



THE COLORADO EDUCATION INITIATIVE

COMPETENCY-BASED learning environments are those in which progress through the education system is based on assessed mastery of learning, demonstrated through competencies, rather than measures of seat time. Competencies describe knowledge and skills that can be applied to novel, complex situations, and include explicit, measurable, and transferable learning objectives that empower students.

STUDENTS...

- advance to increasingly more challenging work by demonstrating mastery of academic, professional, and entrepreneurial competencies without the restrictions of a time-based system.
- address standards at the time and in the manner that meets their needs, rather than being taught only when the entire group covers a certain topic.
- receive timely, differentiated support based on their individual learning needs.
- are provided meaningful assessments which frequently track and measure progress, and facilitate positive learning experiences.
- are provided with meaningful and descriptive feedback on their progress toward academic, professional, and entrepreneurial competencies.
- use feedback to track their progress and determine whether they are on track, ahead or behind.
- learn how to compare their work and understanding to learning targets, so they can accurately identify how close or far they are from the intended learning.

EDUCATORS...

- clearly articulate the learning objectives for students, and provide clear performance criteria and effective rubrics that help students identify their performance level(s) and what they need to do to improve.
- use frequent and varied assessments aligned to outcomes and competencies to check for progress, determine next steps, and support student learning.
- provide just-in-time supports that lead to successfully meeting or exceeding the learning targets.
- teach students to assess their own work, and use feedback to identify their next steps.



IN PRACTICE:

- Students' time at school is maximized. They receive instruction that challenges them in a clear, purposeful way all day long.

They may be challenged by presenting about their learning, or leading inquiry, with a group of age-alike peers who currently have different understandings. Or they may be challenged by being part of a group in which everyone is working on the same, just-right next steps in their skill development. They may be working with a peer that has mastered a skill and who is teaching them. They may be working independently using skillware to get good quick practice on the just-right skills. No matter what they are doing and learning today, what happens today will impact what they do tomorrow.

This experience can be contained to a single classroom, or approached in a school-wide way. Either way, groups of students are flexible and intentional, and that intention is very clear to students. Students track their progress daily and can make connections between their progress and the purpose for the plan their teacher has for them the next day.

Over time, and in the strongest models, students are sometimes given choices about which instruction to participate in, or what mode to work in, based on their own understanding of both their progress and their needs.

RESOURCES:

[New Classrooms'](#) pioneering learning algorithm generates personalized learning paths (including type of instruction and difficulty of content) for each student based on their current level of knowledge and preferred learning styles.

[CompetencyWorks' website](#) provides a variety of resources to help you understand competency education, as well as providing examples, policy, practice tips, and Issue Briefs, including [Re-Engineering Information Technology: Design Considerations for Competency Education \(2013\)](#)

[Competency-Based Pathways](#): Comprehensive resource for competency-based learning, including definition and description, examples, policy frameworks, key issues and resources.

[Making Mastery Work: A Close-Up View of Competency-Based Education Elements](#) (Nellie Mae Education Foundation, 2012): A study of competency-based education as implemented by 11 schools, including a definition, the principal elements, and learnings from the study; tables 2 and 3 describe differences from traditional education and effective assessment in the competency-based model.

[iNACOL's It's Not a Matter of Time: Highlights from the 2011 Competency-Based Summit](#) and [When Success is the Only Option: Designing Competency-Based Pathways for Next Generation Learning](#) (2010): Description of competency-based "pathways", key drivers of innovation and challenges experienced by schools; defines competency-based "pathways" in terms of "design principles".