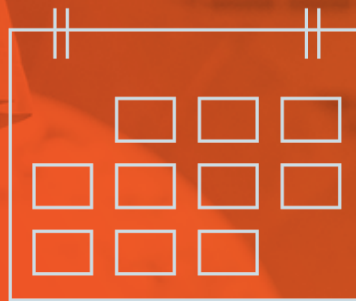
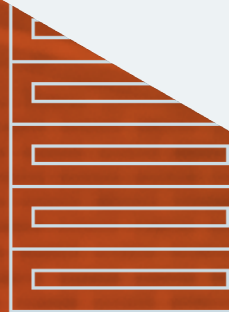




**CANVAS**

BY INSTRUCTURE

# Competency- Based Education



**INSTRUCTURE**



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# Competency-Based Education is More Relevant than Ever

As our society struggles to mitigate the growing skills gap for college graduates, there is an urgent demand for skills-focused, market-aligned education that appeals to a workforce with changing expectations for college. Historic inequities in labor markets are driving colleges and universities to adapt, clarify their value, and create new educational programs and even business models.<sup>1</sup> For some institutions, novel approaches such as competency-based education (CBE) help them deliver flexible, learner-centered journeys that acknowledge prior learning experiences and deliver the skills that lead to career advancement.

Educause describes competency-based education as an educational approach that “...allows students to advance based on their ability to master a skill or competency at their own pace regardless of environment. This method is tailored to meet different learning abilities and can lead to more efficient student outcomes.”<sup>2</sup> With CBE, learners will often prove mastery through meaningful, authentic assessments that produce portfolio-ready artifacts. To provide maximum flexibility for learners, CBE is typically delivered online to manage individualized feedback, progress, and pathways toward competency.

Canvas LMS, the popular open learning platform, is becoming the engine for a growing number of new, online CBE programs. It offers strong support for engaging and authentic outcomes-based education, and is widely adopted by faculty, students, and staff for blended and online programs.

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<sup>1</sup> Education Design Lab. (2022, January 18). [Community College Growth Engine Fund Micro-Pathways: A Gateway to Community College Transformation](#).

<sup>2</sup> Educause. (2014). [Competency-Based Education \(CBE\)](#), Educause Library.







# Utah State University

When Northrop Grumman acquired Utah-based Orbital ATK, they saw a need to upskill their employees but were concerned about the time it might take. Utah State University (USU) stepped up to help by launching a pilot CBE program to help Northrop Grumman employees turn their vocation into a degree. USU focused on optimizing courses for post-traditional learners — adults with little to no college experience, allowing them to apply prior workplace experience and complete their degree quicker.

USU found Canvas Outcomes, Rubrics, and SpeedGrader to be essential in mapping and assessing course competencies for the program. As a bonus, USU found that faculty who built competency-based courses saw their overall teaching improve.

[VIEW FULL CASE STUDY](#)

“

We have been using (Canvas) Outcomes since the beginning. It gave faculty an alternate view of student assessment and possibilities of competency-based education.

**JOHN LOUVIERE**

Executive Director of Academic  
and Instructional Services

”







# Salt Lake Community College

Salt Lake Community College (SLCC) offers more than 35 specialist training programs ranging and allow rolling enrollment. Students can start any week of the year and finish at their own pace. While this flexibility serves a wide range of students, it can also make it difficult to manage individual timelines and track student progress.

To solve this, SLCC partnered with Instructure as they developed a new capability called Canvas Course Pacing. Course Pacing supports open entry / open exit course designs by automatically adjusting due dates for individual students based on enrollment start. Course Pacing also allows for time line adjustment, and gives faculty, staff, and students the ability to track their progress with assessments and learning activities.

[VIEW FULL CASE STUDY](#)

“

Prior to (Canvas) Course Pacing, students often felt a little bit lost. They often felt powerless about how to figure out what their progress rate was, where they needed to be at the end of the week, and what they needed to do to complete modules and entire courses.

DARCIE WHEELER  
Assistant Professor of Healthcare, SLCC

”

# Shifting Expectations of Higher Education

Efficient and skills-oriented approaches like CBE are more relevant than ever due to recent societal changes such as decreasing college enrollments, public concerns about employability or skills gaps in college graduates, and tight labor markets driving employers to focus on workforce up-skilling. Economic and workforce development disruptions caused by the pandemic have put proposals that link education and economic priorities on many state governors' budget agendas.<sup>3</sup>

Students want greater flexibility across all aspects of their learning experiences, particularly with scheduling and pacing to accelerate their return on investment. Recent surveys by the Strada Center for Education Consumer Insights found that students were much more likely to rate a program as “worth the cost” if the time to complete was reduced.<sup>4</sup> Recognizing students' prior learning or workplace experiences can save them time.

Workers and employers also see the rise of short-term credentials as a solution to the turmoil of the labor market, according to the Non-Degree Credit Research Network at the George Washington Institute of Public Policy.<sup>5</sup>

These factors are driving institutions to evolve curricula and generate new programs as they rethink learners' pathways to meaningful credentials. Can educational programs be more flexible, affordable, and efficient?

Institutions that adopt CBE are hopeful that new, online, skills-based programs can re-engage students who couldn't access post-secondary education in the past, including those who may have had competing priorities (work, family). This is seen as a way to reverse the recent enrollment declines that many colleges and universities have seen over the past two years.<sup>6</sup>

“

**What you know is more important than where or how you learned it.**

**TINA GOODYEAR**

Competency-Based Education and Assessment: The Excelsior Experience

”

<sup>3</sup> Marcus, J. (2022, May 12). [As Businesses Hunt for Educated Workers, States Are Loosening the Purse Strings for Higher Ed Again](#). The Hechinger Report.

