

# 4-H Science, Technology, and Engineering

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## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

4-H Science, Technology, and Engineering

## 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%			
	<b>Total</b>	100%			

## V(C). Planned Program (Inputs)

### 1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	7.5	0.0	0.0	0.0
<b>Actual</b>	5.9	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 66269	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching 66269	1890 Matching	1862 Matching	1890 Matching
	0	0	0
1862 All Other 377222	1890 All Other	1862 All Other	1890 All Other
	0	0	0

## V(D). Planned Program (Activity)

### 1. Brief description of the Activity

4-H science clubs/programs (animal science, horticulture); 4-H Technology clubs/programs (Tech Wizards, Lego Robotics); 4-H Engineering clubs/programs/camps (Technology Camp); National 4-H Technology Conference; Afterschool science programs (not-environmental science); Curriculum and material development

### 2. Brief description of the target audience

Youth ages 9-18, 4-H Volunteer leaders, Extension educators

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	2000	2000	40000	40000
2007	4761	2472	27954	7129

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

**Patent Applications Submitted**

**Year Target**

**Plan: 0**

2007: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	7	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Number of youth participating in 4-H science and technology projects and programs.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	0	2600

**V(G). State Defined Outcomes**

<b>O No.</b>	<b>Outcome Name</b>
1	Number of youth gaining skills in science and technology.
2	Number of youth utilizing science and technology skills to improve their school or community.
3	Number of youth whose career choice was affected by participation in 4-H science and technology programs.

**Outcome #1**

**1. Outcome Measures**

*Not reporting on this Outcome for this Annual Report*

**2. Associated Institution Types**

**3a. Outcome Type:**

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
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**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

KA Code	Knowledge Area
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**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

Economy

Competing Public priorities

Competing Programmatic Challenges

**Brief Explanation**

In the fall of 2007 OSU Extension's new on-line planning and reporting system (SOARS) was fully implemented. While this is a positive step forward, there are still some inconsistencies between SOARS and the AREERA State Plan of Work Information System. In the next year, an extra effort will be made to bring these two systems into closer alignment for improved quality in the planning and reporting process.

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

After Only (post program)

Retrospective (post program)

Before-After (before and after program)

Case Study

### **Evaluation Results**

1. The results of the County Fair/4-H Animal Science impact study show that participation in 4-H animal science projects and the 4-H county fair leads to an increase in important life skills and developmental outcomes. Research shows that developing these skills and achieving these outcomes leads to the long-term success of youth as they transition to adulthood.

2. Service-learning through 4-H SET projects leads to improved student retention of academic learning and skills and increased student motivation. Students feel more positive about the relevance of school in their lives.

3. At-risk youth participating in the 4-H Tech Wizards program graduate high school and are more likely to seek careers in SET related fields.

### **Key Items of Evaluation**