



## FROM THE BOTTOM UP: GROUNDING ASSESSMENT PRACTICE IN WORKFORCE-RELEVANT SKILLS

**Laura M. Williams, PhD:** Sr. Lead Assessment Integrity Strategist

**Samantha Coen, PhD:** Manager, Skills Architecture

*WGCU Workforce Intelligence & Credential Integrity*

# Outline

- 1 Introductions
- 2 Skills
- 3 Credentials
- 4 Assessments
- 5 Questions & Discussion

# Who We Are

## **Proudly Nonprofit**

- Founded in 1997 by a bipartisan group of 19 governors

## **Core Experience 100% Online**

- Competency-based and self-paced

## **Made up of Four Schools**

- Business, IT, Health Professions, K-12 Teacher Education

## **Innovative Curriculum Design**

- Workforce-aligned
- Skills-based
- Build industry certifications into our curriculum

# Problems to Solve

Learners need to gain new skills and communicate the value of their accomplishments.

The college credential landscape is growing, adding to ambiguity and confusion about what credentials represent.

Learners need more immediate ROI throughout their educational journey.

Learners need to showcase skills and communicate the value of their accomplishments through competency demonstration (assessment).

Learners need better ways to understand the skills their credentials represent and the value they hold.



# Think Back to Your Academic Journey...

- How aware were you of the skills you were developing?
- Could you articulate these skills to others?
- Could you connect these skills to your future career goals?



*Survey  
Says...*

**45% of employers globally said they cannot find candidates with the skills that they need.**

*Does this surprise you?*



## Survey Says...

*70% of hiring professionals agreed:*

**“If a candidate has the right skills for an open position, it doesn't matter what time or format of education was used to get them.”**

# Refocus Towards the Future

Many employers are changing their degree requirements for various roles and focusing on hiring people based on their demonstrated skills and competencies.



# Why Open Skills

## Earners/learners need:

- to identify, represent, and communicate the value of their skills in a common language

## Employers need:

- to create clearer, skills-based job descriptions
- to make better, faster, cost-effective hiring and training decisions
- to understand the skillset of their current workforce

## Education providers need:

- to ensure their programs and curriculum reflect the skills learners need to be successful in the workforce
- to develop more transparent, value-based, student-centric credentials

