Faculty Competency-Based Education Training

School of Applied Technology and Center for eLearning

Salt Lake Community College

In compliance of TAACCCTT grant

Welcome to the SAT Faculty CBE Training Course!

Regardless of how long you may have been teaching in either competency-based or traditional education, you will find this course relevant for the work ahead. As a result of receiving a federal Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant, the School of Applied Technology is reevaluating and improving the current competency-based education (CBE) methodology. We are committed to designing and delivering CBE courses with a unified approach across all courses. Faculty development is fundamental to the effectiveness of a CBE system and strategies, and in particular, a firm foundation and understanding of CBE and its application in the School of Applied Technology at Salt Lake Community College.

The goal of this course is prepare you for creating and delivering courses using the School of Applied Technology CBE model. These are the competencies you will gain by completing this course and attending workshops. This course provides a foundation to prepare you to work on a collaborative team that includes instructional designers and assessment designers to create or adapt a CBE course:

Course Competencies

After completing this course you will be able to:

- Demonstrate commitment to the Salt Lake Community College CBE model by applying CBE principles, strategies, and techniques to course design and course management
- Describe the foundation of CBE course design
- Identify and analyze student course competencies and write and align learning objectives to course competencies
- Design or locate reliable student assessments that measure student knowledge, skills, abilities, and behavioral changes
- Design or adapt a CBE course aligned to course competencies, learning objectives, and assessments

- Organize and manage a CBE course and/or classroom

Click on the module icon to open the Course Introduction. You must complete the Course Introduction before moving to the next module.

Course Introduction

Writing Competencies and Learning Objectives

Designing Effective Assessments

Developing Competency-based Instruction

Course and Classroom Management

Course Introduction

Watch the video where Eric Heiser, Dean of the School of Applied Technology, welcomes you to this course.

Eric Heiser Video - https://1540181.kaf.kaltura.com/browseandembed/index/media-redirect/entryid/0_tzewmc7u/showDescription/false/showTitle/false/showTags/false/showDuration/false/showOwner/false/showUploadDate/false/embedType/oldEmbed/playerSize/400x285/playerSkin/16379291

About this Course

This course is designed to model the development of a CBE course. Each module begins with an overview page featuring a "day in the life" scenario about two School of Applied Technology students (to situate the content in an authentic learning environment). The overview page lists the module learning objectives that align with the competency, and description of the end-of-module assessment (that will demonstrate your competency).

Modules 1 - 3 will help you prepare a draft course alignment map to design or adapt a CBE course. You will also prepare a classroom management plan and syllabus in Module 4.

- Before you begin, create a personal folder to save the documents you create in this course for future reference.
- Watch for the following icons that will help direct you to information, resources, and progress checks that are sequenced to help move you toward the module competency:


Articles or websites that present facts, procedures, or resources necessary for the competency


Videos, presentations, or demonstrations to help you build skill


Additional information and resources that can help you build knowledge or skill


Discussion forum where you can post and read other students' and/or your facilitator's comments


Practice quizzes, assignments, and final module assignments

Competency

- This module will introduce CBE; you will be able to describe the foundation of CBE course design.

Learning Objectives

- Navigate the course in Canvas
- Introduce yourself as a member of the SLCC CBE faculty community
- Identify the general principles of CBE
- Define CBE at SLCC
- Outline the CBE course design process

Before we look more at CBE at SLCC, let's first make sure you are comfortable with how to get around in Canvas and configure your Canvas settings.

Get to Know Your Canvas Course

The Home Page

The homepage provides you with quick access to the content in each of the modules through the links on the page. This course is designed for you to progress linearly through the modules, assignments, and concepts build that on each other in a particular order. You'll want to start with the Course Introduction and move through each module as they are listed.

How Do I Track My Progress?

"Modules" view shows the material for each module in a sequential order. Use the triangle in front of the module names (1) to open and close the modules. There are four modules in the class. To check your progress in the course, look at "Modules" in the left menu.

Overview Pages

Each module will have an overview page. Here you will be given instructions about what to expect in each module. The modules are divided into thematic sections. Follow each blue link to complete the material for that section. From the overview pages, you can also click the "Next" button which will take you linearly through the course material.

Left Menu

There are other views in the left menu that can help you.

"**Assignments**" view will show you a list of the items that help you build skills for the learning objective and competency.

"**Quizzes**" will show you each of the quizzes in the course.

"**Discussions**" will take you to a global view of every discussion in the course.

"**Grades**" will track your points earned on practice assignments and quizzes in the course.

"**People**" gives you the list of students in the class.

Grades

To see a summary of your grade calculated with the appropriate assignment weight described in the syllabus, scroll to the end of the Grades page.

Canvas Resources

If you'd like more Canvas training visit the "Getting Started Online" Canvas site. You can also call 24/7 Canvas Support at 801-957-5125.

The following links help you learn specific information about how to navigate Canvas and how to submit assignments. This knowledge will help you in the future with your students who will be using Canvas as well.

How do I log into Canvas?

How do I view my Canvas courses?

How do I set my Notification Preferences?

How do I submit an online assignment?

How do I reply to a Discussion as a student?

How do I view my Grades?

What is Conversations?

Which browsers does Canvas support?

CBE at Salt Lake Community College

Competency-based education is not new. In fact, CBE courses have existed at Salt Lake Community College since the 1990s but a number of factors are driving a renewed interest in CBE nationally: “concerns over rising costs, student debt levels, and the lack of alignment between college graduate skills and labor-market demand” (Johnstone & Soares, 2014).

CBE may not be new, but there is still a lack of consensus about exactly what it is, so in this course we will present basic CBE philosophies from the latest research, and then focus more specifically on principles that define CBE at Salt Lake Community College.

Porter and Reilly (2014) provide us with a broad view of CBE:

> "Conversely, when 'learning is fixed, while time is variable,' what a student has learned during his or her course of study is much easier to discern. In a true competency-based program, students take as much or as little time as they need to learn the material. They make progress toward degree completion only by mastering individual competencies, rather than taking courses and accumulating credit hours. Competency-based programs emphasize mastery of competencies through demonstration, and each degree program is based on a specific list of competencies."

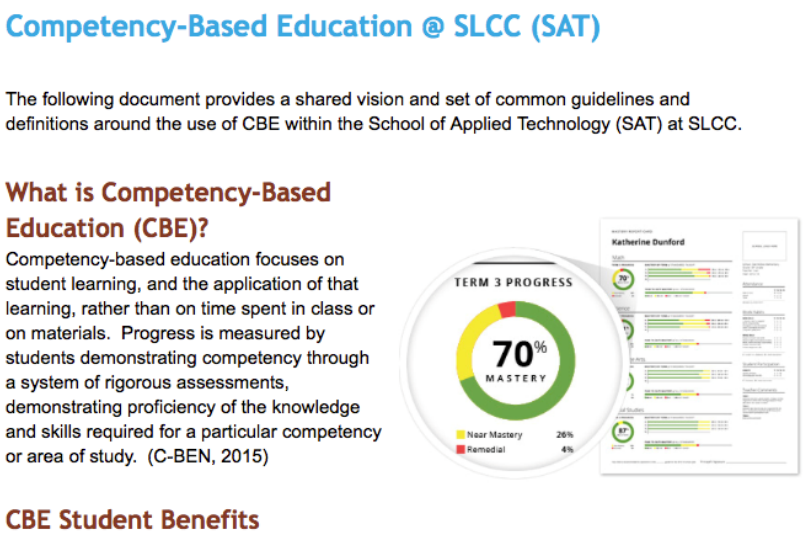
CBE at Salt Lake Community College

Regardless of the approach to CBE, for a consistent and quality student experience across all CBE courses at Salt Lake Community College, as defined by the Competency-based Education Initiative Committee, CBE at the School of Applied Technology should:

- Encompass robust and valid competencies
- Directly align competencies, learning objectives, and assessments (and other instructional activities)
- Offer variable paced learning
- Provide student support and learning resources 24/7
- Include secure and reliable assessments
- Provide authentic assessments tied closely to real world applications
- Include clearly defined levels of proficiency or mastery

Read the following documents:

Competency-based Education at SLCC (SAT) explains familiar definitions and key concepts.



Competency-Based Education @ SLCC (SAT)

The following document provides a shared vision and set of common guidelines and definitions around the use of CBE within the School of Applied Technology (SAT) at SLCC.

What is Competency-Based Education (CBE)?

Competency-based education focuses on student learning, and the application of that learning, rather than on time spent in class or on materials. Progress is measured by students demonstrating competency through a system of rigorous assessments, demonstrating proficiency of the knowledge and skills required for a particular competency or area of study. (C-BEN, 2015)

CBE Student Benefits

[Principles for developing competency-based education programs] by Sally Johnstone and Louis Soares (2014).

The [Council of Regional Accrediting Commissions] describes the different models of competency-based education:

> **Course credit-based approach**- the demonstration of competencies is embedded into a conventional curriculum comprised of courses to be completed to earn credits toward a degree or credential.
>
> **Direct assessment approach**- is not based on semesters (or academic term) or credits; the award of a degree or credential based solely on the demonstration of competencies.
>
> **Hybrid approach**- combines the course-based approach and the direct assessment approach through a combination of direct assessment and credit hours.

Applications

REVIEW the Johnstone and Soares article and [Competency-based Education at SLCC (SAT)] to make sure you can identify general CBE principles and definitions.

Competency-based Course Design

How can you be confident that you are developing/delivering high-quality CBE courses? The foundation to creating excellent competency-based education involves rigor in aligning the

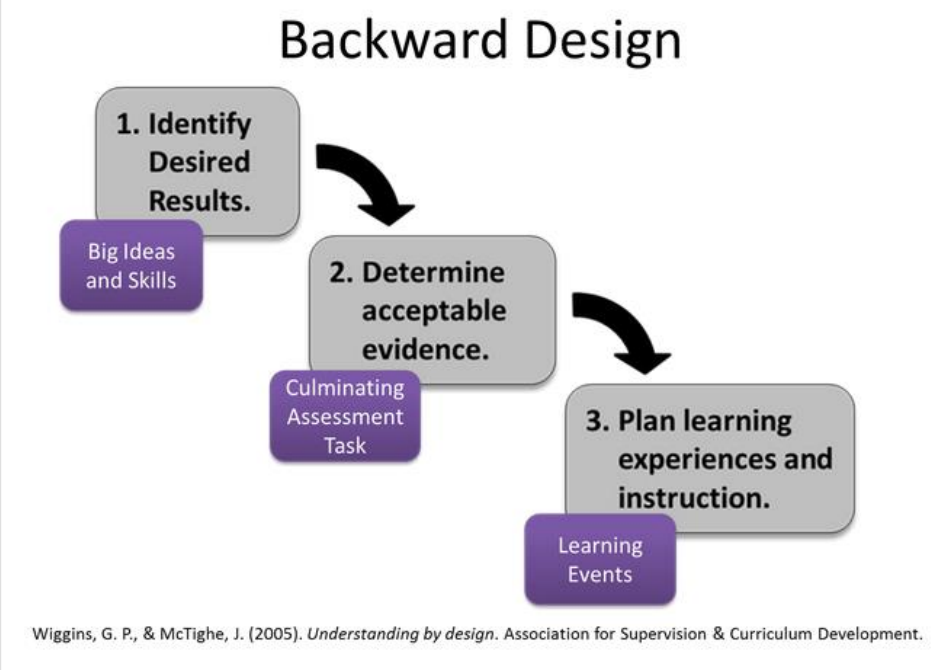
curriculum to provide a student-centered experience and facilitate the attainment of mastery. How can you ensure alignment in your CBE courses?

How to Design a Competency-based Course

CBE is an approach in which decisions about the curriculum are driven by the competencies that the students should display at the end of the course. Assessments, materials, and instruction all work toward helping students achieve those competencies. Or, in other words, the course design is in **alignment**.

There are several ways to ensure that the course aligns. At Salt Lake Community College, we use a method called backward design.

