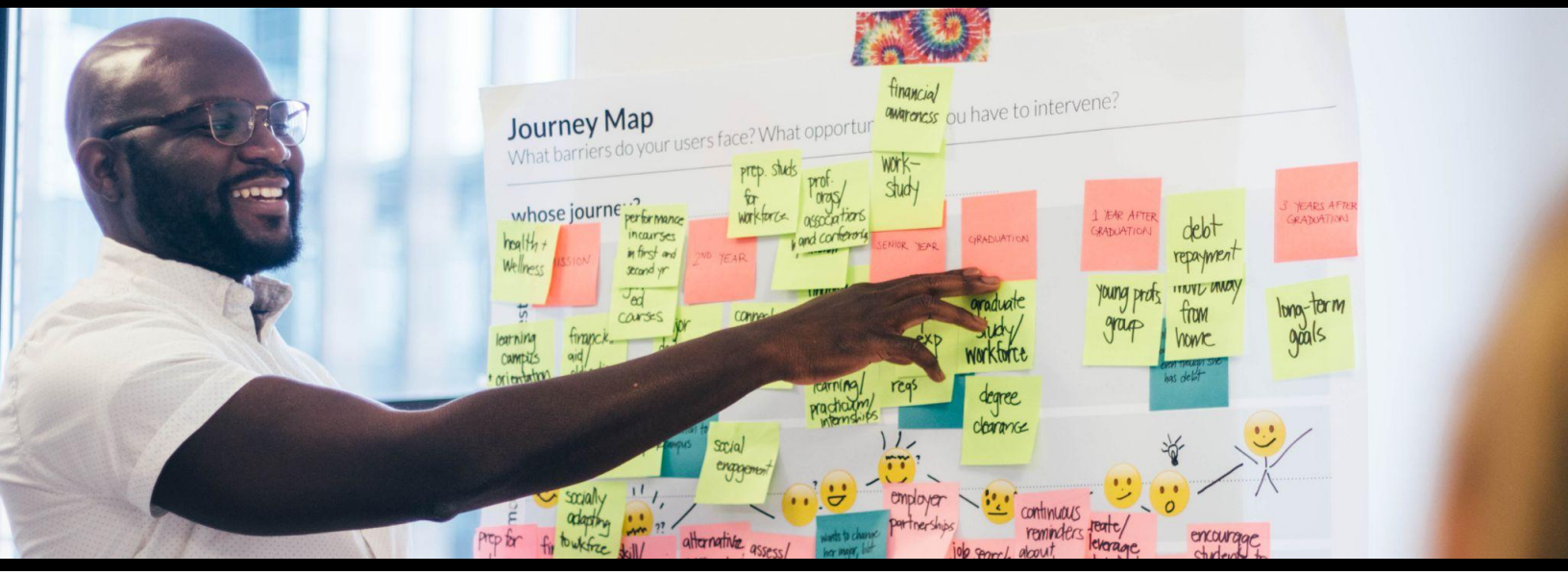
**Education** Design Lab

# Innovations in Skills Validation

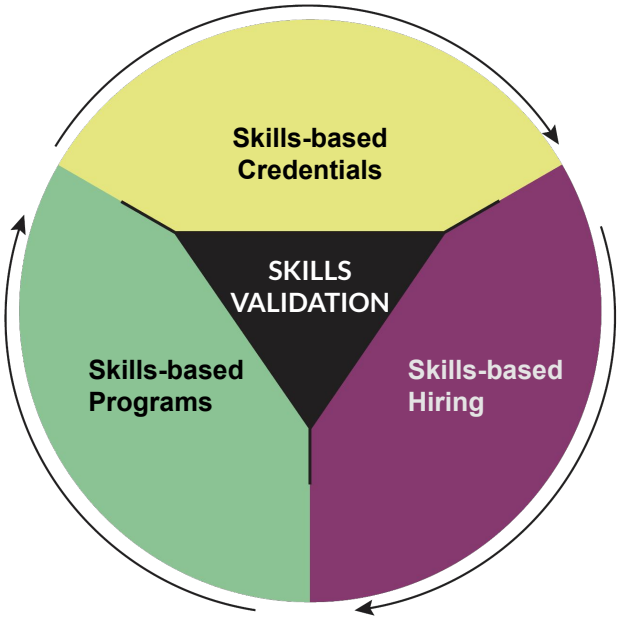
## A "Year" in Review




In November 2022, a group of boundary-spanning innovators - **the Skills Validation Network** - set out on a quest:

To enable equitable opportunity for individuals who are Skilled Through Alternate Routes (STARs) **through diverse, proven methods of skills validation**, empowering them with valuable credentials in the skills-based economy.

