

# 4-H COMMON MEASURES 2.0: 2020 UPDATES

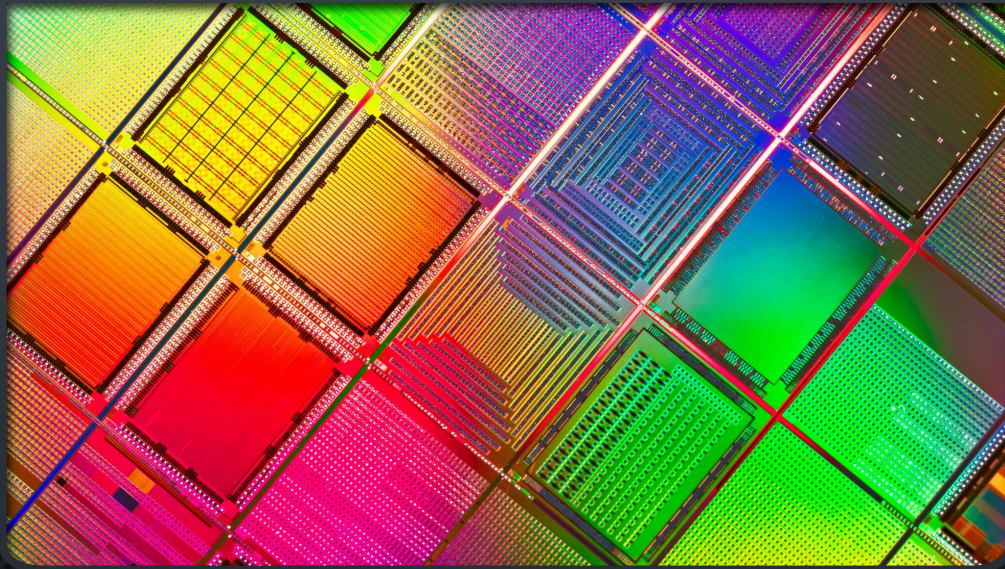
JULIE HUETTEMAN, STRATEGIC INITIATIVES COORDINATOR

C. BRAD SEWELL, PROGRAM MEASUREMENT AND EVALUATION COORDINATOR

IEEA, APRIL 22, 2020



# PLEASE USE THE CHAT



- PLEASE POST YOUR QUESTIONS AND COMMENTS.
- WE WILL REVIEW AND RESPOND AT THE END.



# NEW IRB PROTOCOL 2020

- CITI CERTIFICATION
  - GROUP 2 SOCIAL BEHAVIORAL RESEARCH
  - INITIATE CAYUSE IRB ACCOUNT
- IRB EMAILS
- MODIFICATION (DUE TO COVID-19) – VIRTUAL PROGRAM DELIVERY ONLY

*Thank  
you!*

<https://extension.purdue.edu/hub/citi-research/>



**HTTPS://EXTENSION.PURDUE.EDU/HUB/**

The screenshot shows the Purdue Extension Hub website. At the top, the title "Purdue Extension Hub" is displayed on the left, and a search bar with a magnifying glass icon and the text "Search" is on the right. Below the title is a dark navigation bar with icons and labels for "Home", "E-news", "Essentials", "Business", "Civil Rights", "Evaluation", "Marketing", and "Learn". Underneath this bar is a second row of links: "Knowledge Base", "Technology", "Strategic Planning 2025", "Live Well, V", "CITI & Research", "Evaluation Training & Resources", "Extension Metrics / Digital Measures", "Logic Models", and "Performance Review (staff only)". Below the navigation bar, there is a search bar with a magnifying glass icon and the text "Search". To the right of the search bar is a "Home" button. Below the search bar is a section titled "Recent E-news Posts" with a list of links: "County Field Staff Update Link, April 14" and "Agenda for IEAA virtual Spring Conference".