<sup>4</sup> Marcus, J. (2021, December 14). [A Handful of Colleges Are Finally Providing Training in a Way Consumers Want It: Fast](#). The Hechinger Report.

<sup>5</sup> Non-Degree Credit Research Network. (2021). [New Directions for Non-Degree Credentialing Research](#). George Washington University.

<sup>6</sup> McKinsey and Company. (2020 November). [Higher Education Enrollment: Inevitable Decline or Online Opportunity?](#)

# Principles of Successful CBE Programs

Though CBE is perhaps best known for online delivery, assessment of prior learning, and career relevance, **the heart of CBE is outcomes-based education** — a concept that is well-established in higher education. Outcomes-based education puts the desired learning competencies at the center of curriculum planning, instructional design, and the learner experience. This helps ensure that all teaching and learning activities support the outcomes and yield effective, efficient learning experiences.

While a competency-based program may look different across institutions, the more institutions experiment and share their results, the easier it is to identify key elements of successful CBE programs. Organizations like Competency-Based Education Network (C-BEN) have rallied a community of organizations and institutions and have developed a Quality Framework for **Competency-Based Education**.<sup>7</sup> Informed by the C-BEN Quality Framework and looking across the industry landscape, we've identified four key principles of successful CBE programs:

**1. Learners earn credentials by demonstrating mastery**, as opposed to traditional education models that require seat-time. Assessments can take many forms, but all focus on mastery of competencies — which may require multiple performances to prove. Assessment should happen whenever a learner is ready to prove mastery, not just when an exam is scheduled for the class.

Because of the focus on demonstrable skills, CBE often employs authentic assessments that reflect relevant, real-world situations, e.g. projects or role-plays. Authentic assessments can be more difficult to manage versus traditional exams, but they are a powerful means of ensuring learner competency.

**2. Time to demonstrate mastery varies by learner.** Because progress is not based on seat time, some learners can accelerate through programs more quickly. Others may need more time to learn, practice, and prove mastery.

Flexible pacing naturally leans toward online delivery, where assessments can be efficiently repeated, learning can be individualized, and interactions can be asynchronous.

**3. Students receive proactive guidance and support.** While some learners may be able to prove mastery of competencies immediately, many learners will need instruction and application to master the competencies. As with all quality education, this requires people — instructors, assessors, coaches, etc — to provide corrective feedback on student work, elaborate on topics, or provide guidance and encouragement.

Although CBE is delivered online and asynchronously, learners can also collaborate and support each other.

**4. Learners produce relevant, portfolio-ready work.** Assessments in a CBE program are skills-focused and often authentic, and can result in work that can be showcased in a portfolio for prospective employers.

For example, a learner's portfolio could showcase certificates, badges, or micro-credentials earned through competency assessments, backed by real-world projects and artifacts from the CBE program.

<sup>7</sup> Competency-Based Education Network. (2017). [Quality Framework for Competency Based Education Programs](#).

<sup>8</sup> Wisniewski B, Zierer K, Hattie J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. *Frontiers in Psychology*. 10:3087

<sup>9</sup> Gallup. (2020, February 26). [Improve Student Outcomes by Building Caring Faculty Relationships](#).



## Human Interaction is Critical to the Student Experience

Though CBE may be particularly attractive for independent learners, a well-designed CBE program should not ignore the power of personal, human interaction for optimal learning and student engagement. CBE programs should ensure that human presence can be felt in each learning experience through:

- **Regular, personal feedback** that is corrective, constructive, and also encouraging. This supports continuous improvement and mastery of competencies.<sup>8</sup>
- **Support for learners** by instructors or coaches who express care and interest. This supports learner motivation and persistence.<sup>9</sup>
- **Opportunities for learners to share their successes with others.** Whether with their employers, friends, or family members, sharing progress or milestones can reinforce learners' motivation and lead to the life-changing results that learners are aiming for. Work done to prove mastery should therefore not be "disposable", but rather should be meaningful to learners and those they wish to share them with.

“

It is through others that we develop into ourselves.

LEV VYGOTSKY  
Development of Higher  
Mental Functions

”



CANVAS  
BY INSTRUCTURE





# Challenges in Designing and Delivering CBE

Delivering a CBE program that implements these principles requires careful planning and execution. At the strategic level, programs must evaluate existing curricula for skills-alignment, ensure the real-world value of planned credentials, create a shared language for competencies and outcomes, ensure faculty ability in supporting the CBE model, prepare for holistic student support, and connect learners to industry.

