



Illinois State Board of Education

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FAQ

Illinois Science Assessment Scores

February 14, 2018, ISBE Office of Communications

1. What is the Illinois Science Assessment (ISA)? Who takes this assessment?

The Illinois Science Assessment is an online statewide student performance assessment that aligns to the [Illinois Learning Standards for science](#), which incorporate the national Next Generation Science Standards. Students take the assessment once per year in the spring in the fifth grade, eighth grade, and while taking their first biology course in high school. The test is untimed, but designed to take approximately one hour.

The ISA is designed to reflect classroom experiences. Students who have taken the ISA have said it seems more like instruction than a test. The ISA pushes students to apply their knowledge when they give answers instead of only filling in the bubble of a multiple-choice test, thus better preparing students for higher education and a career. All students deserve the opportunity to demonstrate what they know.

2. Why do students take the Illinois Science Assessment?

Federal accountability law requires that all students take statewide assessments in specific subjects and grades. Students must take an achievement exam in science three times between third and 12th grades. In Illinois, students take the Illinois Science Assessment in the fifth grade, eighth grade, and while taking their first biology course in high school.

A high-quality science assessment is one component of a high-quality science education. The assessment results help us identify local successes in implementing the Illinois Learning Standards for science. The ISA provides educators and administrators with additional data to inform broad curriculum adjustments over time. The ISA helps families understand how well their students are performing academically in science. The ISA represents Illinois' commitment to equity and to preparing all students for college and careers, including in the high-demand science, technology, engineering, and mathematics (STEM) fields.

3. What is the timeline for releasing the scores?

The 2016 and 2017 Illinois Science Assessment aggregate school-, district-, and state-level results are available on ISBE's [Illinois Science Assessment page](#). Student score reports for 2017 are being printed and will be shipped to districts by Southern Illinois University (SIU) later in March. Districts are asked to distribute results to parents through whatever methods are most practicable.

4. Why was the release of the scores delayed?

The task of creating and implementing a brand new test in six months, in combination with the lack of a state budget for more than two years, greatly impacted the timeline for administering, scoring, and reporting the 2016 ISA. The lack of a state budget significantly delayed ISBE's ability to enter into contracts with vendors both to create the test and to score the test. The performance level setting required in the first year of any new assessment also extended the normal timeline for releasing the 2016 ISA scores. We sincerely appreciate the continued cooperation of Illinois' educators and administrators in making each year of the assessment more successful than the last.

ISBE partnered with SIU to develop a secure scoring system and to recruit and train educators and science experts to score the 1.3 million test items from the 2016 ISA. Discussions with potential scoring partners began in July of 2016 and an intergovernmental agreement with SIU was drafted shortly thereafter, but concerns over timely receipt of payments due to the lack of a state budget delayed final execution of the agreement until January 31, 2017. Recruitment of educators and science experts began immediately and training was conducted in February of 2017. Scoring for the 2016 assessment began on February 23, 2017, and concluded on July 25, 2017. Scoring for the 2017 assessment began immediately after the scoring for the 2016 assessment concluded.

After scoring was complete, ISBE and SIU conducted a process of data validation and quality review to ensure:

- A single discreet record for each student;
- Raw scores and scale scores were being calculated identically using multiple methods and systems; and
- Consistent business rules were being applied for coding and necessary suppressions of data.

In addition, ISBE and SIU conducted psychometric work and standard setting on the results through the end of 2017. Only after this work was complete could data be aggregated and finalized. ISBE also built student roster reports and school and district summary reports to make full student data available to schools and districts online. ISBE made 2016 student-level results available to districts via student roster reports in the Assessment system in IWAS, ISBE's secure web application system, on December 1, 2017.

5. Will the 2016 and/or 2017 ISA results appear on the Illinois Report Card?

Given the technical challenges associated with the 2016 ISA administration, the 2016 Illinois Report Card will not include these results. However, the 2017 Illinois Report Card will incorporate the 2017 ISA results in 2018. The 2016 and 2017 ISA results will remain available to the public on ISBE’s [Illinois Science Assessment page](#).

6. What are the ISA performance levels? How were those decided?

The ISA performance levels indicate students’ understanding of the Illinois Learning Standards in science for their grade level.

The State Board approved the Illinois Science Assessment threshold scores and performance levels descriptors at its public regular business meeting on Aug. 16, 2017.

Illinois trusts the judgments of those closest to the students and the content. ISBE employed a widely used standard-setting methodology that engages subject-matter experts in determining the performance levels. The ISBE Standard-Setting Committee for the ISA was composed of Illinois science educators chosen for their content area expertise, familiarity with the Illinois Learning Standards in science, and experience working with diverse student populations. Some committee members also had experience in the development of other large-scale assessment programs.

The State Board approved two performance levels for the ISA, Proficient and Not Proficient, with different threshold scores for each grade-level test, based on the recommendations of the ISBE Standard-Setting Committee for the ISA and an impact data analysis.