**Purdue Extension Hub**

Search

Home E-news Essentials Business Civil Rights Evaluation Marketing Learn

Knowledge Base Technology Strategic Planning 2025 Live Well, V CITI & Research

Faculty & Specialists County Support Staff New Educator Resources Feed Evaluation Training & Resources

Search

Home

Extension Metrics / Digital Measures

Logic Models

Performance Review (staff only)

**Recent E-news Posts**

- County Field Staff Update Link, April 14
- Agenda for IEAA virtual Spring Conference



# Purdue Extension Hub

- Home
- E-news
- Essentials
- Business
- Knowledge Base
- Technology
- Strategic Planning 2025
- Faculty & Specialists
- County Support Staff
- New Educator Resources

[Home](#) > [Logic Models](#)

## Logic Models

*Purdue Extension Logic Models by Program Area*

[4-H Metrics & Logic Models \(Common Measures 2.0\)](#)

[ANR Metrics & Logic Models](#)

[CD Metrics & Logic Models](#)

[HHS Metrics & Logic Models](#)

- 1) IRB PROTOCOL
- 2) WEBINARS
- 3) DOCUMENTS
- 4) REPORTING
- 5) ONLINE SURVEYS
- 6) PRINTABLE SURVEYS



# 2020 UPDATED IRB PROTOCOL

## COMMON MEASURES – 2.0

- Starting **SPRING 2020** — **program delivery MUST BE VIRTUAL.**
- **IRB Protocol** – criteria, process, and templates for using Common Measures 2.0
  - 2020 Instructions for 4-H Common Measures Human Subjects Research Protocol
  - 2020 School Letter Template to be completed **BEFORE** your 4-H program is held in a school setting (during school, after school, or on school property)
  - 2020 Collection of Sample Flyers
  - 2020 Email Invitation Template (for sending the URL of the Qualtrics survey to youth)

<https://extension.purdue.edu/hub/extension-metrics/4-h-metrics/>



# USING CM2.0

## Protocol

- **MUST BE VIRTUAL**
- **6+ HOURS OF INSTRUCTION**
- **PRIORITY TOPICS**
- **GRADES 4 – 12**
- **CM2.0 SURVEY**
- **SCHOOL LETTER**
- **RECRUITING YOUTH (SAMPLE FLYERS)**

## Surveys

- **4-H EXPERIENCE (4-12)**
- **UNIVERSAL (4-12)**
- **CITIZENSHIP (4-12)**
- **COLLEGE AND CAREER READINESS (8-12)**
- **HEALTHY LIVING (4-12)**
  - **FULL, HEALTHY EATING HABITS, BEING ACTIVE HEALTHY DECISION MAKING, FOOD PREPARATION**
- **SCIENCE**
  - **(4-12)**
  - **(8-12)**
  - **SCIENCE AND ENGINEERING (8-12)**



3. Where did the program/event take place?

☐

Camp

☐

Club

☐

Afterschool

☐

School Enrichment

☐

Special Interest Program/Spark Club

☐

I don't know

☐

Not Listed \_\_\_\_\_

**VIRTUAL  
DELIVERY  
AFFECTS  
RESPONSES**



# ADMINISTER SURVEY



- AT CONCLUSION OF PROGRAM, ALLOW 5-10 MINUTES TO DISTRIBUTE SURVEY TO YOUTH.
- **VERBAL INSTRUCTIONS** -- 4-H EDUCATORS GIVE INSTRUCTIONS TO YOUTH FOR COMPLETING THE SURVEY
  - “PLEASE COMPLETE THIS SURVEY. DO NOT PUT YOUR NAME ON IT.”
  - GIVE INSTRUCTIONS TO YOUTH ON HOW TO FILL OUT THE “PROGRAM TITLE” AND “INSTRUCTOR” INFORMATION. (SHOW VISUALLY)
  - “THE INFORMATION YOU PROVIDE HELPS US EVALUATE THE 4-H PROGRAM.”
- **EMAIL** -- USE TEMPLATE PROVIDED
  - BEFORE PROGRAM ENDS, TELL YOUTH YOU WILL BE SENDING THE EMAIL, TELL THEM WHEN TO EXPECT IT, AND ASK THEM TO TAKE A FEW MINUTES TO COMPLETE IT.
  - VIRTUAL – PUT EMAIL TEXT (SURVEY URL) ON SLIDE OR IN CHAT.



# HELPFUL RESOURCES

- **Documents**

- **2020 Quick Guide** – provides a brief summary of the questions in each survey. Gives guidance on when you could use the different surveys.
- **2020 Reference Table** — For each 4-H Common Measures instrument, the 4-H Common Measures Reference Table identifies outcomes addressed by Common Measures, 4-H Learning Outcomes, Digital Measures (DM) indicators, DM Results to Report, and the questions/survey item that map to each DM Indicator and Outcome. Use this to help you determine the OUTCOME indicators and RESULTS narrative that you report in DM on the impact statement screen.

