



Division of Assessment & Testing

mde.testing@state.mn.us

FAQs about the Science MCA-II

TEST CONTENT	2
TEST REQUIREMENTS	2
STUDENTS AND TESTING	3
CURRICULUM IMPLICATIONS	4
TEACHER INVOLVEMENT	5
MDE CONTACTS	6

TEST CONTENT

Questions about test content are answered on the basis of the Test Specifications for Science which are located at

<http://education.state.mn.us/mdeprod/groups/Assessment/documents/Report/006366.pdf>

What will be on the science test?

In grade 5, the assessment will cover all strands and standards from the grade 3–5 band. In grade 8, the assessment will cover all strands and standards from the grade 6–8 band. In high school, the assessment will cover two strands—life science and the history and nature of science, addressed in a life science context.

In what grade will the 9–12 science test be administered? Which standards will it cover?

The high school assessment will be administered once to each student during grade 10, 11, or 12. Each district will choose which of its students will take the test during the regular spring testing window. The assessment will cover the life science standards and the history and nature of science standards, the latter addressed in a life science context.

Are we able to add questions beyond life science to the HS test?

No. According to state law (MN Ch. 294), the science assessment in high school will be a life science assessment. The assessment will address standards in the life science strand and the history and nature of science strand, in the context of life science. Any change to this alignment must be made by the legislature.

Can the standards be made more specific for the purpose of assessment?

Content limits are included in the Test Specifications for Science. These descriptions clarify in more specific terms how achievement of the standards will be assessed. The test specifications are available on the Minnesota Department of Education website.

Will the science test be computer-delivered? Will it be online?

Science MCA-II is an online computer-based assessment. The assessment is interactive and allows students to simulate experiments and provide responses online.

How long will the test take?

Most students will finish the grade-5 and grade-8 tests in less than 2 hours. Some students may finish in less than one hour. Most students will finish the high-school test in less than 2 ½ hours; some may finish in a little over one hour.

These estimates include a required tutorial, which is viewed at the start of the test. The estimates do not include the time needed to set up the test prior to students arriving.

Test Requirements

Students are tested a lot. Why do we need another assessment?

Parents, educators and policymakers use assessment results to set short-and long-term goals to inform instructions,

improve students' performance in the classroom and lay the groundwork for success after high school.

How do statewide testing requirements affect private schools?

The statewide assessment requirements are part of ESEA (NCLB), and are tied to federal funding of public schools. Non-public schools are not required to participate in the MCAs. However, many do participate so they can provide valuable information to their stakeholders, make comparisons, and ensure consistency for students who may attend public schools before and/or after attending non-public schools. Charter schools, public area learning centers, secondary and private-contract alternative programs, distance learning

programs, and secondary vocational programs are subject to the same testing requirements as any other public school.

Will the results of the science assessment be used to calculate AYP?

The science MCA-II's are required under NCLB; the results will be included in individual student reports and school and district summaries. The NCLB target is for at least 95% of the 2007/08 tenth grade cohort of students to have a valid score on the Science MCA-II by the time they graduate from high school. Minnesota will be reporting its participation rates to USDE, and including them on the MDE School Report Card site. Under current law, the results will not be used for AYP calculations. (As of January, 2008)

STUDENTS AND TESTING

Will students taking the science test know what is expected of them?

Yes. MDE has provided test specifications and practice resources for teachers to use in the classroom. The Test Specifications for Science are available on the MDE website and outline, in detail, what will be assessed, how it will be assessed, and how much of the test will address each strand. MDE has also provided sample items that show more directly what the test looks like. These items are accessible to the public through the MDE website. MDE also provides a tutorial for students at the beginning of the actual test to further familiarize students with the test format.

Can students with low reading levels pass the science test?

By using the computer to deliver visual and auditory stimuli in unique item

types, the need for reading is reduced. For example, some items require a "figural" response—either completing or manipulating a figure. Much of the text on the screen is played as an audio file for all students. Scripts and audio CD's of all text will be available to ELL students and students with IEP's where appropriate.

What about students with special needs?

The science test will be "universally designed" meaning it will be accessible to the widest range of students. Accommodations will specifically address the needs of students with IEP's, and vision and hearing impairments. Large print and Braille versions will be available in addition to other accommodations consistent with the Math and Reading MCA-II's

Can a grade 8 or high school student on a block schedule take the assessment at the end of the appropriate science course?

