

Results of the 2016 Science Survey

Education – Core Content Areas – Accountability Program

The following is a summary of the surveys of local school systems that were conducted pursuant to House Bill 1227: *Education-Core Content Areas-Accountability Program*. The information was gathered in the fall of 2016. The 2016 administration of the science survey contained edited questions to better reflect and inform the legislatively mandated areas of focus regarding the progress being made on the implementation of the Next Generation Science Standards (NGSS) within the Local Education Agencies (LEAs): instructional time for science, availability and use of appropriate instructional materials aligned to the NGSS, instructional technology, and teacher certification.

The number of respondents to the surveys:

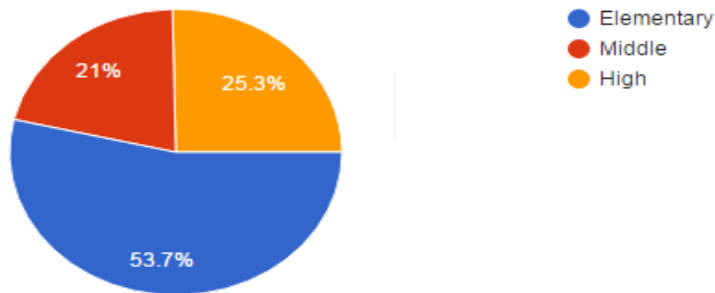
| Grade Band | Teachers | Supervisors | Districts |
|------------|----------|-------------|-----------|
| Elementary | 1604 | 7 | |
| Middle | 624 | 1 | |
| High | 743 | 3 | |
| All Levels | | 23 | |
| Total | 2971 | 53 | 24 |

Summary:

The 2016 survey indicates differences among the NGSS aligned materials, professional development, and instructional time available at each grade band. Instructional time for science at the elementary level remains lower and less consistent than instructional time in the middle school level and high school level. The data indicates that science professional development specifically aligned to the NGSS is in high demand across all grade bands. Middle School science teachers teaching out of their area of certification are more prevalent in many districts. However, this does remain a concern in several LEAs at the High School level also.

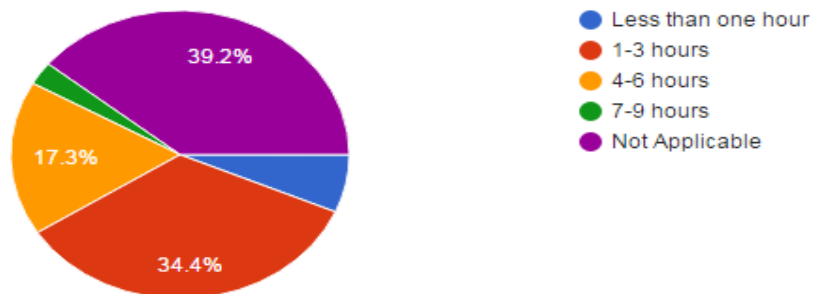
Summary of Science Teacher Survey

Grade Level Taught (2864 responses)



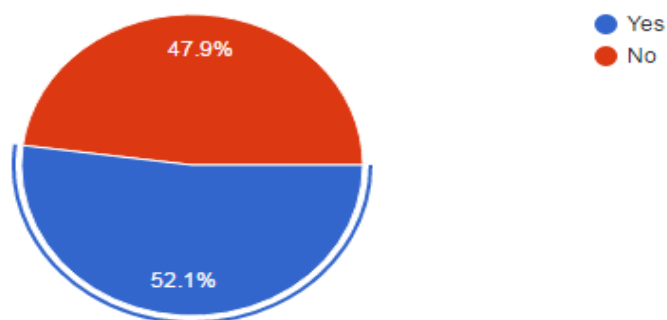
How many hours of instructional time are spent on content aligned to the NGSS in the science classroom per week?

