

# **Science/STEM External Audit Update**

# Science Technology Engineering Math



# Who is the Audit Team?



## **Elementary Teachers**

Katie Holder  
Cameron Bush  
Nicole McKeown  
Lizzie Gallagher  
Trish Campbell  
Natalie Habert  
Betsy Montgomery  
Sharon Jackson  
Emily Stefanski  
Karen Kunsu  
Erin Oelkers  
Laurie Ardoline

## **Principals**

Sara Christianson  
Joel DiBartolomeo  
Beth Mastrocola  
Jillian McGilvery  
Dr. George Ramoundos

## **Curriculum Department**

Jennifer Saksa  
Dr. Jeff Nesbitt

# Who is the Audit Team?



## **Middle School and High School Teachers**

Kelly Sweeney  
Thomas Henry  
Debbie McGlone  
Michael Huth  
Jessica Ramos  
Jana Fitzpatrick  
Patricia Collins  
Kelly Kindregan  
Tim Foster  
Dr. Jeremy  
Tomaszewski

Becky Mortland  
David Corsi  
Laura Clinton  
Chris Walter  
Dr. Vicki Pollard  
Jonathan Howe  
Colleen Pompetti  
Nicholas Bilotti  
Dr. Steve Peterson  
John Scholtz

## **Principals**

Dan Horan  
Pete Donaghy

## **Curriculum Department**

Jennifer Saksa  
Dr. Jeff Nesbitt



# Curriculum Audit Cycle

## External Analysis

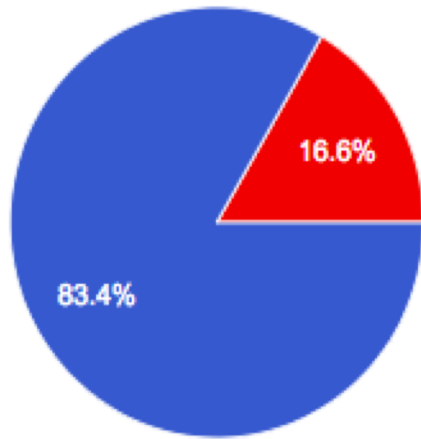
- Parent Survey & analysis
- Empirical research & best practices
- Exemplary school districts
- Resource review, comparison, and selection



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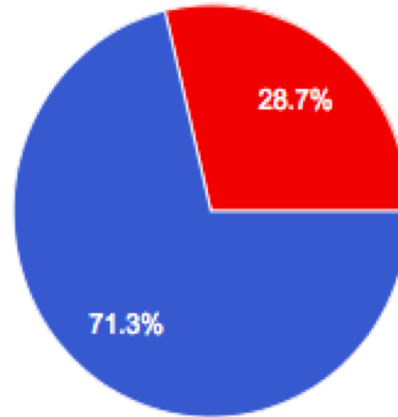
# High School Parent/Guardian & Student Survey Results

# Do you feel middle school science class prepared you/your child for high school?



193 Parents/Guardians

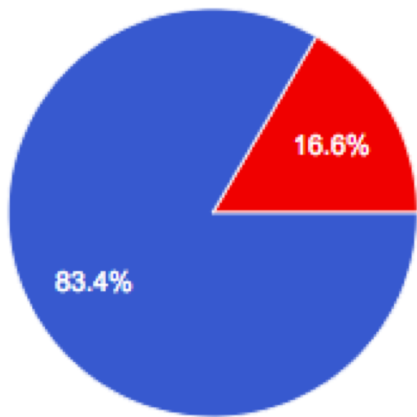
● Yes  
● No



593 Students

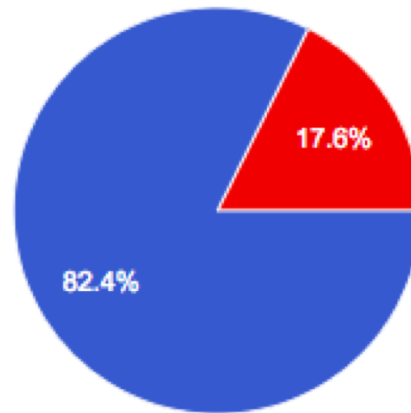
● Yes  
● No

# Do you feel high school Science STEM classes are preparing you/your child for college, and/or a career beyond high school?