There are also tactical challenges when developing a CBE program that warrant technology-based solutions, such as:

- **Supporting alternative registration models:** Administrators will need to offer learning experiences that are more open-ended and allow students open entry and open exit into learning spaces. This may involve changes to how Student Information Systems and other registration tools work and interoperate, as well as how dates and timelines function within the learning environment.
- **Ensuring efficient but robust competency assessments:** It is critical that assessments fully reflect the competencies they aim to assess. This often means that each competency must be assessed directly and may require multiple assessments at different times in the program.
- **Making student progress visible:** Students expect personalized views that track their progress and reflect their unique learning paths and pace. This is important for instructors and support staff, too, who often must track a great number of learners working at different paces. This is an area where the learning environment technology should provide clarity and efficiency.
- **Enabling individualized pacing:** Most CBE programs are self-paced — at least to some extent. Traditionally, self-paced courses have relied on learners to set their own schedule and due dates, on their own terms. This may work for independent learners, but may not provide enough structure for learners with busy schedules and hectic lives. Enabling structured and automated pacing that is still individualized can be challenging for many systems.
- **Managing, stacking, and issuing credentials:** Much of the power of CBE comes through the granularity of information about the competencies that learners have mastered. Micro-credentials validate and showcase skills and competencies in a meaningful form. They must be well-integrated to show their relationship to competencies.
- **Managing and updating materials, activities, and assessments:** A self-paced CBE program allows learners to start and stop anytime — which can make it difficult for instructional designers and instructors to update, revise, or improve the learning materials, activities, and assessments. This becomes more challenging as programs grow to scale, but learning technologies should be a helper — not a hindrance — to managing learning content, activities, and assessments.
- **Decreasing technology learning curves:** If CBE requires the adoption of new and different technology, instructional staff and admins will need additional time, training, and resources. Ideally, institutions will be able to use the technology they already have, such as the LMS, for all types of programs, whether in-person or online, traditional degree or innovative CBE.
- **Ensuring human connection:** Institutions may be tempted to create self-paced independent study plans with automated assessments; however, without personalized human touch points or feedback, the program may feel disconnected and ineffective.

With these challenges in mind, implementing a quality CBE program at scale requires deliberate choices, careful planning, and a learning environment that delivers simple, intuitive student experiences that guide students on their learning journey each step of the way. To achieve this, students will need an easy-to-use, engaging, and accessible learning environment wherever they are and on whatever device they may have. The learning environment should be designed to help students understand where they are in their journey, what they need to do next, and how to interact with the people who will help them move ahead.

# Instructure's Vision for a Learner-Centered CBE Experience

Instructure is committed to inspiring innovators in education, including those blazing trails with competency-based education.

**We believe that competency-based education should be a learner-centered experience that focuses on authentic assessment and personal feedback loops that lead to mastery of a desired skill.**

The best competency-based education must feel personal for each learner, who has their own view of the progress toward mastery of competencies, is able to move forward at their own pace, and may have a distinctly different learning experience than their peers.

The CBE experience should be highly human, with frequent touch points, the ability to connect and communicate as needed, and with voices and faces, not just text.

**Finally, we believe that the value of a CBE program is only as strong as what a learner gets out of it. This means learners must be able to easily prove what they've accomplished with digital credentials — ideally built on open standards and mapped to in-demand skills.**

“

**The only way we can properly judge where we are is relative to where we want to be.**

**GRANT WIGGINS**

Educative Assessment: Designing Assessments to Inform and Improve Student Performance

”







# Canvas for Competency-Based Education

Canvas LMS's design has always been focused on **outcomes-based education**, and many of the underlying tenets of Canvas' design are now being used to support CBE. Ease of use, powerful design capabilities, and high-touch interaction tools can remove barriers in an online learning environment. Perhaps most importantly, Canvas is an open learning platform built to scale, enabling your staff (or our ecosystem partners) to integrate and customize Canvas to suit your specific CBE approach.

Using the same LMS that your college community has already adopted makes transitioning between traditional degree programs and CBE programs simple and seamless for instructors, students, and staff.

Let's take a look at the CBE journey and how Canvas supports it from the perspective of...



**Administrators and Instructional Designers** who develop and administer the CBE competencies and learning experiences;



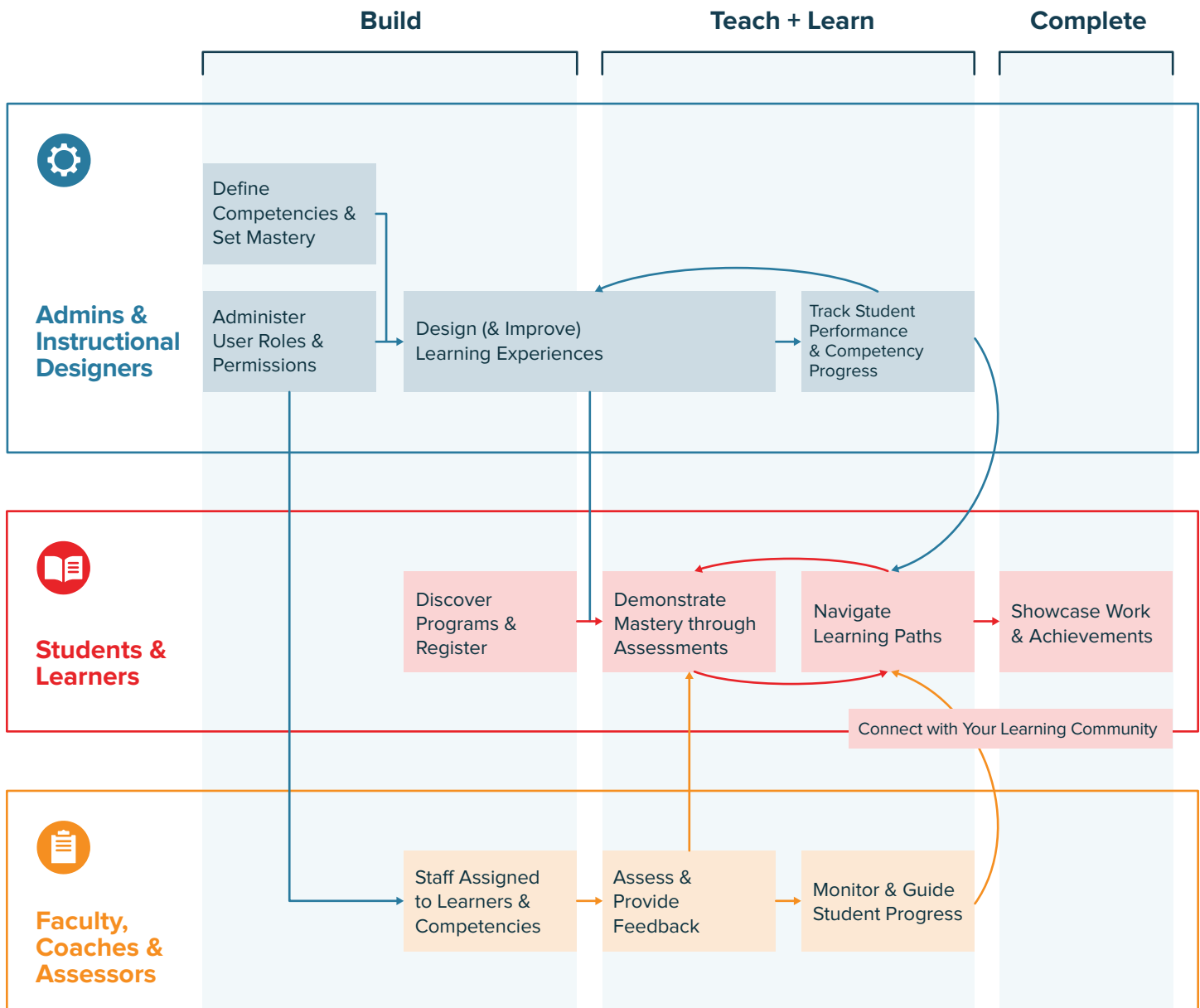
**Students and Learners** who navigate their learning journey with confidence and showcase their achievements;