(2938 responses)



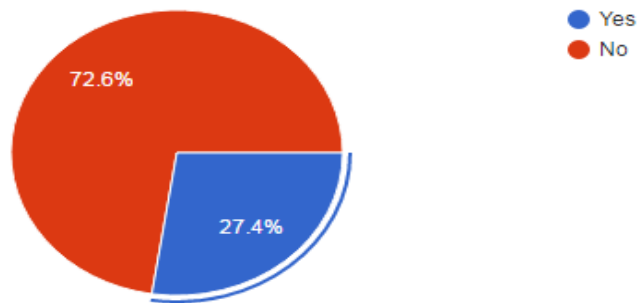
Do your students also have experiences with content aligned to the NGSS in a laboratory environment as part of their regular science class?

(2932 responses)



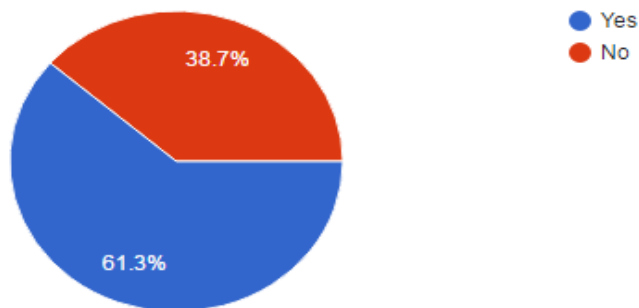
Do your students also have experiences with content aligned to the NGSS in a laboratory environment in addition to their regular science class?

(2919 responses)



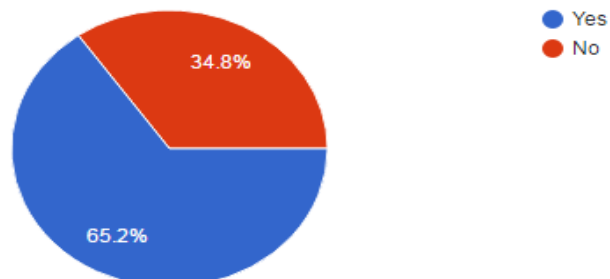
Are appropriate resources aligned to the NGSS available for science instruction in classrooms?

(2900 responses)



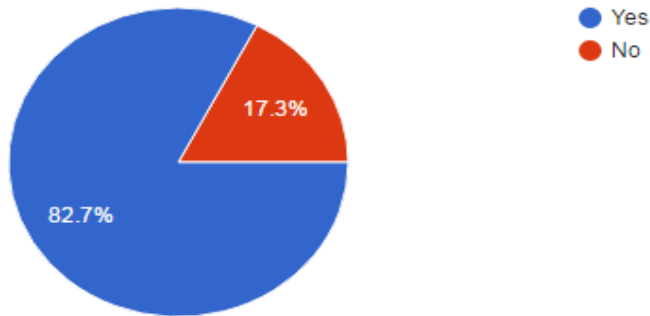
Are appropriate resources aligned to the NGSS utilized for instruction in science classrooms?

(2905 responses)



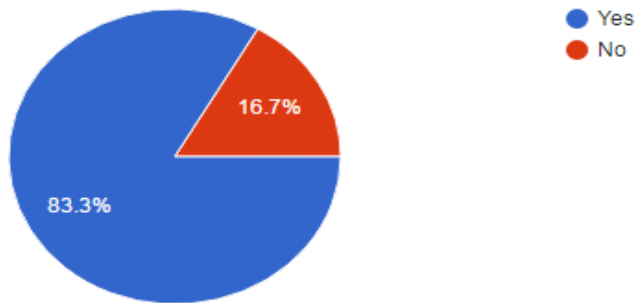
Is technology available for use during science instruction in classrooms?

(2936 responses)



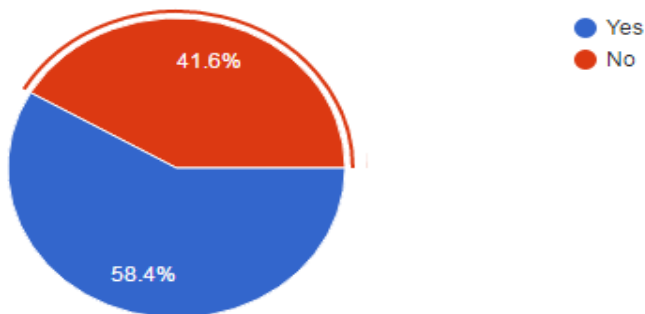
Is available technology used for science instruction in classrooms?