**This is their story.**

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# Year 1:
# Members, Goals and Process

## Year 1 Network Goals

1. **Prototype a set of new skills validation tools and methods,** aimed at empowering STARs (individuals Skilled Through Alternate Routes) with valuable labor market currency along with agency, mobility, and visibility in a rapidly changing skills-based economy.
2. **Provide thought leadership,** to help drive a national dialogue around the criticality, terminology, and methods of skills validation, offered by leading thinkers and doers from diverse organizations across the skills-based ecosystem.

## Member Organizations 👏

Accredicity · Education Design Lab · RANDA · adept ID · JobPaths · SKILLUP · SmartResume · Aspire Ability · Myhub · SOLID · AstrumU · Merify · territorium · cael · MUZZY LANE · VAMETRIC · Edalex · Opportunity @Work · VantagePoint Consulting

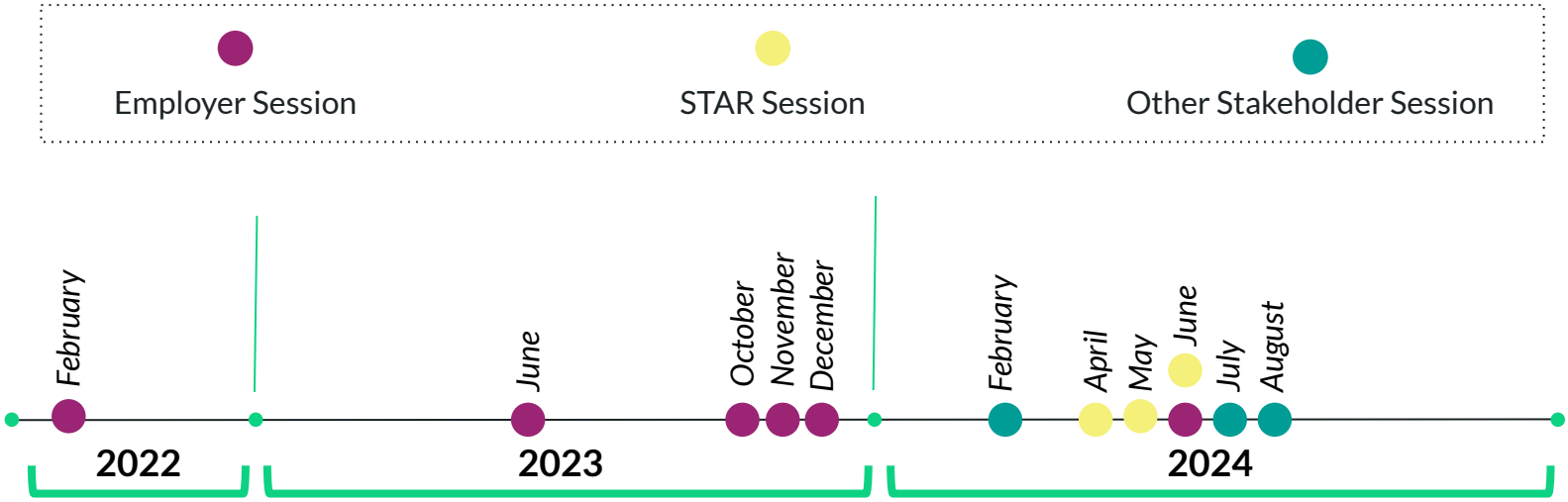
## Network Design Process

Over the course of 18 months, the Skills Validation Network developed a set of three innovative prototypes for the validation of durable skills gained through work and life experience.