**Faculty, Coaches and Assessors** who engage and guide students through authentic assessments and personalized human interactions.









<input type="radio"/>	<input type="text"/>		
<input type="radio"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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# A Guide to Canvas for the CBE Journey

 Administrators and Instructional Designers

 Students and Learners

 Faculty, Coaches and Assessors



# The Canvas CBE Journey For Administrators and Instructional Designers



## Define Competencies & Set Mastery

Supported by Canvas Outcomes, Rubrics, and Credentials.

**Job To Be Done:** “We need to make sure our program competencies are organized, tied to relevant credentials, and ready to be used by instructional designers in learning experiences, as well as for later data collection.”

The first thing CBE program creators must do is define competencies and how they will be assessed. Make sure that both will be meaningful to learners and employers by collaborating with industry experts and employer partners.

The final competencies can be created and managed in Canvas and used across assessments and learning experiences.

### Working in Canvas

- Create and manage competencies using the **Canvas Outcomes** feature set (either manually, via CSV upload, or by way of an integration with your curriculum management system such as eLumen).
- Use **Canvas Outcome Groups** to organize sub-competencies.
- Choose the right method of calculating mastery — do learners need to prove it once or multiple times? If the latter, will it be a decaying average of scores or a minimum number of successful performances?
- Create micro-credential pathways with **Canvas Credentials** that award badges upon successful achievement of one or more competencies.
- Map micro-credentials to workforce-ready skills from the EMSI library via **Canvas Credentials**.
- Create a library of core, competency-aligned **Rubrics or Question Banks** so they are available for re-use across learning experiences and assessments.

In Canvas, competencies can be organized and stored at the department or program level. This ensures that all instructors and instructional designers within the program will have access to the competencies they need as they design and assess learners. This also ensures that student competency performance data will roll-up for tracking and reporting.

CS-1. Demonstrates...

CS-2. Applies workp...

CS-2. Applies workp...

CS-3. Demonstrates...

2.2 Identify ways to ...

2.3 Explain ways for...

2.4 Explain how to b...

2.5 Explain skills tha...

2.6 Explain ways to ...

### 2.2 Identify ways to manage stress in the workplace

Your job is a likely source of stress, but you're not powerless to the effects of stress at work. Effectively coping with job stress can benefit both the professional and personal lives of your team members.

Exemplary	Satisfactory	Unsatisfactory	Total Points
2 Points	1 Points	0 Points	2 Points

Mastery: 1 Points  
Calculation Method: Decaying Average

Last Item: 65  
Between 1% and 99%

Calculation Meth...  
Example: 65/35 Decaying Average  
Most recent result counts as 65% of mastery weight, average of all other results count as 35% of weight. If there is only one result, the single score will be returned.

Define competencies and set how mastery will be measured, whether assessed once or a multiple times.



## Administer User Roles and Permissions

## Supported by Canvas Roles and Permissions

**Job To Be Done:** “We need to make sure the right people have the right level of access to learning experiences and to the students they will support, whether current staff members or folks external to our college. This should be something we can ‘set and forget.’”

A CBE program involves a variety of users operating with roles and responsibilities that may differ from traditional academic programs, such as administrators, instructional designers, instructors, assessors, coaches, external experts, and, of course, learners. Canvas makes it easy to set up a variety of unique roles with specific permissions in the same LMS environment that staff and instructors already use.

