Creating equitable assessments
Promoting fairness and inclusion to advance educational opportunity.

NWEA® strives to support student success by keeping equity in education at the center of our work. The Organisation for Economic Co-operation and Development (OECD) provides a useful definition of equity in education, positing that it means that personal or social circumstances such as gender, ethnic origin, or family background are not obstacles to achieving educational potential. Equity requires the fair and inclusive treatment, access, opportunity, and advancement of students.

Employing student-centered instruction is the basis of an equitable educational practice. To create student-centered instruction, educators must determine the unique needs of individual students and create learning opportunities that allow for equitable access to rigorous content. Local and state leaders need resources and data that can be meaningfully disaggregated so they can identify and address barriers to an inclusive and fair education and improve student growth and achievement.

At NWEA, we are driven to design and develop assessments that:

- Are fair, valid, reliable, and equitable
- Support the same high expectations for all students
- Include services that facilitate accurate interpretation and application of data

We understand that data from the assessments we create plays a critical role not only in supporting student-centered instruction, but also in informing the systems, policies, and investments that impact whether a learning environment promotes or prohibits equal opportunity for all students to learn and excel. As we partner with states and the districts they serve to create systems that positively impact all students, we apply an equity lens to test design, content development, and integration of accessibility and accommodations.

Design and development
At NWEA, we adhere to the conventional standards and guidelines for fair, valid, and reliable assessments. At the same time, we aim to create relevant, engaging assessments that provide equal opportunity for all students to show what they know and produce results that help stakeholders close opportunity gaps.
**Principled approach.** We use a principled approach to test design, in which we identify the stakeholders using the assessments, the decisions they need the data to help them make, and the outcomes they hope to achieve. We then define the information needed to support the identified purpose(s) and create tests and content to gather this data. We use techniques to analyze the data to ensure that our tests meet validity standards—that is, they test the skills and knowledge that we are targeting.

**User experience research.** Our user experience department conducts a multitude of research studies with educators and families, with an intentional focus on diverse representation to ensure that our assessment systems meet the needs of the stakeholders they are designed to serve. We are also in the early stages of developing a plan for engaging students in the development and review process of our statewide assessments.

**Innovative designs.** We think outside of “what has always been done” to create new approaches to testing focused on protecting fairness and validity while engaging all students and fostering equitable opportunity for them to demonstrate their knowledge and skills. Aspects that we may leverage when creating solutions include:

- **Adaptivity.** Measurement precision is best when students are given items that are closely matched to their abilities. Adaptive assessments—whether adaptive on or off grade—adjust dynamically based on each student’s performance, resulting in a personalized assessment experience and providing students with more opportunity to show what they know.

- **Information to help educators challenge every student.** We can support educators in holding all students to the same rigorous standards by building assessments that are aligned to detailed descriptions of what students should know and be able to do as they progress from beginning to advanced understanding of each grade-level standard. These descriptions are called “range achievement level descriptors,” and they help educators engage students in grade-appropriate content—whether at the earliest stages of skill development or at the advanced levels students should reach before moving into content for the next grade.

- **Within-year growth.** We specialize in assessment system designs that can measure each student’s academic growth from fall to winter to spring and across years. Teachers can use this information to set challenging growth goals for students in support of equitable opportunity to learn and achieve. At the systems level, district and state leaders can use the information to gain a more holistic view of student and school performance. This can be especially illuminating when looking at the impact of schools in underserved areas, where many students may not yet be proficient, but may have grown significantly during the school year.

- **Curriculum integration.** We are able to create assessment designs that use curriculum-specific anchor texts directly from the English language arts (ELA) and social studies curriculum instead of reading passages that are disconnected from the curriculum and unfamiliar to students—an approach that has been shown to increase student engagement and “level the playing field” in terms of opportunity for all students to show what they know.

- **Cultural responsivity.** NWEA researchers are partnering with researchers at the University of Massachusetts Amherst to explore ways to allow for a test event that is more culturally responsive. Possibilities under consideration include implementing student agency in the content, as well as a student-created avatar to navigate students through the test experience.

- **Opportunity to learn.** We are currently exploring ways to address more program-level factors and variables that we might report upon to give the greater context around student performance. We are developing a prototype of a new score report designed to provide teachers and students an avenue to input opportunity to learn information—for example, what has been taught and how student performance can be interpreted accordingly.