| | Understand | Ideate | Understand | Ideate | Prototype |
|---|---|---|---|---|---|
| | **Tools + Touchpoints** | **Tools + Touchpoints** | **Tools + Touchpoints** | **Tools + Touchpoints** | **Tools + Touchpoints** |
| Full Group | 🤝Launch Network<br>🤝Bi-monthly meetings<br>🛠️Charter<br>🛠️Market Scan<br>🛠️Glossary | 🤝Bi-monthly meetings<br>🛠️Validation formula<br>🛠️8 methods<br>🛠️Validator design criteria | 🤝Monthly meetings<br>🤝Member spotlights<br>🤝Working group updates | 🤝Monthly meetings<br>🤝Member spotlights<br>🤝Working group updates<br>🤝Member concept feedback | 🤝Monthly meetings<br>🤝Member spotlights<br>🤝Working group updates<br>🤝Member concept feedback |
| Working Groups | | | **Tools + Touchpoints**<br>🤝Launch working groups<br>🤝Bi-weekly meetings<br>🛠️Asset Maps<br>🛠️Personas<br>🛠️STAR Gallery Walk<br>🛠️Stakeholder Maps | **Tools + Touchpoints**<br>🤝Bi-weekly meetings<br>🤝Ideating with an increasingly narrowed Focus<br>🛠️Blog 1: What + How<br>🛠️Blog 2: Self-Assertion | **Tools + Touchpoints**<br>🤝Bi-weekly meetings<br>🤝SVN Design<br>🛠️Prototype journey map Showcase<br>🛠️Blog 3: Exp. Translation<br>🛠️Blog 4: Skills Demo. |
| | Nov 2022 - Feb 2023 | March - July 2023 | Aug - Nov 2023 | Dec 2023 - Feb 2024 | March - July 2024 |

# Stakeholder Insights: Skills Validation

The Lab facilitated a variety of feedback sessions to gather employer, STAR, and other stakeholder perspectives on skills validation and the prototypes throughout the development process. Feedback was incorporated into the prototypes through an agile, iterative development process.




## Employer Insights

- **Multiple Layers.** Preference for multiple layers of validation to strengthen skill credibility.
- **Tangible Evidence.** Preference for work products over resumes as more reliable evidence.
- **Holistic Candidate Evaluation.** Interest in understanding whole person, beyond credentials.
- **Durable Skills.** Indicated challenge of standardizing validation of durable skills across contexts.
- **Trust and Recognition Issues.** Emphasis on secure, tamper-proof data and understandable artifacts.
- **Non-Traditional Experiences.** Strong support for skills translation of "non-traditional experiences".
- **Integration of Humans + AI.** Interest in holistic solutions which integrate human + AI insights.
- **Constraints.** Despite interest, cost + tech limitations prevent orgs from using advanced solutions.

## STAR Insights

- **High Interest.** Interest in validation to enhance resumes, articulate skills, and aid career transitions.
- **Customization.** Preference for options: individual vs group; self-paced; various response methods.
- **Tracking + Visualization.** Motivated by ability to track and visualize validated skills over time.
- **Data Security + Accuracy.** Concerned about reliable skill validation and security of data.
- **Relevance.** Value connection to current + future roles and real world examples.
- **Engagement.** Preference for fun + interactivity balanced with reasonable amount of effort.
- **Accessibility.** Emphasis on ensuring tools are accessible across tech, economic, and learning needs.

# The Network's First Big Breakthrough

**What + How:** A (Draft) Formula for Skills Validation

**VALIDATION METHOD** = **WHAT** + **HOW**

*Source of Evidence*

*Method of Analysis*

## Using the Formula

While it may seem obvious when viewed through the lens of familiar methods, this formula offers an opportunity to **mix-and-match different components**, expanding our concept of both what we might consider "evidence" of skills (the what) and innovative ways of analyzing that evidence (the how).

Together, the Network has defined a set of 10 emergent components — **8 WHATs** and **2 HOWs**.

