

2024 REPORT TO THE OREGON LEGISLATURE:

Competency Based Education (ORS 350.125)



Photo Credit: Southwestern Oregon Community College

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COMPETENCY-BASED EDUCATION IN OREGON

OVERVIEW

As specified in ORS 350.125¹, this report defines Competency-Based Education (CBE) and provides an overview of CBE in Oregon’s public postsecondary institutions, barriers to expansion, student outcomes, funding strategies, and policy recommendations. CBE is defined, for the purposes of this report, as a system or systems, of instruction, assessment, grading, and academic reporting where success is defined based on students demonstrating progress towards, or competence in, specific skills². Under this definition, in a CBE model, students advance at the speed at which they demonstrate mastery of particular skills or competencies³. According to the Competency-Based Education Network (C-BEN), the CBE approach works well for adult learners, especially those already working, because it allows educators to unpack and rebuild courses more flexibly for learners⁴. This approach also supports the achievement of Oregon’s Adult Education Attainment Goal of “300,000 adult Oregonians will earn a new postsecondary degree, certificate, or credential of value by 2030” (OAR 715-017-0002)⁵.

In Oregon, adoption of competency based education in higher education is fairly limited and, until now, has yet to be implemented comprehensively across programs or fields of study. In the past two years, with the support of the Oregon Health Authority, Oregon’s Emergency Medical Services (EMS) Consortium has been developing and implementing competency based assessments in Emergency Medical Technician (EMT) education programs across the state. This report focuses on that work and an overall update on barriers to expanding CBE, student outcomes, funding strategies, and policy recommendations.

PUBLIC POSTSECONDARY INSTITUTIONS

The Oregon EMS Consortium is a group of public colleges, universities, and private training providers offering EMS training, including EMT and Paramedic. In Oregon, programs are governed by the Higher Education Coordinating Commission (HECC), responsible for accreditation, and the Oregon Health Authority (OHA), responsible for licensure. The agencies collaborate to ensure programs comply with federal and state laws, standards, and licensure requirements. OHA’s Oregon EMS and Trauma Systems Section is the designated entity that oversees education and testing for EMS providers and sets the standards for curriculum, instructor qualifications, and course administration for initial EMS provider courses. They designate Oregon colleges, universities, and other accredited programs to provide training, instructors, and testing to qualify EMS providers for state licensure⁶.

For EMS education providers, this shift in assessment methods from traditional paper-based testing and check-off skill sheets to a competency based assessment model was precipitated by a national exam redesign in

¹ Oregon Revised Statute 350.125 https://oregon.public.law/statutes/ors_350.125

² Competency-Based Education Network, Competency-Based Education "What is Competency-Based Education?" Close-Captioned Video - C-BEN (cbenetwork.org)

³ Western Governors University-Competency Based Education https://www.wgu.edu/about_WGU/competency-based-education#

⁴ Partners in a New Learning Model: Competency Based Education and Credit for Prior Learning [ED617339.pdf](https://www.wgu.edu/about_WGU/competency-based-education#)

⁵ Oregon Adult Education Attainment Goal - <https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=254467>

⁶ [Oregon Health Authority : Education and Training for EMS Providers : Education and Training for EMS Providers : State of Oregon](#)

2020 and a replacement of standardized skill examinations with state-approved student competency verification program as the requirement for EMS provider licensure. This changed how these programs embed state-required learning targets in initial EMS provider courses to determine a student’s readiness for practice. The learning targets are based on the National EMS Education Standards and Scope of Practice,⁷ with criteria for learning targets and scoring linked to learning frameworks/taxonomies. In the competency-based assessment model, course activities map to the learning targets. These activities are key evidence in building a student’s case for competence in each learning target. Learning frameworks or taxonomies facilitate the development of competencies, in which students progress longitudinally, and competency decisions are guided by modern assessment design principles. In this system, formal accountability involves state approval of CBA courses by OHA and HECC and annual reporting of course data by educational programs. Quality improvement includes local and state activities⁸.