Open  
Skills



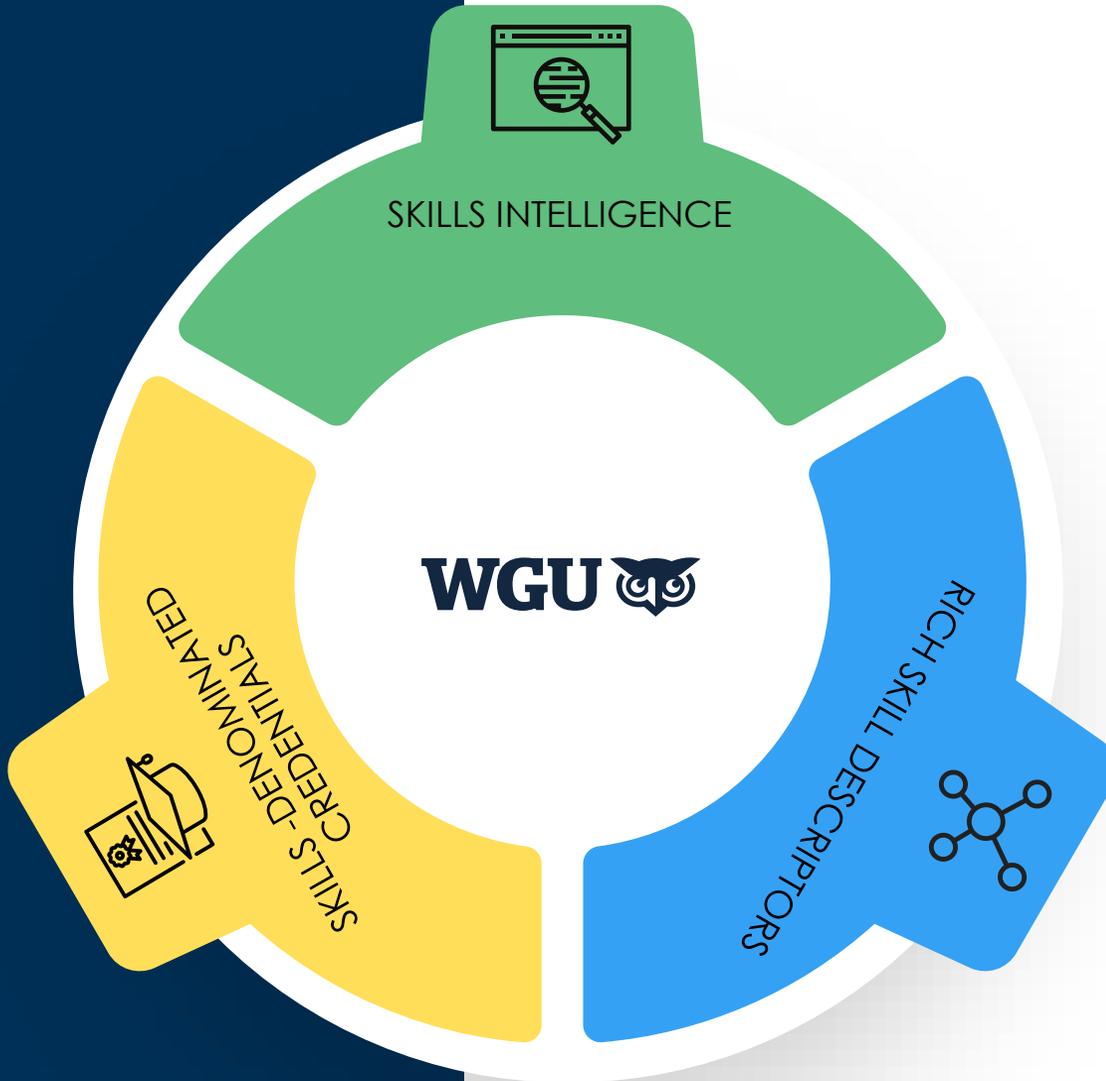
Enable a  
common  
language  
of skills.

# WGU's Response

**Skills Intelligence** is a comprehensive set of data points that enables WGU to gain insights into the skills required for specific occupations and job roles, as well as the current state of the workforce for those roles.

**Rich Skill Descriptors (RSDs)** are skill statements and the associated metadata that allows for the interoperability of the skill across digital platforms.

**Skills-Denominated Credentials** are verified credentials explicitly tied to skills and employment value that is sharable with employers and other education institutions in a currency they value and understand.



# Skills let us open the doors of opportunity for our learners in new ways.



## Equity

At WGU, skills advance **EQUITY** by ensuring all students have equal access to opportunity, attainment, and expression of skill attainment, especially our "traditionally overlooked" populations (e.g., first-gen, minority, and low-income).



## Return

Skills-based learning empowers our students with the language of employers to enhance their professional brand and pursue optimal economic **RETURN** on their education investment.



## Completion

Rich Skill Descriptors (RSDs) illuminate relevancy of learning and credentials for our learners, demonstrating direct connections to their career goals. Relevance is a key driver of persistence and **COMPLETION**.

