

5.3 Science and Technology Literacy

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V(A). Planned Program (Summary)

1. Name of the Planned Program

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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%		100%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	9.7	0.0	0.0	0.0
Actual	46.7	0.0	0.0	0.0

2. Institution Name: Cornell University

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

Extension		Research	
Smith-Lever 3b & 3c 289052	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching 289052	1890 Matching	1862 Matching	1890 Matching
	0	0	0
1862 All Other 0	1890 All Other	1862 All Other	1890 All Other
	0	0	0

2. Institution Name: NY State Agricultural Experiment Station

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	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

This is a comprehensive, statewide educational program entailing a wide variety of applied research and multiple education methods depending on local context and need. Campus-based faculty and extension associates, the science and technology program work team, the NYSACCE4-HE professional development committee and county-based educators all are involved in designing, implementing, and evaluating tailored educational efforts depending on the focus and scope of their role.

Activities will include: •Connecting kids to science and technology at Cornell University through programs at local Cornell Cooperative Extension associations, educational events at Cornell and by building relationships with Cornell Departments, faculty, staff and students. •Enhancing and maintaining accessibility to hands-on science and technology curriculum that has a youth development basis and a connection to land grant universities through the NYS 4-H Resource Directory.

2. Brief description of the target audience

The target audiences for 4-H Science and Technology programming and curricula are youth in grades K-12 and adults who work with youth. These include, but are not exclusive of 4-H Leaders, 4-H Junior Leaders, and 4-H youth members, parents of 4-H members, adult leaders and the youth involved in after school and out-of-school-time programs, summer camp staff and youth campers, classroom teachers and their students in grades K-12, and leaders and youth in other youth serving organizations such as Scouts. Training one adult leader will result in a significant multiplier of youth who will participate in the activity from which their adult leader received training. This audience is reached directly through educational classes and workshops, individual consultations, group consultations and hands-on-curricula. These may be provided to youth or to their adult leaders. Additional contacts are made through newsletter articles highlighting curricula and curriculum reviews. The New York State 4-H Curriculum Resource Directory website provides and opportunity for any person to search for approved curricula in any Science and Technology topic, read a description of the curricula and then purchase it.

V(E). Planned Program (Outputs)

1. Standard output measures

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

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	750	24000	35000	50000
2008	16304	385343	117516	1428995

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

Patent Applications Submitted

Year	Target
Plan:	0
2008:	0

Patents listed

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3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	12

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

non-credit instructional activities directed to this program.

Not reporting on this Output in this Annual Report

Output #2

Output Measure

non-credit instructional activity contact hours directed to this program.

Not reporting on this Output in this Annual Report

Output #3

Output Measure

funded applied research projects directed to this program.

Not reporting on this Output in this Annual Report

Output #4

Output Measure

of 4-H members enrolled in Science and Technology project areas (as reported on ES-237). (5.3.1a)

Not reporting on this Output in this Annual Report

Output #5

Output Measure

of youth reached through school enrichment and special interest programs coded as science and technology related (as reported on ES-237). (5.3.1b)

Not reporting on this Output in this Annual Report

V(G). State Defined Outcomes

O No.	Outcome Name
1	# of members/participants who choose science/technology related college majors/careers. (5.3.1g)
2	# of participants demonstrating knowledge or skill gains related to science and technology. (5.3.1c)
3	# of participants that report improved success in school science and/or increased interest in science and technology. (5.3.1d)
4	# of members/participants who report participating in new science/technology related activities (Career Exploration workshops, Special Interest offerings, school science clubs, etc.). (5.3.1e)
5	# of youth documented to become contributing participants in sci/tech related issues in their communities and/or choose sci/tech related professions and who attribute same at least in part to involvement with the program. (5.3.1f)
6	Geospatial Science
7	Thinking Like A Scientist: Developing Real-World Thinking and Reasoning in Ethnic Minority and Disadvantaged Youth

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

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

Brief Explanation

- Public policy changes
 - Competing programmatic priorities
 - Population changes (immigration, new cultural groupings, etc.
- See plan for additional details.

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.
- Comparison between locales where the program operates and sites without program intervention

Evaluation Results

Evaluation results are reflected in the outcome indicators and impact statements associated with each planned program and result from a broad variety of evaluation approaches appropriate to the individual programs and contexts they represent.

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Key Items of Evaluation

Each of our planned programs represents broad program emphases and strategies. Program evaluation results are incorporated in outcome statements associated with each plan.