These methods led to the formation of three working groups, each of which created a skills validation prototype reflecting a particular method. Read on to learn more about these prototypes!

| | **The WHATs** \| *Sources of Evidence* |
|---|---|
| **Assessment** | An individual's assessment results. |
| **Performance Evaluation** | Documentation from performance evaluations others have completed on an individual's work performance. |
| **Existing Media** | Media an individual possesses which provides evidence of a skill. Media was not **specifically** created for the purpose of providing evidence or showcasing proficiency. |
| **Endorsement** | Endorsements received from others regarding performance. |
| **Experience Translation** | Documentation acquired through lived experiences and identities outside of the classroom or workplace. |
| **Skills Demonstration** | An individual's demonstration of a skill, performed for the purpose of providing evidence or showcasing proficiency. |
| **Self-Assertion** | An individual's statement of their own skills + proficiency levels. |
| **Interview** | An individual's performance in an interview. |

**The HOWs**
*Methods of Analysis*

**Human-Facilitated**

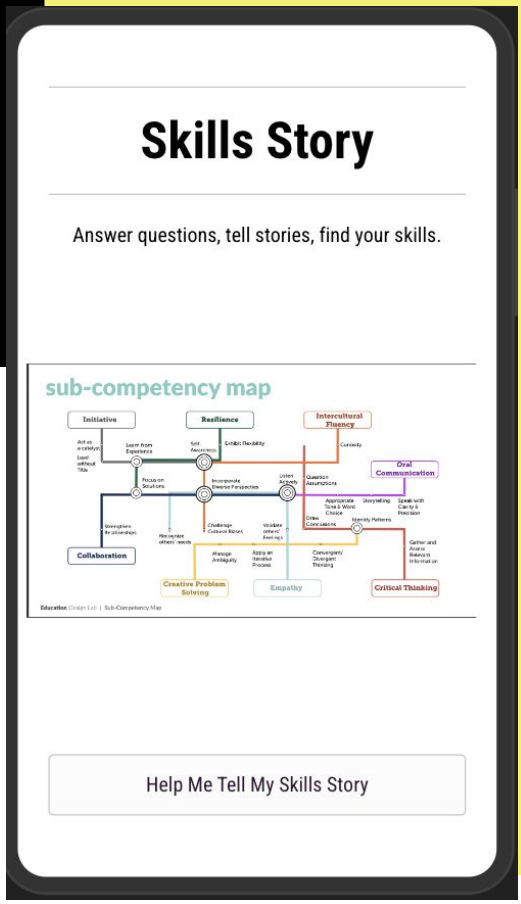
A human compares evidence (the WHAT) to a defined standard and determines if the evidence validates the skill.

**Tech Enabled**

Technology scans, parses, analyzes, or compares evidence (the WHAT) to standards, large data sets, or other info to determine if the evidence validates the skill.

# Prototype 1: Skills Story

An interactive chatbot that helps STARs extract employable skills to validate by telling about their lives and experiences




## Problem to Address

Many STARs aren't sure what their skills are, or which skills they have that are valued by employers. They don't know how to tell their "skills story".

## Overview of Prototype

This prototype operates from a simple hypothesis:

**Giving people the chance to discover their skills first eases the process of identifying and asserting their own skills.**

Skills Story is an interactive chatbot that helps STARs extract employable skills to validate by telling about their lives and experiences. It is designed to:

- Ask a series of simple, targeted questions to learn about a STAR
- Understand input to identify durable skills
- Structure output for STAR so they can validate their skills, linking their self-assertion to evidence

## Skills Validation Method

### Self-Assertion

Identify skills based on an individual's statement of their own skills and proficiency levels, as a means to recommend what skills to validate.

**Examples of this Method:**

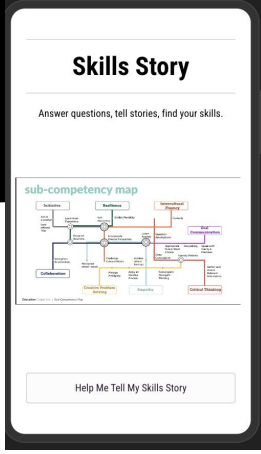
- Resume
- Written narrative about personal performance
- Self-assessments of skills

### Current Dominant Method

Self-Assertion is currently the dominant skills validation method used in hiring, staffing, and promotion, and yet many people have difficulty identifying their own skills.