193 Parents/Guardians

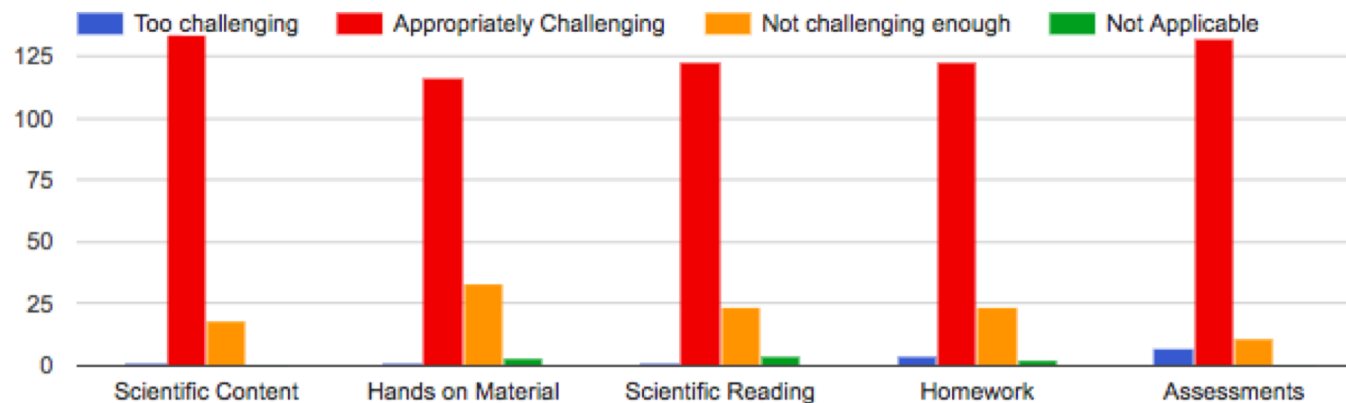
● Yes  
● No



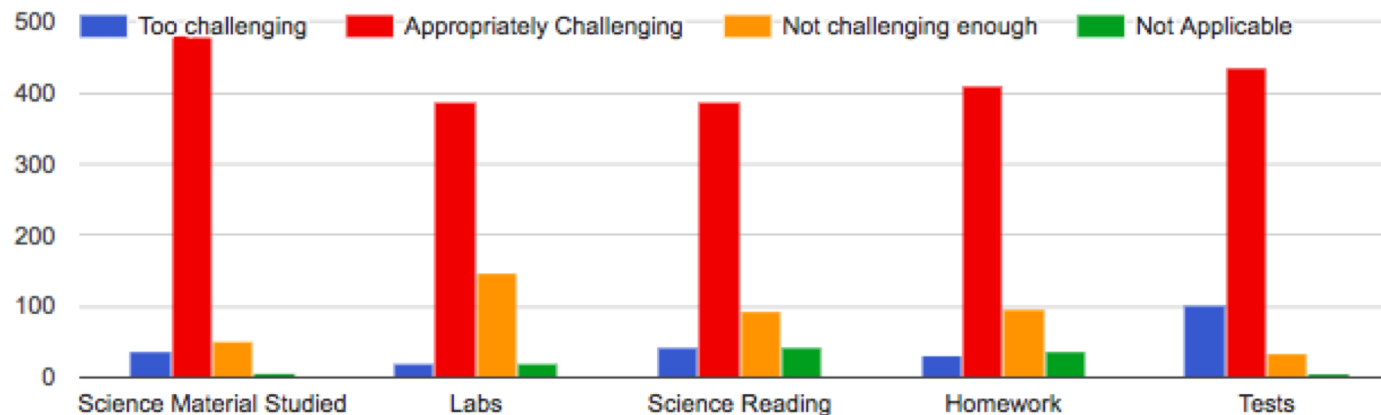
593 Students

● Yes  
● No

**Please rate  
the  
following  
for  
you/your  
child's  
science  
classes.**

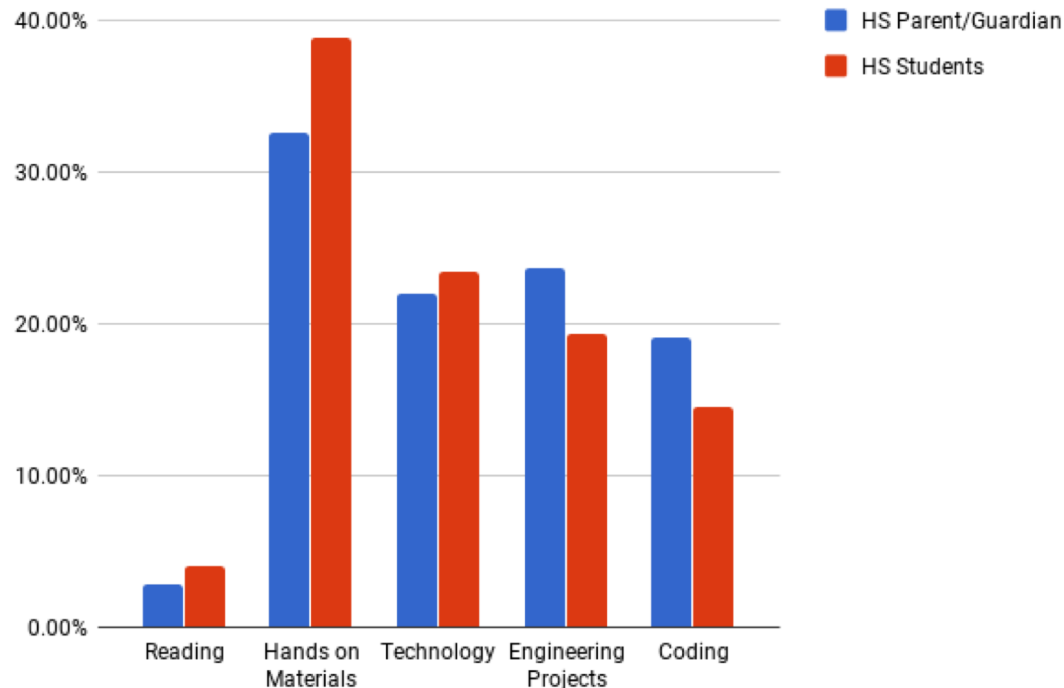


193 Parents/Guardians