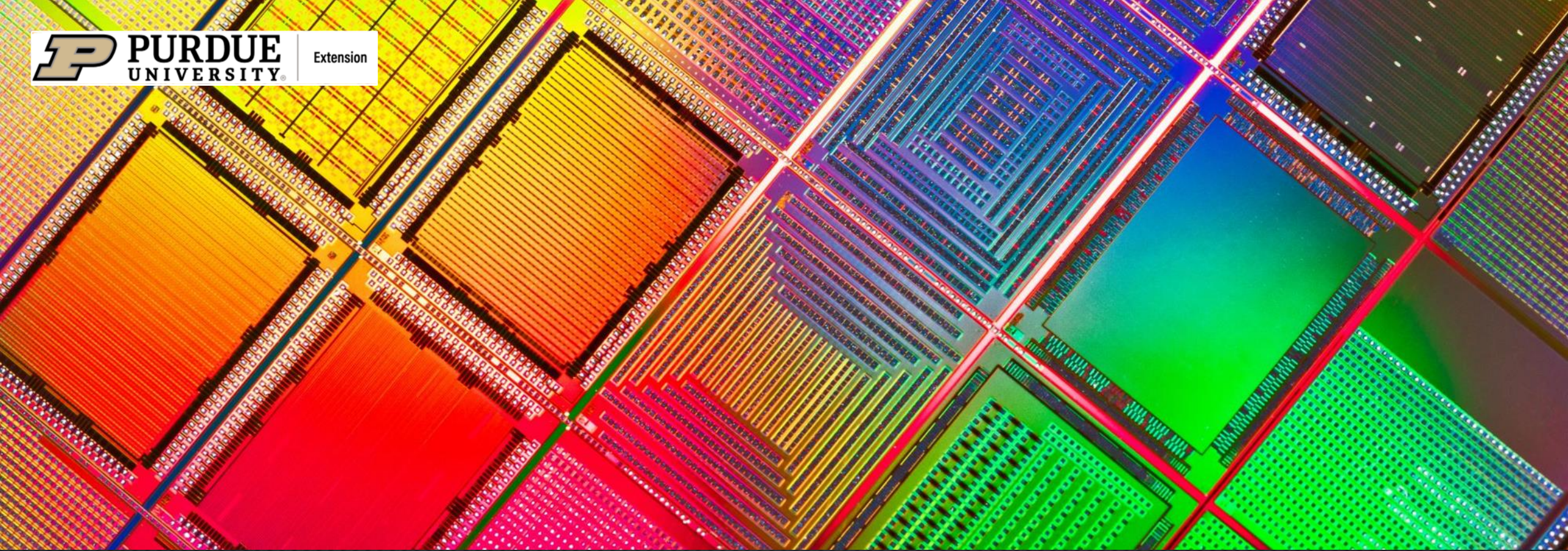
<https://extension.purdue.edu/hub/extension-metrics/4-h-metrics/>



# RESULTS REPORT

- When data are in Qualtrics, email [jhuette@purdue.edu](mailto:jhuette@purdue.edu).
  - Your name
  - Your County
  - Title of program
  - Date(s) of program
  - County in which the program was delivered
  - Survey name
  - Date and time data were entered
- Use [2020 Reference Table](#) to review results and report OUTCOME indicators and RESULTS narrative in DM – Impact Statement.





# EXAMPLE: PURDUE COUNTY VIRTUAL SCIENCE



# PURDUE COUNTY VIRTUAL SCIENCE

## PROGRAM

- VIA ZOOM
- TUESDAY & THURSDAY AT 3:00-5:00 P.M.
- APRIL 28-MAY 21
- YOUTH IN GRADES 4-6

## IRB PROTOCOL

- SELECT CM2.0 – SCIENCE SURVEY (4-12)
- FLYER -- EMAIL AND ONLINE DISTRIBUTION OF “PURDUE COUNTY VIRTUAL SCIENCE” FLYER FOR YOUTH. ENCOURAGE THEM TO REGISTER, SIGNUP, ATTEND.



# PURDUE COUNTY VIRTUAL SCIENCE

LAST SESSION – MAY 21

## SAVE 10 MINUTES AT END

- PLEASE COMPLETE THIS SURVEY. DO NOT PUT YOUR NAME ON IT.
- PROGRAM TITLE = PURDUE COUNTY VIRTUAL SCIENCE
- INSTRUCTOR = HUETTEMAN
- THE INFORMATION YOU PROVIDE HELPS US EVALUATE THE 4-H PROGRAM.