	Grade 5	Grade 8	High School
Scale Score Needed to be Proficient (out of 200-400 Scale Score Range)	296	293	307

7. Will students receive individual score reports? What will these reports contain?

All school districts have received paper Individual Score Reports for the 2016 ISA for each student tested. Student score reports for 2017 are being printed and will be shipped to districts by Southern Illinois University (SIU) later in March. Districts are asked to distribute results to parents through whatever methods are most practicable. The score reports will contain the student’s individual performance level (Proficient or Not Proficient) and scale score compared to average scale scores at the school, district, and state levels.

8. How should districts, schools, educators, and families use these scores?

The ISA yields data to help administrators and educators make broad adjustments to curriculum and instruction over time to better align with state standards. The ISA provides data for the state to ensure all Illinois students build a comprehensive understanding of science over time. The results **are not intended** to support teaching decisions for individual students.

The ISA also helps families understand how well their children are performing academically in science. We encourage families to talk with their children about the importance of doing their best in science generally, while communicating that the ISA yields only one piece of information about them and their school's progress. Students' attendance, classroom work, homework, projects, performance on local tests, participation in sports and extracurricular activities, and contributions to the school's climate and culture all help students grow and learn.

9. Why is the 2016 participation rate low?

The 2016 assessment window opened on May 1, 2016, giving some districts limited time to administer the assessment before the conclusion of the school year. In addition, schools that utilized devices running Apple iOS operating systems experienced significant technology issues that required converting to a paper administration. In some places, paper materials did not arrive in time for students to take the assessment before the school year ended. ***Low participation rates in some schools and districts should not be interpreted as a lack of effort or diligence on their part in light of the obstacles some of them faced.***

The statewide 2016 participation rate is 93.1 percent. ISBE worked with school districts in the time between the 2016 and 2017 ISA administrations to address technology issues, as well as improve the testing platform. The participation rate for the 2017 ISA increased to 94.4 percent.

10. Will Illinois continue to administer the ISA?

Yes. Federal accountability law requires students to be assessed in science.

ISBE will continue to improve test administration and the ISA testing platform. Building the assessment in Illinois from the ground up has allowed ISBE to innovate on the traditional assessment model, while maintaining quality and reducing costs.

ISBE developed the ISA through new methods and by forging new partnerships. The Office of the State Superintendent in the District of Columbia provided the initial test items aligned to the Next Generation Science Standards for inclusion in ISA, which also aligns to the Illinois Learning Standards. The ISBE Information Technology Division created a new assessment administration user interface that automatically updates student records in near real time and replaces the time-intensive manual rostering required by other assessment programs. ISBE partnered

with Illinois-based software company BreakThrough Technologies to develop the ISA using software from an open-source platform, resulting in the elimination of licensing fees and significant resource savings.

Next, ISBE will partner with teachers throughout the state to develop new items and build capacity for teachers to develop high-quality formative assessment items in their classrooms. ISBE will transition over the next few years to the use of test items developed primarily by Illinois practitioners, utilizing the wealth of knowledge within Illinois and providing rich professional learning opportunities for Illinois educators.

11. When will students take the 2018 ISA?

The exact day students take the 2018 ISA depends on the school district. The statewide ISA testing window opens March 1, 2018, and closes April 30, 2018.

12. How will the ISA factor into school and district accountability under the new Illinois Every Student Succeeds Act Plan?

The percentage of students scoring in the Proficient performance level will be reported as a part of the overall accountability system beginning with the 2018 administration. However, the ISA will not count toward a school or district's overall summative designation or eligibility for comprehensive or targeted supports until the 2020 school year, when its weight will increase from 0 to 5 percent of each school and district's balanced accountability rating.

13. What are the key takeaways about student performance on the 2016 ISA?

Overall, the statewide 2016 ISA results reflect a foundation of mastery in science in the "all students" groups in grades 5 and 8. Results are lower for the biology assessment. It is difficult with only one administration to explain the differences in performance at the different grade levels. There are multiple possible contributing factors, including, but not limited to: systemic challenges moving to an integrated, standards-aligned curriculum at the high school level, the increased complexity of the analysis and the synthesis required for students to solve problems at the high school level, possible differences in the tested pool of students, and the impact of known technical issues with the assessment administration. We see performance differences that are similar to assessments in reading and mathematics as we look across various targeted demographic groups, though performance in science is higher in general across the board.

14. What are the key takeaways about student performance on the 2017 ISA?

The 2017 ISA results allow us to identify schools and districts with potential promising practices, particularly when it comes to historically underserved student groups such as low-income students, students with disabilities, and English

Learners. Scores overall decreased slightly, but the pattern of performance across grade levels remained consistent. The statewide 2017 ISA results reflect a foundation of mastery of science in the “all students” groups in the fifth and eighth grades. Results in high school are lower than in the other grades, both in 2016 and in 2017. As before, there are multiple possible contributing factors, including, but not limited to: systemic challenges moving to integrated, standards-aligned curriculum at the high school level, increased complexity of the analysis and the synthesis required to solve problems at the high school level, and possible differences in the tested pool of students. These results become one point in a much larger discussion about continuous improvement for all students at the school, district, and community levels. We are pleased to see indications that the results are promoting conversations about science instruction between parents and educators, as well as within classrooms.

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