593 Students

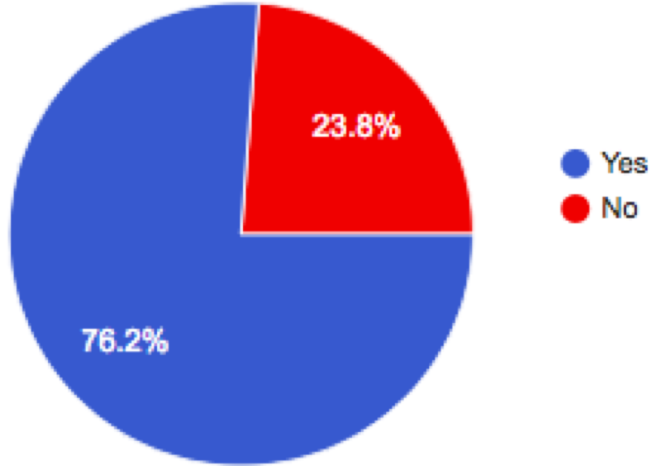
# What would you/your child like to see more of in High School Science/STEM classes?



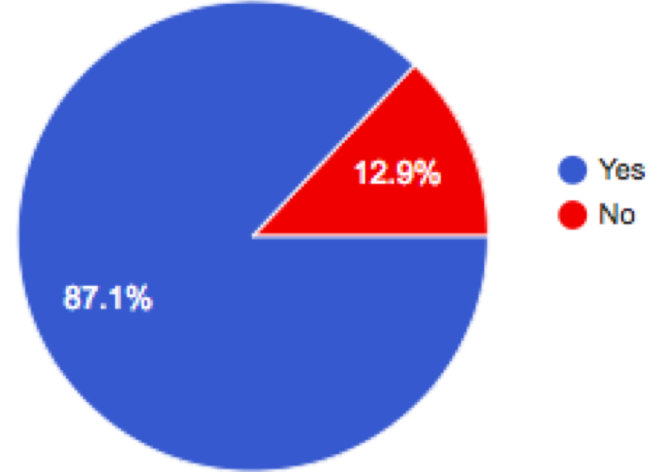
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# Middle & Elementary School Parent/Guardian Survey Results