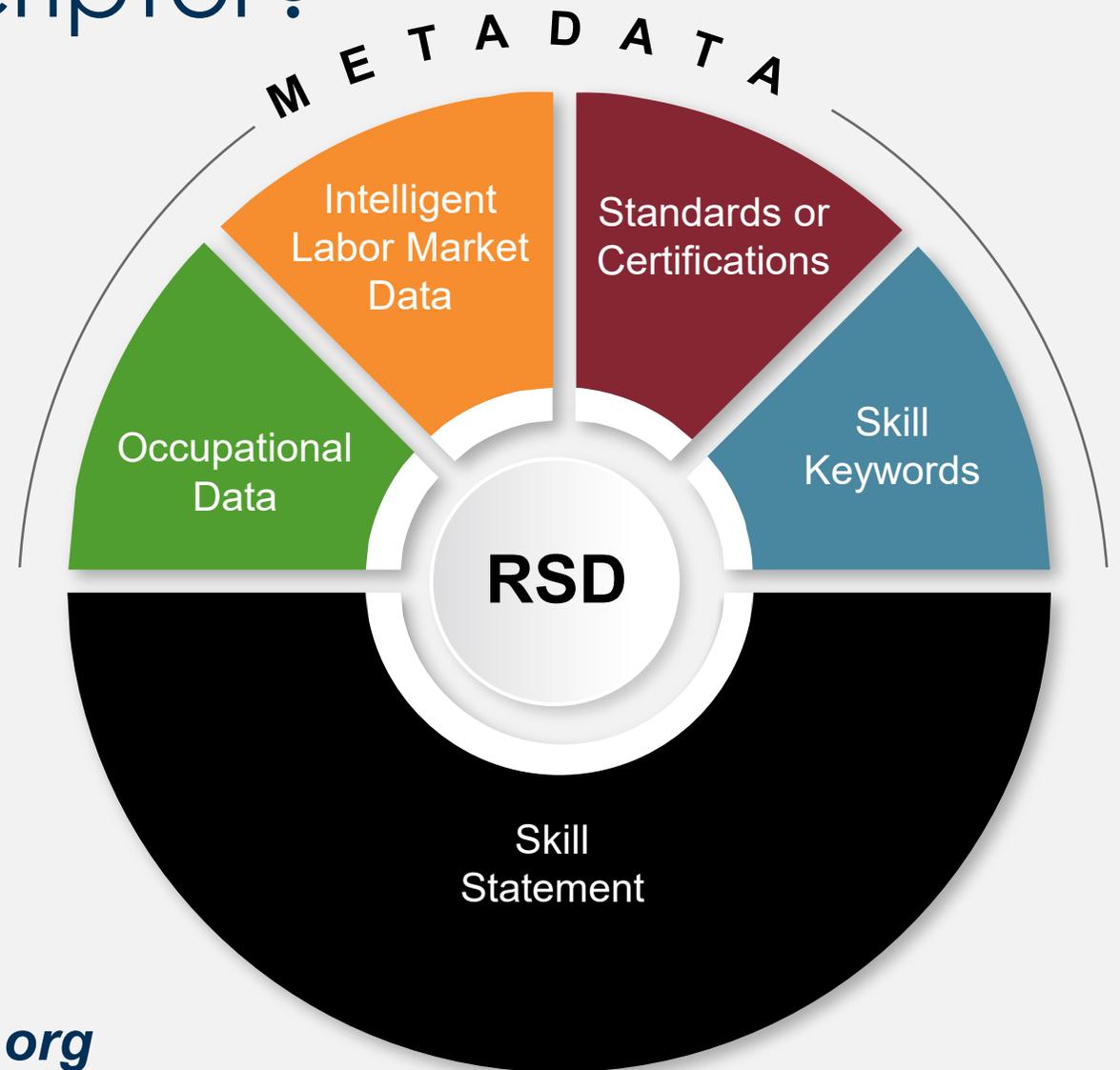


## Equity

Competency-based, skills-driven credentials give individuals a verifiable way of showing their skills and abilities to employers. This evidence of attainment provides opportunities that advance **EQUITY** in post-graduation career pathways.

# What is a Rich Skill Descriptor?

A rich skill descriptor is made up of a contextualized skill statement and associated meta data that enables the interoperability of skills.



Learn more at [rsd.openskillsnetwork.org](https://rsd.openskillsnetwork.org)

# Rich Skill Descriptor (RSD)

## RICH SKILL DESCRIPTOR

# Network Connection Design

Author: Western Governors University

 Published

## SKILL STATEMENT

Design network connections between a core network and an internet service provider.

## CATEGORY

Access Network

## KEYWORDS

design; Access Network; WGUSID: 10407

## CERTIFICATIONS

300-420\_ENSLD

## OCCUPATIONS

### DETAILED OCCUPATIONS

**15-1231** Computer Network Support Specialists

**15-1241** Computer Network Architects

**15-1244** Network and Computer Systems Administrators

### O\*NET JOB ROLES

[View All Groups](#)

## ALIGNMENTS

[Access Network](#)

# RSDs and WGU Skills Library Collections

The WGU skills library informs competencies in our educational model. This ensures that our courses are reflective of labor market demands.