(2936 responses)



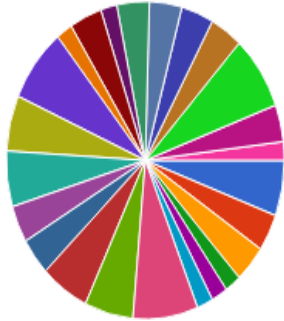
Is appropriate professional development aligned to the NGSS available to you?

(2934 responses)



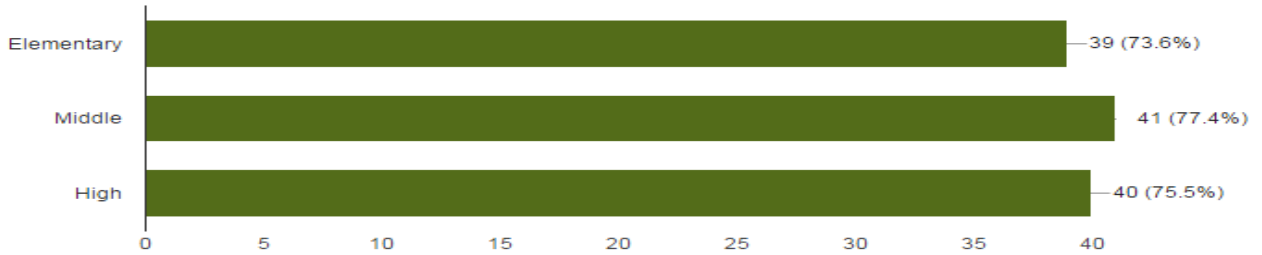
Summary of Science Supervisor Survey

Your local school system: (53 responses)



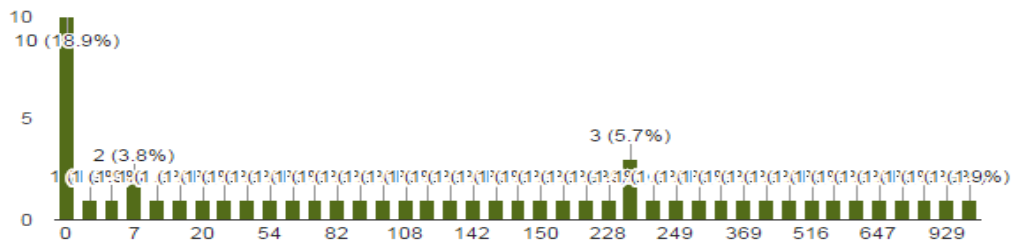
| | | |
|------------------|---|------|
| Allegany | 3 | 5.7% |
| Anne Arundel | 2 | 3.8% |
| Baltimore County | 2 | 3.8% |
| Baltimore City | 1 | 1.9% |
| Calvert | 1 | 1.9% |
| Caroline | 1 | 1.9% |
| Carroll | 4 | 7.5% |
| Cecil | 3 | 5.7% |
| Charles | 3 | 5.7% |
| Dorchester | 2 | 3.8% |
| Frederick | 2 | 3.8% |
| Garrett | 3 | 5.7% |
| Harford | 3 | 5.7% |
| Howard | 4 | 7.5% |
| Kent | 1 | 1.9% |
| Montgomery | 2 | 3.8% |
| Prince George's | 1 | 1.9% |
| Queen Anne's | 2 | 3.8% |
| Saint Mary's | 2 | 3.8% |
| Somerset | 2 | 3.8% |
| Talbot | 2 | 3.8% |
| Washington | 4 | 7.5% |
| Wicomico | 2 | 3.8% |
| Worcester | 1 | 1.9% |

Grade Level Supervised (53 responses)



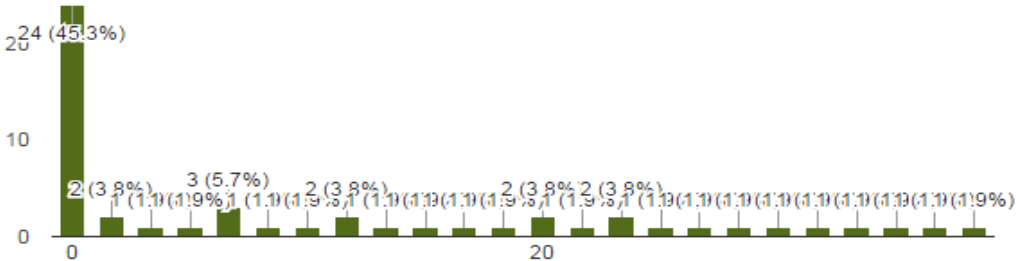
What is the number of middle school science classes taught by teachers who are certified in the subject being taught?

