

Connecting Lifelong Skills with Digital Credentials

Meta-Competency Frameworks

<https://lfc.asu.edu/>


Presented by


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Digital Credentials


A **credential is an attestation of qualification** or competence or authority issued to an individual by a third party with a relevant or de facto authority or assumed competence to do so.

 **Credential** (evidence)

 **Qualification** (process of attesting)

 **Competency**
(application of knowledge and/or skill in context)

 **Knowledge**
(what a person knows and understands)

 **Skills**
(what a person can do)

'possession of sufficient knowledge or skill'

Merriam/Webster

'The proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development.'

European Qualifications Framework, 2009

'The application of knowledge and skills in context and in terms of autonomy, responsibility and accountability'

Australian Qualification Framework. Jan 2013

'the skills, tools, and operational knowledge students will draw upon in the successful execution of the outcome'

UOEEE, ASU. Feb 2020

How do learners demonstrate their skills and how do employers validate?

Example from EMSI skills data

If you're ready to join a high-functioning team of full stack devs working closely with product managers, data engineers, and designers to create interfaces and visualizations that make nuanced data intelligible, we'd love to hear from you.

Candidates must have...

- Experience with the front-end basics: [HTML5](#), [CSS3](#), and [JS](#)
- Experience using a [version control system](#)
- Familiarity with MV* frameworks, e.g. [React](#), [Ember](#), [Angular](#), Vue
- Familiarity with server-side languages like [PHP](#), [Python](#), or [Node](#)

Great candidates also have...

- Experience with a particular [JS](#) MV* framework (we happen to use [React](#))
- Experience working with databases
- Experience with [AWS](#)
- Familiarity with microservice architecture
- Familiarity with modern [CSS](#) practices, e.g. LESS, SASS, [CSS-in-JS](#)

HARD SKILL

HTML5

[i Learn about this skill](#)

Tagging Confidence

100%

You wrote: [HTML5](#)

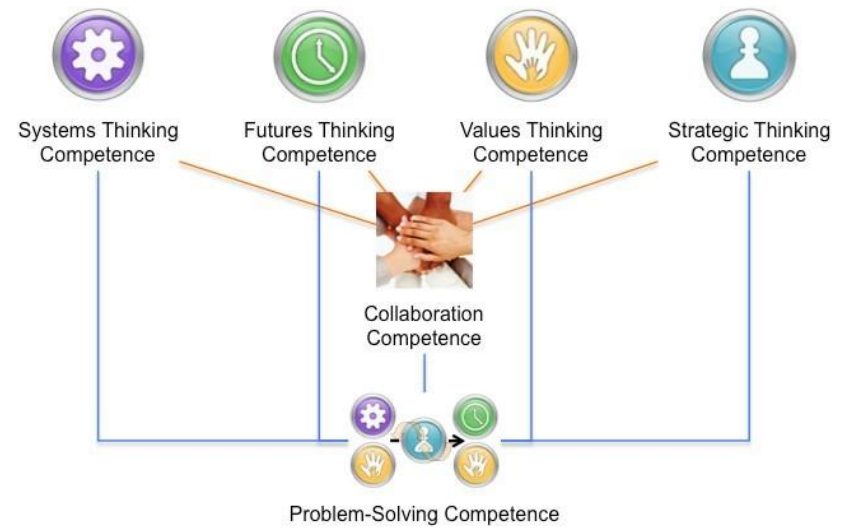
Show Context [?](#)

Related Skills

Cascading Style Sheets (CSS)
JavaScript (Programming Language)
Angular (Web Framework)
Agile Software Development
jQuery

Internal Frameworks

UOEEE, HIDA, CHS, SoS



Skills and Intellectual Habits: Where in the program are these areas addressed?	General Studies Courses	Core Curriculum	Other: IA, Internships, Graduate School, Publications
Written Communication			
Verbal Communication			
Intercultural Competency			
Reasoning & Evidence			
Critical Thinking			
Ideas to Real-World Application			
Civic Engagement			
Civil Discourse			
Lifelong Learning			

Options: Measure, Narrative, Proxy

Transferable Competencies <i>(NACE + HIDA specific competencies that layer on top of foundational competencies)</i>	Cognitive Skills	Digital + Creative Technology
		Critical/Creative Thinking + Problem Solving
		Professionalism + Work Ethic
	Collaborative Skills	Oral + Written Communication
		Teamwork + Collaboration
		Leadership + Civic Engagement
		Global + Cultural Fluency
	Reflective Skills	Career + Project Management
		Power + Ethics
Self-Care		
Foundational Competencies <i>(All HIDA programs include the following competencies)</i>	Creativity + Innovation	
	Disciplinary Craft + Technical Skills	



External Frameworks

Penn State, University of Central Florida
University System of Maryland



After successfully completing UCF's Information Literacy Modules, you will receive one of the following digital badges.