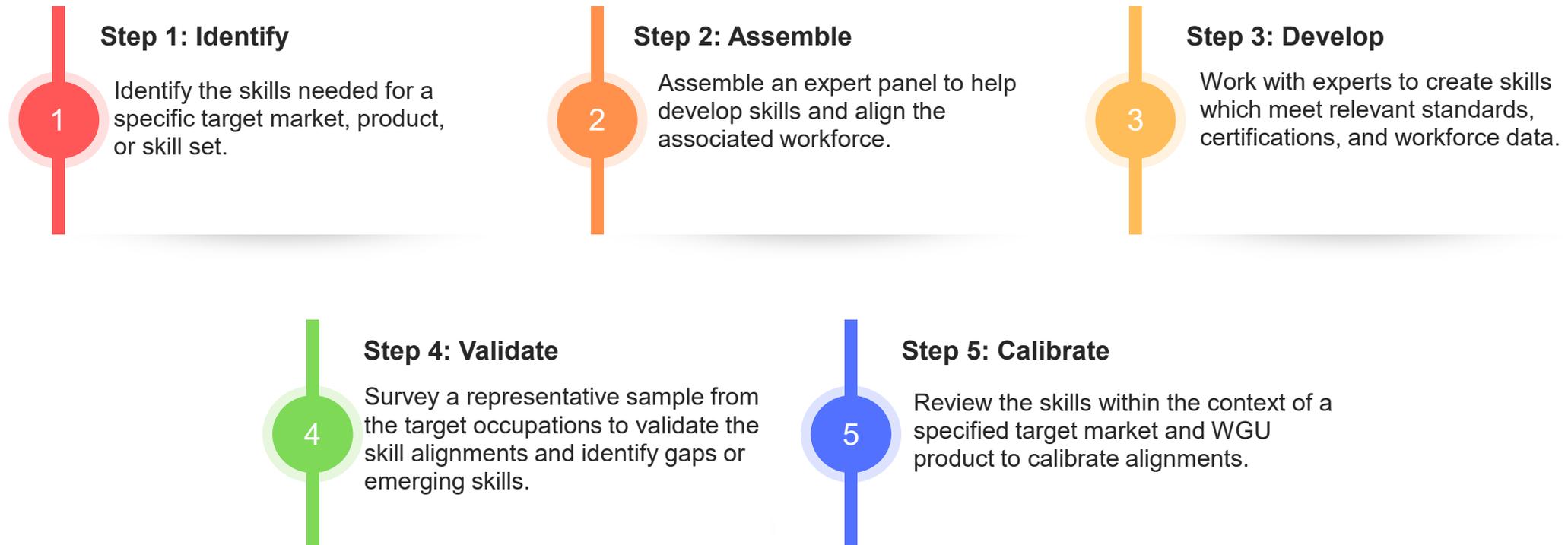
## Skills Libraries:

- Centralized and structured collections
- Contain skills data, qualifications, and attributes
- Create a unified understanding of skills for employment, curriculum development, job architecture, or competency grouping

The screenshot displays the 'Open Skills Management Tool' interface. At the top, the WGU logo and 'Open Skills Management Tool' are visible. The main content area shows a collection titled 'Computer Network Architects' with a sub-header 'COLLECTION'. Below the title is a detailed description: 'The Computer Network Architects Collection represents the skills necessary to design and implement computer and information networks by performing network modeling, analysis, and planning, including those of capacity needs for network infrastructures. This includes the responsibilities of design engineers, network and security engineers, and telecommunications analysts. This collection of skills was developed in partnership with a panel of subject matter experts who have worked as computer network architects.' The author is listed as 'Western Governors University' and the collection was published on 'Apr 28, 2023'. It contains '150 RSDs in collection. Viewing 1-50.' Below this, there is a table with two columns: 'CATEGORY' and 'RICH SKILL DESCRIPTOR'. The first row shows 'Access Network' and 'Network Connection Design' with the description 'Design network connections between a core network and'. The second row shows 'Access Network' and 'Network Router Performance Monitoring' with the description 'Monitor network routers for performance issues.'