The science MCA-II testing window will be in the spring of each year. Students will only be able to take the assessment during this testing window regardless of their particular school's schedule.

How do schools motivate students to try hard on a test that does not count for AYP?

While many students may be intrinsically motivated to do well on the test, we are aware that for some, effort would be limited if they don't see any value in the test. We hope that teachers and administrators can communicate the value of statewide assessment and the

opportunity for students to show what they know.

In addition, the test itself is designed to be engaging. Teachers should let students know what to expect and how the data will be used. Teachers can also use item samplers in their classes, making the transition to taking a statewide assessment in science more seamless.

Can students refuse to take the test because of religious beliefs?

Parents can refuse to have a child take an assessment without indicating why. Parents who do so should be informed of the opportunities missed, consequences for the school (the loss of valuable data, the effect on decisions based on the data) and other issues surrounding refusal.

CURRICULUM IMPLICATIONS

Does statewide testing result in a state-dictated curriculum?

No. Statewide tests are aligned to the academic standards, not to any specific science curriculum.

Will a mandated science test water down curricula to "minimum competencies"? *(If everyone has to learn it, it has to be pretty basic, which hurts more capable students)*

NCLB requires the science standards to be "challenging," not "minimum competencies." Since the tests are aligned to Minnesota's academic standards, the tests should be challenging. The goal of the assessment program is to ensure that all students have the opportunity to achieve at a level deemed proficient by state advisory panels (mostly science teachers). To register to be part of these advisory

panels, follow the link at the end of this document.

Can we reduce the curriculum to fewer, essential outcomes?

State law requires all standards for all students. However, districts may choose to emphasize some standards over others.

During the development of the test specifications, panel members had the opportunity to prioritize the standards. This prioritization was open for public comment in April 2005. The result of this process is used to guide the development of assessments that emphasize "essential" standards, while still assessing all of the standards intended for inclusion in statewide assessments.

Can we address the middle-level physical science standards in 8th grade rather than 6th grade?

The standards in grades 6–8 are "banded," meaning that individual districts can address the standards in any grade within the band. The same is true of the standards in grades 3–5.

We are considering placing earth science in grade 6 and physical science in grade 8. Would this put our students at a disadvantage on the grade 8 test?

It is difficult to say without any data. The purpose of the science test is to measure student performance on standards, not compare students to each other. (The test will not be “norm-referenced.”) If students are given a good opportunity to achieve what is written in the standards, it should not matter whether the student is in grade six or eight. What students might lose by waiting two years for an assessment of earth science, they should gain in physical science. These strands will

have roughly equal representation on the grade-8 test.

What consideration is being made for the amount of time teachers spend testing, thereby disrupting their instruction?

All classroom, district and statewide assessments take instructional time—even more so if students have to cycle through a computer lab to take a computer-delivered test. Computer-delivered assessments may compete with the instructional use of computers.

At many statewide conferences and district staff meetings attended by MDE science specialists, most educators said the benefits of having computer-delivered assessments outweigh the lost instructional time. These benefits include more seamless inclusion of students with disabilities, reducing the reading load, and using scenarios that show real-world phenomena or common classroom experiments.

Teacher Involvement

How can teachers participate in advisory panels for the MCA-II Science test?

Teachers can sign up to participate in Assessment Advisory Panels during development and on an ongoing basis during the coming years. The purpose of these panels is to provide input into the development of the science assessment and ensures the validity of the test content. The process of applying to be on a panel begins with getting your name on the Advisory Panel Register.

http://education.state.mn.us/mde/Assessment_Programs/Assessment_and_Testing/Professional_Development/Advisory_Panels/index.html

Register for advisory panels at:
http://education.state.mn.us/mde/Accounting/Advisory_Panels/index.html

MDE CONTACTS

**If you have further questions about science MCA-II,
please contact a science specialist at MDE.**

<i>MDE Science Assessment Specialists</i>	
Research and Assessment	Dawn Cameron 651-582-8551 dawn.cameron@state.mn.us
Research and Assessment	Jim Wood 651-582-8541 Jim.Wood@state.mn.us

**If you have further questions about technology,
please check with an MDE technology coordinator.**

<i>MDE Technology Specialists</i>	
Research and Assessment	<u>Diane Gamm</u> 651-582-8335 diane.gamm@state.mn.us