The details of this transition are included in OHA’s Competency-Based Assessment for Initial Education in Emergency Medical Services report to the Higher Education Coordinating Commission, which is included in the Appendix to this report. As noted in previous ORS 350.125 reports, competency based education, as defined in the statute, is a continuum with various components. The assessments being implemented by EMS programs are an example of one component. The programs largely still follow the 11-week term and traditional seat-based reimbursement model. However, instructors are noting improvements in student outcomes. At Chemeketa Community College, the EMT basic program is run in one 11-week term; with competency based assessments, students can gain the knowledge required to pass the licensing exam in week five. The remainder of the term is spent providing practice in becoming an EMT. An instructor in the EMT program at Chemeketa noted that the remaining class time becomes a more immersive experience that includes simulations and real-life scenarios that help students “think like an EMT” and “become a better employee and partner in the field.” An EMT instructor at Central Oregon Community College noted that “students like this assessment method because it is hands-on,” and students lead scenario debriefs, which increases their confidence and leadership skills.

Instructors in these programs note the importance of a learning management system (LMS) that includes a student-specific outcomes tracker; this is only a feature in some LMS platforms. The outcomes tracker becomes a grade book that clearly shows progress for the instructor and student, includes scores, and is color-coded. Students can see their status continuously, and instructors can note trends and trouble spots, giving them the information needed to adjust scenarios to support learning better. Students are also empowered to reach out to the instructor to determine how they can show evidence of skill mastery.

BARRIERS TO EXPANSION

The most significant barrier to the development and implementation of CBE in Oregon continues to be how Oregon determines state funding for community colleges and universities. The Community College and Public University Support Funds base much of their funding on completing “Student Credit Hours” or clock hours. Currently, institutions offering CBE components could consider completing a crosswalk for how the CBE components map to the traditional credit hours in the course. This issue could also be considered as the Agency works with community colleges and public universities to assess changes in how the support funds are distributed.

⁷ [National EMS Scope of Practice Model | EMS.gov](#)

⁸ [OHA EMSTS EMS CBA Program Intro Infographic.pdf - Google Drive](#)

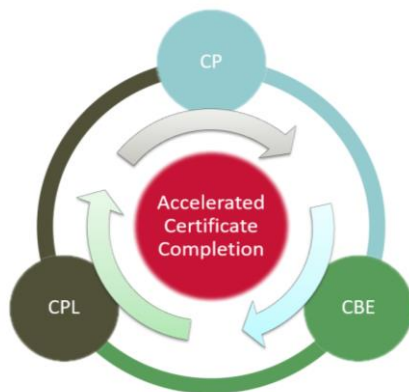
STUDENT OUTCOMES

The Higher Education Coordinating Commission does not currently collect data identifying programs or courses as competency based. That limitation, coupled with a small number of programs utilizing CBE in the state, does not provide sufficient student outcomes for meaningful analysis. However, the HECC Office of Research and Data has proposed strategies to start comparing program year outcomes for EMT courses as programs implement the CBA model. These comparisons would be a first step in identifying potential changes in student outcomes. They could serve as a starting point in collecting more individual student-level and course-level data.

FUNDING STRATEGIES AND POLICY RECOMMENDATIONS

As noted in previous years, CBE, and Credit for Prior Learning (CPL) can be used to accelerate student progress toward credential attainment. However, CBE is sometimes confused with CPL. In Oregon, CPL is defined as “the knowledge and skills gained through work and life experience, through military training and experience, through formal and informal education and training from institutions of higher education in the United States and in other nations⁹.” While CBE can enable students to demonstrate competency in an accelerated way utilizing various assessment methods, CPL supports students in earning credit for what they already know¹⁰. Although these methods are different, CBE and CPL can complement each other. In most cases, institutions map CPL to an entire course, and all the competencies in that course must be met for the student to earn the credit through CPL. Therefore, if the student has partial knowledge, they will not receive the CPL credit. However, if the institution also utilizes a CBE framework, CPL assessments can be developed to meet the requirements for specific competencies in the course and, paired together, can accelerate student progress.