Beyond our own anecdotal examples, organizational psychologist Tasha Eurich's research found that even though a majority of people believe they are self-aware, only 10 to 15 percent of people they studied actually fit the criteria.

# Skills Story




## Summary of Stakeholder Feedback

### Employer Feedback

- **Positive Reception**: Highly regarded by employers for potential to help candidates articulate skills and experiences effectively.
- **Screening Tool Potential**: May serve as a valuable screening tool to document and validate active job-seeking efforts.
- **Skill Articulation**: Value the prototype's ability to help candidates to translate various life experiences into relevant job skills.
- **Guidance for Job Seekers**: Seen as providing a roadmap for job seekers to understand and present their skills in a meaningful way.
- **Interview Enhancement**: Could enhance interview process by providing structured way for candidates to present skills and experiences.
- **Additional Validation:** Signaled additional validation needed beyond self-assertion: This would be "valuable and necessary" to confirm individual's self-perception.

### STAR Feedback

- **Target Users**: Highly beneficial for early career individuals and those pivoting careers.
- **Accessibility and Inclusivity**: Must reach users with limited tech and economic access.
- **Flexible Response Options**: Incorporate both written and audio responses, with guided prompts.
- **Human-Centered Design**: Emphasize storytelling and human-centric interactions.
- **Role and Skill Connection**: Link validation to specific roles and industries to enhance relevance.
- **Credibility**: Include expertise levels in skill validation to ensure the credibility of badges.
- **Chatbot Use**: Offer a balanced approach with both chatbot assistance and human support.

### Career Counselor Feedback

- **Efficiency for Career Counselors:** Questioning process simulates process used by career counselors to help people find a path through available services. Tool may decrease onramp time and make in person counseling more effective.

## Next Steps

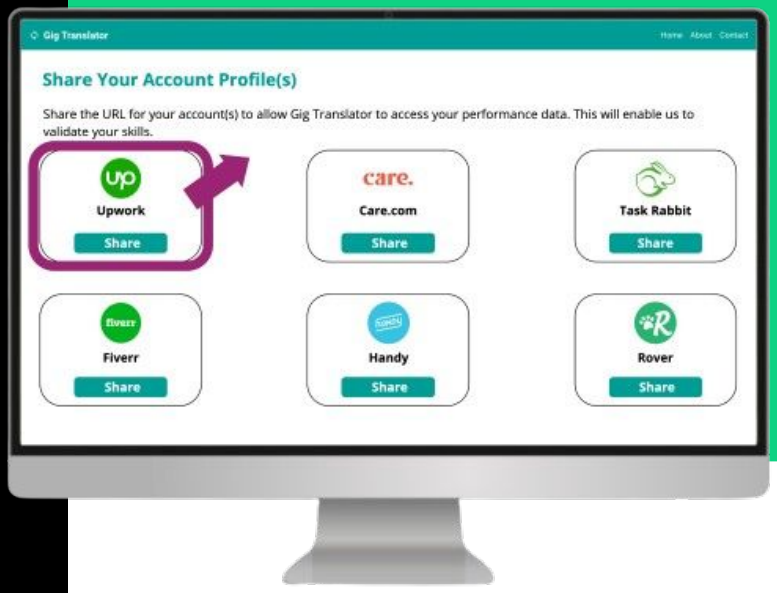
Given these findings, we believe Skills Story to be a prototype with significant promise. Potential next steps include hiring a contractor to support robust development of the chatbot and adding additional validators to the recommendations.

| NOW | NEXT | FUTURE |
|---|---|---|
| • Working chatbot trained to connect STAR stories with two Lab competencies<br>• Question set for expanding use of the chatbot | • Chatbot development (training tone, questions, semantic matches, etc.)<br>• Linking output to existing XCredit assessments | • Development to increase accuracy, security, utility<br>• Integration of additional validators beyond XCredit assessments |

# Prototype 2: Gig Translator

A tool that accesses and analyzes an individual's gig performance data to identify and validate durable skills.