Backward design was developed by Wiggens and McTighe as a **process for designing educational experiences**. It emphasizes defining learning outcomes (competencies) before choosing forms of assessment and creating instruction. Often instruction is planned by starting with the third step - planning learning experiences and instruction - which can cause *misalignment* of the instruction with exams and result in vague outcomes. Backward design starts with the end in mind.



Wiggins, G. P., & McTighe, J. (2005). *Understanding by design*. Association for Supervision & Curriculum Development.

Here is more detail about backward design as it might be used in competency-based instruction.

In their book *Understanding by Design*, Wiggins and McTighe describe what happens in each of the three stages of backward design:

Stage 1: Identify desired results

"What should students know, understand, and be able to do?" (p. 17)

To identify the desired results, you first examine established SLCC College-wide Student Learning Outcomes (CWSLOs) and course Student Learning Outcomes (SLOs) or **competencies** found in the Course Curriculum Outline (CCO). Competencies should clearly describe the high-level results you want your students to achieve.

Based on the competencies, you create **learning objectives**. Learning objectives are similar to course competencies in that they still identify what you want students to know, understand, and be able to do, but they are more specific. They are the desired result of a unit of instruction, such as one concept or theme within a course.

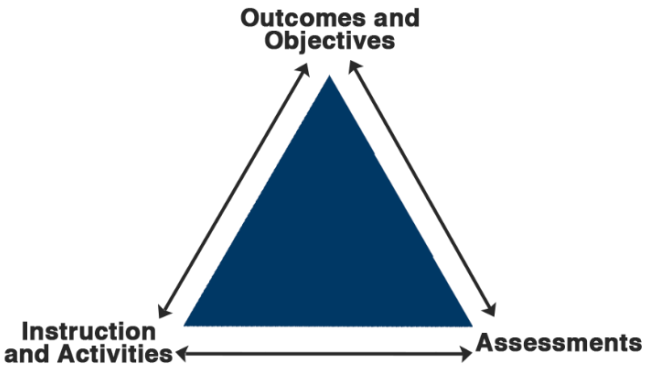
Stage 2: Determine acceptable evidence

"How will we know if students have achieved the desired results? What will we accept as evidence of student proficiency or mastery?" (p. 18) Assessments are typically used to gather evidence that students have achieved the competencies.

Stage 3: Plan learning experiences and instruction

"Several key questions must be considered at this stage of backward design: What knowledge (facts, concepts, principles) and skills (processes, procedures, strategies) will students need in order to perform effectively and achieve desired results? What activities will equip students with the needed knowledge and skills? What will need to be taught and coached, and how should it best be taught?" (p. 18-19)

Working through the backward design process helps support strong alignment between instruction, assessments, and student competencies. Let's illustrate with a triangle diagram. In designing a competency-based course, you work from the top point of the triangle down, from competencies and objectives to assessments and then to instruction, making sure that you make a tight triangle, or that each element of the course aligns to enable student learning.



In the next module, you will experience the first step in developing competency-based courses, writing competencies and learning objectives.

Explore More

Read these articles for a more in-depth understanding of competency-based education practices.

Competency-Based Learning or Personalized Learning

What is Backward Design. Chapter 1 of *Understanding by Design* by Wiggins and McTighe present a process for designing learning for enduring understanding.

Course Introduction Wrap Up

Congratulations! You have completed the introduction to this course!

This module was designed to give you a foundation of competency-based education. You explored the latest research and best practices for CBE and how it is being used at Salt Lake Community College. You also briefly examined the competency-based course design process where you start with the end in mind: What will students know, be able to do or feel after completing a CBE course?

In the next module, you will look at best practices for writing competencies and learning objectives.

Writing Competencies and Learning Objectives Overview

Consider this scenario: Two students meet in the hallway of the Student Center food court at the Redwood Campus. Joan has started in the Clinical Medical Assisting program and has her syllabus; Rob is about to begin his coursework for Network Engineer. They excitedly talk about each other's programs, although Rob seems somewhat unclear about how competency-based courses work. "What does it mean to complete a competency," he wonders. He asks Joan, "how does the College decide what competencies should be part of a program? And I also see a list of learning objectives - what's the difference?" Joan responds, "I really don't know how the school determines what will be in a course, but as I understand, the competencies are what an employer will expect me to do in the job and the learning objectives help me get that competency. And that's my goal - to be good enough to get a better job!"

Competency

This module details how a competency-based course is developed. After completing this module, you will be able to identify and analyze student course competencies, and write and align learning objectives to course competencies.

Review the following learning objectives for this module and notice how they **align** to the competency for this module.

Learning Objectives

- Explain the relationship between College-wide Student Learning Outcomes (CWSLOs), Program Student Learning Outcomes (PLOs), Course Student Learning Outcomes (SLOs) and Course Competencies

    - Define a competency at SLCC
- Explain the steps for identifying competencies
- Write course competencies applying backward design
- Define a learning objective
- Compare differences between competencies and learning objectives
- Write learning objectives that align to course competencies

As a final assignment in this module, you will write learning objectives aligned to a course competency and place them in a course alignment map.

Let's first examine the systems Salt Lake Community College uses to create programs and courses and how that relates to the course development process.

SLCC Curriculum Process

> Angie is a new faculty who has just been assigned to teach a CBE course in the School of Applied Technology. She is recognized in her field and is confident in her mastery of her discipline. She is anxious to get started preparing for her course, but she is unsure where to begin. Can she, as a subject-matter expert, design her course any way she feels is best for the topic? She wonders, is there a process or procedure she needs to follow? And is it different for competency-based education rather than a traditional course?

Whether developing a new course or teaching an existing course, you will want to be aware of the curriculum documents created for all courses and programs at Salt Lake Community College and the terminology used within those documents.

Read and review the following documents.

College-wide Student Learning Outcomes (CWSLOs) define broad educational student outcomes for all students at Salt Lake Community College, regardless of their program or course. A PROGRAM CURRICULUM OUTLINE (PCO) is created for each SLCC degree or certificate program, and the PCO includes Program Student Learning Outcome statements defined by the program's department and aligned to the CWSLOs.

A Course Curriculum Outline (CCO) is created for each Salt Lake Community College course and includes COURSE-LEVEL STUDENT LEARNING OUTCOME (SLO) statements. For compatibility with existing SLCC curriculum and assessment documents, SLO statements will be considered equivalent to competency outcome statements. As with SLO statements, each course competency statement that is developed should align with one or more higher level program outcomes and CWSLOs.

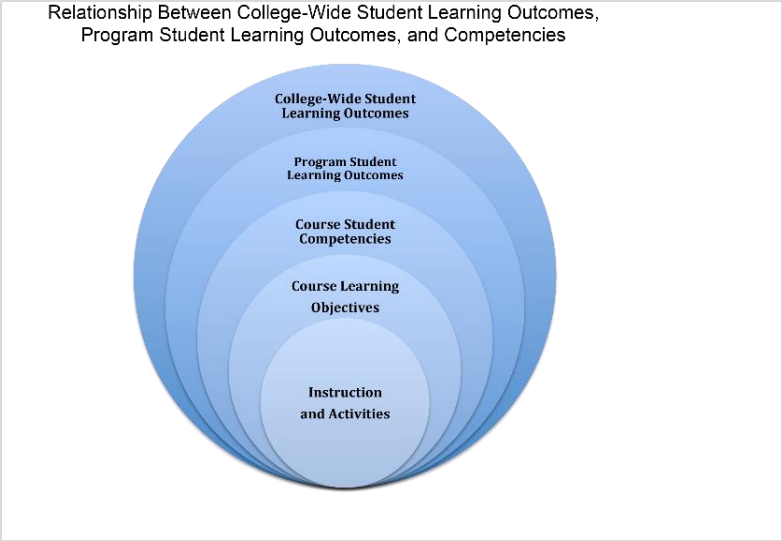
The Curriculum Process.

A College-wide Assessment Plan is created for each SLCC degree or certificate program and references the college-wide, program, and course-level outcomes defined in PCOs and CCOs.

SLCC Senate Curriculum Committee SharePoint site contains the PCOs and CCOs for all courses. (You will be asked to login with your MyPage login and password.)

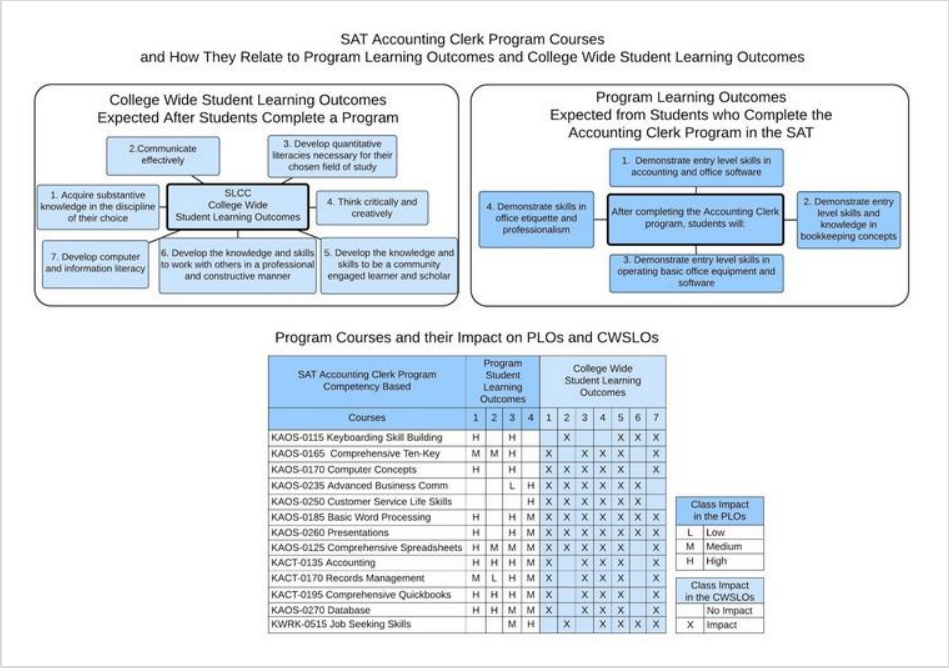
Review the following charts.

 The chart illustrates how the college-wide and program student learning outcomes in general radiate down to the course competencies, learning objectives, and the basic lesson activities, in other words, ***how they are aligned***. *(Remember, we talked about alignment as we discussed competency-based design in the Introduction module.)*



The Accounting Clerk Program from the School of Applied Technology demonstrates the relationships between the different courses in a program and the Program Learning Outcomes and the College Wide Learning Outcomes. As you develop or revise a competency-based course at Salt Lake Community College, ask yourself, "do the competencies I am writing or revising align to the more global program and college-wide outcomes?" Why do you think it is important to determine how your course impacts the program?

Click here to see a full-size view



SAT Accounting Clerk Program Competency Based	Program Student Learning Outcomes				College Wide Student Learning Outcomes					
Courses	1	2	3	4	1	2	3	4	5	6	7
KAOS-0115 Keyboarding Skill Building	H		H			X			X	X	X
KAOS-0165 Comprehensive Ten-Key	M	M	H		X		X	X	X		X
KAOS-0170 Computer Concepts	H		H		X	X	X	X	X		X
KAOS-0235 Advanced Business Comm			L	H	X	X	X	X	X	X	
KAOS-0250 Customer Service Life Skills				H	X	X	X	X	X	X	
KAOS-0185 Basic Word Processing	H		H	M	X	X	X	X	X	X	X
KAOS-0260 Presentations	H		H	M	X	X	X	X	X	X	X
KAOS-0125 Comprehensive Spreadsheets	H	M	M	M	X	X	X	X	X		X
KACT-0135 Accounting	H	H	H	M	X		X	X	X		X
KACT-0170 Records Management	M	L	H	M	X		X	X	X		X
KACT-0195 Comprehensive Quickbooks	H	H	H	M	X		X	X	X		X
KAOS-0270 Database	H	H	M	M	X		X	X	X		X
KWRK-0515 Job Seeking Skills			M	H		X		X	X	X	X

When developing a competency-based education course, include your course competency statements in the Course Student Learning Outcomes column in the CCO document.