## URL TO SURVEY

- IN THE CHAT
- ON A POWERPOINT SLIDE
- SEND EMAIL TEMPLATE – ADD DATE, RECIPIENT, PROGRAM TITLE, URL
- [HTTP://PURDUE.AG/SCIENCEGRADES4-12](http://Purdue.ag/sciencegrades4-12)



# PURDUE COUNTY VIRTUAL SCIENCE

## REQUEST REPORT

### PROGRAM DETAILS

- **NAME:** HUETTEMAN
- **COUNTY:** PURDUE COUNTY
- **PROGRAM:** PURDUE COUNTY VIRTUAL SCIENCE
- **DATES:** APR 28 – MAY 21
- **COUNTY / DELIVERED:** VIA ZOOM
- **SURVEY:** SCIENCE GRADES 4-12
- **DATE/TIME OF DATA:** MAY 21 5:00 – MAY 28 5:00

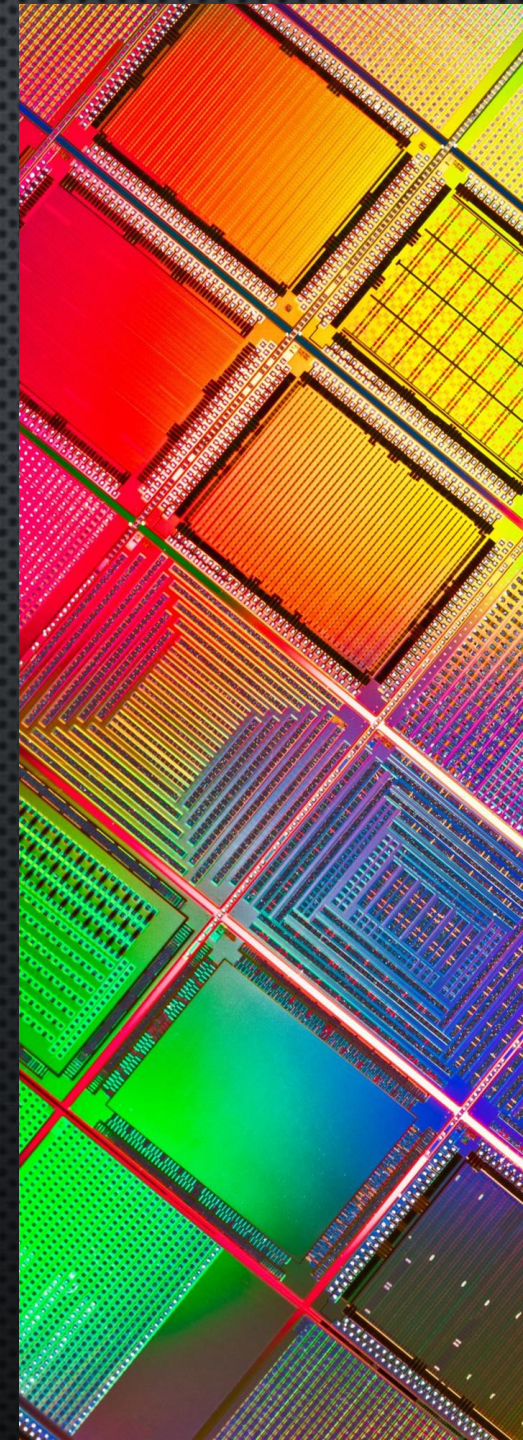
### EMAIL REQUEST

[JHUETTEM@PURDUE.EDU](mailto:JHUETTEM@PURDUE.EDU)



# USING THE RESULTS REPORT

- WRITE AN IMPACT STATEMENT
- ENTER IMPACT STATEMENT WITH 4-H OUTCOMES IN DIGITAL MEASURES
- MARKETING - HIGHLIGHT RESULTS
  - SOCIAL MEDIA
  - ANNUAL REPORT TO COUNTY
  - FOR YOUR NEXT PROGRAM