# Skill Development Process

A skill represents knowledge, abilities, or learned behaviors described in a short, verb-driven phrase that communicates discrete, discernable value an individual can demonstrate or acquire.



# Skills + Competency + Assessment = Workforce Aligned Products

## Skills

- Modify instruction to meet goals based on assessment data.
- Design instructional plans that are appropriate for students based on assessment data.
- Analyze assessment data to adapt lesson planning and instruction.

## Competency

The learner analyzes assessment data to design and modify instruction to meet student needs and mastery of content.

## Assessment

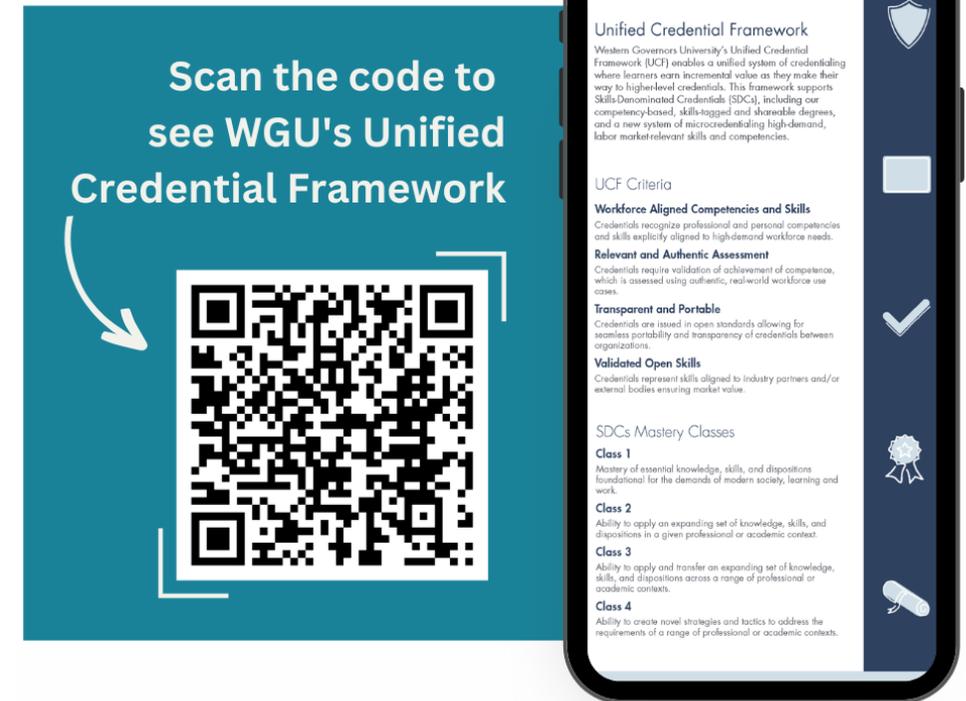
- Description includes instructional accommodations for all student populations.
- Check for student understanding and appropriate for grade and content of the lesson.
- Demonstrated modification of lesson plan based on assessment data.

# Unified Credential Framework

**Why:** No consistent approach and definitions to ensure every credential at WGU was aligned with a clear market value.

**What:** The UCF provides the structure to ensure future university credentials' relevancy, credibility, and portability. Provides standard definitions and guidance on different types and classes of Skills-Denominated Credentials issued at WGU.

**How:** Though Credential Integrity alignment checks, ensures consistency in credential assertion requirements.



# UCF Criteria



## Workforce Competencies and Skills

Achievements recognize professional and personal competencies and skills explicitly aligned to high-demand workforce needs.



## Portable

Achievements are issued in open standards, allowing for seamless portability between organizations.



## Relevant and Authentic Assessment

Achievements require verification of competence, which is assessed using authentic, real-world workforce use cases.



## Validated Open Skills

Achievements represent skills aligned to industry and/or external bodies ensuring market value.