## Working in Canvas

- Create uniquely named user **Roles** (or re-use existing roles), such as designer, independent assessor, coach, or learner.
- Apply **Permissions** to those Roles to enable or restrict them from activities such as editing course materials, assessing and providing feedback, or only viewing/communicating with learners assigned to work with them
- Create and update users and enrollments automatically via the Canvas SIS or CRM integration CRM, via the Canvas Open API integration

Permissions	Student	Teacher	TA	Assessor	Coach	Designer
> <a href="#">Manage Assignments and Quizzes</a> add / delete / edit	✗	✓	✓	✓	✗	✓
> <a href="#">Manage Course Content</a>	✗	✓	✓	✗	✗	✓
> <a href="#">Manage Course Files</a> add / delete / edit	✗	✓	✓	✗	✗	✓

Canvas administrators can create custom roles with a broad range of specific permissions.

## Design (and Improve) Learning Experiences

Supported by Canvas Outcomes, Mastery Paths, Course Pacing, and Blueprints.

**Job To Be Done:** “We need to design and develop online, competency-aligned learning experiences that focus on mastery, provide maximum flexibility, and are easy to manage and update over time.”

Once the competencies, and mastery criteria, have been set up in Canvas, the next step is for instructional designers to design and develop competency-focused assessments and learning experiences in Canvas. This includes setting up Course Pacing, which enables open-entry / open-exit timelines with personalized due dates to help learners stay on track.

## Working in Canvas

- Create the structure for CBE assessments and learning experiences using **Canvas Modules** for each competency or even an entire “course” space.
- Manage learners’ progress through competencies via **Module Requirements**, enabling learners to proceed based on success on one or more assessments. Use Facilitate mastery learning loops with **Mastery Paths**, which can differentiate instructional content or activities based on students’ performance on an activity or assessment.
- Design beautiful and engaging learning content with the **Canvas Rich Content Editor**, linking to competencies, embedding multimedia and activities, and connecting to quizzes, assignments, collaborations, or discussions.
- Plan social, collaborative, or team learning experiences (when appropriate) using **Canvas Groups** (social spaces and assignments).
- Use **Course Pacing** to ensure that each learner has personalized course pacing with due dates and milestones no matter when they start or stop a program.
- Use **Canvas Blueprints** to easily control and update the quality and design of learning experiences. Blueprints also enable any part of a learning experience design to be locked from instructor edits or fully editable by instructors.
- Create assessments (including prior learning assessments) with **Canvas Assignments or Quizzes**, ensuring that each is aligned to the relevant competencies (e.g. via Outcomes-aligned question bank alignment or rubrics).
- Streamline authentic assessments by enabling learners to submit artifacts or projects directly from their pre-existing **Google Apps, O365, or iWorks** accounts, or even via published websites or social media.
- Ensure students can complete **multiple attempts** to prove mastery

<b>Checkpoint: Ready to Start!</b> 1 pt				7	<div> <div></div> <div></div> </div>	Tue, Sep 13, 2022	✓
<b>2. Competency 1.1: HTML 5 fundamentals</b>							
Item		Days ⓘ		Due Date		Status	
<b>Knowledge Assessment 1.1: HTML 5 Fundamentals</b> 16 pts		14	<div> <div></div> <div></div> </div>	Mon, Oct 3, 2022		✓	
<b>Skills Assessment 1.1: HTML 5 Fundamentals</b> 5 pts		14	<div> <div></div> <div></div> </div>	Fri, Oct 21, 2022		✓	
<b>3. Competency 1.2: Web Server Fundamentals</b>							
Item		Days ⓘ		Due Date		Status	
<b>Knowledge Assessment 1.2: Web Server Fundamentals</b> 10 pts		21	<div> <div></div> <div></div> </div>	Mon, Nov 21, 2022		✓	
<b>Skills Assessment 1.2: Web Server Fundamentals</b> 5 pts		21	<div> <div></div> <div></div> </div>	Tue, Dec 20, 2022		✓	

Set up Course Pacing to automatically set target due dates based on each students’ start date.

Details
Questions
Mastery Paths

10 pts

+

8 pts

7 pts

Skills Assessment 1.4: Javascript Fundamentals

+

4 pts

1.4 Javascript Variables

&

Test Your Understanding of Javascript 4 pts

&

1.4 Javascript Loops

&

1.4 Javascript and the Document Object Model (DOM)

&

1.4 Examples of Effective Uses of Javascript

+

0 pts

1.4 What is Javascript?

&

1.4 How Javascript Works

&

1.4 Javascript Variables

&

Test Your Understanding of Javascript 4 pts

&

1.4 Javascript Loops

&

1.4 Javascript and the Document Object Model (DOM)

&

1.4 Examples of Effective Uses of Javascript

Create personalized learning experiences based on competency assessments with Mastery Paths.

<b>Make Programs Discoverable</b>	<b>Supported by Canvas Catalog</b>
<b>Job To Be Done: "How can we help learners find and register for programs?"</b>	
Prospective students need a way to learn about available programs and the competencies they can develop. The online storefront, Canvas Catalog, makes your CBE program discoverable by the public, easy to register for and user friendly.	
<b>Working in Canvas Catalog</b>	
<ul style="list-style-type: none"> <li>Map out available CBE programs in <b>Canvas Catalog</b>.</li> <li>Designate what micro-credentials or badges each program delivers, and how that relates to skills.</li> <li>Set the estimated time requirements, opportunities for direct assessment, etc.</li> <li>Open registration online and set fees (if any). <ul style="list-style-type: none"> <li>Data can flow to CRM or other 3rd-party systems.</li> </ul> </li> <li>Ensure your CBE learning experience and/or microcredential pathway is accessible and renders correctly in <b>Canvas</b>.</li> </ul>	



## Track Student Performance and Progress

Supported by Canvas Learning Mastery View, Reports, Data, and Credentials.