# 2020 REFERENCE TABLE

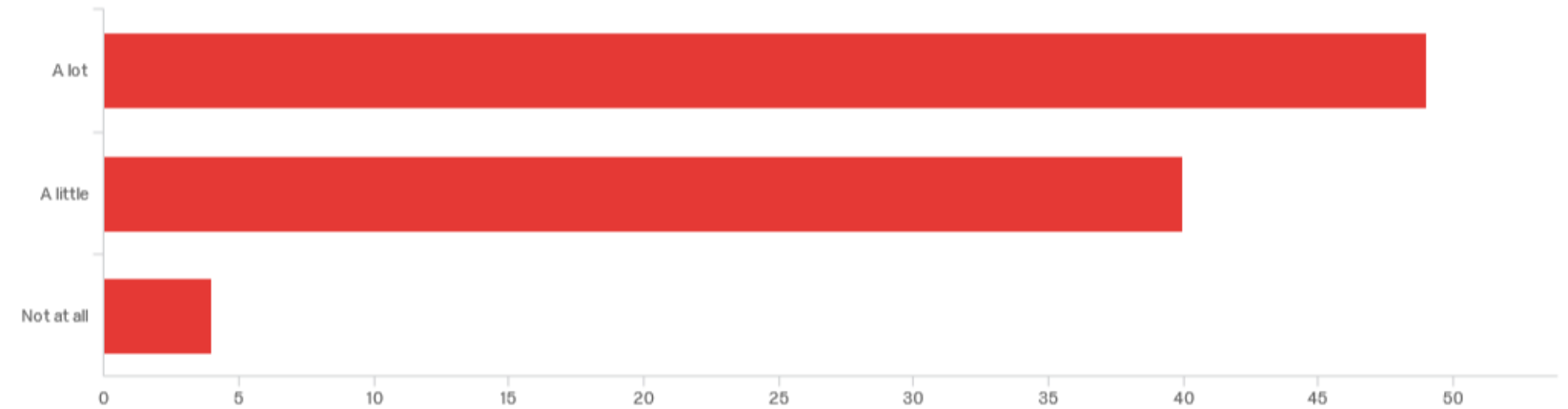
Science (Grades 4-12)				
Content Block	Outcome	Survey Item	Qualtrics Results Report	Indicator in Digital Measures
Science Interest & Thinking	Positive Attitudes and Aspirations toward Science	How much do you like science?	Total # = A lot + A little	Youth express positive attitudes about science
	Positive Attitudes and Aspirations toward Science	Would you like a job that uses science?	Total # = Yes + Sort Of	Youth see science in their futures and recognize the relevance of science
	Positive Attitudes and Aspirations toward Engineering	How much do you like engineering?	Total # = A lot + A little	Youth express positive attitudes about engineering
	Positive Attitudes and Aspirations toward Engineering	Would you like a job that uses engineering?	Total # = Yes + Sort Of	Youth see engineering in their futures and recognize the relevance of engineering
	Develop Science Skills and Abilities (Choose one of the survey items to report)	Do you try new things to see how they will work?	Total # = Yes + Usually	Youth demonstrate a capacity for science process skills such as: Experimenting, Classifying, Measuring, Inferring, and Predicting
		Do you look at how things are the same or different?	Total # = Yes + Usually	
		Do you compare how different things work?	Total # = Yes + Usually	
		Do you take things apart to see how they work?	Total # = Yes + Usually	
		Do you come up with ideas for how to build new things?	Total # = Yes + Usually	
	Contributions	Have you shared a science-related project with others?	Total # = Yes + Sort Of	Youth make contributions to their peers, families, and communities



# RESULTS REPORT

TOTAL =  
# A LOT  
+  
# A LITTLE

## Sc6 - How much do you like science?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How much do you like science?	1.00	3.00	2.48	0.58	0.34	93

#	Field	Choice Count
3	A lot	52.69% 49
2	A little	43.01% 40
1	Not at all	4.30% 4



# DM IMPACT STATEMENT

## OUTCOME INDICATOR

Youth express positive attitudes about science.

## Edit Extension Educators or Specialists - Impact Statements

Select the outcome indicator(s) for this program or project and provide the number, but don't duplicate these if you have already reported outcome indicators elsewhere.

### ▼ 4-H - (Common Measures 2.0) Updated January 2018

#### 4-H - Outcome Indicators

##### Citizenship (Civic Engagement) 2.0

Civic 2.1: Youth will engage in civic involvement

Civic 2.2: Youth participate in community service and volunteer

##### Science 2.0

Sci 2.2: Youth express positive attitudes about science

Sci 2.3: Youth see science in their futures and recognize the relevance of science

Sci 2.6: Youth demonstrate a capacity for science process skills such as: Experimenting, Classifying, Measuring, Inferring, and Predicting

Sci 2.8: Youth make contributions to their peers, families, and communities



# DIGITAL MEASURES

- LEARNING EVENT
  - DOCUMENT IN THE MONTH THAT SESSIONS OCCURRED
- IMPACT STATEMENT
  - AFTER PROGRAM COMPLETED, WHEN YOU HAVE COMMON MEASURES RESULTS REPORT IN HAND