Gig workers can earn the Lab's digital micro-credentials, which can be used to confidently showcase their skills to potential employers.




## Problem to Address

Many STARs have gig economy experience, accumulating valuable performance data from clients. However, they struggle to leverage this experience effectively to identify and showcase their skills to potential employers.

## Consider the Statistics

- 36% of Americans engage in contract or freelance work (McKinsey)
- 16% of Americans earn money specifically through a "gig platform" (Pew Research)
- Workers who are under 30, Hispanic, and with lower incomes, are most represented in the gig economy. Moreover, a majority of gig platform workers rely on this income for basic needs. (Pew)

## Skills Validation Method
## Experience Translation

Validate skills based on documentation acquired through lived experiences and identities outside of the traditional classroom or workplace.

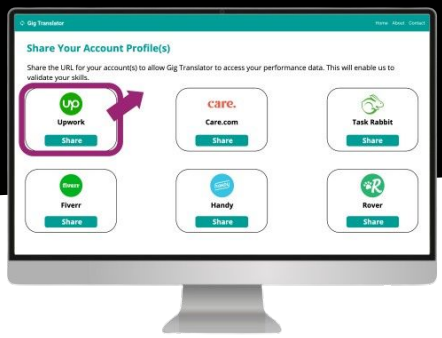
**This may include (but is not limited to) documentation of skills gained by:**

- Parents
- Veterans
- Gig workers
- Influencers
- Caretakers

## Sample Data Points found in Gig Profiles:

- *# of gigs*
- *star ratings*
- *reliability rating*
- *client reviews*
- *other in-app achievements*

# Gig Translator




## Summary of Stakeholder Feedback

### Employer Feedback

- **Strong Interest in Prototype:** Excited about potential of "Gig Translator"; See it as a valuable tool for integrating and validating gig work experience.
- **Challenges in Highlighting Gig Work:** Candidates often underreport gig work due to embarrassment or perceived irrelevance, despite it demonstrating valuable skills and motivation.
- **Technical and Legal Feasibility:** Significant concerns regarding the technical feasibility of data transfer, willingness of gig platforms to share data, and legal implications of such transfers.
- **Need for Secure Data Validation:** Ensuring integrity and security of transferred data is paramount for employers to trust and utilize this information in their hiring and evaluation processes.

### STAR Feedback

- **High Interest and Concept Clarity**: STARs see the "Gig Translator" as a valuable tool and quickly grasped its concept.
- **Importance of Data Security**: Ensuring data security and handling personal information carefully is critical.
- **Integration with Professional Platforms**: Linking the prototype's data to platforms like LinkedIn would enhance its appeal.
- **Support for Non-platform Work**: Prototype should accommodate gig work done outside formal platforms, such as through word of mouth or community involvement.
- **Emphasis on Positive Validation**: Ability to receive and showcase positive client feedback and skill validations is a key motivator.
- **Efficient and Accurate Process**: A seamless, efficient process with accurate data output is essential for user adoption.