Gather	Evaluate	Use
Creating a Search Strategy	Evaluating Websites	Avoiding Plagiarism using APA style
Focusing an Information Search	Selecting Articles for Academic Assignments	Avoiding Plagiarism using MLA style
Moving into Discipline Specific Research	Understanding the Information Cycle	Citing Sources using APA style
Conducting a Literature Review	Recognizing a Research Study	Citing Sources using MLA style
Maximizing Google Scholar Searches		Using RefWorks

The **Gather Information** badge is awarded for earning all of the above badges.

The **Evaluate Information** badge is awarded for earning all of the above badges.

The **Use Information** badge is awarded for earning three of the above badges.

You will receive the **Information Literacy** badge after you have earned the Gather, Evaluate and Use badges.

Figure 2. University of Central Florida Information Literacy Modules badges

National Higher Education Competencies



- The Collaborator
- The Communicator
- The Critical Thinker
- The Globalist
- The Interculturalist
- The Leader
- The Problem-solver
- The Professional



- Oral Communication
- Critical Thinking
- Information Literacy
- Quantitative Reasoning
- Written Communication



- Knowledge Acquisition/application
- Life Skills And Self-knowledge
- Personal Integrity And Values
- Intercultural Development
- Leadership And Active Citizenship



- Curiosity
- Advocacy
- Inclusivity
- Kindness



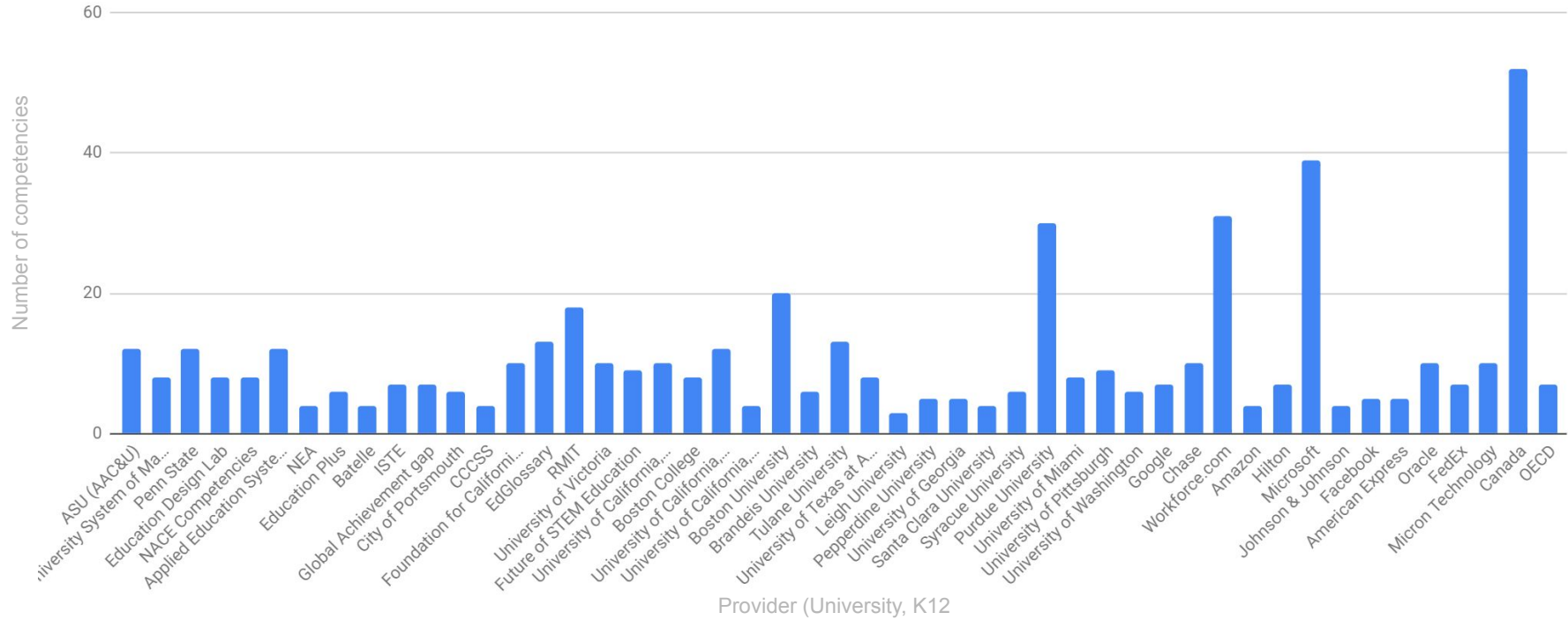
- Teamwork
- Communication
- Critical Thinking
- Global Perspectives
- Project Management