# Psychometrically Sound Assessment

## Fair

- Do not advantage or disadvantage any group or groups of learners

## Reliable

- Measure what we intend to measure

## Valid

- Inferences made on scores are reasonable, defensible



# Psychometrically Sound Assessment

## Fair

- Do not advantage or disadvantage any group or groups of learners

## Reliable

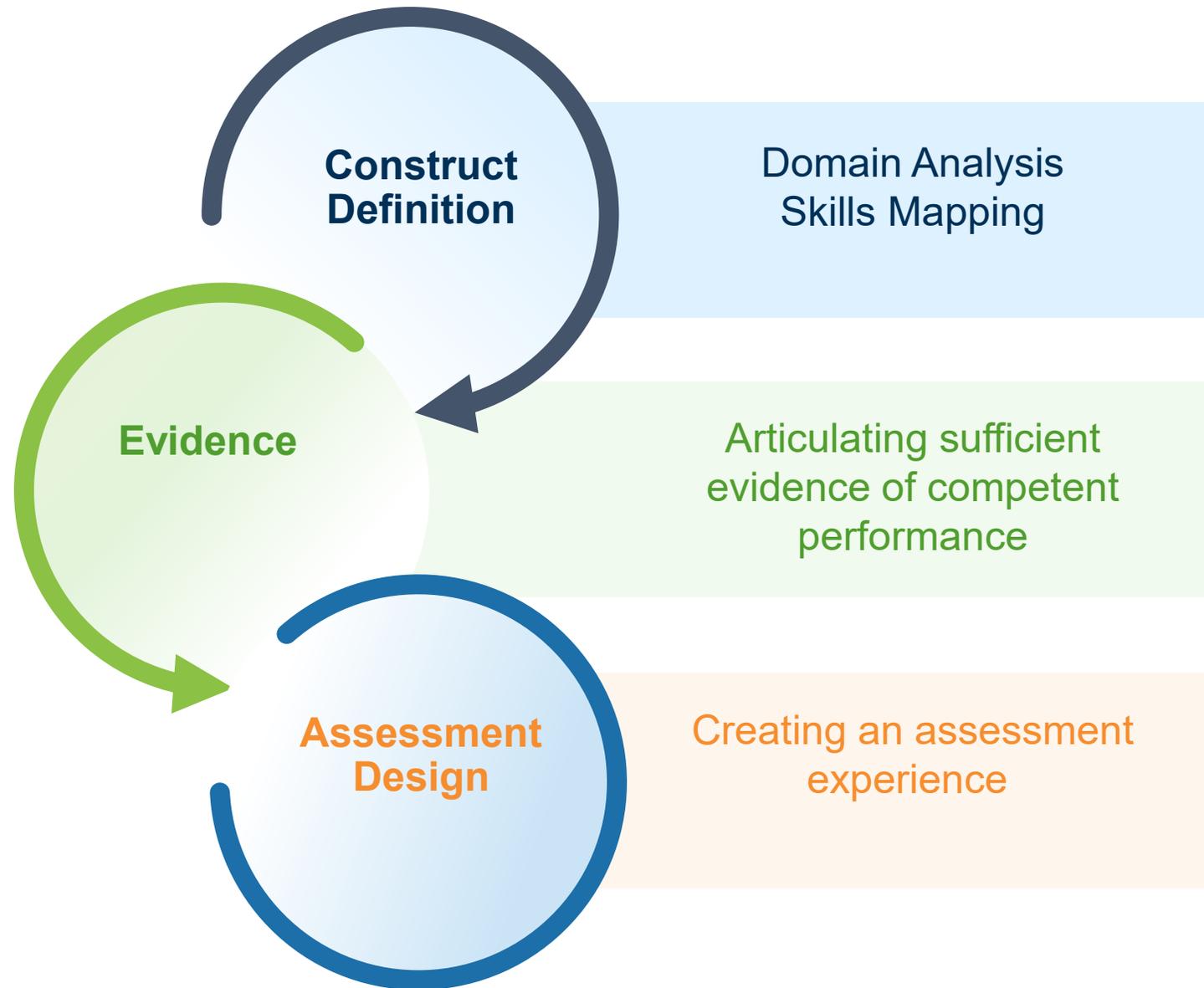
- Measure what we intend to measure

## Valid

- Inferences made on scores are reasonable, defensible



# Validity: What's your inference?



# Open Skills and Validity

## Domain Analysis/Modeling

- Competency design: **skills** analysis informs competencies

## Assessment Design

- What **skills** are we trying to measure?
- What **evidence of skills** do we need to see to make claims about students?