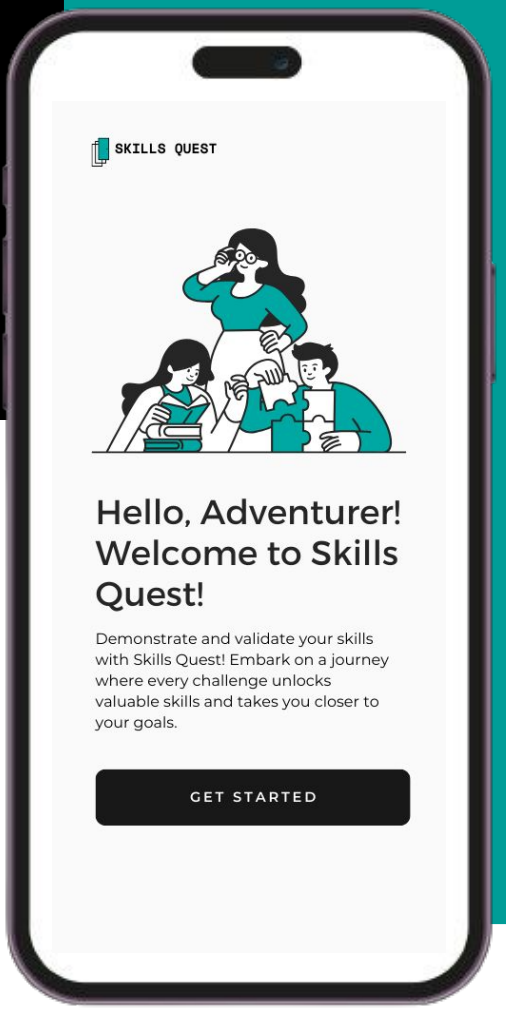
## Next Steps

Given these findings, we believe Gig Translator to be a prototype with significant promise.

| NOW | NEXT | FUTURE |
|---|---|---|
| • Using custom Web Scraper to access publicly available gig data<br>• Using generic AI (NLP) Skills Mapping Tool | • Enable integration with single gig app (i.e Upwork)<br>• Develop custom AI (NLP) Skills Mapping Tool | • Enable multi-app integration<br>• Refine custom AI (NLP) Skills Mapping Tool |

# Prototype 3: Skills Quest

An app that leverages gamification to support STARs in demonstrating their skills by engaging in workplace challenges in a group setting




## Problem to Address

Many STARs don't have documentation or evidence of their skills and need a way to demonstrate their skills in a manner recognized and valued by employers.

**Traditional Supervised and Few-Shot Large Language Models will evaluate evidence fragments.**

- *"Can you repeat that, please?"* is an evidence fragment for the skill "Asking Clarifying Questions".
- Scores derived from AI will be correlated with human scores for validation.

## Skills Validation Method

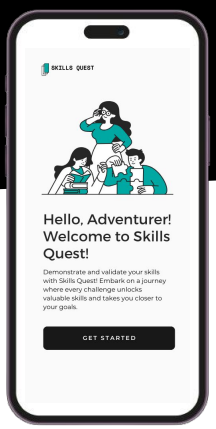
### Skills Demonstration

Validate skills based on an individual's demonstration of a skill, performed for the purpose of providing evidence or showcasing proficiency.

**This may include (but is not limited to):**

- A live performance
- A video recording of a live performance
- A work product created as a demonstration
- A hiring task

# Skills Quest




## Summary of Stakeholder Feedback

### Employer Feedback

- **Accessibility Concerns**: Need for coordination among job seekers conducting group activity is significant barrier.
- **Skepticism About Gaming:** Employers may be more skeptical about gaming as method for skills validation. Literature reviews of Game Based Assessment research identifies mixed results in terms of outcomes; traditional approaches to assessment offer more tangible evidence of performance prediction.
- **Need for Trusted Environments**: Trusted environments like hackathons or school settings where participants know each other are seen as more valid contexts for skills demonstration.
- **Individual Job Search Nature**: Competitive and individual nature of job searching presents challenges for a collaborative gaming approach, as job seekers may not want to share their efforts openly.
- **Clear Artifact Requirements**: Employers need clear, understandable artifacts (badges, bingo cards) that effectively communicate and validate the skills demonstrated through the game.

### STAR Feedback

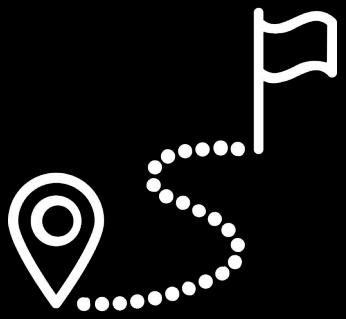
- **Balancing Effort and Engagement**: Prototype should minimize additional effort for users while maximizing engagement through fun and interactive scenarios.
- **Flexibility in Participation**: Offering both individual and group play options can cater to different preferences
- **Scenario Relevance**: Scenarios should be relevant to both current and future roles to effectively showcase participants' skills to potential employers.
- **Inclusivity and Accessibility**: The prototype must be inclusive of introverts and those with neurodivergence, providing options to play alone or at a beginner level.
- **Integration with Real-World Applications**: The prototype should incorporate real-world examples of durable skills in action to make the experience more relatable and valuable.
- **Positive Reinforcement**: Including quotes and positive reflections in the mockup can help users articulate their skills in interviews, while mechanisms to handle negative or inappropriate reflections should be in place.
- **Incentives and Rewards**: Ensuring that users always receive something in return for their participation will encourage continued engagement.