# Do you feel science class prepared your child for the next grade levels?



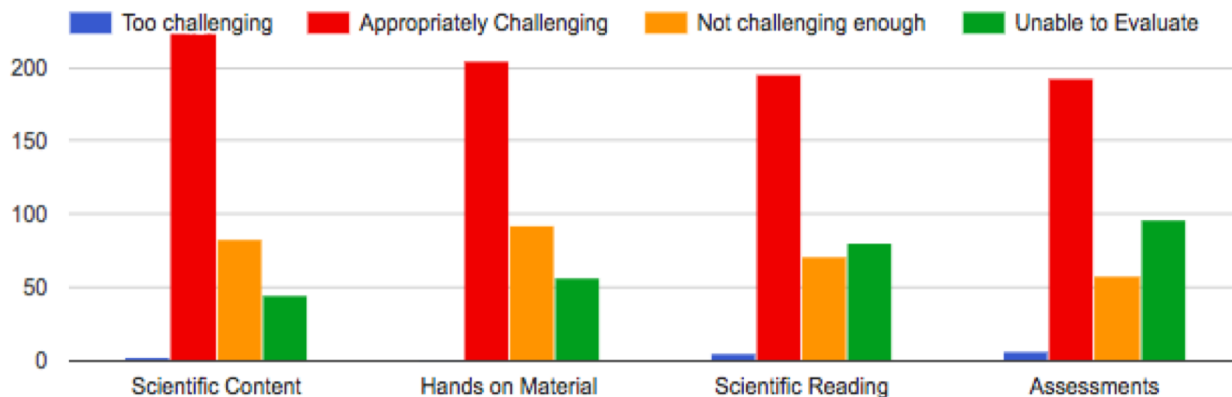
593 Elementary  
Parents/Guardians



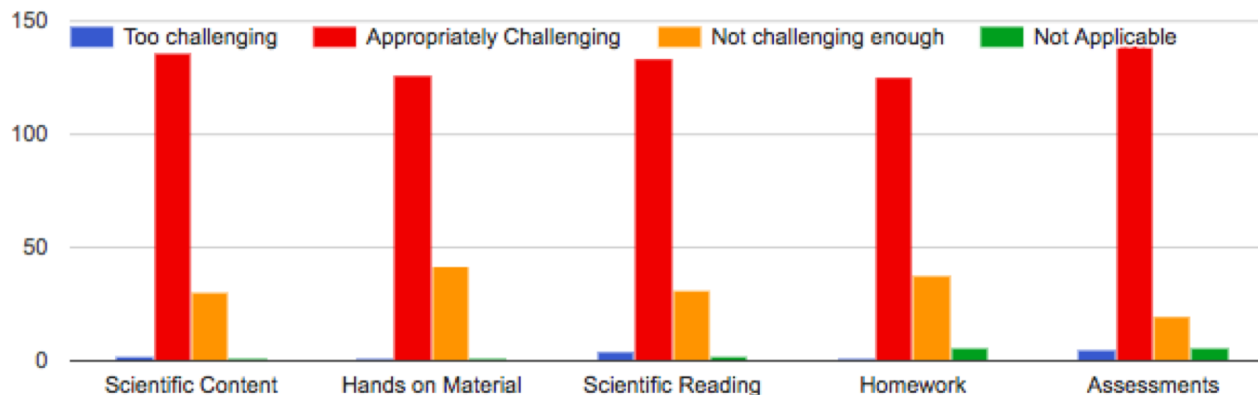
172 Middle School  
Parents/Guardians



**Please rate  
the  
following  
for your  
child's  
science  
classes.**

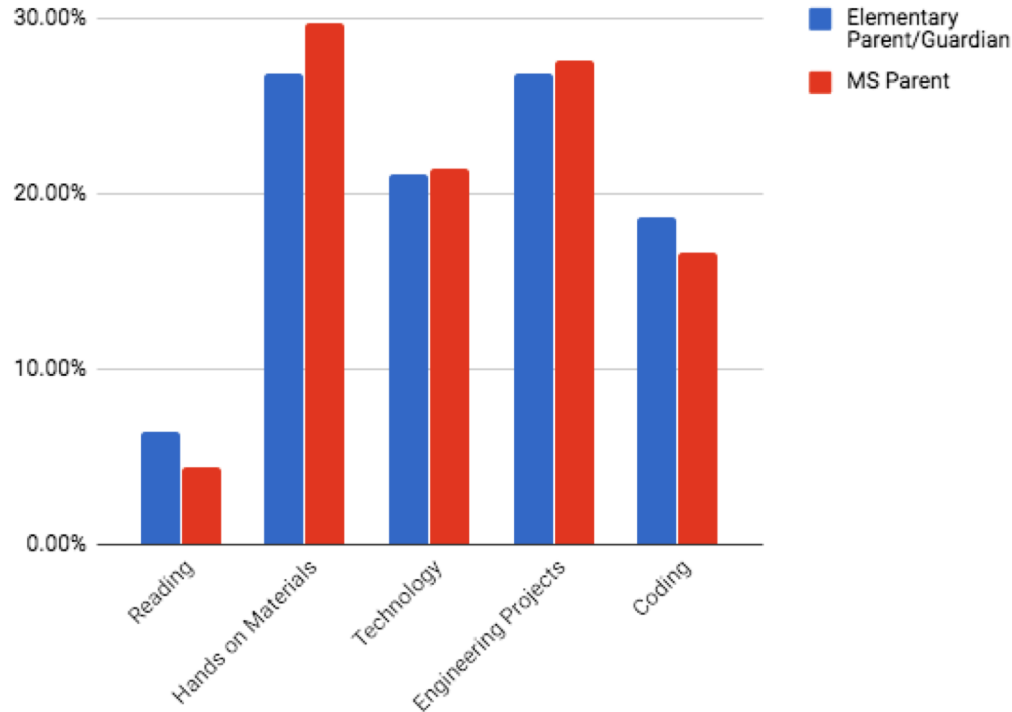


593 Elementary Parents/Guardians



172 Middle School Parents/Guardians

# What would you/your child like to see more of in Science/STEM classes?



# Professional Development

## Franklin Institute - May 15

Professional development for  
science teachers at all levels &  
librarians:

- Maker 101
- Open-ended Science &  
Literacy Activities
- Thinking About Maker in  
Your Space



Demystifying Makerspaces

# Science Advisory Summary

## Comcast

[Mr. Nick DiPatri](#) - Engineer at Comcast Cable - Computer Programming

## Drexel University

[Dr. Joe Martin](#) - Civil Engineering

[Dr. Alisa Clyne](#) - Vascular Kinetics Lab

[Dr. Jason Baxter](#) - Chemical and Biological Engineering

## Haverford College

[Dr. Alex Norquist](#) - Chemistry

[Dr. John Dougherty](#) - Computer Science

## Villanova University

[Mr. Jordan Ermilio](#) - Director of Engineering Service Learning at Villanova



# Expanding Coding & Computer Science

- Researching
- Networking
- Resources & Tools
- Training & Professional Development
- Getting Started



# Site Visits

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Unionville-Chadds Ford, Ridley,  
Garnet Valley School Districts

Maker spaces-MS Design & Create  
using 3D printers

Science Instruction-Integration of  
Coding

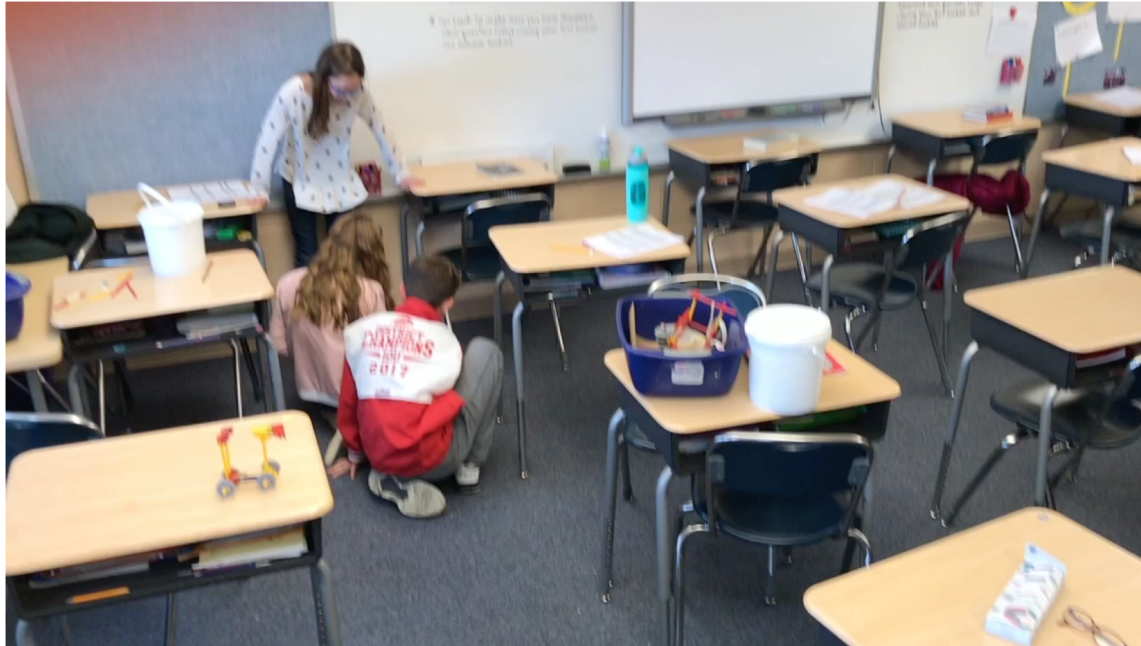
Engineering Practices-Honors  
Engineering Curriculum





# Preliminary Technology Tools

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# Next Steps

## Elementary

Makerspaces

Unit revision/Professional Learning

Strengthen Home School Connections

Explore use of resources

## Secondary

Makerspaces

Resource evaluation and Replacement

Tech Ed and Computer Science

Development







Experts' best guess about the combination of traits that will guarantee rewarding employment in tomorrow's economy.

Elite-level technical abilities

The probing mind of a scientist

And a deft human touch