**Job To Be Done:** “We need to make sure our learners are on-track toward mastery of the program competencies — and intervene to support them, when necessary.”

Once the program is underway, support staff and program administrators will want to track progress in aggregate toward competency mastery and micro-credentials. This not only allows them to better praise, support, or nudge learners along their path, it also provides insights that may help improve curriculum or learning experience design.

## Working in Canvas

- Check on individual or cohort student competency performance using **Canvas Learning Mastery View**.
- Generate on-demand student competency reports via **Canvas Reports** — ready to download as CSV for further analysis.
- Dig further into the data, matching competency performance to online activity with **Canvas Data**.
- Track the issuance of competency-based badges and micro-credentials in **Canvas Credentials**.

Students	1.1.1 Underst...	1.1.2 Explains...	1.1.3 Structur...	1.1.4 Produce...	1.1 HTML5 F...	1.2.1 Underst...	1.2.2 Uploads...	1.2.3 Organiz...
Steven Ballard 2022-09	1 / 1 <span>■</span>	1 / 1 <span>■</span>						1 / 1 <span>■</span>
Hazel Burser 2022-08	1 / 1 <span>■</span>							0 / 1 <span>■</span>
Gayle Brady 2022-09	1 / 1 <span>■</span>	1 / 1 <span>■</span>						
Malcolm Chan 2022-09	1 / 1 <span>■</span>							0 / 1 <span>■</span>
Paige Chen 2022-09	1 / 1 <span>■</span>	1 / 1 <span>■</span>						1 / 1 <span>■</span>
Geraldine Davis 2022-08	1 / 1 <span>■</span>	1 / 1 <span>■</span>						
Julia Desai 2022-09	1 / 1 <span>■</span>	1 / 1 <span>■</span>						
Kristine Dougherty 2022-09	0 / 1 <span>■</span>							
Laura Eason 2022-10	1 / 1 <span>■</span>	1 / 1 <span>■</span>	1 / 1 <span>■</span>	1 / 1 <span>■</span>	2.35 / 2 <span>■</span>	1 / 1 <span>■</span>	1 / 1 <span>■</span>	1 / 1 <span>■</span>
Erin Finch 2022-09	1 / 1 <span>■</span>							

**1.1 HTML5 Fundamentals**

Encodes web content with HTML 5 semantically and validly.

■ Exceeds Expectations  
■ Meets Expectations  
■ Almost Meets Expectations  
■ Does Not Yet Meet Expectations

Mastery set at: 2

Calculation Method: 65/35 Decaying Average

Track progress toward competency with the Learning Mastery View for just the learners you are responsible for.

# The Canvas CBE Journey For Students and Learners



## Discover Programs and Register

## Supported by Canvas Catalog

### Job To Be Done: “What program will help me take the next step in my career / life?”

Through the online storefront Canvas Catalog, prospective students can discover and register for your available CBE programs and learn about the competencies they offer.

### Working in Canvas

- Browse or search for available CBE programs through **Canvas Catalog**.
- Understand what micro-credentials or badges each program delivers, and how that relates to skills.
- Understand the estimated time requirements, opportunities for direct assessment, etc.
- Register online and pay fees (if any).
- Access your CBE learning experience and/or microcredential pathway directly in **Canvas**.

The screenshot shows the Canvas Catalog interface. At the top, there's a search bar and a 'Refine' button. Below the header, four program cards are displayed in a grid. Each card features a representative image, the program title, a brief description, and the start date or pacing. The programs are: Web Development Certification (started Aug 1, 2022), Agile Project Management Certificate (self-paced), Data Analytics and Visualization Certificate (self-paced), and Operations and Supply Chain Management (self-paced). Each card has a right arrow icon at the bottom right.

Prospective learners discover and register for your competency-based programs with Canvas Catalog.

## Navigate Learning Paths

Supported by Canvas Modules, Mastery Paths, Course Pacing

**Job To Be Done:** “What do I need to do first? What will I need to do next to ensure I’m ready for the assessment.”

Students are oriented toward learning exactly what they need to learn in order to prove mastery through organized, sequenced, and sometimes self-remediated content and activities.

### Working in Canvas

- Plan ahead with **Canvas To Do list**, personalized **Notifications**, and **Calendar**.
- Understand your progress toward mastery of all competencies and their aligned assessments via **Canvas Learning Mastery View**.
- Navigate through sequenced learning activities that help you gain competency at your own pace with **Modules**.
- Go deeper with materials you haven’t mastered based on assessment performance with **Mastery Paths**.
- Stay on-track with an individualized schedule of due dates based on whenever you started thanks to **Course Pacing**.

The screenshot displays the Canvas Learning Mastery interface. On the left is a dark sidebar with navigation icons for Account, Dashboard, My Programs, Calendar, Inbox, History, and Help. The main content area has two tabs: 'Assignments' and 'Learning Mastery'. The 'Learning Mastery' tab is active, showing a section for '1.1 HTML 5 fundamentals' with a '5 OF 5 MASTERED' badge. Below this, a sub-section for '1.1 HTML5 Fundamentals' shows '2.35/3' and a 'MASTERED' badge. It lists '2 alignments' and includes a 'Skills Assessment 1.1: HTML 5 Fundamentals' with a score of 2. A progress bar shows 3 pts (Exceeds Expectations), 2 pts (Meets Expectations), 1 pt (Almost Meets Expectations), and 0 pts (Does Not Yet Meet Expectations). Below this is a 'Full Sub-Competency Assessment' with a score of 3, showing a similar progress bar. At the bottom, a 'Comprehensive Skill Assessment: Web Dev Fundamentals (Not yet assessed)' is listed. The bottom section shows '1.1.1 Understands HTML 5 and its applications' with '1 alignment' and a '1/1 MASTERED' badge.