Leveraging short-term certificates and stackable credentials such as Career Pathways Certificates along with CBE and CPL is also a way to provide flexibility that can enable students to accelerate progress through courses in multiple ways, recognizing skill acquisition and prior knowledge that support adult education



attainment. In these programs, students may complete courses by demonstrating competencies, challenging courses by examination, providing evidence of an industry certification or professional license, transcription of military experience, developing a portfolio demonstrating prior knowledge, and other forms of CPL. By valuing previous experience and capacity for learning, students are actively engaged in co-creating their learning experience with instructors. Aligning these programs and determining data collection strategies needs to be an intentional conversation that engages higher education leaders and policymakers as we implement these strategies. With that in mind, staff recommends convening higher education leaders and

other interested parties to learn more about CBE and how it can be aligned with different strategies to support adult education attainment, identify data collection elements and reporting, and engage national leaders to learn how other states and institutions have implemented these programs.

⁹ Oregon Revised Statute 350.110 ORS 350.110 - [Coordination between Higher Education Coordinating Commission, public universities, community college districts and independent for-profit and not-for-profit institutions of higher education](#)

¹⁰ Partners in a New Learning Model: Competency Based Education and Credit for Prior Learning [ED617339.pdf](#)

Additional policy recommendations include providing resources for professional development in colleges and universities to help faculty and administrators better understand CBE and how it can support student progress toward adult attainment of academic and career goals. CBE models could also be considered as changes are discussed in the Community College and University Support Funds to support institutions with the flexibility to implement CBE components into existing programs or establish CBE programs. Finally, achieving the goal of expanding CBE will also rely on champions in community colleges and universities willing to take on local leadership needed to convene stakeholders and change the culture to accept models outside the traditional credit hour model.

EMS & TRAUMA SYSTEMS

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Competency-Based Assessment for Initial Education in Emergency Medical Services: Report to the Higher Education Coordinating Commission

July 2024

Background

With some exceptions, initial education courses for emergency medical service (EMS) providers are coordinated and conducted by EMS education programs at Oregon community colleges and universities. The education programs are accredited by the Higher Education Coordinating Commission (HECC).

The Oregon Health Authority, EMS and Trauma Systems program (OHA-EMS/TS), sets the standards for curriculum, instructor qualifications, and course administration for initial EMS provider courses. Additionally, OHA-EMS/TS prescribes the methods and procedures for verifying student knowledge and skills for initial licensing. For skills verification, OHA-EMS/TS utilizes examination user guides and standardized evaluation forms published by the National Registry of EMTs (NREMT), the national certification agency for EMS providers.

Transition to Competency-Based Assessment for Licensing

The NREMT initiated the redesign their certification schemes and exams for all EMS provider levels in 2020; this includes the replacement of standardized skill examinations with a state-approved student competency verification program as a requirement for certification for all EMS provider levels (exception: competency verification requirements for the paramedic level are set by the Commission on Accreditation for EMS Programs, the national accreditation agency for paramedic education).

Notice of the redesign prompted OHA-EMS/TS education staff to explore different paths for skills verification. In November of 2021, education staff conducted several focus groups with EMS education program faculty, internal licensing staff, and EMS program accreditation staff at HECC to set a vision and direction for the assessment of student competency. The collection of feedback is summarized in Appendix 1. Research and development of a competency assessment system was guided by this input. Research further informed the development of a statewide accountability system to support effective competency-based assessment (CBA) for initial licensing.

Description of the Oregon CBA Program

An infographic summarizing the Oregon CBA program is in Appendix 2.

The Oregon CBA program is a statewide assessment system that is founded upon the principles of competency-based education (CBE), the CBE and CBA model used in graduate medical education, principles of modern assessment design, and balanced assessment systems.¹¹

The CBA program targets five competency areas of entry-level practice:

- Patient care
- Clinical knowledge and rationale
- Systems knowledge
- Interpersonal and communication skills
- Professionalism and professional development

Each competency area includes student performance outcomes reflecting realistic expectations of authentic, entry-level EMS practice for the EMS provider level.¹² The competency descriptions and outcomes were created from national content standards for EMS education, national and Oregon EMS scopes of practice, and input from instructors and EMS providers.

