CASE STUDY #3

WELLSPRING INITIATIVE PHASE II

BRIDGING THE GAP

SKILLS ON THE HORIZON: SCALING THE COMMUNICATION OF SKILLS

PROJECT REPORT

Wellspring is a multi-year initiative of the 1EdTech Foundation and IMS Global Learning Consortium aiming to accelerate the adoption of an education-to-work ecosystem based on open technology standards. Wellspring envisions an environment where educators and employers can collaborate on education curricula focused on skills, learners control their skills-based achievements through secure and verifiable digital credentials, and employers can find highly qualified talent based on their verifiable credentials. The initiative establishes proof points through research, practice, and demonstration as a roadmap for talent ecosystem stakeholders to achieve digital transformation based upon proven open standards. See the Wellspring Initiative for more information.

This case study shares the practical experiences of participating teams of educators and employers of the Wellspring Phase II Project in relation to creating a competency-based structure to respond to the skills-based economy. The foundational work and deliverables accomplished during the project duration provide key insights regarding the existing challenges to the widespread adoption of a skills strategy.

SKILLS CONDUITS, CONNECTORS, AND CONTEXT FOR SUCCESS

Competencies and skills are not synonymous terms. Competencies are related to knowledge, skills, and abilities. They, therefore, are a more comprehensive concept than skills, though the term skills is being used in the mainstream lexicon to encompass the same components as competencies.

The emergent skills-based ecosystem and resultant skills-based hiring practices are executions of this broader thinking and show a tangible, boundary-spanning effort to scale skills as an agent of increased opportunity for jobs and the fostering of a rich and diverse talent pipeline.

Elevating the role of skills does not eliminate the need or desire for degrees; rather, using skills as the unit of expression to describe what an individual knows and can do, within credentials and independent of credentials, provides additional details to signal relevance, meaning, and alignment to work opportunities. Validated and verified skills are a powerful communicator of what an individual knows and can do.

This extends beyond the utilization of a degree or credential as a proxy for what someone "should" be able to do with regard to technical and durable, transferable 21st-century skills. Employer dissatisfaction with new hire performance and racial, ethnic, and economic inequity in those with and without degrees are drivers for the value of skills as a signal for specific jobs.

There are 76% of Black Americans without degrees that are potential hires. New populations will need to be enticed to expand and enrich talent pipelines, and 75% of job listings that currently require a bachelor's degree will need to be altered. The context of work has shifted as a result of several variables, including but not limited to: the impact of technological advancements such as artificial intelligence and autonomous systems; pandemic-induced market shifts, remote work routines, and career attitudes and; the need to reskill and upskill over the longevity of an employee's work life.

Individuals with documentation of validated and verified skills are empowered with a currency in this dynamically changing skills marketplace, facilitating a more seamless earn-learn continuum and decreasing time to leverage these skills to reduce unemployment and underemployment.

Challenges to Scale

The Wellspring participants, upon completion of their academic credential and job role competency frameworks, collectively shared concerns about the time, effort, and overwhelming nature of the tasks ahead to move beyond the targeted approach utilized as a part of Wellspring. Organizations of all types, such as education providers, employers, technology vendors, and non-profits, are navigating the development and implementation of scalable strategies and processes that support skills-based systems. Getting started with skills-focused efforts can seem daunting, expensive, and require significant institutional adaptations to culture, practices, processes, and systems. Technology is inherently essential to the success of these efforts, but initial steps toward a skills strategy require human intervention.

Making the "learner-earner" skills visible begins with the dissection and the reassembly of existing course structures and program learning outcomes into competency frameworks that reflect the demonstrable skills gained in academic credentials. Unfortunately, as expressed by Wellspring partner institutions, this exercise is exceedingly time-intensive, detailed, and complicated. The introduction of multiple partner perspectives, such as employers and industry associations, further exacerbates the required time and effort, yet key to the process and outcomes; thereby limiting the ability to replicate and scale.

Bridging academic credentials and workplace roles is critical to tap into the potential value of skills.

Bridging academic credentials and workplace roles is critical to tap into the potential value of skills. Industry associations or intermediary organizations can often act as this bridge by providing multi-institutional membership, occupation of job role standards, and broader viewpoints for education and workforce to build upon. In some cases, beyond individual employer job descriptions there are no industry standards in place to utilize as a benchmark to the broader development of competency frameworks.

A rich collaboration between multiple coordinating providers and standards bodies.

Wellspring team Community Connections Career Partnership Opportunity (C3PO) provided an example of a rich collaboration between multiple coordinating providers and standards bodies, whereas the University of North Texas' data analytics certificate is indicative of a field that is emergent and not associated with any national standard to build upon for uniformity of job roles skills and functions. In fact, a participating employer suggested that the Wellspring competency framework development and validation process, could be instrumental in establishing broader industry standards for the data analytics field.

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While there have been initiatives and stalwart efforts to establish learning-earning and workforce ecosystems to support the skills-based economy, there is much to be done to build conduits between the academic and workplace, including vocabulary, opportunities for dialogue about the role of skills, and open interoperable, data systems for facilitating skills data. Participating Wellspring teams diligently established partnerships that represented education providers, employers, and industry; however, identifying the "right" members with awareness and commitment to the building competency frameworks was not easy.

Maryville University had two strong workforce partners in Rung for Women and Kelley Companies that "spoke" the language of skills and perceived their work with Maryville University as essential to cultivating a robust and diverse pipeline in customer service and construction project accounting. Similarly, the University of Arkansas Pine at Bluff and CON-Real traversed the skills landscape together with both parties recounting the significant value of the partnership and the empowerment of learner-earners with a meaningful certification.