Learners can track their progress toward competencies and quickly navigate to assessments.

## Demonstrate Mastery through Assessments

Supported by Canvas Quizzes, Assignments, Rubrics

**Job To Be Done:** “I want to see whether what I know and can do meets the requirements for mastery of this competency.”

Learners can demonstrate prior learning and mastery of competencies through successful completion of assessments and assignments to outcome-aligned rubrics.

### Working in Canvas

- Attempt to show mastery of competencies with Prior Learning Assessments (exams or tests) in **Canvas Quizzes**.
- Submit projects, performances, or other evidence from files or cloud-based tools such as Google Drive, Office365, or iWorks via a **Canvas Assignment**.
- See scores and feedback instantly on objective assessments.
- Receive **Notifications** via email, text, or the mobile app of assessment feedback and updates from your assessor. assignments and learning activities for additional practice and skill development
- Review feedback such as inline comments on your project, rubric scoring, or video comments from your assessor.
- When requested, improve, revise, and resubmit your work for another round of assessment.
- Automatically unlock additional **Modules** with learning activities to help you master the current competencies or progress to the next competency in the series.

## Connect with Your Learning Community

Messages, Discussions, Chat, Conferences, Mobile App

**Job To Be Done:** “I could really use some support! And maybe make some connections that will help me feel better about this and energize me for the next step.”

Whether your CBE learners are primarily working with coaches and assessors, or they are part of a cohort of other learners, Canvas provides the right methods at the right times to connect and engage.

### Working in Canvas

- Learners in cohorts can communicate formally or informally in asynchronous or synchronous **Discussions, Conferences, or Chat**.
- Learners working in teams can share files, schedule working sessions, etc. via **Groups**.
- Coaches or assessors are available for support via **Messages, Chat**, or through ongoing **Assignment** feedback loops.
- All communication works with students’ preferred tools or methods, whether email, text, or through the **Canvas Student** mobile app.



## Showcase Work and Achievements

Supported by Canvas Credentials, ePortfolios


**Job To Be Done:** “Woo hoo! I mastered the competency. I’m actually on my way to finishing the program. When I do, I’ll need to share the evidence of what I can do with employers so I can move up in my career.”

Learner progress and milestones are marked by the attainment of badges or skills-aligned microcredentials, which can be shared with potential employers alongside a portfolio.

### Working in Canvas

- Learner views will display learning pathway progress and badges attained across all learning spaces/sites/courses
- Showcase your skills-aligned achievements such as micro-credentials or badges with **Canvas Credentials**. Share these to your LinkedIn profile or portfolio.
- Post evidence of learning such as assessment submissions or projects in your **Canvas ePortfolios**.

Earned



PC

Learner

Paige Chen

Identifier

badgr/integrations/canvas/recip...

(more)

Status

Earned

[View Canvas Profile](#)

## HTML 5 Fundamentals

Offered by

Computer Programming & Software Development

Requirement

Complete Competency 1.1: HTML 5 fundamentals

...

Requirement description:

Complete the Canvas module [Competency 1.1: HTML 5 fundamentals](#).

Module status in Canvas:

Module completed. Checked at 1:06 PM.

### Badge details

DESCRIPTION	
Description of this badge	Encodes web content with HTML5 Understands HTML 5 and its applications Knows the most common HTML 5 elements and attributes Structures page content semantically with HTML 5 Produces validated HTML 5

Learners earn open badges and micro-credentials with Canvas Credentials, which can be shared with employers.

# The Canvas CBE Journey For Faculty, Coaches and Assessors



## Assess and Provide Feedback

Supported by Canvas SpeedGrader

**Job To Be Done:** “We need to assess and provide feedback to learners on their work as swiftly as possible, and guide them to improve and re-attempt when necessary.”

Faculty and assessors support learners’ mastery attainment by assessing performance and providing rich feedback using competency-rubrics, inline comments, and video.

## Working in Canvas

- Respond to **To Do** notifications when learners have completed an assessment.
- Review exams, projects, videos, or other authentic student work in **Canvas SpeedGrader** — in your browser or via the popular **Canvas Teacher** mobile app.
  - Provide personal, corrective feedback loops in the form of inline comments, video feedback, rubric scores, etc.
  - Easily prompt students to revise and resubmit when needed.
- Guide team and peer learning through **Groups** spaces that allow you to engage in discussions and provide additional feedback.