Now that you have the “back story” of course development at Salt Lake Community College, let's look at how competencies are defined.

Defining a Competency

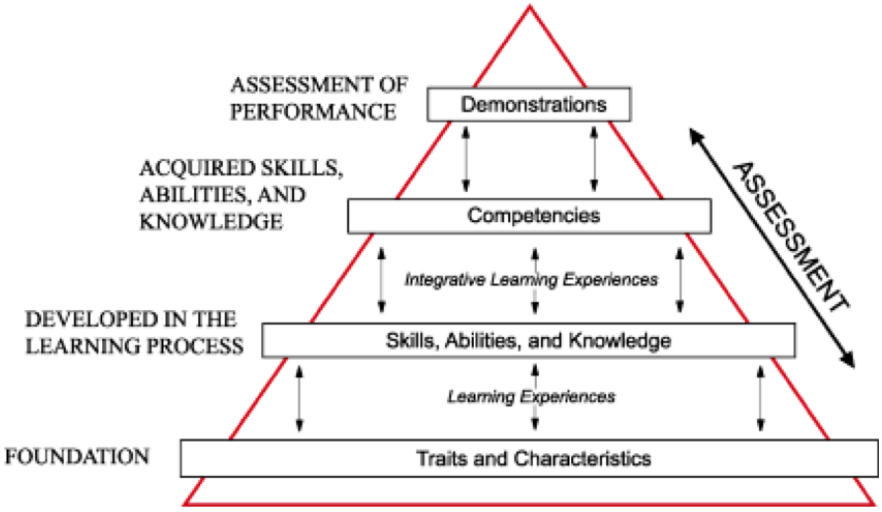
> “*The process of defining competencies is one of the most important steps in the development of a CBE program…”* (Sharpening Our Focus On Learning: The Rise of Competency-Based Approaches to Degree Completion. Rebecca Klein-Collins).

A competency is often tied to a job description or role. Boyatsiz (1982) defined competency as, "A capacity that exists in a person that leads to behavior that meets the job demands within parameters of organizational environment, and that in turn brings about desired results."

Read pages 1-5 and 19-31 in Defining and Assessing Learning from the National Center for Education Statistics.

Then select two case studies to read. Think about the competency-based education definition in the article. Is it different than what you expect? Does it make sense to you?

Review the pyramid from the previous article that demonstrates terms that may be used to define a competency.



The Salt Lake Community College View

At Salt Lake Community College, we define competencies as observable and measurable statements that describe the specific skills, knowledge or abilities demonstrated by a learner. They are often focused at an overarching level rather than a more granular level. They are the foundation of a course.

Competencies can be developed by course designers and faculty through the study of needs in the workplace and by identifying the knowledge, skills, and abilities needed to perform entry-level jobs. As you begin to develop a course, you will find the following resources essential to the development of relevant, valid, and authentic competencies:

- Work with local employers, industry partners, Program Advisory Committees (PACs), and/or labor unions.
- Utilize information located on the Department of Labor's Occupational Information Network website which includes information regarding knowledge, skills, and abilities required to perform a wide variety of jobs.
- Refer to standards established by professional associations, industry certifications, and licensures.

Note that a course that already exists at SLCC will list course-level student learning outcomes (remember we are calling these the competencies) in the CCO. Competencies should also be listed in the course syllabus. CCOs may include a combination of competencies and objectives. Transitioning to a CBE model is an opportunity to review course-level competencies for clarity. Let's look in more detail at a competency:

Characteristics of a Competency

Focuses on the learner
Is written in broad terms
Is specific to a course
Is relevant to a job description, role, responsibility, or task
Precisely states expected results
Aligns with Program Student Learning Outcomes
Aligns with College-wide Student Learning Outcomes

Review the examples.

Everyday Competency Statements

- Start a car
- Mow a lawn
- Make lemonade

School of Applied Technology Specific Competency Statements

The following examples will help you visualize the elements of a competency:

The student will utilize listening and comprehension skills when giving and taking directions in a workplace environment.

The student will record banking transactions and utilize the check register in QuickBooks.

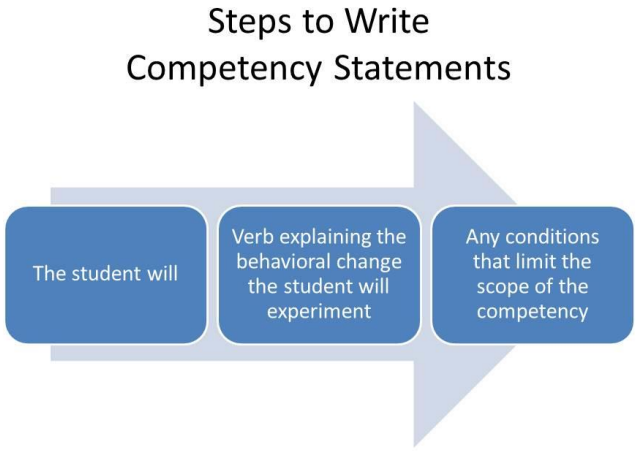
Developing Your Competencies

Let's use an example from a School of Applied Technology course, Server Administrator 2, KNWE 0740. Jeff has been teaching this course for a number of years, but he needs to revise it due to changing industry standards so he must update the CCO with new competencies.

These are the steps Jeff followed to write his new competencies:

He met with employers, partners and the program advisory committee (PAC), and reviewed the standards established by the professional associations and industry certifications. Also as part of this step Jeff next determined the final set of skills, abilities or behaviors he expects a student to acquire in the end, in other words, what a student will demonstrate after a successful learning process.

He starts his competency statement with, "Students will configure server and client settings, DNS and certificates..." At this point he writes in broad terms - describing the major knowledge, skills, abilities and behaviors the student will be able to do, demonstrate or achieve. Jeff does not go into the details or steps necessary to achieve the competency; he plans to include those as learning objectives that he will write later. But he does specify the scope of the competency.



The following image shows the revised CCO that Jeff created. (Remember, the course Student Learning Outcomes are equivalent to competencies.)

Salt Lake Community College
Course Curriculum Outline

Course Basics:
Course Prefix: KNWE **Course #** 0740

Abbreviate Course Title: Server Administrator 2
Full Course Title: Server Administrator 2

Course Description: Prereq: KNWE 0640. From small offices to enterprise environments, learn to support and implement Windows Server services such as DirectAccess, Network Policy Server, Network Access Protection, Service Authentication, FSMO role maintenance, Group Policy settings, and Active Directory backup and recovery. MCP and MCSA titles (Course 2 of 2 for exam 70-411).

Course Student Learning Outcomes	Related College-Wide Student Learning Outcome(s)
Configure server and client settings, DNS and certificates to support and implement DirectAccess connections allowing mobile users access to corporate networks.	1, 4
Configure Network Policy Server (NPS). Configure RADIUS server infrastructures, RADIUS clients, RADIUS templates, and RADIUS accounting	1, 4
Configure connection request policies; configure network policies for VPN clients; manage NPS templates; import and export NPS policies	1, 4

Defining a Learning Objective

Now let's revisit Angie. Remember, she is given a CCO, syllabus and textbook by the Associate Dean with high-level SLOs. She understands these are the competencies for the course. However, the course topic is based on a large body of knowledge and technical skills. She knows she cannot cover every possible concept, let alone expect students to master every skill! She is having difficulty determining the focus, and how to assess whether the course and the students fulfill the competencies. She really does not see the difference between a competency and a learning objective, so wonders if she should leave the competencies as the objectives for the course and work on her course outline? Or does she go deeper and determine how the competencies will be met in the course?

A learning objective describes the specific knowledge, ability or behavior expected from the student after completing the learning cycle. **The learning objectives are the parts that make up a competency.**

Universally, the terms *Competency, Learning Objective,* and *Learning Outcome* are often used interchangeably. For CBE courses at Salt Lake Community College, a competency is a higher level

and broader statement than an objective. The following readings and video present different models of how to write learning objectives. As a common thread, they all focus on the behavior or the student - they are student centered.

Read Writing Learning Objectives from the University of Missouri which refers to the ABCD model, as described by Robert Mager (1962).

A well-written learning objective will:

1. Specify the audience (student)
2. Specify the behavior that would be demonstrated by the student as a result of instruction
3. Specify under what conditions the behavior would be displayed
4. Specify the degree to which the behavior would be demonstrated

Frequently, one or more elements of the learning objective will not be stated if it is implied. For example, in a college course, it may be assumed the audience is the student. Or the criterion or the condition may not be specified if they are obvious; however, sometimes adding the condition(s) and/or the criterion add much clarity to a learning objective.

The table below provides three examples where the audience and the behavior are combined:

Condition	Observable Behavior	Standard
1. Given an illustration,	the student will be able to Identify the anatomy related to the respiratory and circulatory/cardiovascular systems	with at least 85% accuracy
2. Following a video demonstration,	the student will be able to describe the devices used to support communications in data networks and the internet	referring to least four of the five major devices.

Condition	Observable Behavior	Standard
3. Using a driving simulator,	the student will be able to identify and demonstrate the safe operation of a commercial motor vehicle using defensive driving skills	at CDL industry standard.

As an example, let's take a look at the following learning objectives related to a course on "How to Make Lemonade":

Competency 1: The student utilizes appropriate food handling procedures to make lemonade.

Learning Objective 1: The student lists the basic handling procedures for fruits and vegetables as defined by the FDA.

Learning Objective 2: The student recognizes the importance of proper food handling techniques when preparing lemonade.

Learning Objective 3: The student applies the required food handling techniques when manipulating the components needed to make lemonade.

Notice that each of these learning objectives do not specifically state the condition; that may be stated in the performance instructions. But they do indicate what is required to achieve the competency and which will therefore guide the instruction.

This video that summarizes how to use backward design in writing learning objectives that will support competencies.

Writing Learning Objectives - video

In summary, a learning objective:

- Is specific to what the student needs to know and the expected outcome
- Is written in behavioral terms
- Is measurable

- Aligns to one or more of the competencies students need to attain at the end of the course.
- By aligning to a competency, the learning objective is also aligned to the Program and Course Student Learning Outcomes and the College-wide Student Learning Outcomes.

On the next page, we will look at the differences between a competency and a learning objective.

References

Mager, Robert F. (1962) Preparing instructional objectives. Ferron Publishers, Palo Alto, CA.

Differentiate Competency Statements and Learning Objectives Statements

Read the following chart.

If you have written competencies or learning objectives, how do they compare to these definitions? Were some of your competencies actually written as learning objectives or vice versa?

Competency	Learning Objective
• Is specific to a course • Is written in more generalized terms than objectives (By the end of the course students should be able to…) • A competency can be broken down into a set of objectives • Is relevant to a real-world job task or responsibility • Clearly and precisely states expected results • Aligns with College-wide Student Learning Outcomes • Can indicate a level at which one is competent • Can address the depth of one's knowledge	• Is written in specific terms typically at the unit/lesson/module level (by the end of this module students should be able to...) • Written so it can be measured and assessed (making learning objectives measurable, makes the competency also measurable.) • Aligns with one or more competencies (in other words, when the learning objectives are successfully completed, that makes a student competent as indicated by the related competency) • Demonstration of a set of objectives validates a competency

The following example from Angie's course shows the difference between competencies and learning objectives for a course. Can you see the distinction and how the learning objectives guide the student to achieve the competency?

CBE Hybrid Model
Alignment of Competencies, Learning Objectives, & Summative Assessment

Course: KMCB-0130 Anatomy **Hours: 40**

Competency 1	**Summative Assessment**
The student will correctly identify human anatomy by labeling diagrams.	Correctly label body parts using visual diagrams.

Learning Objectives
1. Identify the anatomy of the integumentary, skeletal, and muscular systems. 2. Identify the anatomy of the nervous and sensory systems. 3. Identify the anatomy of the endocrine, blood, and cardiovascular systems. 4. Identify the anatomy related to the lymphatic, immune, and respiratory systems. 5. Identify the anatomy of the digestive and urinary systems. 6. Identify the anatomy related to the male and female reproductive systems.
Notes: Purpose: Let students know this is to give them the basics of anatomy to be used in future course, such as medical coding. Know how to spell the words correctly.