## ▼ Extension

Extension Educators - Profile

Extension Educators or Specialists - Learning Events

Purdue Fast Start Program

Extension Educators or Specialists - Other Activities

Extension Educators or Specialists - Impact Statements



# WRITING THE NARRATIVE

- ISSUE
  - DESCRIBE THE ISSUE THE PROGRAM ADDRESSES. EXAMPLE – LAGGING SCIENCE INTERESTS AND SKILLS OF YOUTH IN INDIANA AND THE U.S.
- WHAT HAS BEEN DONE
  - DESCRIBE YOUR PROGRAM. DESCRIBE YOUR YOUTH ATTENDEES – USE COMMON MEASURES.
- RESULTS
  - USE COMMON MEASURES RESULTS.



# LITERATURE / STATISTICS

IES : NCES National Center for  
Education Statistics 



*Program for International Student Assessment (PISA)*

 [Join News](#)

IAP

PISA

Publications & Products

Staff

Overview

[PISA Data Explorer](#)

[PISA 2018 Results](#)

[Technical Notes](#)

[Previous PISA Results](#)

[FAQs](#)

[Data](#)

[PISA Released Assessment  
Items](#)

[Questionnaires](#)

[Countries](#)

[Schedule and Plans](#)

## Overview

The Program for International Student Assessment (PISA) is an international assessment that measures 15-year-old students' reading, mathematics, and science literacy every three years. First conducted in 2000, the major domain of study rotates between reading, mathematics, and science in each cycle. PISA also includes measures of general or cross-curricular competencies, such as collaborative problem solving. By design, PISA emphasizes functional skills that students have acquired as they near the end of compulsory schooling. PISA is coordinated by the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of industrialized countries, and is conducted in the United States by NCES. Data collection for the most recent assessment was completed in Fall 2018.

PISA 2018 assessed students' science, reading, and mathematics literacy in

Locate statistics  
on the relevance  
or prevalence to  
help write the  
**ISSUE.**



# ISSUE

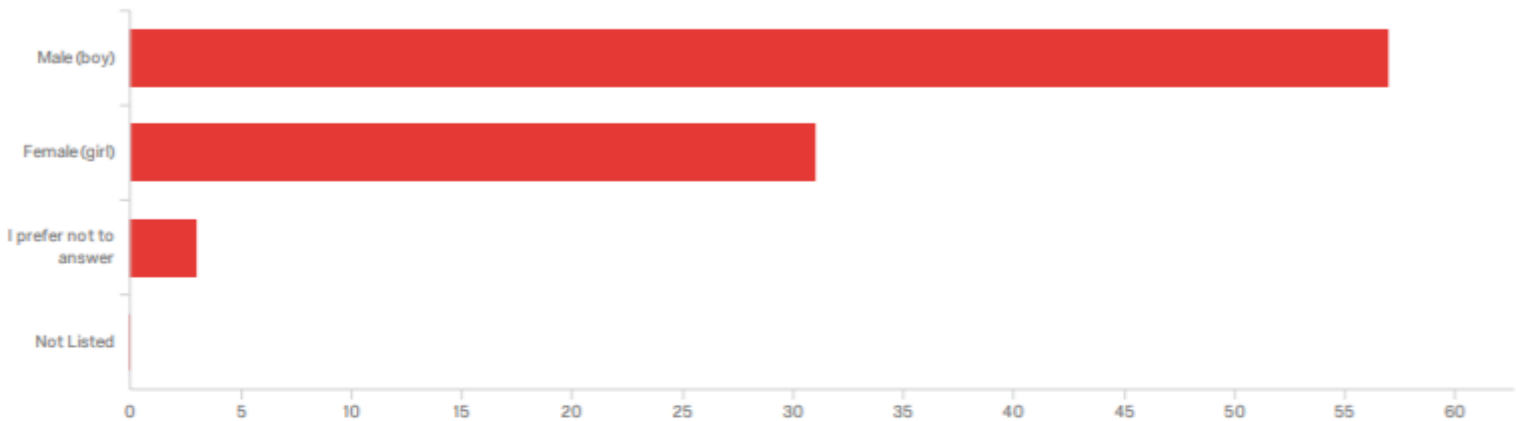
**U.S. youth are lacking in the fields of science and mathematics. Data from the 2015 Program for International Student Assessment (PISA), show U.S. 15-year-olds as just above average in science literacy and below average in math literacy compared to 72 countries. STEM education is very important, and youth need more opportunities to be involved to increase their mastery level in science and mathematics.**



