



A main goal of an educational system is for every student to graduate from high school ready for college and a career. Such readiness will provide students with meaningful choices upon graduation from high school. High-quality assessment systems must produce accessible and interpretable information to determine whether students are on track toward college and career readiness.

Tracking Growth towards College Readiness with the *Iowa Assessments*

What is college readiness?

College readiness is the level of achievement a student should attain to be ready to enroll and succeed, without remediation, in credit-bearing postsecondary courses. The concept of readiness has multiple dimensions, but educators and policy makers have identified important academic characteristics of students prepared for postsecondary educational opportunities including achievement in reading, mathematics, and science.

What are the requirements for accurately tracking college readiness?

- Alignment between college readiness standards and test specifications
- Defined targets of readiness
- Reporting scales that support longitudinal tracking and information relevant to future performance
- Validity evidence that relates student performance to college outcomes

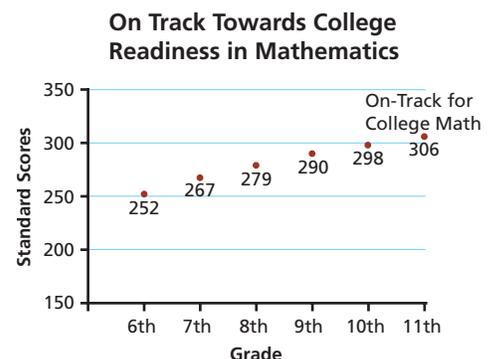
Longitudinal databases that allow for tracking individual student performance across time are an essential tool for monitoring growth and providing assessment information to interested audiences.

What should readiness tests measure?

The test should measure achievement in the core academic areas that are most important for success in college. The *Iowa Assessments* represent a continuum of achievement that measures student progress from kindergarten to Grade 12 in reading, language arts, mathematics, and science. These assessments have been carefully designed using core state standards, surveys of classroom teachers, reviews of curriculum guides and instructional materials, and responses from students.

What is the target for readiness?

For college readiness, the target is that level of achievement where a student is ready to enroll and succeed in credit-bearing first-year postsecondary courses. These targets are currently defined on the *Iowa Assessments* using the relationship between test scores and college outcomes. A mathematics example shows how standard scores can be used to monitor growth and progress towards college readiness. Targets are shown for spring test takers.



Tracking Growth towards Readiness with the *Iowa Assessments*

How can readiness information be used?

Readiness information gives families and educators the information they need to determine whether their students are on track and where additional coursework and preparation are necessary. It allows families and educators to monitor student progress from elementary school through high school and allows flexibility to determine the appropriate improvement and support strategies for students. Information from the *Iowa Assessments* should be combined with other available information to help students develop realistic goals and plan relevant educational interventions.

References

AERA, APA, and NCME (2014). *The standards for educational and psychological testing*. Washington, DC: American Educational Research Association.

What are the Iowa reporting scales that support longitudinal tracking?

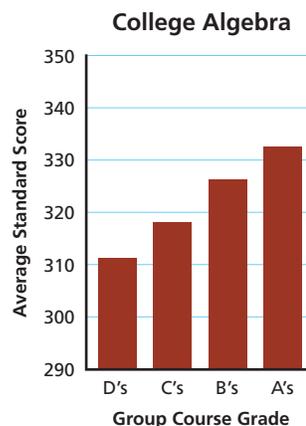
The *Iowa Assessments* were developed using standard scores that describe a student's location on an achievement continuum. Expectations for a student's annual growth (beginning at any point on the scale) can be established and linked to appropriate interventions and instructional strategies. The Iowa scale tracks year-to-year growth and compares student growth expectations to achieved growth.

This vertical scale, developed by Iowa Testing Programs, is psychometrically sound, has been used extensively at the district and state level, and meets the technical requirements and professional standards of large scale assessment (AERA, APA, & NCME, 2014).

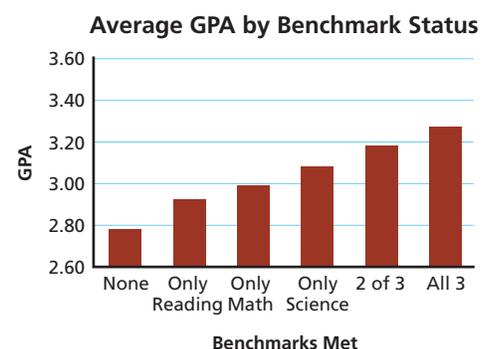
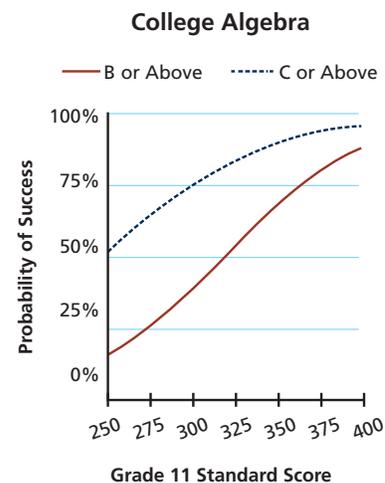
What validity evidence supports using the *Iowa Assessments* for measuring readiness?

Validity evidence supports the interpretation and use of test scores for a particular purpose. A comprehensive approach to the collection of validity evidence is an integral part of assessments designed to measure growth. Content alignments and criterion-related research studies are examples of such validity evidence.

Evidence of a very strong relationship between *Iowa Assessments* scores and key indicators of college readiness suggests that the *Iowa Assessments* measure foundational skills that are necessary for success later in college. For example, when the high school performance of students who later enrolled in college algebra was examined, a distinctive pattern emerged. It is clear that higher scores on the *Iowa Assessments* are associated with higher grades in college.



Scores in core subject areas on the *Iowa Assessments* were mapped to defined targets of readiness to determine preparedness in mathematics, reading, science, and written expression. The probability of earning a B or above and C or above in college algebra is plotted in the figure below for every Grade 11 mathematics score on the *Iowa Assessments*. The second figure shows how attaining readiness in multiple subjects is associated with higher first-year overall GPAs in college.



Tracking Growth towards Readiness with the *Iowa Assessments*

How to determine if a student is on track towards college readiness?

Targets for college readiness were defined in each subject area by testing time of year and are provided in the tables below. These standard scores based on performance on the *Iowa Assessments* represent the minimum level of achievement a student needs in each grade to be on track to college readiness at the time of high school graduation.

Reading

Grade	On Track Towards Readiness		
	Fall	Midyear	Spring
6	244	248	253
7	258	262	266
8	271	275	279
9	283	287	290
10	293	297	299
11	302	304	306

Mathematics

Grade	On Track Towards Readiness		
	Fall	Midyear	Spring
6	242	247	252
7	257	262	267
8	271	275	279
9	283	286	290
10	292	296	298
11	301	304	306

Written Expression

Grade	On Track Towards Readiness		
	Fall	Midyear	Spring
6	244	249	254
7	258	263	268
8	272	277	282
9	280	284	287
10	290	293	296
11	298	301	303

Science

Grade	On Track Towards Readiness		
	Fall	Midyear	Spring
6	262	268	273
7	278	283	288
8	291	296	300
9	303	306	309
10	313	315	318
11	320	323	325

The full research report can be found at:

<https://itp.education.uiowa.edu/ia/documents/College-Readiness-with-the-Iowa-Assessments.pdf>

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