Look at this next example. Do you think the learning objectives support the competency? Note that analyze is a higher order cognitive ability. Will the learning objectives prepare them to actually analyze software for usability issues?

CBE Hybrid Model
Alignment of Competencies, Learning Objectives, & Summative Assessment

Course: Computer Software Troubleshooting **Hours: 40**

Competency 1	**Summative Assessment**
Analyze software programs to determine usability issues.	Evaluate software programs and identify usability issues.

Learning Objectives
1. Recall elements of a software program interface. 2. Describe general usability issues associated with software programs. 3. Examine the hardware requirements for a software program.
Notes: Purpose: Course will prepare students to troubleshoot usability issues with software programs.

Consider one more example. The following learning objective that might be seen in a course syllabus:

Demonstrate understanding of general cryptography concepts and their appropriate use.

What will the student do to demonstrate understanding? What level of knowledge do they need to demonstrate and in what conditions? How would a student know if their knowledge demonstrates proficiency and how will it be assessed? Learning objectives should identify the key behaviors, from the student perspective, that contribute to the competency. How can you know whether you have identified these key behaviors?

How could you rewrite this objective so that it conveys to the student what is expected and so that it is measurable?

Aligning Your Learning Objectives with Competencies

> Consider a situation that you, as faculty, might face. Your students represent a wide range of knowledge and skill levels - students might be entering the course directly from high school or as an adult learner. How will you know whether the instruction will result in the desired competencies for all students? How can you accommodate students who must gain foundational knowledge and students who may already have basic or even a more extensive knowledge or skills?

The anatomy course we referred to earlier is such a course. Remember one of Angie's competencies, “Identify human anatomy by labeling diagrams”? The ability to ***identify*** is a cognitive skill and includes knowing and understanding information. Angie deliberately chose the action verb ***identify*** as the competency that students need to achieve because it is what the student should be able to do at the end of the course. Now, she writes learning objectives to move the student toward the competency. Her first learning objective is, “Identify the anatomy of the integumentary, skeletal, and muscular systems.” which is essential to the competency, so she will design assessments and learning activities that scaffold lower knowledge students while still challenging more advanced students.

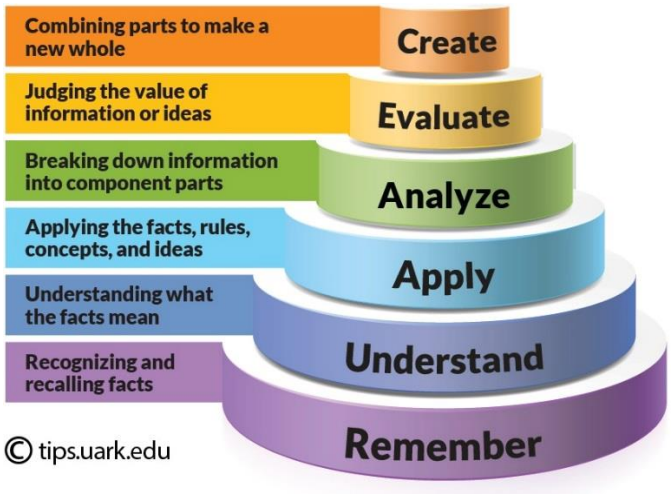
How did Angie determine what verbs to use for her competencies and learning objectives? She may have used a learning taxonomy, such as Bloom’s Taxonomy. Bloom’s categorizes the levels of learning. You'll learn more about using a taxonomy to develop competency statements and learning objectives next.

Using Bloom’s Taxonomy to Write Competencies and Learning Objectives

Bloom's Taxonomy of Educational Objectives, a hierarchy developed in the 1950s, breaks learning into domains, dimensions and categories of learning. Bloom’s is widely used in education to identify

types of learning, and there are other taxonomies for selecting just the right action verb for what students should know or be able to do within a course of instruction. It provides a way to express competency and objective statements in a way that reflects lower to higher-level cognitive, psychomotor, and affective skills.

Here is one of the many representations of Bloom's Taxonomy at the cognitive dimension:



Watch the following videos for an introduction and overview of Bloom's Taxonomy.

Bloom's Taxonomy for Teachers

How to Write Learning Objectives Using Bloom's Taxonomy

Read the following articles.

"A Model of Learning Objectives" from Iowa State University is a good summary of how to consider both the knowledge and the cognitive process dimensions when writing competencies or learning objectives.

The accompanying interactive website from Iowa State demonstrates the application of the concepts of writing learning objectives that align to students knowledge and cognitive process dimensions. Using this taxonomy as you develop your own courses can improve alignment between learning objectives and competencies.

Blooms Taxonomy of Learning Domains explores all three learning domains: cognitive, psychomotor, and affective and provides helpful tools for writing learning objectives.

Instructional designers can help you identify the learning domains required to move your students toward the competency, a critical step in writing effective competencies.

Next is a useful tool that can help you align your competencies and learning objectives as well as other elements of your course.

Course Alignment Map

Using an Alignment Map

Alignment maps are useful tools to connect student competencies and learning objectives to assessments and instruction as we go through the competency-based design process. Below is a template that you can use to develop your course. You will complete portions of this map in this module and Modules 2 and 3. Later, you can add your finalized competencies, learning objectives, assessments, instructional activities, and hours to whatever curriculum map format your department uses.

COMPETENCY-BASED COURSE ALIGNMENT MAP

Related College-wide Student Learning Outcomes (CWSLOs) The competencies and learning objectives will align to the CWSLOs (defined by the College)						
Course Competencies *Observable and measurable statements that define the specific skills, knowledge, abilities, or behavioral changes demonstrated by a learner.*	**Course Learning Objectives** *Measurable goals that direct/guide the learner to obtain the competency*	**Summative Assessment** *Demonstration of the attainment of competencies and objectives; measures proficiency.*	**Formative Assessment** *Measures learning and demonstrates progress toward attainment of the competency.*	**Instructional Activities** Aligned to the competencies, and learning objectives. Provide learners with the necessary skills, knowledge, and experience to prepare for assessments.	**Feedback/ Intervention** *Additional learning support, resources or activities to assist learners to move toward the competency.*	**Course Hours**

Examine the following example Angie's course alignment map with aligned competencies and learning objectives.

COMPETENCY-BASED COURSE ALIGNMENT MAP

Related College-wide Student Learning Outcomes (CWSLOs) The competencies and learning objectives will align to the CWSLOs (defined by the College)						
Course Competencies *Observable and measurable statements that define the specific skills, knowledge, abilities, or behavioral changes demonstrated by a learner.*	**Course Learning Objectives** *Measurable goals that direct/guide the learner to obtain the competency.*	**Summative Assessment** *Demonstration of the attainment of competencies and objectives; measures proficiency.*	**Formative Assessment** *Measures learning and demonstrates progress toward attainment of the competency.*	**Instructional Activities** Aligned to the competencies, and learning objectives. Provide learners with the necessary skills, knowledge, and experience to prepare for assessments.	**Feedback/ Intervention** *Additional learning support, resources or activities to assist learners to move toward the competency.*	**Course Hours**
Correctly identify human anatomy systems by labeling diagrams.	1. Identify the anatomy of the integumentary, skeletal, and muscular systems.					
	2. Identify the anatomy of the nervous and sensory systems.					
	3. Identify the anatomy of the endocrine system.					
	4.Identify the anatomy related to the lymphatic, immune, and respiratory system.					
	5. Identify the anatomy of the digestive and urinary systems.					
	6. Identify the anatomy related to the male and female reproductive systems.					

Explore More

The following websites and articles dig deeper into the development of competency-based education, its definitions, and different models.

Take some time to explore these resources to increase your knowledge generally about competency-based education.

National Center for Education Statistics, Defining and Assessing Learning: exploring Competency-Based Initiatives p.16

The University of New Mexico School of Medicine

The Center for Faculty Development at University of Colorado

Clarifying CBE Terms

Competency Model Clearinghouse. Definitions and Industry specific information

The Competency Model in Australia

What is a Competency, University of Texas

Competencies & Learning Objectives Wrap Up

Congratulations! You have completed the Competencies and Learning Objectives module of this course!

This module explored how SLCC develops programs and how a competency-based course is developed. You focused especially on identifying and analyzing student course competencies, and writing and aligning learning objectives to course competencies. You should have written objectives for competencies and placed them in a course alignment map.

Designing Effective Assessments

Overview

Let's see how Joan and Rob are coming along in their coursework. Joan has just completed a demonstration test where the faculty observed and scored Joan using a checklist. Later, she sees Rob and tells him that she is so glad she did all of the course assignments and quizzes. She believes the course “smaller” tests helped prepare her for the final test. She says, "those quizzes and practice guides made it so I could see where I needed to focus." Rob shrugs, "You know, they said I did not have to do the quizzes and assignments as long as I could pass the final, so I am just doing my reading and I think I will do just fine." "Well, I hope so, all I know is those assignments really helped me!" says Joan.

Competency

As faculty, how can you be sure your assessments are preparing students to attain the competency? In this module, you will design or locate reliable student assessments that measure student knowledge, skills, abilities, behavioral changes, and student progress.

Learning Objectives

- Explain the role of assessment in CBE

- Compare criteria for valid, reliable, and authentic assessment
- Describe the use of general CBE assessment methods
- Identify formative and summative assessments
- Choose assessments that align with learning objectives and competencies
- Construct rubrics for evaluating assessments
- Use feedback to help learners make progress toward competency
- Write authentic, performance-based assessments for a CBE course

As a final assignment in this module, you will draft an assessment and rubric for a CBE course.

Assessment in Competency-based Education

> Angie's dean has emphasized that CBE assessments should not only assess student progress (formative), but will be used to determine whether the student can move forward in the program (summative). Rather than a letter grade, as Angie is used to, she will need to develop assessments that demonstrate that the student has achieved the competency. What should Angie do differently than she might in a traditional course as she develops the assessment tools? Anything? She normally assigns points to exams, quizzes, and assignments and then grades based on total points earned. In CBE, how will she know if her assessment is truly measuring that the student has met the competency?

Whether you are developing competency-based or traditional assessment, you can use assessment to impact student learning - the overall goal of instruction. Kit Giddings and Richard Hemingway describe how assessment impacts their teaching and courses.

Watch the videos.

Kit Giddings - Assessment at SLCC

Richard Hemingway - Assessment at SLCC

Competency-Based Assessment at Salt Lake Community College

How is CBE assessment different from traditional assessment? As Professor Giddings mentions, it directs what and how to teach and provide feedback, so in many ways it is similar, especially if a course is student-centered. But there are some differences to be aware of as develop your competency-based course assessments.

- Standards for demonstrated learning are held constant, but the amount of time students must spend to reach them can vary.
- There is an explicit link between the skills measured by the assessments and clearly defined competencies.
- There is a clear, documented relationship between assessment scores and future outcomes (such as success in the workplace or attainment of a more advanced competency).

Notice that four of the CBE differentiating principles we reviewed in the CBE SAT document from the introductory module are related to assessment:

- Directly align competencies, learning objectives
- Include secure and reliable assessments
- Provide authentic assessments tied closely to real-world application
- Include clearly defined levels of mastery

At Salt Lake Community College, Competency-based Assessment is ...

"The demonstration of the competencies and objectives. Educators use a variety of assessment methods to evaluate, measure, and document the academic readiness, learning progress, and skill acquisition of students. Assessment should be authentic - indicating as closely as possible the way in which a competency or objective will be demonstrated in the individual's professional and/or civic life. Formative assessments serve as instructional activities for the course while summative assessments measure proficiency at the end of the course." - Competency-based Education at SLCC (SAT)

Read more about how Competency-Based Education and Assessment's role and how it is used.

Assessment plays a key role in competency-based education because assessments are used to determine mastery or proficiency as defined by the industry or program. In addition, a competency-based course or program is credible only to the extent that its assessments are valid, reliable, and authentic. We'll explore validity and reliability, and authenticity in the next section.