(53 responses)



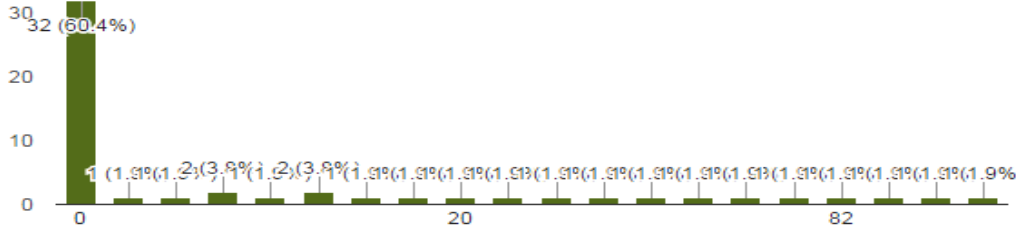
What is the number of high school science classes taught by teachers who are teaching a majority of classes out of their area of certification?

(53 responses)



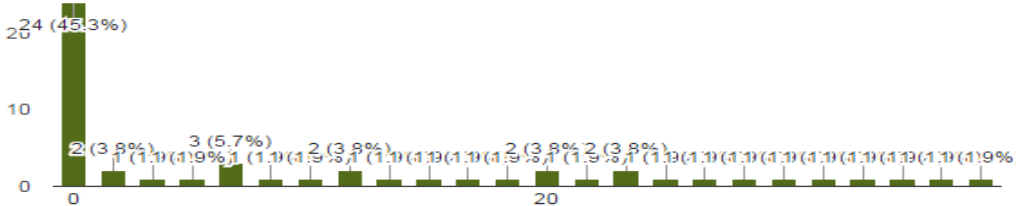
What is the number of middle school science classes taught by teachers who are teaching a majority of classes out of their area of certification?

(53 responses)



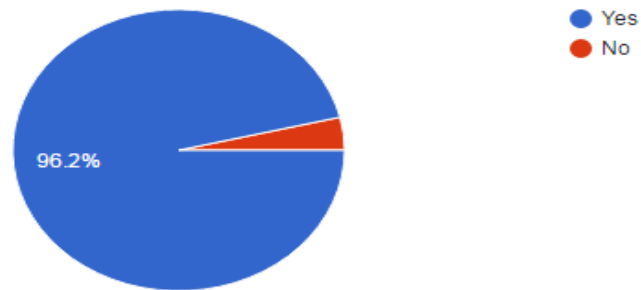
What is the number of high school science classes taught by teachers who are teaching a majority of classes out of their area of certification?

(53 responses)



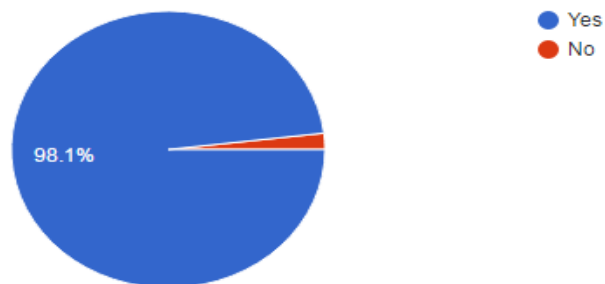
Are there district-level professional development opportunities focused on the implementation of NGSS for elementary school teachers?

(53 responses)



Are there district-level professional development opportunities focused on the implementation of NGSS for middle school teachers?

(53 responses)



Are there district-level professional development opportunities focused on the implementation of NGSS for high school teachers?

(53 responses)