Open  
Skills



Enable a  
common  
language  
of skills.

# Assessment Design

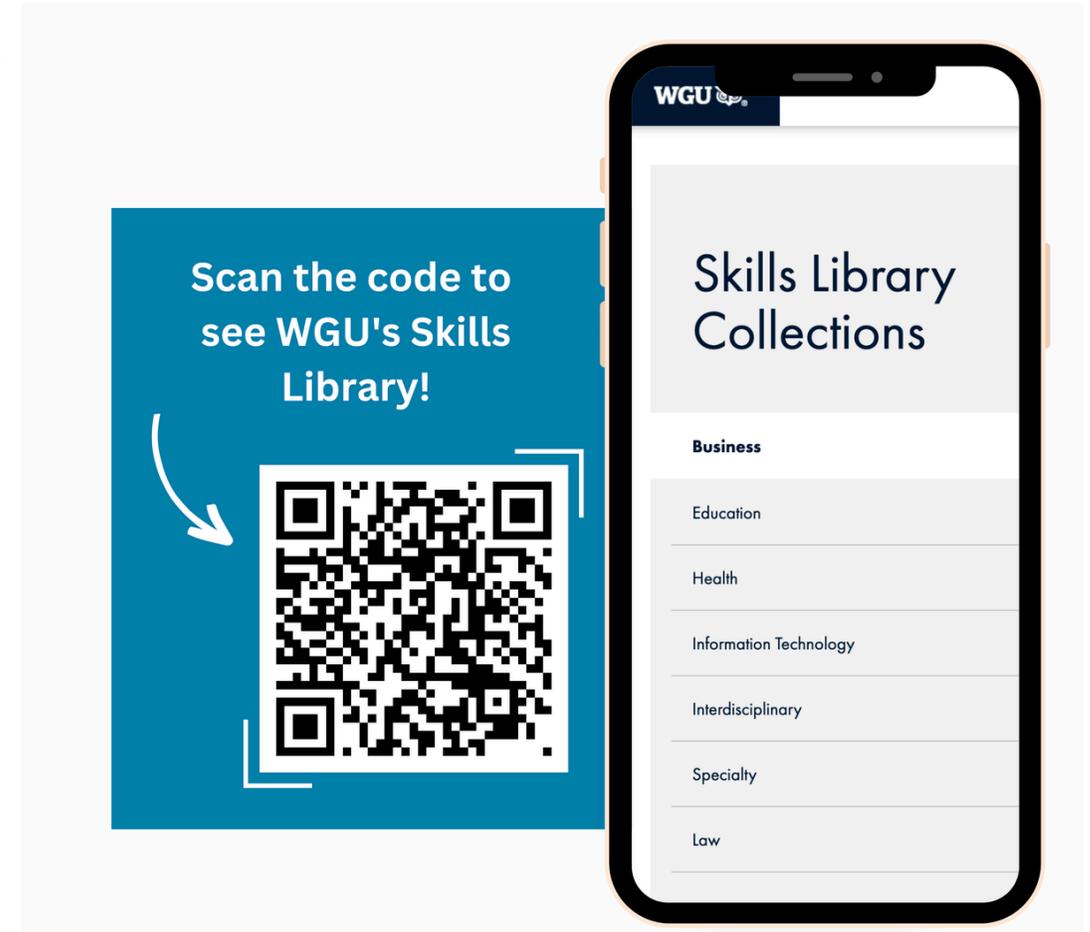
*What evidence do we need to elicit from students to measure their competence?*



# You Can Operationalize Skills

## Join the Open Skills Network

- Coalition of employers, education providers, military, and other stakeholders advancing skills-based education and hiring
- Committed to reducing inequity by helping people get hired for what they can do, not for where they got their degree
- Focused on developing and implementing a common skills language and open, accessible, machine-actionable skills libraries



Use Open Skills Libraries



# Questions and Discussion

# Thank You!



[l.williams@wgu.edu](mailto:l.williams@wgu.edu)

[samantha.coen@wgu.edu](mailto:samantha.coen@wgu.edu)

**WGU**  | WICI