Valid, Reliable, and Authentic Assessments

> "Because competency assessments are used to determine mastery and award credit, the value of CBE credentials hinges on the reliability and validity of those assessments."
>
> *-Katie Larsen McClarty and Matthew N. Goertner. April 2015 Measuring Mastery. Best Practices for Assessment in Competency-based Education. AEI Series in Competency-based Education. Pearson.*

As you assess your students, it is important to consider whether learning is happening and if your students can demonstrate that learning. The effectiveness of an assessment is dependent upon whether it is valid, and reliable, and in CBE, **authentic**. In other words, the assessment measures real-world knowledge, skills and abilities. Let's explore reliable and valid first.

Consider these scenarios:

> You administer two different versions of a test to students. You think the questions all address the same construct, but you receive a wide range of scores between version 1 and version 2. Is your test reliable?
>
> Or you require a demonstration for a complex 10-step procedure. Can you measure whether the student can execute the procedure with only a partial demonstration? Is your test valid?

Reliability = consistent results

Validity = tests what it is supposed to test

Authentic + Performance Based = real world application

An assessment can be reliable but not valid. An assessment cannot be valid unless it is also reliable.

Read the following articles on validity, reliability and authentic and performance-based assessment.

How Do You Determine if a Test has Validity and Reliability and Legal Defensibility?

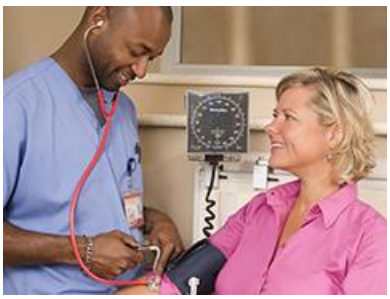
Authenticity in assessment, (re)- defined and explained. Grant Wiggins (January, 2014) clarify what is meant by AUTHENTIC ASSESSMENT: “A real-world task requires students to deal with the messiness of real or simulated settings, purposes, and audience (as opposed to a simplified and “clean” academic task to no audience but the teacher-evaluator).”

Performance-Based Assessment Steven Mintz builds the case for assessments to demonstrate that students can use their knowledge and skills in real settings. When you create authentic, performance-based assessments, you get right to the heart of competency-based education.

What's the Difference Between Authentic and Performance-Based Assessments?

What is Performance-Based Assessment Stanford University (2008) presents a research-based performance-based assessment that requires students to use high-level thinking to perform, create, or produce something with transferable real-world application and a model for developing performance-based assessment systems and evaluation rubrics.

Examples of competency-based assessments in the School of Applied Technology



A student in a medical assisting program takes a patient's blood pressure.

A student in a business course creates a professional letter.

A student in an accounting course analyzes a balance sheet.

Types of CBE Assessments

In the competency-based backward design process, assessment is closely aligned with the learning objectives and competency. For example, the assessment you just completed in this course is formative in nature, meaning it is designed for you to compare effective assessments in CBE, one of the learning objectives tied to the competency. The Course Alignment Map, once you complete it, is summative - demonstrating your attainment of the competencies in Modules 1-3. Summative and formative assessments are two of the four major types of assessment you might use in competency-based education. Remember whatever types of assessments you use in your courses, they should be reliable, valid, and authentic.

Types of Assessment

In CBE, not only do you need to select the right type of assessment, but the specific methods you choose to assess must be applicable to the learning that is being tested and demonstrated. They must prove that the learning objectives have been met and that the student has the knowledge and skill to perform the competency.

Read the following articles to learn about types of CBE assessment.

Types of Assessments are listed in the table with some examples of techniques you might use.

Competency-based Education and Assessment discusses the types of competency-based assessments. As you read this article, think about how you plan to use assessment in your course. Can you articulate your assessment strategy?

Methods of Assessment describes more techniques for formative and summative assessments, including a video from Canvas describing how to use Modules as a formative technique. The sidebar contains links to more detail about specific assessment methods.

Develop Competency-based Assessment Plans presents a model for choosing the right type and method of assessments.

Here is an example of both a formative and summative assessment in a SAT CBE course. Notice how the practice tasks help the student prepare for the final exam.

Salt Lake Community College School of Applied Technology
Medical Assistant Clinical Skills
Practice Log Sheet
Module # 3 Skills Sheet

Student: _____

The skills or tasks on this list must be signed by the instructor as the student completes each task and then returned to the instructor at the end of the module.

Practice #1 – Instructor must be present to demonstrate appropriate skills.

Practice #2-#9 (or middle practice sessions if less than 10 required) – student may practice with classmates, ask instructor as needed.

Test #10 (Final) – The Instructor must observe the entire procedure of the final practice. Students demonstrate the appropriate skills as deemed appropriate by the instructor based upon the checklist in the *Procedure Checklist Manual* (PCM or Evolve site) which must be presented to the instructor. The Student will repeat as necessary until he/she is deemed competent for the skill.

Aligning and Selecting Your CBE Assessments

> Aligning your objectives, assessments and content allows you to answer to these questions:
>
> "How will we know if students have achieved the desired results? What will we accept as evidence of student understanding and proficiency?" (Wiggins & McTighe, p. 18)

In the previous module, you explored the importance of accurately describing the type of learning in the competency and learning objective. You reviewed some examples of using Bloom's Taxonomy to select just the right verb for the competency. Now you will want to make sure the assessment measures *THAT* learning. This step requires a careful analysis of the domain and level of learning to determine just what type and technique of assessment will best measure the student achievement of the objective and ultimately attainment of the competency.

Read the following articles to learn more about how to select that right assessment for your learning objectives.

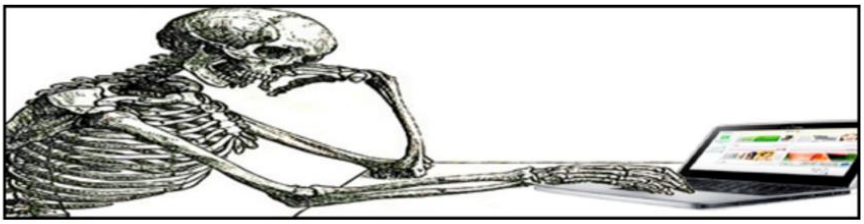
Carnegie Melon University, Alignment explains alignment using the familiar triangle.

Carnegie Melon University, Align Assessments with Objectives provides examples of objectives and the related assessments.

Methods of Assessment includes a video about how to use Canvas learning management system to track your students' progress.

Let's look again at Angie's course. She has written her learning objectives and knows that she wants her assessments to be authentic and performance-based. Let's analyze the steps she will use to select and evaluate his assessment.

Here are competencies associated with Angie's course:



Anatomy

When sitting in a doctor's office, have you ever wished you really understood what the physician was talking about? If so, you will **love** learning the proper terminology used by healthcare professionals to explain the function and structure of body systems.

This course allows for self-paced, competency-based, individualized student training. Various learning activities are included in each module to help you master two required competencies. This course will be interesting, informative, and fun!

Now, let's start learning about the human body! Then, **you** can tell your doctor which middle ear bones transmit sound to your inner ear!

Competencies

At the end of this course, you will be able to:

- Correctly identify human anatomy by labeling diagrams.
- Explain how body systems function and interact.

Angie has created several objectives to support this competency, and she uses them to create her assessments. She plans on using a combination of practice opportunities, study aids, and quizzes first to test for foundational knowledge (knowledge and comprehension level of Bloom's cognitive taxonomy) and then a set of authentic simulations to gauge students' ability to actually explain these

critical body systems (application level in Bloom's taxonomy). Students use these various formative assessments to self-assess their knowledge and ability and Angie can use them to analyze the students' knowledge and application gaps or clarify misunderstandings.

All of these formative assessments will help the students prepare for their summative assessment, an authentic simulation of identifying and explaining the relationship between body systems. As a last step, Angie prepares a rubric to evaluate student performance. You will learn more about writing rubrics later in this module.

Here is an example of the Course Alignment map with Angie's competencies, learning objectives, and now the assessments she has outlined. Take a moment and analyze the chart. Are the assessments aligned?

COMPETENCY-BASED COURSE ALIGNMENT MAP

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Correctly identify human anatomy systems by labeling diagrams.	1. Identify the anatomy of the integumentary, skeletal, and muscular systems.	Student will label a diagram with the correct body systems.	Students will complete knowledge checks, study aids, and objective quizzes for each objective.			
	2. Identify the anatomy of the nervous and sensory systems.					
	3. Identify the anatomy of the endocrine system.					
	4.Identify the anatomy related to the lymphatic, immune, and respiratory system.					
	5. Identify the anatomy of the digestive and urinary systems.					
	6. Identify the anatomy related to the male and female reproductive systems.					

Now, using the Blooms Assessment Table, see if you can determine how the summative assessment matches the learning level for the objective in this example.

Evaluate Student Assessments

Develop a Scoring Rubric

Rubrics can be a great way to give students direction and rate student performance. Done correctly, rubrics help ensure the assessment aligns with objectives. Jeff knows that writing a rubric takes effort, but here are some steps to ensure good results:

- Identify the objectives.
- Determine what evidence is needed in order to know that students have fulfilled the objectives.
- Describe what excellent and poor examples of that evidence might look like.
- If there is a middle ground, describe that too.
- Scale the rubric to reflect the proficiency with which the student has fulfilled the objectives using points or some other factor.

Read the following articles on writing rubrics, rubric examples and templates:

A Step-by-step Approach to Creating an Effective Rubric

Critical Assessment Using Signature Assignments (SLCC assessment site)

Rubistar

RCampus Rubric Gallery

Review the Writing Competencies Assignment from Module 1 for an example of how criteria and performance ratings and descriptions are written.

An instructional designer can help you through the steps to develop effective rubrics.

Rubrics can also be an effective way to provide feedback to your students. Click Next to learn more about how feedback is used in competency-based education.

Provide Feedback

> "As a result of research, we know of a number of ways to improve feedback: it needs to be delivered frequently; it needs to be linked to behavior and specific parameters, not generalities; it should be formative, directed toward improving performance, not summative (i.e., for determining grades or graduation decisions); and it should balance the identification of deficiencies and strengths in performance." (Kilminster, S., et. al.)

Read the following articles.

Competency-based Education, Feedback, and Humility where Gruppen (2014) emphasizes that in self-regulated learning, learners assess the results of their learning or performance; in other words, they provide their own feedback internally. Where else does he say feedback comes from? What is the challenge? And how can you help move students toward competency?

Using eVALUate to improve student learning for a step by step framework for giving and modeling good feedback.

You can also help develop reliable internal feedback processes in your students by modeling. How do you react when given feedback? Do you seek out and apply feedback? Do you explain clearly the difference between feedback and evaluation so that students can also build their own confidence and skill at self-assessment?

Watch the videos

In the following two videos, different SAT faculty provide feedback to one of their students. Watch the first segment of video 1. As you watch, think about whether you think this accomplishes the goals of competency-based feedback: *effective learner self-assessment and effective external feedback.* Then, watch a second segment of the video. Jot down the principles from the EVALUEate framework that the faculty is using this time. Repeat this process with the second video, but see if you can identify different feedback principles that the faculty is using. What feedback principles would you apply?

Video 1-1 Computer Science (Video embedded in Kaltura. Can't access from outside the course)

Video 1-2 Computer Science (Video embedded in Kaltura. Can't access from outside the course)

Video 2-1 Medical Assisting (Video embedded in Kaltura. Can't access from outside the course)

Video 2-2 Medical Assisting (Video embedded in Kaltura. Can't access from outside the course)

Explore More

Read following resources to dig deeper into the topics in this module.

 Investing in Quality Competency-based Education. Can you explain the use of objective, traditional, and authentic assessments in CBE? What are the pros and cons of each? In your particular field, would you use each of these types of tests, if so, how? If not, why not?

CBE assessment is explored in detail in Develop Competency-Based Assessment Plans.(2012)

Authentic Assessment: Practical Assessment, Research and Evaluation answers the question, "Why do we need to invest in labor intensive authentic assessment?"

Formative and Summative Assessment discusses formative and summative assessment in the continuum of assessment, evaluation, decision-making.

