foods they should eat daily, why it's important to eat a healthy diet, and how to make healthy food choices. Participants also changed behaviors to drink more water (90%), eat more fruits/vegetables and whole grains (78% and 80.2% respectively), and consume less junk food (60%). Nearly 70% of them encouraged their family and friends to eat meals together. Similarly in Fort Bend County, 85% of 125 youth participants ages 10 to 12 indicated they would do things differently because of what they learned. The greatest knowledge gains were in understanding My Pyramid (56%), how to create a menu (52%), the functions of fat (51%), and how to recognize fad diets.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

Outcome #15

1. Outcome Measures

% increase in application of life skills, life leadership skills, and livelihood skills in and outside of 4-H context.

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2013	77

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Life skills are central to CEP 4-H programming as they have been identified as a key resource for positive, productive development of youth because it addresses what they must have to function well in society as they find it. In The Jacobs Foundation Guideline on Monitoring and Evaluating Life Skills for Youth Development (2011), life skills is presented as a set of core adaptive and positive attitudes, knowledge, and behaviors that enable young people to navigate the societal challenges encountered in everyday living and deal adequately with developmental tasks. According to UNICEF (2002), they can be applied to actions directed at the self, other people, or the local environment. So they are important for helping youth shape the world and not just cope with it. They empower youth to take steps that promote health, positive social relationships, and contribute to society. The core areas of life skills are social and interpersonal skills, cognitive skills, emotional coping skills, life leadership skills, technical skills, livelihood skills, civic engagement, and service.

What has been done

Educational outcome programs were conducted in at least eight counties throughout the state to promote the development of life, leadership, and livelihood skills in the areas of science, healthy living, and citizenship for youth participants.

Results

There was an average increase of 77% in healthy eating and physical activity among the 444 participants surveyed in Cameron and Fort Bend Counties. There was an average increase of 73% among the 1468 participants surveyed in pro social behaviors such as listening, controlling anger, and resolving conflict positively in Bexar, Brazos, Cameron, Dallas, Fort Bend, Harris, Tarrant, and Travis Counties. In science there was an average increase of 77% among the 267 respondents in their ability to apply the scientific method to inquire and solve problems in and outside the classroom in Cass, Dallas, Harris, and Tarrant Counties.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

All intended objectives and goals were met. We are working to build the SPIN 4-H Club concept and expect this to grow.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

The results offered in this document are pulled from county, district, and statewide evaluations and aggregated as best possible to answer these questions. The focus agency wide is outcome measures (knowledge, skills, behaviors) as indicated in this document.

Key Items of Evaluation

Youth Leadership, life skill development, career workforce development