

What is a Competency?

At its core, competencies do 3 crucial things:

- 1) Gives students a better understanding of what is expected of them in whatever work role they plan to be in/go for.
- 2) Gives employers a common language to speak in.
- 3) Gives educators a foundation to teach from and to.

So, what is a competency?

By definition (credits to Dr. Fowler & Dr. Nestler as well as Clark.Center and the other wonderful people who have worked on this):

“Competency is the ability for the student to complete a task in the context of a work role.”

“Competency is situational (located in an actual place and time), normative (framed by expected ways of doing things), observable, meaningful and relates to the workplace.”

How do we find/define what a work role is?

Using the NICE Framework or the DCWF framework links (found below), you can find the tasks associated with a work role and develop competencies from it.

It is important to remember that competencies are based on and specifically relates to tasks NOT skills, abilities, or knowledge. As you explore the frameworks and look to build competencies you will want to reference the tasks. Paige Flores at SecurED created a work role tool to make this a bit easier it is located here: <https://tasktool.clark.center/>

What does that mean?

It means that assignments, projects, tasks, skills that you give/develop with students translates to actual tasks they may be expected to do in their chosen work role. For example, if you are teaching a digital forensics course and are using the tasks given by NICE/DCWF for such a position you can link your projects, assignments, tasks to these roles. When students graduate, they should be able to have whatever skills developed from their work on their resume. When their employer interviews them the conversation goes from “I think” or “I’m pretty sure” to “I can and here is where/when/how I did it before with these tools”

It really turns the conversation around, right? It takes hypothetical and theoretical to applicable as much as possible from a college setting. In essence, the things we will start to teach isn’t just knowledge based, it becomes knowledge and skilled based. This will, hopefully, increase confidence in our students that they are not only interested in the work but know that they can do tasks within the work role.

Cool, cool, so how do I develop a competency?

I’m glad you asked! Competency development is based on 5 elements (ABCDE)

A – Actor	Who is involved in this competency? What background knowledge/experience/previous learning are necessary for this competency?
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B – Behavior/Task	What is being done? Maps directly onto tasks from either the DoD's DCWF or the NICE framework
C – Context	How is this task being done? With what resources, affordances and constraints?
D – Degree	How long should this task take to complete? How accurate does it need to be? What degree of completion would be acceptable to an employer?
E – Employability	What professional skills are also embedded in this practice (e.g. team work, collaboration, ethics, etc.)? Be sure to include a short description on how the task builds the employability skill ***We encourage you to use Montreat 360 competencies & skills here [There is a PDF with this information on it or if you'd like to check for updates to it]: www.montreat.edu/student-life/montreat-360 However, you can also input your own employability skills as well***

You can actually build these out for your class in any word processor or spreadsheet whichever works for you.... OR be on the lookout for the template and other resources to help with the construction of these from the CAE community.

You can use the template located here:

https://caecommunity.org/sites/default/files/national_centers/CPNC_CYBER_EDU_Competency_Handbook_Mar%202024.pdf to build these out

OR you can view other competencies and develop your own at the competencies constructor:

<https://cybercompetencies.com/login>

Frameworks:

NICE Framework - <https://niccs.cisa.gov/workforce-development/nice-framework> (v1)

<https://www.nist.gov/document/nice-framework-components-v100> (Updated)

Above is a link to the NICE Framework. It has been updated since March 2024 and a link to download the updated version is available above as well.

DCWF Framework - <https://public.cyber.mil/wid/dcwf/>

Above is a link to the DCWF Framework, you may notice crossover and similarities with the NICE framework. The DCWF is the DoD's Framework there are differences.