- Shaping Culture & Leading Change
- Building Instructional Capacity
- Advocating With Students, Families & Communities
- Committing to Ethical Practices
- Driving Improvement With Data
- Marshaling Resources & Improving Systems

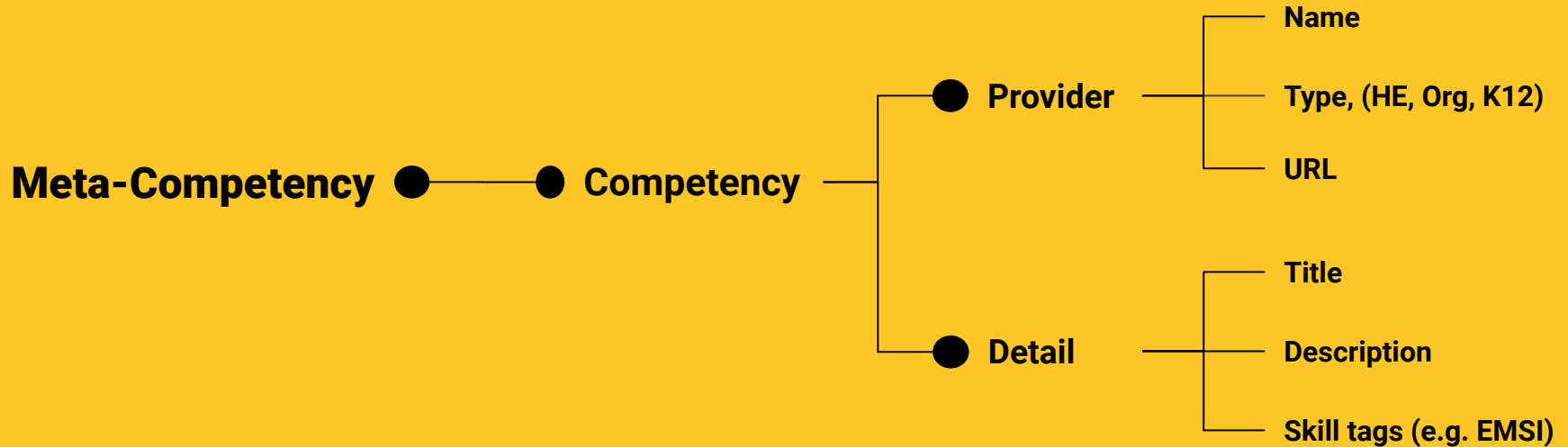
competencies/framework by provider

- 58 frameworks from Higher Ed, K12, Government, Commercial, Org and from Edu literature
- Range between 3 and 52 competencies/framework
- Total 514 competencies/descriptions



Meta-competency model

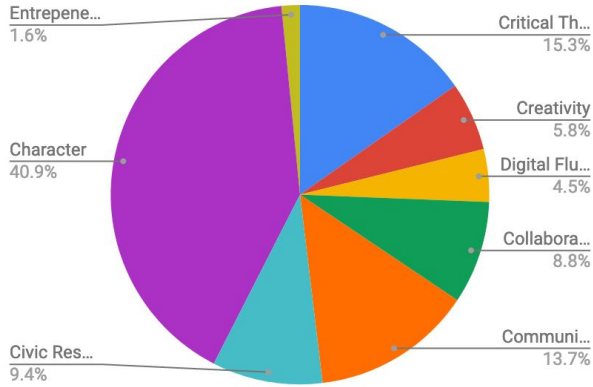
Information Architecture



Meta-competency dataset

Identified eight meta-competencies

Meta Competencies



Copy of Competencies/Skill Meta-list

File Edit View Insert Format Data Tools Form Add-ons Help All changes saved in Drive