What Constitutes Assessment Evidence? describes the role of assessment generally at Salt Lake Community College.

Designing Effective Assessments Wrap Up

Congratulations! You have completed the Designing Effective Assessments module of this course!

Assessment is really the foundation of competency-based education. You should now be able to apply the principles of competency-based assessment. First and foremost, you should ensure that your assessments are aligned to your learning objectives. Assessments should be authentic and test what the student is expected to know, do or feel as a result of the instruction.

In the next module, you will look at developing competency-based instruction.

Developing Competency-based Instruction Overview

Joan and Rob are having a soda in the student center. Joan explains that she is actually moving more quickly through her program than she expected. "Everything is so well-organized," she says. "In fact, each of the activities gives me the knowledge or ability to quickly move on to the next level. I also have different kinds of activities to choose from - some work better for me than others." Rob seems somewhat disengaged, in fact, he says, "Well, I am glad it is working for you. I am beginning to feel a little bit lost - I really don't know where I should be in the course at this point. I am not sure I am gaining the skills to pass the final test and if I don't, what then? I am beginning to wonder if competency-based instruction really works!"

Competency

As faculty, how can you make sure your course is designed to scaffold and support student success? In this module, you will design or adapt a draft of a competency-based course that is aligned to course competencies and learning objectives.

Learning Objectives

- Develop an instructional strategy for a CBE course

- Identify enabling content to support learning objectives
- Choose learning activities appropriate for the learning objectives and CBE model
- Determine course instruction and course hours/hours per milestone
- Align curriculum (enabling content and learning activities) to competencies, objectives, and assessments in a course alignment map

We will look at the next step in designing a competency-based course: “plan learning experiences and instruction.” (Wiggins & McTighe, 2005). You will examine how to apply competency-based instruction in your course and complete your draft course alignment map to use when you attend a workshop and/or work with instructional designers.

CBE Instructional Strategy

> Let's see how Angie is doing in her course design process. She has refined the competencies and learning objectives and aligned her assessments. Now she is not sure whether selecting CBE content, instructional strategies, sequencing, and selecting her instructional materials is different in a CBE course. How can Angie be confident about this step of the design process? Is the curriculum-building process different in competency-based instruction?

In many ways developing curriculum is not any different than in a traditional course. What is different is that students must demonstrate they have mastered each competency required in a program, rather than passing tests that are averaged to receive a grade. And because CBE courses are self-paced and self-directed, the faculty takes on the role of a facilitator. CBE is about what the student *knows and is able to do,* so the instructional process demands a somewhat different approach or instructional strategy.

As noted in Active Teaching Strategies and Learning Activities, "strategy refers to the structure, system, methods, techniques, procedures, and processes a faculty uses during instruction...Learning activities refer to the teacher-guided instructional tasks or assignments for students."

Your strategy will help you align your content, activities and materials to the learning objectives:

Enabling content - What enabling content or knowledge (concepts, facts, principles) and basic skills must students possess to complete the learning objective? For example, the enabling content

for the learning objective, “Add page numbers to a document in a word-processing software program” is “What are page numbers?” “What is a footer?” and so forth. (Hoffman, 2013)

Content Sequence and Clustering - How will you sequence and cluster the learning objectives into lessons or modules? How will you organize your content to help students accomplish the learning objectives of the class? (Carnegie Mellon, 2015).

Individual Instructional strategies - What delivery methods will you use, what technologies, and how will you engage and guide students to the appropriate material or activity? Will you use readings, videos, labs, written assignments, or student projects? These activities should allow students to self-pace their learning and receive formative feedback. CBE instruction is also self-directed. So are you using a variety of activities to accommodate students' different learning needs? Instructional strategies should align to the assessments and objectives and support students meeting the learning objectives.

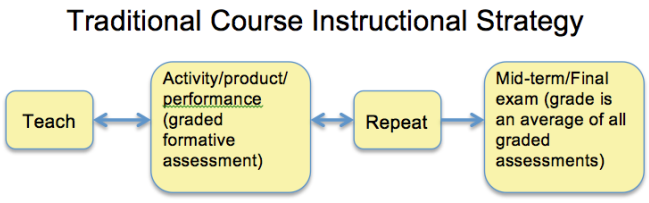
Read the following articles.

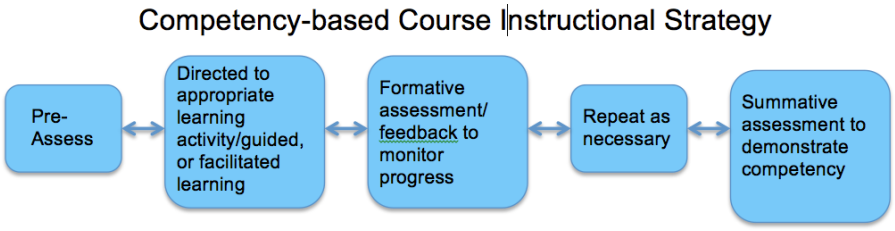
Instructional Strategies is a good guide to aligning instructional strategies to learning objectives and assessments.

Review Merlot's Pedagogy Teaching Strategies, a wide variety of active learning teaching strategies that might be adapted to competency-based instruction.

CBE Instructional Strategy in the School of Applied Technology

The following graphics compare a traditional instructional strategy to a CBE instructional strategy.





Angie has decided on an overall instructional strategy. (Right now she is outlining in general terms. Later she will identify specific activities.) She:

1. Identified key enabling content and skills students need to accomplish the competencies

2. Organized and sequenced the content to scaffold students toward attaining the competency

3. Will use the following combination of individual instructional strategies as her overall course instructional strategy

- pre-assessment to test for student's knowledge and skills related to the content

- video examples of the job being performed in a real context to motivate students

- readings/video demonstrations sequenced to provide student with relevant enabling knowledge prior to learning activities

- formative quizzes that allow students to check their understanding

- in-class lab demonstrations to help students synthesize enabling content

- on-line study aids to build knowledge and skill

- performance-based assessment simulating the actual workplace environment

CBE Learning Activities

Learning activities are the instructional tasks the students are directed to, but in a competency-based course learning activities they may be optional. Nevertheless, they should provide scaffolding and feedback so students can self-assess their progress.

Learning activities are about more than just what concepts and skills you want to teach. Effective competency-based learning activities also take into consideration other elements that support instruction, such as what students already know, how to motivate students, how to encourage student participation, and other support students need.

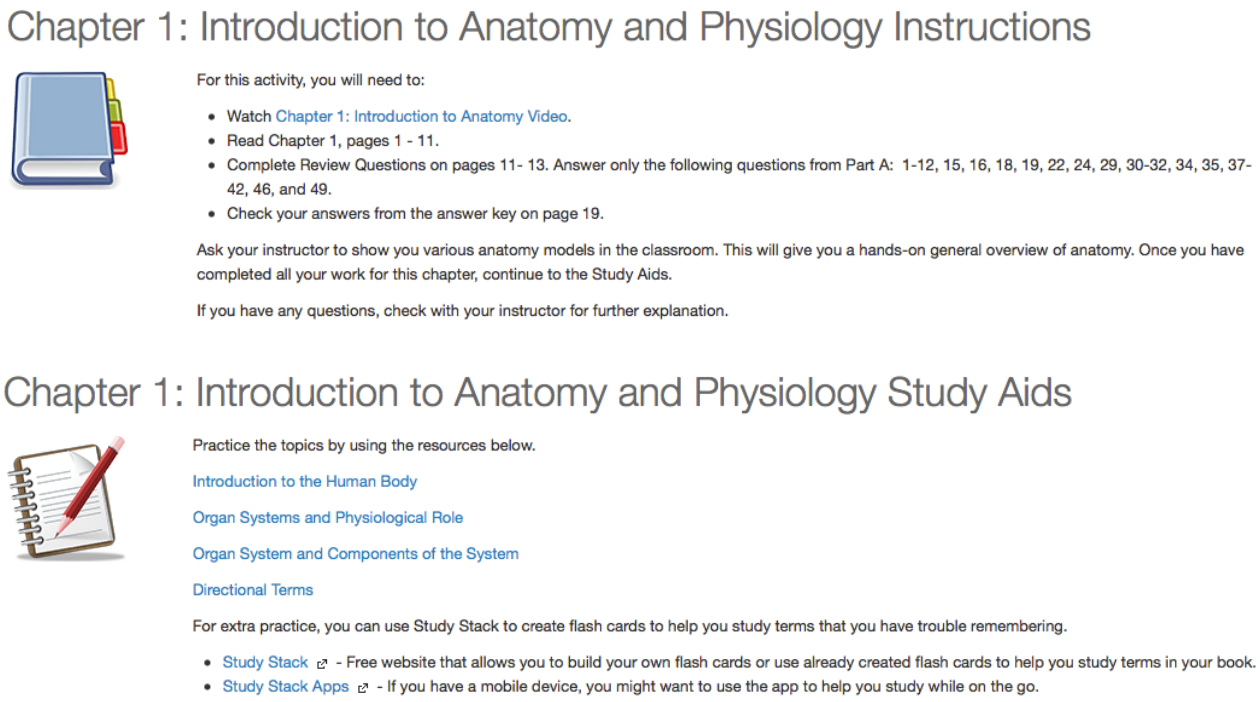
Read the following articles.

Main Components of Learning Activities (Dick, Carey, and Carey, 2009)

Choosing Learning Activities, a step-by-step process for aligning learning activities that refers to using a taxonomy to ensure aligning the learning domain to the learning objective.

ARCS Model of Motivational Design

Here is how Angie's learning activities look in the online component of her hybrid course. Notice that the module is structured for flexibility, motivation and engagement. We can see that students observe, discover, self-evaluate, and practice (Angie's instructional strategy).



Chapter 1: Introduction to Anatomy and Physiology Instructions

For this activity, you will need to:

- Watch Chapter 1: Introduction to Anatomy Video.
- Read Chapter 1, pages 1 - 11.
- Complete Review Questions on pages 11- 13. Answer only the following questions from Part A: 1-12, 15, 16, 18, 19, 22, 24, 29, 30-32, 34, 35, 37-42, 46, and 49.
- Check your answers from the answer key on page 19.

Ask your instructor to show you various anatomy models in the classroom. This will give you a hands-on general overview of anatomy. Once you have completed all your work for this chapter, continue to the Study Aids.

If you have any questions, check with your instructor for further explanation.

Chapter 1: Introduction to Anatomy and Physiology Study Aids

Practice the topics by using the resources below.

Introduction to the Human Body

Organ Systems and Physiological Role

Organ System and Components of the System

Directional Terms

For extra practice, you can use Study Stack to create flash cards to help you study terms that you have trouble remembering.

- Study Stack - Free website that allows you to build your own flash cards or use already created flash cards to help you study terms in your book.
- Study Stack Apps - If you have a mobile device, you might want to use the app to help you study while on the go.

The activities support the learning that must take place and they are sequenced and combined to move toward the competency. Angie uses videos to gain students' interest and attention and readings to present more in-depth information. Using Keller's ARCS model, students are directed to relevant practice questions and gain confidence through checking their answers. Additional study aids and quizzes test their knowledge. They can guide their own practice with a variety of resource options. The instructor provides hands-on, real-world demonstrations for authentic learning.

Read the following article.

Learning Experience Evaluations is a tool to self-assess as you plan and reflect on your learning activities. Use the list of questions to evaluate learning activities in one of your courses.

Planning the Instruction

Angie has completed the three steps of the competency-based design process:
Step 1 Identified the course competencies and related learning objectives.

Step 2: Determined assessments that demonstrate the attainment of the competencies.

Step 3: Selected and sequenced content and learning activities that equip students with the needed knowledge and skills and that are aligned to the assessments.

But she knows there is more work to prepare a CBE course for live or virtual presentation. She will need to complete the final planning for the instruction: prepare materials, presentations and student support systems. Finally, she will determine how much time an average student would spend completing the course or competency.

Learning Materials and Student Support

Read the following articles.