Perhaps the most pressing issue for education and employers alike is the need for technology systems to address the issues noted above. Reducing the human manual process of establishing competency statements from existing materials such as syllabi, course catalogs, program learning outcomes, job descriptions, and job analysis will still require review. Still, through automated technologies, this time can be reduced significantly. Several tools on the market advertise this ability but have not been integrated into the existing technology system architecture.

In addition, the need to establish, maintain, and promote open standards to reduce siloed skills data is critical. Many technology standards organizations support these efforts, such as IMS Global Learning Consortium, Credential Engine, and Open Skills Network. But institutions are struggling to understand how to capitalize on the efforts of these groups, how to maneuver existing technology systems to incorporate these best practices and reduce costs to benefit the true owner of achieved skills, the learner-earner.

For instance, College Unbound has significantly transformed academic structures to best align to their unique learner audience and swiftly respond to business partner needs; however, spring boarding into the required technology infrastructure to support these accomplishments will take time and financial resources. Organizational size, technological maturity, and industry are three elements that contribute to whether mainstream organizations will be able to pivot and adopt a skills-targeted approach.

Advancing the Skills Movement: Recommendations for the Field

The Wellspring project provides insights that can assist in thinking about the conditions that must emerge for the critical work underway to be leveraged more broadly and scaled across organizations. Below are some suggested recommendations that the field can address to intentionally take action to minimize barriers.

- Technology solutions, for not only parsing but also curating competency statements from academic/job/industry materials, are needed to diminish the time-intensive and complicated work of crafting competency frameworks. Specifically:

  Academic materials - syllabi, program and accreditation documentation, course catalogs, and curricula

  Job materials - job descriptions, performance evaluation templates, job postings, handbooks

  Industry materials - licensure standards, nationally published standards, O*Net skills lists, accrediting body guidelines, and membership association frameworks

- A clear, documented visual image and description of the emergent, complex and dynamic skills ecosystem is needed that includes step-by-step suggestions and resources for the various stakeholders to initiate, contribute, and optimize opportunities along the learning-earning journey.

- The technology tools that support this work are extensive, with little clarity as to what systems are needed to perform which functions and in what order they should be implemented. Existing systems such as Student Information Systems, Enterprise Resource Planning Systems, Human Resource Information Systems, and Learning Management Systems all have a role in the documentation and communication of skills, but solutions for badge issuing (digital micro-credentials) and verified credentials, establishing comprehensive learner records or learner employment records, skills cataloging, and learner wallets have not yet been seamlessly integrated these systems. Understanding the optimum technology stack, regardless of a specific vendor, becomes essential for those attempting to make skills visible, accessible, and transferable.

- Digital learner wallets are a way of collecting, storing, and distributing personal information about learning, experiences, and work that the individual (learner) wishes to share. Integral to this is the need for control by both the issuer (education or training provider) to deploy and revoke credentials and the learner to receive and grant access to others. Ultimately, trust and verification become cornerstones to the learner's wallet. Currently, a number of pilot projects have tested and deployed learner wallets to begin this work in both proprietary and open technologies; however, until the learner wallet becomes ubiquitous to all, the ability to optimize skills for equitable hiring practices is limited.

- There are policy implications that will influence the skills ecosystem moving forward. State, national, regional, institutional, and accreditation policies, laws, and practices must be modified in order to encourage, fund, and elevate the skills dialogue and scaffold a nation toward innovation. Business and academic leaders alike can support efforts through awareness, advocacy, and innovative organizational strategy. These same leaders must also champion efforts to diminish silos with regard to skill frameworks and pertinent data both within and between organizations while maintaining secure, safe, and protected data practices. The cyclical nature of understanding the value of digital credentials, alternative educational opportunities, and validated, verified skills requires proof points from multiple perspectives to truly understand the impact and what works.

- Perhaps one of the biggest hurdles for organizations and the field to overcome is the need for interoperability across the education-work continuum. Information and communication barriers currently exist within all types of industries much less between different types of organizations. The learner-earner, as a consumer and contributor, is indispensable for both education and business entities to maintain economic stability, yet learning over a lifetime and the resulting skills achievements are segmented by digital walls and barriers. Through the following strategies progress can be made toward dismantling the constraints that limit the possibilities of equitable, job seeker opportunity in the skills ecosystem:

    - A targeted, intentional effort by all parties toward interoperability should be adopted as a core design criteria

    - The adoption of open standards by technology vendors (all types of technologies) to allow organizations to share data within and between internal and external systems of their choice

    - The widespread availability of tools for connecting complex data sources, in real-time, to track, align, document, report, and share information about skills must be developed

About 1EdTech Foundation

1EdTech Foundation facilitates cooperative investment catalyzing a connected ecosystem of innovative educational products and digital credentials that together accelerate teaching and learning innovation enabling every individual to achieve without limits.

For more information visit https:// www.1edtech.org.

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About IMS Global Learning Consortium

IMS Global Learning Consortium is a non-profit organization that advances technology to scale and improve educational participation and attainment affordably. IMS members are leading suppliers, higher education institutions, K-12 districts and schools, and government organizations that enable better teaching and learning by collaborating on interoperability and adoption initiatives. IMS sponsors the annual Learning Impact program to recognize the impact of innovative technology on educational access, affordability, and quality while developing the leadership and ideas to help shape the future of educational technology.

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