V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

Creating Complex Environments for Positive Youth Development

☑ 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
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2014	Extension		Research	
	1862	1890	1862	1890
Plan	25.0	0.0	0.0	0.0
Actual Paid	25.0	0.0	0.0	0.0
Actual Volunteer	0.0	0.0	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**
621973	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
666982	0	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

4-H Community Clubs.

2. Brief description of the target audience

Adults (youth staff, local leaders, parents, volunteers, teachers, organizational leaders), youth aged 5 - 19.

3. How was eXtension used?

About one-third of campus and field faculty are members of a community of practices pertaining to youth. eXtension allows them to collaborate on science and agricultural science programming for young people.

V(E). Planned Program (Outputs)

1. Standard output measures

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	22549	45694	36755	59994

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

Patent Applications Submitted

Year: 2014

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2014	Extension	Research	Total
Actual	10	0	0

V(F). State Defined Outputs

Output Target

<u>Output #1</u>

Output Measure

- Number of youth enrolled in 4-H community clubs.

Year	Actual
2014	24592

Output #2

Output Measure

- Number of 4-H volunteers.

Year	Actual
2014	11325

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	A sample of Missouri young people participating in the 4-H Study of positive youth development or those responding to the Missouri 4-H Life Skills survey will report they are competent, capable, caring and contributing.

Outcome #1

1. Outcome Measures

A sample of Missouri young people participating in the 4-H Study of positive youth development or those responding to the Missouri 4-H Life Skills survey will report they are competent, capable, caring and contributing.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2014	500

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Youth today must be prepared to live and work in a world that we can't completely envision - for jobs that do not yet exist, using technologies that have not been yet invented, solving problems that have not yet been identified. Changes in technology increases the demand for trained scientists and engineers and a broader understanding of technology and science by all citizens. The need for advanced technology abilities cuts across all types of communities, professions and skill levels.

What has been done
Working collaboratively, 4-H field and campus faculty, with 11,325 volunteers, reached 290,969 youth across Missouri. Food, Health and Fitness, 211,115; Science, 69,782; and, Citizenship/Leadership programming, 25,569.

The Office of Social and Economic Data Analysis is conducting a three-year 4-H Alumni Study to study higher education enrollment and career aspirations.

Results
Missouri 4-H Members are twice more likely to have been on a college campus than their non-4-H peers. Annually, MU Extension faculty and staff connect 8,353 youth to campus faculty. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). Being on a campus is a predictor of youth going on to higher education (Hoover, 2006). Missouri data do show an advantage of 4-H participation for developing positive attitudes about science and more active participation in science-focused experiences during out-of-school time. The benefit for girls is particularly important. 4-H girls were

significantly more positive on all measures related to science. Missouri girls in 4-H also reported increased interest in science-related topics.

Quotes from focus groups of 4-H members suggest Missouri 4-H members demonstrate higher education aspirations - "if it was not for 4-H, I would not have ever been on a college campus."

4-H'ers believe in engaging in leadership today rather than waiting for future opportunities. 4-H members report twice the number of leadership experiences than their non-4-H peers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

The ability to provide volunteer training and educational experiences for youth is dependent on having well-educated and motivated local and state faculty to guide and support volunteers. In the past year, we have added 20 new 4-H faculty and 10 staff to MU Extension 4-H Youth Development. The impact of their programming will be reported next year. Currently there is a St. Louis Metropolitan area that hampers efforts to recruit, support and train volunteers to reach urban youth.

The 4-H Center for Youth Development is working with the Office of Social and Economic Data Analysis to evaluate the impact of Missouri 4-H Youth Development Programs on alumni that left the program May, 2013 and 2014. Results of the 4-H alumni study will be shared in next year's report.

We are laying the ground work to train faculty on the 4-H Youth Program Quality Assessment used by the University of Minnesota. We have 30 faculty trained in using this observation tool and they are currently evaluating two of their clubs in geographically assigned counties. A post assessment score will be created. Technical assistance will be provided to each club based on the data. A follow-up assessment will be conducted to see if quality of the learning experience improves. Program improvement outcomes for the clubs will be shared in next year's report.

In addition, the 4-H Center for Youth Development is transitioning from the 4-H Lifeskills Evaluation System to the National 4-H Common Measures Evaluation System.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Missouri 4-H Members are twice more likely to have been on a college campus than their non-4-H peers. During this program year, MU Extension faculty and staff connected 8,353 youth from 107 of the 114 counties to campus faculty. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). Being on a campus is a predictor of youth going on to higher education (Hoover, 2006).

In 2007, the University of Missouri 4-H Center for Youth Development joined the national 4-H Study of Positive Youth Development. Funded by the National 4-H Council and led by researchers at Tufts University, this longitudinal study began with fifth graders in 2001. By the end of the study in 2009, data had been collected by extension faculty from 6,450 adolescents and over 3,000 of their parents in 45 states.

The advantages of 4-H participation include developing positive attitudes about science and more participation in science-focused activities during out-of-school time. The benefit for girls is particularly important. 4-H girls were significantly more positive on all measures related to science. Missouri girls in 4-H also reported increased interest in science-related topics.

4-H'ers believe in engaging in leadership today rather than waiting for future opportunities. 4-H members report twice the number of leadership experiences than their non-4-H peers.

The 4-H Center for Youth Development is working with the Office of Social and Economic Data Analysis to evaluate the impact of Missouri 4-H Youth Development Programs on alumni that left the program May, 2013 and 2014. Results of the 4-H alumni study will be shared in next year's report. Preliminary results from focus groups conducted to inform the study are promising. Quotes from collegiate 4-H members - "4-H is always pushing higher education." There was an expectation with comments to questions like, "where are you going to college?" "If it was not for 4-H I would not have been on a college campus. It was an expectation to attend college. I thought that was awesome."

The 4-H Center hosts the Missouri AfterSchool Network that works synchronically with the Missouri Department of Secondary and Elementary Education to enhance the after-school experience of 28,972 youth and 3,620 staff members annually. From 2010-2014, the Noyce Family Foundation funded MASN in the amount of $1.3 million to develop Project LIFTOFF. This STEM initiative focused on building systems to improve and expand STEM education offerings in after school and informal settings across Missouri. Although the funding period has ended, MASN continues to offer STEM professional development, data collection, and leadership opportunities started by Project LIFTOFF in an effort to:

- Increase youth interest in STEM,
- Increase the number of college majors in STEM, and
- Improve the pipeline for careers in STEM.

Key Items of Evaluation

Missouri 4-H Members are twice more likely to have been on a college campus than their non-4-H peers. During this program year, MU Extension faculty and staff connected 8,353 youth from 107 of the 114 counties to campus faculty. MU is by far the campus most frequently visited and 4-H is the second most reported reason to be on the MU Campus (Lerner, 2008). Being on a campus is a predictor of youth going on to higher education

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