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Fostering Teamwork

A	B	C	D
231	Ethics, Integrity, and Commitment to Diversity	Civic Responsibility	Syracuse University
232	Critical and Creative Thinking	Critical Thinking	Syracuse University
233	Scientific Inquiry and Research Skills		Syracuse University
234	Civic and Global Responsibility	Civic Responsibility	Syracuse University
235	Communication Skills	Communication	Syracuse University
236	Information Literacy and Technological Proficiency		Syracuse University
237	Effective Communication	Communication	Penn State
238	Key Literacies		Penn State
239	Critical And Analytical Thinking	Critical Thinking	Penn State
240	Integrative Thinking		Penn State
241	Creative Thinking	Creativity	Penn State
242	Global Learning		Penn State
243	Social Responsibility And Ethical Reasoning	Character	Penn State
244	Listen & Observe	Communication	Purdue University
245	Nonverbal Communication	Communication	Purdue University
246	Summarize & Distill Information	Communication	Purdue University
247	Verbal/sign Communication	Communication	Purdue University
248	Written Communication	Communication	Purdue University
249	Continuous Learning	Character	Purdue University
250	Initiative & Follow Through	Character	Purdue University
251	Personal Responsibility	Character	Purdue University
252	Resiliency	Character	Purdue University
253	Self-understanding	Character	Purdue University
254	Appropriate & Productive Relationships	Character	Purdue University
255	Cultural Intelligence & Inclusion	Character	Purdue University
256	Helping Others & Collaboration	Collaboration	Purdue University
257	Organizational Behavior & Teamwork	Collaboration	Purdue University
258	Service & Social Responsibility	Civic Responsibility	Purdue University
259	Decision-making & Problem-solving	Critical Thinking	Purdue University
260	Ethics	Civic Responsibility	Purdue University
261	Idea Generation	Critical Thinking	Purdue University
262	Reflection & Analytical Reasoning	Critical Thinking	Purdue University
263	Systems Thinking & Planning	Critical Thinking	Purdue University
264	Create Knowledge	Creativity	Purdue University
265	Synthesize Knowledge	Creativity	Purdue University
266	Communicate Knowledge	Communication	Purdue University
267	Think Critically and Reflectively	Critical Thinking	Purdue University
268	Demonstrate Engineering Skills		Purdue University

Reflection on the dynamic relationships among power, inequality, identities, and social structures. Thoughtful engagement with one's own values, intersectional identities, experiences, Exploration and synthesis of ideas, artifacts, issues, and events to inform and evaluate arguments, develop new insights, and produce creative work. Reflection on, and application of scientific inquiry and problem solving in various contexts. Analysis of theories, replication of procedures, and rethinking existing frameworks. Supporting argument Knowledge, exploration, and analysis of the complexity surrounding interdependent local, national, and global affairs. Engagement in responsible, collaborative, and inclusive civic Effective individual, interpersonal, and collaborative presentation and development of ideas through oral, written, and other forms of expression to inform, persuade, or inspire. Identification, collection, evaluation, and responsible use of information. Effective, ethical, and critical application of various technologies and media in academic, creative, personal The ability to exchange information and ideas in oral, written, and visual form in ways that allow for informed and persuasive discourse that builds trust and respect among those The ability to identify, interpret, create, communicate, and compute using materials in a variety of media and contexts. Literacy acquired in multiple areas, such as textual, quantitative The habit of mind characterized by comprehensive exploration of issues, ideas, artifacts, and events before accepting a conclusion. It is the intellectually discipline The ability to synthesize knowledge across multiple domains, modes of inquiry, historical periods, and perspectives, as well as the ability to identify linkages between existing knowledge The capacity to synthesize existing ideas, images, or beliefs in original ways and the experience of performing making, thinking, or acting in an imaginative way that may be civic The intellectually disciplined abilities to analyze similarities and differences among cultures, evaluate natural, physical, social, cultural, historical, and economic legacies and their The ability to assess one's own values within the social context of problems, recognize ethical issues in a variety of settings, describe how different perspectives might be applied Hearing what is being said and observing nonverbal cues to prevent miscommunication, promote understanding, gather and receive feedback, and demonstrate a sense of caring Using body language, gestures, other cues, and visual aids to support the conveyance of meaning Selecting, sorting and combining information in order to capture and effect on important facts, concepts, and processes leading to increased comprehension and the ability to communicate Using spoken and/or signed communication to share information with others one-on-one, in small groups, and/or in front of a large audience in a clear, concise, and persuasive manner Using written formats to share information with others in a clear, concise, and persuasive manner Committing to constant expansion and improvement of skills, abilities, knowledge and understanding by adopting continuous learning strategies (e.g. Seeking feedback, observing Taking charge of a situation either individually to fill a need or motivating others to take action. Completing tasks without having to be followed-up with or reminded and can be relied upon for ownership for not meeting expectations or achieving desired outcomes, receives feedback from others and is able to consider it in order to develop competencies and Facing challenges, adversity, and major setbacks and learning from the experience, take corrective action, and rise to the next challenge. Understanding one's beliefs, values, culture, actions, personality, strengths, and weaknesses. Assessing a situation and engaging in interactions, relations, and exchanges based on what is suitable for the context and person or people involved. Cultivating connections or a Understanding how diverse perspectives, backgrounds, beliefs, cultures, experiences and/or historical dynamics can influence groups and individuals and enhance a group's effectiveness. Understanding the importance teamwork has for the effectiveness of groups and organizations and using that understanding to foster a culture of helping others and collaborative Understanding how groups develop; anticipating, navigating, mitigating, and responding to behaviors of a group and the people in it to foster group development to enhance the group Understanding the rights and obligations one has as a citizen in communities, nations, and the world, how cultural, social, and historical dynamics influence groups and individuals and Defines a problem or issue, identifies its potential causes; specifies a desired outcome, employs critical, practical, and creative thinking skills to generate possible solutions, and Understanding standards and expectations for personal and professional ethical behavior by acting in accord with an appropriate set of social norms, beliefs, and cultural values and Developing new and/or novel ideas through critical thinking and creative processes that address issues and/or lead to change. Considering the past and learning from successes and failures –own and others' – to understand a situation, strategies used, and the impact of decisions. Employing critical, practical, and identifying tasks and setting deadlines to design, evaluate, and implement strategies to answer questions or achieve desired goals. Assessing a situation, organization, or network The graduate will describe common research methods in his/her discipline, read and evaluate educational research, and apply research findings to the solution of practical problem The graduate will read and synthesize knowledge of fundamental theories of human learning, and apply knowledge of human learning, diversity, and effective pedagogical The graduate will communicate effectively in both oral and written formats including the ability to communicate content from his/her discipline through the design and delivery of The graduate will develop a personal vision of inclusive educational practice, identify the relationship of his/her discipline to the broader field of education, and critically evaluate The graduate will have the capacity to function as an engineer in a traditional, non-education area. This should include, to the extent possible, the knowledge and use of technology