KAOS0145 Basic Ten-Key is an example of how one faculty prepared self-directed instruction for a competency-based ten-key course. Students can go through the material at their own pace and repeat formative assessments as needed to move toward the competency. Notice how the faculty provides very detailed instructions and helpful hints regarding the course work.

Supporting Student Success in a Competency-Based Learning Environment describes six principles for meeting one of the definitions of competency-based education: "Students receive timely, differentiated support based on their individual learning needs." Read about these strategies starting on page 8. As you read, think about how you can apply some of these principles in your courses.

Student Support Is a Must: Improving Competency-Based Education Through the Student Perspective looks at CBE programs, including one from Salt Lake Community College, and what students are saying about the importance of student support.

Determining Course Hours

The following tips and guidelines will help you determine the number of justifiable course hours for a competency-based course. By its nature, seat time is not considered in a competency-based course, and time spent to complete a competency within a course can vary student by student, but you will need to indicate the average time that a course may take to complete as part of your course alignment map. If you are developing a new course, you would include course hours in the CCO and syllabus.

Read the following articles and review a sample worksheet.

6 Tips To Estimate Your eLearning Course Length

The Southern Colleges of Colleges and Schools policy on determining credit hours. While competency-based courses in the SAT are not credit-hour based, you may find it helpful to see how one commission defines the minimum time a student is expected to dedicate to classroom and study time for one credit hour.

Worksheet for Determining Course Hours in a Competency-based Course template can help you evaluate a variety of factors and feedback for identifying course hours. Keep in mind that a standard defined in the School of Applied Technology is that 16 credits = 600 hours = 37.5 = 1 credit. You may find you need to adjust your course activities if your course is taking, on average, more or less time than is average for similar courses.

Putting It All Together

> Angie has completed the steps in designing a competency-based course, using a competency-based design process:
>
> She identified what the students should know and be able to do after the course, and wrote her competency statements using the appropriate learning domain and level. She used the highest cognitive, psychomotor or affective domain descriptor (action verb). She wrote learning objectives that will guide the students toward attaining the competency. Next, she identified authentic assessments that measure students' competence. Finally, she determined the enabling knowledge, instructional strategy and learning activities. Using these three elements of her course alignment map, she developed the curriculum, which included sequencing learning objectives and grouping content into units or modules, developing her materials and instructions, and building out the assessments and methods for feedback.
>
> She evaluates what she has prepared against a rubric to make sure she has a rigorous, self-paced course that provides authentic experiences and student support and feedback.

Read and view or download.

Instructional Activities rubric, a guide to check for elements to consider when creating competency-based modules (adapted from Dick & Carey Systems Approach Model)

Watch the video.

Gagne's Nine Events of Instruction is still a good outline of the steps for developing and implementing effective instruction that can be applied to competency-based instruction.

Angie's Curriculum Alignment map below is an example of what a completed map might look like - really an outline of course alignment, assessments, instructional activities and student support.

COMPETENCY-BASED COURSE ALIGNMENT MAP

Related College-wide Student Learning Outcomes (CWSLOs) The competencies and learning objectives will align to the CWSLOs (defined by the College)						
Course Competencies *Observable and measurable statements that define the specific skills, knowledge, abilities, or behavioral changes demonstrated by a learner.*	**Course Learning Objectives** *Measurable goals that direct/guide the learner to obtain the competency.*	**Summative Assessment** *Demonstration of the attainment of competencies and objectives; measures proficiency.*	**Formative Assessment** *Measures learning and demonstrates progress toward attainment of the competency.*	**Instructional Activities** Aligned to the competencies, and learning objectives. Provide learners with the necessary skills, knowledge, and experience to prepare for assessments.	**Feedback/ Intervention** *Additional learning support, resources or activities to assist learners to move toward the competency.*	**Course Hours**
Correctly identify human anatomy systems by labeling diagrams.	1. Identify the anatomy of the integumentary, skeletal, and muscular systems.	Student will label a diagram with the correct body systems.	Students will complete knowledge checks, study aids, and objective quizzes for each objective.	Chapter 5, 6, 7 videos Read Chapter 5, 6, 7 Complete review and labeling Practice study aids Quizzes	Students encouraged to contact instructor with questions. Students may retake quiz to attain 80%	22.5 hours

In modules one through three you reviewed all the steps of the competency-based course design process. In the next module, Course and Classroom Management you will look more at the implementation of a course. Now Angie will build out her content, knowing that she has a well-designed competency-based course.

Explore More

Learn more about CBE instructional planning and methods by visiting the following websites:

- The webpage, Instructional Strategy, based on Dick and Carey's Developing an Instructional Strategy, provides a comprehensive discussion of developing an instructional strategy.
- Strategies for Effective Lesson Planning provides more in-depth information on instructional planning for both traditional and competency-based courses.
- Instructional Design for Competence-based Learning explores the implication of helping students attain competence when designing instruction.
- Situated Learning fosters student learning by "situating" by actively involving them in real-world problems.

- Learner Support Services for Online Students: Scaffolding for success describes a comprehensive structure for supporting students in online classes; much of what is presented is also applicable to CBE hybrid program students.

Developing Competency-Based Instruction

Congratulations! You have completed the Developing Competency-Based Instruction module of this course!

Competency-based instruction is similar in many ways to traditional education, but there are some important differences. You explored the latest research and best practices for CBE and how it is being used at Salt Lake Community College. You also briefly examined the competency-based course design process where you start with the end in mind: What will students know, be able to do or feel after completing a CBE course?

In the next module, you will look at best practices for course and classroom management.

Course and Class Management Overview

A day in the life of a CBE student continues: Joan is working on her program from home - sitting in a comfortable chair and in front of her computer. She has a little more time before her youngest wakes up and her hectic day will begin, but she feels good about the course and her progress, especially because she can adjust to her family and work priorities. She thinks, "but I still get all the support I need - my instructor talks with me directly at least once a week, and that has been helpful." Rob, on the other hand, is not doing so well. He is walking into the computer lab to talk with the instructor. He is clearly upset - they are threatening to drop him from the program for lack of progress! "How can that be - I was told I could progress at my own rate!"

In previous modules, you considered the steps of developing and organizing learning experiences and identifying learning resources for your CBE courses. You are also responsible for arranging physical space for labs and equipment needs and creating a syllabus. Most importantly, you will want to create a positive learning environment and be able to track your students' progress. *In other words, manage the entire competency-based experience.*

Competency: In this module, you will organize and manage a CBE course and classroom in the School of Applied Technology.

Learning Objectives

- Explain how to facilitate learning in a CBE course/classroom
- Identify SLCC and departmental guidelines for managing students in a CBE course environment
- Describe a documentation process to track interaction with students
- Identify CBE grading procedures and requirements for a CBE course
- Prepare a course and classroom management plan for CBE classroom
- Create a course syllabus

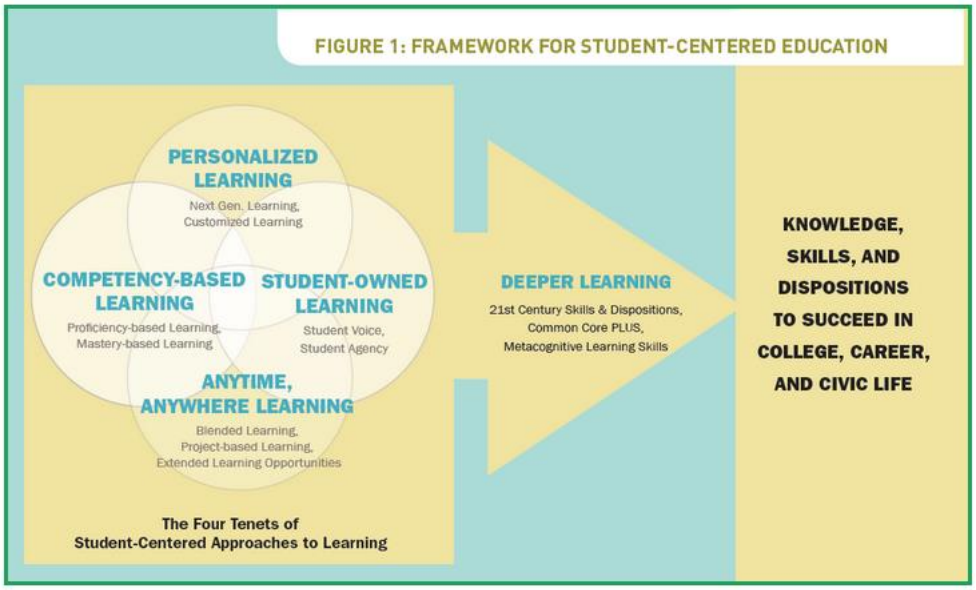
You will examine how to create a CBE learning environment, review guidelines for managing and grading CBE students, and prepare a classroom management plan and syllabus.

Facilitating the Competency-based Learning Experience

In previous modules we explored competency-based education generally at Salt Lake Community College and the importance of designing with the student in mind. Competency-based learning is a major tenet of *student-centered learning* as illustrated by this following graphic from the Nellie Mae Education Foundation.

Review the graphic and READ the articles.

Putting Students First, A Reference Guide, page 3, gives a more detailed explanation of this graphic. As you read, think about how the principles of student-centered learning can be applied to your competency-based course.



Competency-Based Education: A Framework for Measuring Quality Courses. The authors highlight the critical elements of managing a quality competency-based course:

- Learning activities and resources support achievement of competencies
- Course technology and navigation supports personalized learning pathways
- Course facilitates access to support services essential to student success
- Course demonstrates a commitment to accessibility and usability for all students
- Course complies with institutional policies

Hybrid Learning Maximizing Student Engagement (Links to an external site.). Dr. Ruth Reynard, while not focusing specifically on competency-based instruction, offers years of experience creating successful hybrid learning environments. How might you apply these principles in your competency-based course?

M-SAMC presents "The New Education Model," a 9-part original series on competency-based education. Featuring Dr. Tracy Pierner, Vice President of Academic Affairs for Career and Technical Programs at Henry Ford College, the series looks at transitioning the classroom to a competency-based learning environment. In this sixth video, Dr. Pierner discusses competency-based education learning tactics, including having a flexible delivery format and built-in remediation paths.

Watch the video. **The New Education Model**

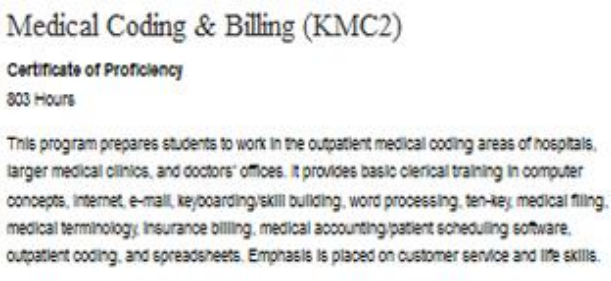
Guidelines for Managing Students in a CBE Course Environment

Remember Rob in the scenario at the beginning of this module? The student and faculty were about to have a serious conversation about the student's progress. The student believes the faculty did not notify him that there was an issue. As it turns out, the faculty did send out a general email reminding students that those who have not met their last two milestones are at risk for of being dropped from the course. The student says he missed that email and the faculty had not communicated directly with him. Who is at fault here? What should the faculty have done differently, if anything?

Managing CBE Students

In the School of Applied Technology at Salt Lake Community College a course may be hybrid or classroom//lab or some combination. (A hybrid course delivery combines classroom or labs or experiential environments with online learning.) Whatever the specific format, there are specific guidelines for facilitating the CBE learning experience.

The CBE learning experience at SLCC begins with clear communication. Students who enroll in a CBE course may have started out looking at the SLCC course catalog, which may be their first source of information. The following examples illustrate how SAT CBE courses are presented in the SLCC course catalog. Notice that the listing includes important information for the student including the competencies they are expected to achieve. (click on the image to view the entire listing). The courses are organized to facilitate learning and the student's career goals - the primary job of a competency-based faculty. To that end, there are a number of important considerations and guidelines for managing students in a CBE course environment, and it can vary by department.