End learning targets and scoring criteria for each outcome are based on educational taxonomies in the cognitive, affective, and psychomotor domains of learning.

The performance outcomes are incorporated into course design. The instructor strategically groups and aligns key assessments and activities to each outcome, which will be used to capture and track student progress towards the end learning target of the respective outcome.

¹¹ References: [Implementing Competency-Based Education](#), Essays on Learning and Teaching; [Core Principles of Assessment in Competency-Based Medical Education](#), Medical Teacher; [How 'Testing' Has Become 'Programmatic Assessment for Learning'](#), Health Professions Education; [When Assessment Data Are Words: Validity Evidence for Qualitative Educational Assessments](#), Academic Medicine; [Designing a Coherent State System of Accountability: The Every Student Succeeds Act and Perkins V](#), National Center for the Improvement of Educational Assessment.

¹² Refer to the [OHA-EMS/TS EMT Student Competencies and Performance Outcomes document](#) for examples and additional details.

Requirements of the Oregon CBA program and quality improvement activities within the statewide system stand upon the key components of an effective CBA program, as noted in the literature. These components are outlined in Appendix 3.

Creating Statewide Change Through Collaboration

Transitioning to a competency framework from a longstanding practice of prescriptive skills testing has proven to be major endeavor for system change and individual practice. The strength of the current EMS education system – collaboration between OHA-EMS education staff, HECC staff, and college EMS faculty – serves as the critical element for initiating and sustaining progress in the development of the Oregon CBA program. OHA-EMS/TS regularly engages with instructors and members of the Oregon EMS Education Consortium to review proposals and draft procedures, develop resources, address barriers to program implementation, and engage in instructional development. Since 2022, biweekly CBA workgroup sessions invite college EMS faculty to collaborate directly with one another and with staff from OHA-EMS/TS and HECC on any aspect relating to the Oregon CBA program.

The collaborative work has expanded to other college staff and faculty from e-learning departments, centers for teaching and learning, curriculum committees, and assessment offices. In some cases, the statewide outcomes were adopted as program-level outcomes for college-wide assessment.

The accountability system for the Oregon CBA program was shaped through close collaboration between the staff of OHA-EMS/TS and HECC. A significant issue within the current system of EMS education oversight, as identified in the 2021 focus groups, was the presence of multiple competing program and course requirements between national accreditation standards, state accreditation standards, and OHA-EMS/TS administrative rules. OHA-EMS/TS and HECC jointly clarified and aligned policy and rule requirements where feasible; these changes narrow the gaps between state and national standards.

Implementing CBA: Insights and Recommendations

CBA strongly supports student-centered learning and offers longitudinal assessment of student learning and growth. Assessment and grading in traditional, content-centric EMS course design typically offer cross-sectional perspectives of student knowledge and skills, lacking the linkage to provide a complete and continuous view of a student's progression towards entry-level competency. In CBA, the alignment of assessments and activities with student-specific performance outcomes and learning targets create a clear and logical path of progression towards proficiency.

The outcomes tracking feature in the Canvas learning management system was used in CBA pilot courses, allowing students and instructors to monitor growth towards proficiency in specific outcomes in real time. One instructor noted the ability of this

function to provide early trends of learning and performance, even earlier than the traditional grading system. According to Kiva Lyell, EMT instructor at Chemeketa Community College, she and her students were able to individualize and adapt learning goals and activities as the students progressed through the course. She also stated that several students become more interested in their learning progress within outcome areas than with letter grades.

The CBA program creates opportunities to explore non-traditional course administration and delivery. The performance outcomes and underlying assessment principles embedded in the CBA program allow instructors to build flexible learning pathways and assessment options for their students. System changes may be necessary to fully adopt innovative and non-traditional course design and delivery, as many policies and rules are based on the traditional classroom experience.