# RESULTS REPORT

Demographics can be  
used to describe the  
attendees in  
WHAT HAS BEEN DONE

## AY3 - Which of the following best describes your gender?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Which of the following best describes your gender? - Selected Choice	1.00	3.00	1.41	0.55	0.31	91

#	Field	Choice Count
1	Male (boy)	62.64% 57
2	Female (girl)	34.07% 31
3	I prefer not to answer	3.30% 3
4	Not Listed	0.00% 0



# WHAT HAS BEEN DONE

Purdue Extension implemented “Purdue County Virtual Stem” in April and May 2020. This eight session, virtual program via ZOOM addressed \_\_\_\_ (topics) \_\_\_\_, \_\_\_\_, and \_\_\_\_\_. Online activities included \_\_\_\_\_ and \_\_\_\_\_.

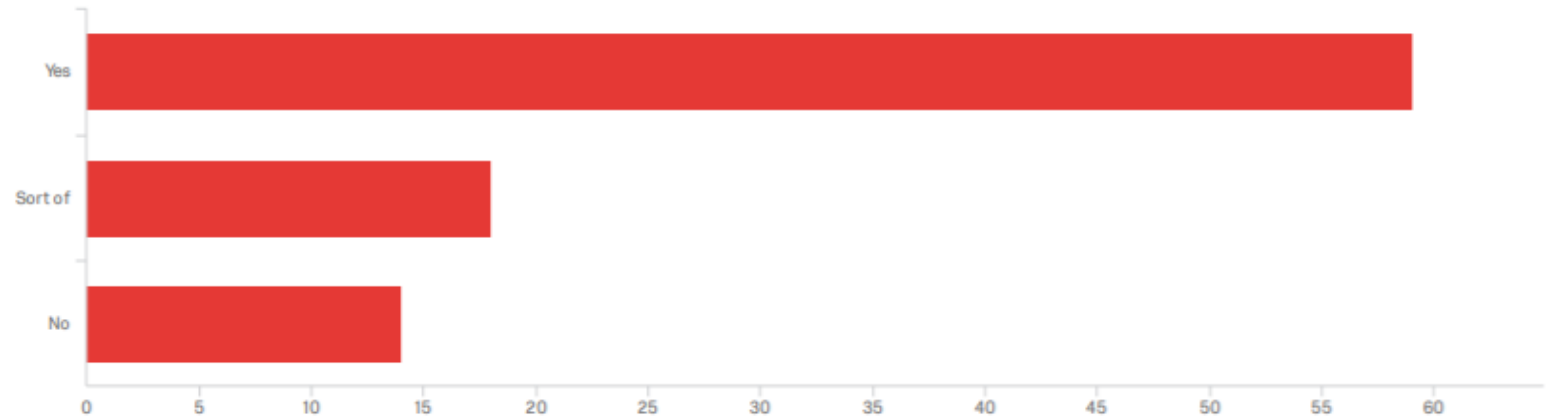
There were 107 youth in grades 4-6 who attended, and 93 completed the 4-H Common Measures science survey. For some 89 youth this was their first time in a 4-H program. Most attendees were 11 years old (67%), in 5<sup>th</sup> grade (96%), male (63%), white (41%), and live in a rural town (74%).



# RESULTS REPORT

Survey responses can be used to show Science/Engineering knowledge & interest gain, and sharing with others for RESULTS narrative.

## Sc19 - Have you shared a science-related project with others?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Have you shared a science-related project with others?	1.00	3.00	2.49	0.75	0.56	91

#	Field	Choice Count
3	Yes	64.84% 59
2	Sort of	19.78% 18
1	No	15.38% 14
		91



# RESULTS

Survey respondents indicated that as a result of attending Purdue County Virtual STEM they learned something new about engineering (81%) and science (62%). For science and engineering skills, youth indicated they try new things to see how they will work (57%), come up with ideas for how to build new things (55%), ask questions about how things work (39%), look at how things are same or different (35%), compare how different things work (32%), and take things apart to see how they work (30%).

Youth expressed interest in learning about robotics (61%), animal science (54%), engineering (52%), environmental science (33%), and plant science (21%). Youth were interested in getting a job that uses engineering (40%) or science (33%). Many youth (65%) shared a science-related project with others.

Purdue County Virtual STEM program helps contribute to the development of youth interest, knowledge and skills in science and engineering.