## Next Steps

Given these findings, we believe the Skills Quest concept needs additional testing and iteration in its current form before it would be ready to progress to the next stage of development.

| SAMPLE QUEST | EVALUATOR'S GUIDE | TESTING WITH STARS | ENGAGING EMPLOYERS |
|---|---|---|---|
| Develop sample quest set within a workplace scenario. | Create guide for expert evaluators to measure performance accurately and consistently. | Conduct trials of sample quest with STARs to gather feedback on effectiveness and UX.. | Test sample quest with employers to assess willingness to accept method for validation. |

# Our first year of Skills Validation Network may have come to a close, but the quest continues!



## If you believe:

- Diverse experience requires diverse opportunities to demonstrate the skills gained through that experience
- An inclusive approach to skill validation is needed to address systemic barriers and ensure that everyone, regardless of their background, has the chance to access meaningful career opportunities

## Consider joining us!

**Get more information or join the Skills Validation Network!**

*Skills Validation Network members at Digital Credentials Summit, March 2024.*

## WHAT'S NEXT FOR THE SVN?

The next iteration of Skills Validation Network - **SVN 2.0** -will offer multiple tiers of engagement.

- ✓ Just want resources and updates?
- ✓ How about events, shared learning, and dialogue?
- ✓ Want to contribute to the next wave of innovation through co-design?

We've got you covered! Just **scan the QR code above** for more information.

## Acknowledgements

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The research included in this report was made possible through funding by Walmart. The findings, conclusions and recommendations presented in this report are those of Education Design Lab alone, and do not necessarily reflect the opinions of Walmart.

## About Philanthropy at Walmart

Walmart.org represents the philanthropic efforts of Walmart and the Walmart Foundation. By focusing where the business has unique strengths, Walmart.org works to tackle key social and environmental issues and collaborate with others to spark long-lasting systemic change. Walmart has stores in 19 countries, employs more than 2.1 million associates and does business with thousands of suppliers who, in turn, employ millions of people. Walmart.org is helping people live better by supporting programs to accelerate upward job mobility for frontline workers, advance equity, address hunger, build inclusive economic opportunity for people in supply chains, protect and restore nature, reduce waste and emissions and build strong communities where Walmart operates. To learn more, visit www.walmart.org or connect on Twitter @Walmartorg.

## Contributors

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# About Education Design Lab

Education Design Lab ("The Lab") works as a boundary-spanning intermediary in the space between education providers and the workforce, bringing deep expertise in human-centered design, skills-based solutions, and emerging technology. The Lab designs, tests, and scales new models, products, and tools with and for New Majority Learners that address systemic and environmental barriers to success and help to prepare learners, educators, and employers for the emerging digital skills economy. The Lab's philosophy is to co-design "with" opportunity seekers to unpack the perspectives, lived experiences, motivations, and unique needs to inform solution design. The Lab engages multiple stakeholder perspectives in its design processes - including opportunity seekers, education providers, employers, industry associations, standards bodies, technology vendors, and nonprofit organizations to design and test solutions that help education move at the speed of business. These stakeholders are engaged in a skills movement at the margins; however, ultimately, forward progress in the skills ecosystem will require traversing the boundaries and establishing both internal and external data flow to express skills and achievements.

# About XCredit

XCredit ("experience-credit") provides opportunity seekers with an interoperable ecosystem of tools for experience-based skills validation and discoverability. Leveraging the Lab's durable skills competency framework, XCredit allows (l)earners to turn their intangible or invisible skills, gained informally through work and life experience, into validated tangible credentials that are visible to employers seeking talent. Using XCredit, (l)earners will verify and credential existing skills utilizing a variety of techniques. This will enable them to signal skills they have gained through experience to employers, who will search for talent with desired skill sets. By the end of their experience, (l)earners will be able to apply their validated skill sets to matching job opportunities.