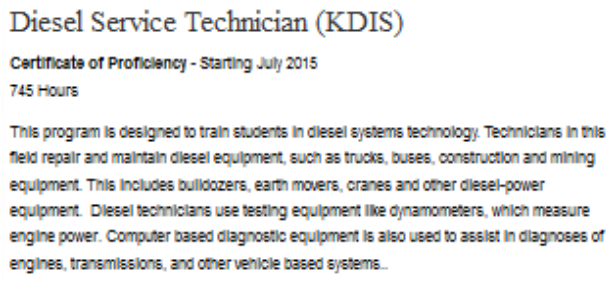


Medical Coding & Billing (KMC2)

Certificate of Proficiency

803 Hours

This program prepares students to work in the outpatient medical coding areas of hospitals, larger medical clinics, and doctors' offices. It provides basic clerical training in computer concepts, internet, e-mail, keyboarding/skill building, word processing, ten-key, medical filing, medical terminology, insurance billing, medical accounting/patient scheduling software, outpatient coding, and spreadsheets. Emphasis is placed on customer service and life skills.



Diesel Service Technician (KDIS)

Certificate of Proficiency - Starting July 2015

745 Hours

This program is designed to train students in diesel systems technology. Technicians in this field repair and maintain diesel equipment, such as trucks, buses, construction and mining equipment. This includes bulldozers, earth movers, cranes and other diesel-power equipment. Diesel technicians use testing equipment like dynamometers, which measure engine power. Computer based diagnostic equipment is also used to assist in diagnoses of engines, transmissions, and other vehicle based systems..

the following guidelines that might affect how you operationalize your course.

- To register for an SAT program, students must demonstrate basic skill levels as defined for the program.
- No seat-time requirement.
- No weekly schedule required.
- Students:
  - missing two weeks of meaningful contact will be dropped from a course and withdrawn from their training program
  - who fail to attend the preliminary instructional orientation with their instructor
  - during the first week of the program will be administratively dropped and may be responsible for paying for the class.
  - can work from home, in the classroom or both. Practical examinations and assignments must be completed in the classroom during instructional time.
  - are expected to complete weekly milestones (based on an average of 15 hours of coursework per week). The actual hours a student works may vary depending on prior knowledge, experience and ability. Students are expected to have weekly meaningful contact with the instructor (in persona or via phone/Skype).
  - may accelerate and complete courses sooner - no limits on when or how often the student attends class.

SAT Competency-Based Education CBE Pilot Program Student Information Checklist, a list of policies and procedures (page 4). Page 3 also describes the prerequisites for SAT courses, but notes that "skills level requirements vary by program (see an enrollment advisor for details). See Testing Services for details about the tests that may be required in your program."

Classroom Management Plan

Let's walk through our example of Angie's Anatomy course to see how she has organized her classroom management to facilitate learning and to incorporate SAT guidelines.

Angie knows she needs to provide the student information specific to her course. She will meet with the new student the first day and explain the requirements for the course; her instructions will be clearly detailed in the syllabus. Angie gathers the following information as part of her competency-based course management plan:

Course Requirements. Angie writes out her program requirements and expectations for new students, including attendance, academic progress and student communication.

Classroom Management. In the meantime, Angie organizes her online content delivery, arranges for instructional materials, equipment, labs and classroom schedules. She includes all of this information in the course syllabus that will be given to the student.

Student Support. Angie plans how she will monitor her student's academic progress. She will watch for signs that the student is not completing assignments or milestones or that they miss in-class sessions or labs. She wants to be aware and respond quickly if the student needs remediation, advising or intervention.

Student Contact and Tracking. Angie is diligent about student contact, student tracking, and student communication, following guidelines established by the SAT. **As faculty, she is expected to have meaningful contact with each student at least once a week in which she engages in a two-way conversation either face-to-face, phone, or video.** During these conversations, she will discuss progress and offer instruction as needed. Angie may use email for a variety of communications, but knows that email does not meet the minimum meaningful contact requirement. At this time, the SAT uses a spreadsheet format to track communications with students.

One of the most important details to convey to your students is the grading policy which should be part of your course management plan and must be included in your syllabus. In the next section, we'll look at how competency-based grading is different from traditional grading and the policies around CBE grading in the SAT.

Grading in the CBE Course Format

> Referring again to the scenario in the beginning of the module, the upset student explains to the faculty that he thought that since this is a competency-based program, that meant he could simply demonstrate that he could "do the job" at the end of the instruction, so it did not matter what else he did. Why do you think the student thinks that, and is he correct? Isn't that what we have said, competency-based education at SLCC in the School of Applied Technology is not time-based, does not require seat time, and the student moves on once they demonstrate the competency?

Competency-based education at SLCC is defined by those factors, but includes additional structure to facilitate both learning and progress as reflected in the competency-based grading model.

Competency-based Grading Model

Read the article.

What is the Difference between Standards-Based Grading (or Reporting) and Competency-Based Education? where **competency-based grading** is an overall reflection of the broad principles of competency-based education, "students advance to higher-level work and can earn credit at their own pace, and teachers assess skills or concepts in multiple contexts and multiple ways."

Consider these six elements of competency-based grading. (adapted from Competency Works Issue Brief).

1. Embrace explicit standards so that everyone will have a shared vision of what students should learn.
2. Develop a clear understanding of levels of knowledge so that students and teachers share an understanding of what proficiency means.
3. Ensure transparency so that educators and students understand where students are on their learning progression.
4. Create a school-wide or program-wide standards-based grading policy.
5. Offer timely feedback and meaningful re-assessments so that students can continue to progress and stay on track.
6. Provide adequate information infrastructure to support students, teachers, and school-wide continuous improvement.

Competency-based Grading in the SAT

Read the CBE grading policy.

Competency-Based Education @ SAT, page 8 explains the two terms associated with grading or mastery of a competency in a program or course:

> **SAT Grading System**
>
> Mastery of competency is demonstrated when the student successfully completes the coursework on or before the course end date. Students who complete early may register for the next course in the sequence immediately following mastery of competency.
>
> Grading System

Grades for SAT are based on mastery of competency within the published course hours. The mastery criteria for each course will be outlined in the syllabus.

MC Mastered Competency

NM Competencies Not Mastered or withdrawn from a course after 61% of the scheduled time.

TC Transfer Competency (see Previous Competency Attainment section)

W Withdrawn (see Withdrawal and Refund section above)

Here is an example of the grading policy in the Anatomy course. Notice that Angie is very clear about the requirements for assessment and grading.

ASSESSMENT PROCEDURES:

Exams may only be accessed with **Lockdown Browser engaged** and a password entered by the instructor or Test Lab Aide. You may access Lockdown Browser by clicking on the icon on your computer desktop. Students are expected to be quiet and refrain from talking or whispering, although there may be soft talking as the instructor works with individual students. On days you are testing, you may want to bring earplugs or noise reduction headphones to help minimize distractions.

Testing Schedule:

TB 534: Monday-Thursday 8 a.m. to 8 p.m.

TB 534: Friday 10 a.m. and 1 p.m.

Phones must be put away.

MODULE QUIZ ASSESSMENTS

This course is divided into eight Modules with one to three quizzes at the end of each Module. Passing with 80% or higher will enhance a student's ability to pass the comprehensive final exam. If students score less than 80%, they may study and retake the exam ONE additional time. Upon completion of the retest, the higher of the two test scores will be recorded in Canvas. Students may NOT use their textbook or notes on any of the exams. Correct spelling is required!

FINAL EXAM

After completion of the course, students will take two comprehensive Final Exams (Part 1 and Part 2) in the classroom using Lockdown Browser. Students may retake an exam one time if a score of 79% or below is scored.

Competency-based Syllabus for SAT

> Imagine this scenario. A student walks into class on the first day and receives a syllabus from the instructor. It is only a half-page with very little applicable information. Or, imagine this. On their first day, a student is given a 25-page syllabus! It is no wonder he/she may want to turn around and walk out. So how much information is appropriate for a syllabus, and what specific information should be included in a competency-based course syllabus?

A syllabus is the formalization of the course management plan from the student view. Using a syllabus to communicate expectations and policies to your students helps to create a positive learning experience and notifies students of your expectations and what they need to do to succeed. A syllabus is often thought of as a contract between you, the SAT and students. This idea of a contract is especially appropriate in competency-based instruction where students are expected to be self-motivated and in control of their learning.

Salt Lake Community College requires a syllabus for every course taught and it should be available to students. Some departments have a standard syllabus template, and if yours does, follow it.

Read the following.

This checklist of the recommended necessary items.

- Salt Lake Community College Name of Department
- Prefix and Number of Course/Course Hours
- Contact Information
- Consultation Hours [if applicable]
- Textbooks (Title, Edition; Author; Publisher, date)
- Link or Instructions for Accessing the Online Course Materials [if applicable]
- Required Equipment, Packets, etc. [if applicable]

- Course Description (from current College Catalog)
- Emergency Evacuation Procedure
- Course Requirements
- Course Schedule
- Competencies (Faculty should describe the course learning outcomes in the context of the College-Wide learning outcomes.)

The following language needs to be incorporated in your syllabus word for word:

STUDENT CODE OF CONDUCT

The student is expected to follow the SLCC Student Code of Conduct found at http://www.slcc.edu/policies/docs/stdtcode.pdf

ADA STATEMENT

SLCC values inclusive learning environments and strives to make all aspects of the College accessible to our students. If you have a disability and believe you need accommodations to improve access to learning materials or the learning environment, please contact the Disability Resource Center: (phone) 801-957-4659; (email) drc@slcc.edu; (website) www.slcc.edu/drc.

Information from http://www.slcc.edu/drc/faculty/index.aspx.

TITLE IX Click on Title IX Information to view the exact language to include in your syllabus.

READ the SAT Anatomy course syllabus to see a good example of a competency-based format.

Explore More...

Learn more about a positive learning environment, grading, and creating a syllabus by visiting these websites:

- The Learning Edge: Supporting Students in a Competency-Based Learning Environment outlines principles that contribute to a positive learning experience and outcome.
- Progress and Proficiency: Redesigning Grading for Competency Education offers an in-depth analysis of competency-based grading.

- According to What is Proficiency-based Grading?, grades are connected to clearly defined learning objectives, separate academic achievement from behaviors, and are focused on learning progress.
- Focusing Your Syllabus on the Learner, while directed to the medical profession, contains excellent tips very applicable to a competency-based syllabus in any field.
- http://www.competencyworks.org/analysis/what-is-the-difference-between-standards-based-grading/

CBE Course and Classroom Management

Congratulations! You have completed the CBE Course and Classroom Management module of this course!

This module outlined the key elements of organizing and managing a CBE course. Your classroom management plan and syllabus should reflect both CBE principles and SLCC policies and procedures for CBE courses and students. You should have created a syllabus that you can use as a reference as you develop and/or facilitate CBE course for Salt Lake Community College.

End of Course Details

Congratulations! You have completed the Faculty Competency-based Education Handbook!

> Let's check in as Joan and Rob are nearing their program completion: They are having a soda in the student center again; they have both nearly finished their programs and now they get together to "compare notes." Joan is excited because she has a new job opportunity. "This is exactly what I was hoping for," she says. "I know I would not have gotten the job without being able to demonstrate the course competencies. How about you, Rob? What's happening with your program?" Rob smiles, "Amazingly, I am finishing up in the next few weeks, and based on my new skills, I am in line for a promotion! My manager was so impressed with what I have learned in the course that he went to bat for me with the hiring folks," He reminisces, "Boy I had some challenges at first; I almost dropped out, but fortunately, my instructor pointed me to resources and encouraged me to use the course materials to keep an eye on my progress. That made all the difference. Once I understood how the competency-based programs work and took advantage of all the support, I moved much more quickly." "That's great to hear," Joan says. "Hey, let's stay in touch - love to hear how your new job goes!"

Remember, the goal of competency-based education at Salt Lake Community College is to provide students with the knowledge, skills and abilities needed to succeed in their job or in developing more advanced competencies. We urge you to visit this site often to refresh your understanding and application of competency-based education in the School of Applied Technology at Salt Lake Community College.

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