Implementing effective competency education and assessment will require institutional and system investments in professional development for their instructors. Shifting from content-oriented teaching strategies and prescriptive methods and procedures of skill assessment to the CBA model is a challenge for instructors. Prescriptive skills examinations have persisted in EMS education and licensing in Oregon for more than 25 years, perpetuating assumptions that standardized examinations are the only 'true' method for student assessment. Principles of modern assessment design dictate otherwise.¹³ As evidenced in this project, instructors and assistant instructors will need to address assumptions relating to student learning and assessment and develop new skills in assessment literacy and strategies for effective student learning. As a part of CBA program development, OHA-EMS/TS education staff have facilitated several sessions focused on the domains of learning and assessment design. Release time or additional contract time for instructors to learn and create new teaching methods, as well as mentorship with others familiar with CBE and CBA, is highly recommended.

Effective and efficient implementation and deployment of CBA in a course is highly dependent on the ability of a learning management system (LMS) to provide direct student-specific outcomes tracking separate from the gradebook. While all LMS systems provide outcomes tracking, not all were as effective as Canvas in providing useful, student-specific information efficiently. At least one default LMS outcome tracking prevented student-specific outcome reporting altogether. Colleges should advocate for and/or invest in outcome tracking applications that are directly relevant and useful for students and instructors.

Looking Ahead

Official adoption of the Oregon CBA program is anticipated for winter term of the 2024-2025 academic year. Preparations are ongoing:

¹³ Refer to the sources on assessment listed in Footnote 1.

- Revised OHA-EMS/TS educational administrative rules are in the official rulemaking process
- Instructors continue to review and revise course elements for CBA implementation
- OHA-EMS/TS continues to provide guidance and technical assistance to EMS educational programs
- OHA-EMS/TS education and data team members are testing and refine data collection points and reporting

The 2024-2025 academic year will focus on strengthening the CBA infrastructure at the course and state level. Statewide data collection and quality improvement efforts are slated to begin in June, 2025.

Conclusion


CBA expands teaching, learning and assessment to develop and capture holistic attributes of entry-level competency. It also functions as a realistic measure of entry-level competency for initial certification and licensing when it is embedded in system-minded accountability frameworks and incorporates principles of modern assessment design.

CBA provides a different perspective on teaching and learning and invites leaders and instructors to explore and foster innovative, student-centered approaches to EMS education. Experiences from this project have shown that CBA cultivates personal and professional transformation for students, instructors, and educational leaders alike.

Appendix 1: Summary of Feedback from OHA-EMS/TS Focus Groups (2021)



Appendix 2: Summary of the Oregon CBA Program (Infographic)





Competency-Based Assessment for Oregon EMS Licensing

The Oregon Competency-Based Assessment (CBA) program embeds state-required learning targets in initial EMS provider courses to determine a student's readiness for practice.

The learning targets reflect realistic expectations of entry-level practice. The CBA system blends educational principles with modern assessment design to ensure a credible and valid system of competency assessment.



Standards

- Learning targets based on the National EMS Education Standards and Scope of Practice
- Criteria for learning targets and scoring linked to learning frameworks/taxonomies





Structure

- Course activities map to the learning targets
- Activities serve as key evidence in building a student's case for competence for each learning target





Strategy


- Competency development facilitated by learning frameworks/taxonomies
- Student progress measured longitudinally
- Competency decisions guided by modern principles of assessment design




System

- Formal accountability involves state approval of CBA courses and annual reporting of course data by educational programs
- Quality improvement includes local and state activities





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Appendix 3: Components of an Effective CBA System



Primary Sources:

- [Implementing Competency-Based Education](#), Essays on Learning and Teaching
- [Core Principles of Assessment in Competency-Based Medical Education](#), Medical Teacher
- [How 'Testing' Has Become 'Programmatic Assessment for Learning'](#), Health Professions Education
- [Designing a Coherent State System of Accountability: The Every Student Succeeds Act and Perkins V](#), National Center for the Improvement of Educational Assessment