**Professional learning.** We view professional learning as an integral part of assessment system design because regardless of how fair and valid an assessment is, it will not play a role in fostering equity in education if results are not used appropriately to inform stakeholder action. Professional learning is tailored to state vision, goals, and stakeholder needs as well as the assessment design and data types produced, with a focus on aligning the right data with the right purpose.
We partner with educators in the states we serve to develop content aligned to state expectations for grade-level performance. We also create items with student engagement in mind, because if students are not engaged, their opportunity to show what they know is compromised. Lastly, we employ processes to ensure sensitivity to local context and prevent bias toward any group.

**Universal Design for Learning (UDL).** Every member of our content team has over a decade of experience in developing summative assessment content and applying universal design principles to content development and is trained by the Center for Applied Specialized Technology.

**Rigorous assessment content.** We use the Depth of Knowledge (DOK) framework to develop assessment items that target the intended level of content complexity, including access to rigorous content required for students to demonstrate deeper learning.

**Alignment to state standards.** Assessment items are aligned with academic standards taught in a state, so that students only see items they are expected to have the opportunity to learn as part of their education.

**Bias and sensitivity review.** We conduct content bias and sensitivity review for all assessment items, in partnership with educators in the states where we serve, to ensure they are appropriate for all students taking the tests, sensitive to the cultural context in that state, and free of topics that may create discomfort or disadvantages for test-takers.

**Differential item functioning (DIF).** The content team reviews any items that psychometric analysis has flagged for potential bias towards a population subgroup (DIF) after each test administration, for both operational and field test items. Flagged field test items are also reviewed by the state to determine if the item contains potential bias and should be removed from the pool.

**Student engagement.** Technology-enhanced items include testing items such as multiple choice, multi-select, gap match, text select, true/false, agree/disagree, graphs, and more to engage students and provide opportunity for them to demonstrate deeper learning. We are also investigating ways to report out on student engagement.

**Content equity team.** NWEA has established a content equity team composed of content experts from its state and district divisions dedicated to the creation of inclusive assessments. This group focuses on continually auditing and refining NWEA content and content development processes to eliminate bias that impacts students’ ability to demonstrate their learning. As part of this work, the team is using a human-centered design approach and has established a panel of diverse teachers to support diverse lenses in content development.
Accessibility

NWEA is committed to creating assessments that meet the unique learning needs of all students. We employ universal design in our approach to building assessments and we are continually evolving our assessments, tools, and accommodations to support an equitable testing experience.

**Designing test aids, item aids, and interfaces** that maximize the validity of our assessments for the greatest number of students, including those with disabilities and those who are English learners.

**Making images accessible for all students.** We apply alternative text or alt tags to images within our test items. Alt tags include descriptions for pictures, graphs, charts, and other images. This provides access to information that might otherwise be unavailable to students who are blind or have a visual disability.

**Device agnostic.** Assessments are accessible on the most popular operating systems, browsers, and devices, including iPads® and Chromebooks®.

**Increasing access to web content.** Our solutions are 508 compliant; we follow Web Content Accessibility Guidelines (WCAG) 2.0 and implement protocols like Accessible Rich Internet Applications (ARIA).

**Accessibility tools for students.** NWEA assessment platforms provide standard assessment tools to support many IEP accessibility accommodations, including a screen reader, keyboard navigation, and refreshable braille. We are also able to provide paper/pencil and alternate assessments.

**Alternate assessments.** We develop and provide alternate assessments for ELA, math, and science for students with significant cognitive disabilities.

**Focus on the future with equity in mind**

Contributing to equity in education with our assessment solutions, insights, and services means ensuring that assessments are responsive, inclusive, and accessible to students from all backgrounds and provide valid and reliable results so that decisions informed by the data are in the best interests of students. There is much work to be done on this journey and we are committed to partnering with states, districts, and the diverse communities they serve to do our part in the effort to support equal access to a high-quality education and successful outcomes for all students.

Connect with us at [nwea.org/state-solutions](http://nwea.org/state-solutions) to explore opportunities to create fair and inclusive assessments for students in your state.