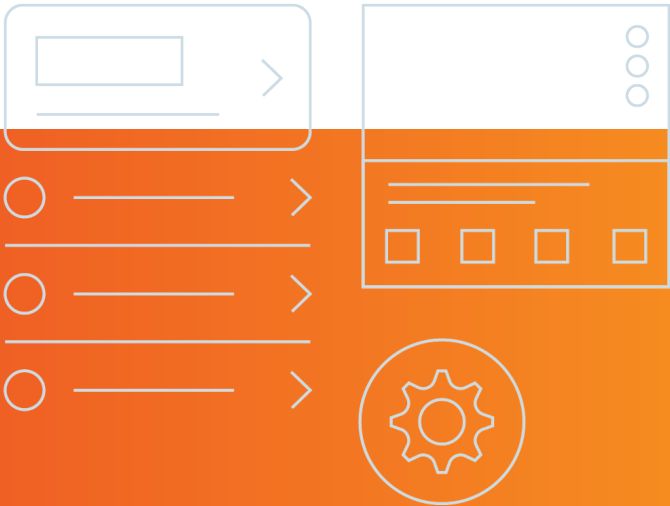
The screenshot displays the Canvas SpeedGrader interface for a student's assignment titled "1.1: HTML5 Fundamentals". The main area shows the student's code, which includes various HTML tags and comments. On the right, there is a sidebar with comments from Jared Stein, indicating areas for improvement such as "You should indicate the language here." and "Missing HEAD and TITLE elements". Below the code, there is a grading rubric for the assignment. The rubric lists criteria and ratings, with a total score of 3 out of 5 points. A video comment from Jared Stein is also visible at the bottom of the interface.

Criteria	Rating	Points
1.1 HTML5 Fundamentals	3 pts Exceeds Expectations	3 pts
1.1.3 Structures page content	1 pts Meets Expectations	1 pts
1.1.4 Produces valid HTML 5	1 pts Meets Expectations	1 pts

Speedgrader not only saves assessors hours of time, it creates rich feedback loops with learners on their projects.

Monitor and Guide Student Progress	Supported by Canvas SpeedGrader, Discussions, Chat, Conferences.
Job To Be Done: “We’re responsible for the students assigned to us, and that means knowing where they are in the program and offering help if they appear to be struggling.”	
Faculty, Coaches, and SMEs leverage Canvas’ communication tools and assignment feedback loops to provide constructive and encouraging touch points with students.	
Working in Canvas	
<ul style="list-style-type: none"><li>• Check on the competency performance of individuals or cohorts of students using <b>Canvas Learning Mastery View</b>, and track their time to completion with <b>Course Pacing</b>.</li><li>• With <b>Canvas Analytics</b>, understand the relationship of learners’ engagement with course materials to their performance, and then reach out to those who need help.</li><li>• Keep learners engaged and feeling cared for with synchronous or asynchronous communication tools like <b>Canvas Messages, Chat, or Conferences</b>.</li><li>• Track the issuance of competency-based badges and micro-credentials in <b>Canvas Credentials</b>.</li></ul>	

We hope this high-level view of how Canvas delivers a CBE experience is helpful as you think about each of the user roles for the program you are planning. We find that starting from the perspective of each role helps visualize their needs, identify what really matters in technology, and ultimately deliver a truly learner-centered experience.





Just a few examples from the  
Canvas Partner Ecosystem:



# Partnering for Your Unique CBE Needs

While Canvas is the foundation of a learner-centered CBE experience, Instructure's vast partner ecosystem provides more options to deliver exactly what you need, from curriculum management to SIS integrations to discipline-specific learning tools. Here are just a few examples from the Canvas Partner Ecosystem:

- **Curriculum Management: eLumen** is the source of truth for competencies and curricula maps, which can be synced with Canvas Outcomes at the click of a button and assessed in a truly integrated manner.
- **Cloud Office Tools: Google, Office365** support authentic assessment in Canvas by allowing learners to use the products that they've used in the past (or will use in the future), often through collaboration with other team members.
- **Enrollment Sharing: Quottly** enables systems, consortia, and individual institutions to deliver a unified cross-enrollment experience for course sharing programs.
- **Experiential Learning: Riipen** connects students to small, experiential learning opportunities offered by industry partners through in-course assignments or projects, integrated into Canvas.
- **Skills Content & Training: NexusEdge** delivers student success tool that helps students identify career paths and earn micro-credentials aligned to skills needed by employers based on the course work they have completed.
- **Workforce Data: Lightcast**, formerly Emsi + Burning Glass, is a platform and services company that guides businesses, learning providers, and communities through today's complex talent challenges and toward a job market that works for everyone. Lightcast integrates with Canvas Credentials to map badges or micro-credentials to relevant skills.

At Instructure we believe that openness enables innovation, and interoperability improves the user experience. Both of these are critical to a robust, student-centered CBE journey, making our unique, industry-leading partnerships and open platform capabilities among the most valued and powerful differentiators for higher ed institutions (though Canvas is pretty great, too.)



# Instructure Professional Services **For CBE**

Instructure's learning and technical services team helps organizations learn how to use Canvas and other Instructure products to best support their specific needs for competency-based or outcomes-based educational programs. We provide resources to help with planning programs, training staff, applying best practices in Canvas, creating great course models, moving content, or creating specialized reports.





# Powering the World's Smartest Classrooms.

Instructure is an education technology company dedicated to helping everyone learn together. We amplify the power of teaching and elevate the learning process, leading to improved student outcomes. Today, Instructure supports more than 30 million educators and learners at more than 6,000 organizations around the world.

The Instructure Learning Platform makes learning more personal and student success more equitable by delivering the solutions you need to support, enrich, and connect every aspect of teaching and learning. The Instructure Learning Platform for higher education includes:



**Canvas by Instructure:** bringing together Canvas LMS, video engagement with Canvas Studio, a branded course catalog system by Canvas Catalog, and student badging with Canvas Credentials.



**Impact by Instructure:** helping teachers and students adopt educational technology to promote deeper engagement with learning while guaranteeing the campus edtech ecosystem is utilized to its fullest potential.

Learn more at [instructure.com/higher-education](https://instructure.com/higher-education).