## **CITI/IRB**

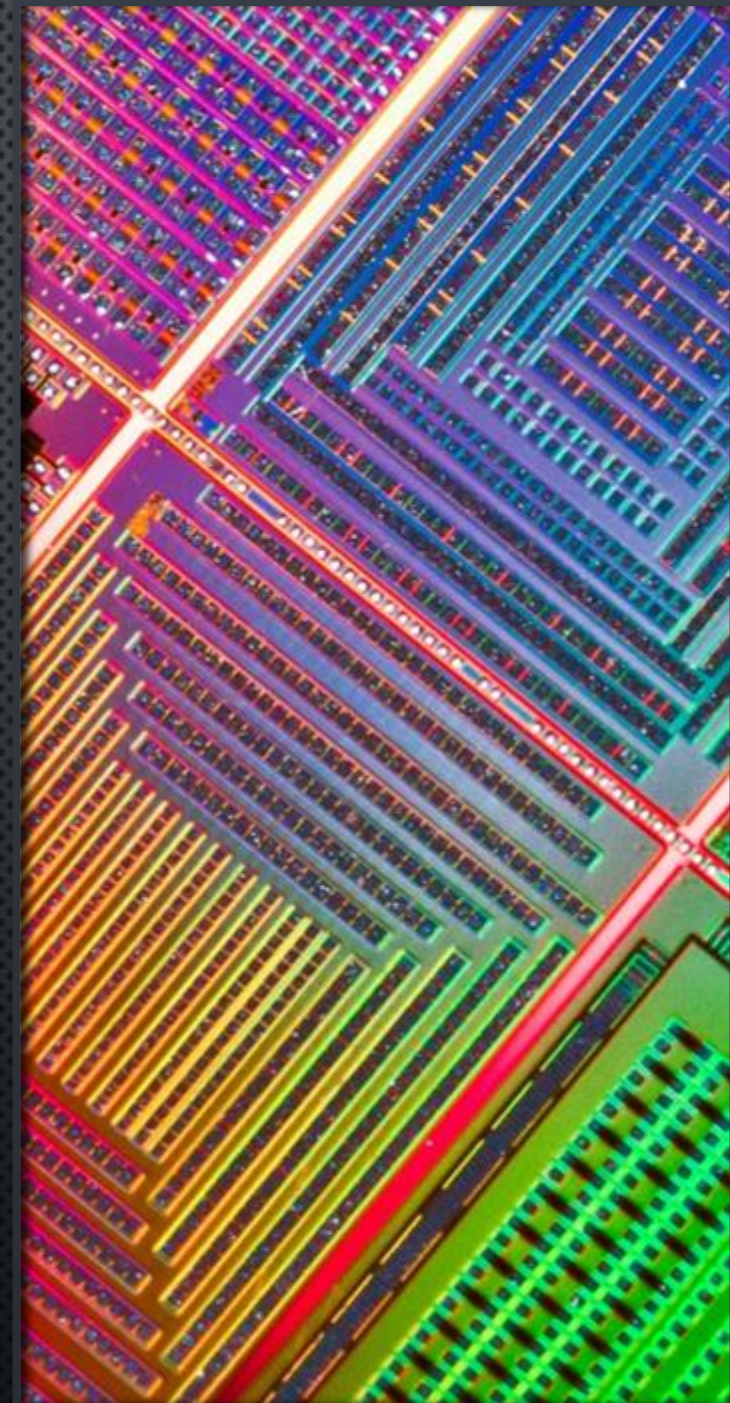
[HTTPS://EXTENSION.PURDUE.EDU/HUB/CITI-RESEARCH/](https://extension.purdue.edu/hub/citi-research/)

## **COMMON MEASURES**

[HTTPS://EXTENSION.PURDUE.EDU/HUB/EXTENSION-METRICS/4-H-METRICS/](https://extension.purdue.edu/hub/extension-metrics/4-h-metrics/)

## **DIGITAL MEASURES**

[HTTPS://AG.PURDUE.EDU/ARGE/DIGITALMEASURES/](https://ag.purdue.edu/arge/digitalmeasures/)





## 4-H COMMON MEASURES 2.0: 2020 UPDATES

JULIE HUETTEMAN, STRATEGIC INITIATIVES COORDINATOR

[JHUETTEM@PURDUE.EDU](mailto:JHUETTEM@PURDUE.EDU)

C. BRAD SEWELL, PROGRAM MEASUREMENT AND EVALUATION COORDINATOR

[CBSEWELL@PURDUE.EDU](mailto:CBSEWELL@PURDUE.EDU)