+ Providers Sheet10 Competencies Competency/Master meta-competency Charts Explore

Meta-Competencies
(Lifelong learning skills)



Character
Civic Responsibility
Collaboration
Communication
Creativity
Critical Thinking
Digital Fluency
Entrepreneurship

Meta-competency model

Example from dataset

Meta-Competencies

Character
Civic Responsibility
Collaboration
Communication
Creativity
Critical Thinking
Digital Fluency
Entrepreneurship

Competencies

Cross-cultural
Fostering Teamwork
Global Collaborator
Helping Others
Leading By Influence
Motivational Support
Multicultural skills
Organizational Behavior
Participate in Projects
Resourcefulness
Teamwork
Working with others

Provider/Detail

Fostering Teamwork

Understanding the importance teamwork has for the effectiveness of groups and organizations and using that understanding to foster a culture of helping others and collaboration.

Skill Tags

Teamwork, Team Oriented, Leadership, Team Building, Team Management, Team Performance Management, Virtual Teams, Team Effectiveness

Purdue University

<https://engineering.purdue.edu/ENE/Academics/Graduate/Competencies>

**What is on the
horizon?**

External Collaboration

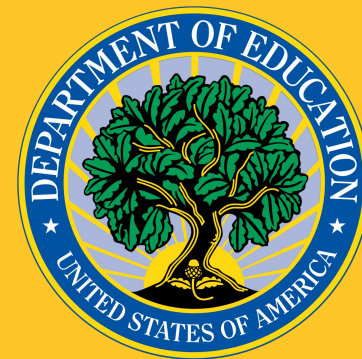
Partnering with organizations, employers and other universities to create an open skills taxonomy tied to the future of work



CONCENTRIC SKY



Credential
Engine™



Emsi



IMS GLOBAL
Learning Consortium
Better Learning From Better Learning Technology

Internal ASU Collaboration

Partnering across the ASU Enterprises

Academic
Enterprise

Learning
Enterprise

Knowledge
Enterprise

Guiding Questions

- What does this look like in your college/unit/program?
- Who will be leading the effort within your organization?
- How can we collaborate across ASU?
- How can this framework support faculty?
- How can this framework support learners?
- Do you want to continue the conversation?



<https://forms.gle/KkGZU2Jr4DrhWtdH7>