

WELLSPRING INITIATIVE

COLLABORATING ON COMPETENCY FRAMEWORKS



NOVEMBER 2021

About Wellspring

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.

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Wellspring Initiative

PHASE II FINAL REPORT

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EXECUTIVE SUMMARY

Wellspring Phase II consists of three parallel projects exploring and developing knowledge and practice related to a skills infrastructure of published frameworks and verifiable digital credentials, all based on open standards. This report presents one project's product, deliverable, and findings, which developed and published machine-readable digital form academic and job role competency frameworks authored by partner education providers and employers. The employer and educator frameworks were aligned with each other and with other national and industry professional standards also in machine-readable frameworks. What results is a network of interconnected skill statements and metadata that can be navigated and processed by employment software such as applicant tracking systems (ATS) and machine-learning algorithms in HR and talent technology systems.

The emerging skills-based economy provides context with many academic providers and employers seeking ways to diversify and identify talent based on their skills rather than a degree pedigree or a social network. Achieving a thriving, scalable skills-based ecosystem will require interoperability made possible by open standards.

Wellspring participating teams have contributed significantly to the body of knowledge related to skills framework design and development, as this report hopes to share. They, too, have benefited by participating. The collaborating teams leveraged the project to initiate a skills strategy, map learning outcomes to real-world jobs, create short-term workplace and industry credentials, and establish professional career credentialing pathways in high need, in-demand occupations. Of the eight initial teams, five completed and published 12 competency frameworks and identified additional professional and national industry standards used to align local efforts with broader quality guidelines. Two other teams are near complete at this writing, with additional work still underway. One team exited the project at the end of the third work phase, before the development of the frameworks due to the excessive demands on the schedules of health care partners related to pandemic conditions. As a result of Wellspring Phase II, a total of 21 competency frameworks were added to [CASE Network Labs](#), the free website made available by IMS for CASE standard exploration.

The phases of the project's twelve-month process included: 1) planning, recruitment, and project application, 2) selection and onboarding, 3) competency framework workshops, 4) competency framework development, 5) publishing of the competency frameworks in CASE format, and 6) project documentation and reporting. Resources and materials for each phase and insights realized are provided within this report. In addition, six case studies, representative of the significant findings throughout the Wellspring project, are also presented.

Several important overarching themes emerged to inform practice for initiating skills strategies for organizations based on the team exit interviews and observations. The Wellspring participants broadly used the project as leverage to begin a skills strategy in their organizations. This looked very different in practice across each, but all teams were initiating or continuing the development of a skills infrastructure. Relationships were vital in maintaining team momentum, the quality of the work product, and the representation of different organizational or role perspectives. The T-Profile tool and process, provided by Education Design Lab, was a foundational concept for developing the competency frameworks. Given the very human-engaged, detailed, and time-intensive nature of the work, there were suggestions made to streamline, automate, and improve the logistics of the process. Finally, participants made suggestions for CASE Network Labs' terminology improvements to further enhance the published frameworks' clarity. The next steps for teams and the project as a whole are noted in the final section of this report. As the work concluded, many of the participating organizations are now in the phase of implementing

completed credential programs and, in the case of employers, modifying internal human resource practices. All involved could use additional support on moving toward institutional scale and automation of processes to expand and extend the previous work. The skills economy is upon us! The skills journey described below showcases important practical steps for initiating action in organizations and demonstrates elements of the emergent ecosystem.

Additional Resources

As mentioned, Wellspring Phase II consists of three concurrent projects:

- The development and publishing of machine-readable competency frameworks to identify and align academic learning outcomes and job role competencies—this report.
- Research on employers' readiness and use of skills frameworks and digital credentials in the talent hiring and management process. [Download the Employer Readiness Research Report.](#)
- Development of functioning software prototypes that demonstrate more effective, unbiased hiring and talent development based on skills and verifiable digital credentials. See the demonstration videos at <https://www.imsglobal.org/about/wellspring>.

USING COMPETENCY FRAMEWORKS TO CULTIVATE THE TALENT PIPELINE

With the advent of skills-based hiring, employers and academic institutions are navigating the identification, prioritization, validation, and communication of skills to foster a robust career and continuous learning trajectory.

Skills-based hiring leverages the objective skills required for a particular job role to match new or existing employee talent to job positions instead of using the degree as a proxy for the perceived existing skills associated with that credential.¹ Limiting access to jobs based upon academic pedigree and social networks minimizes diversity in the talent pool in high-demand, meaningful job roles.

Five steps are necessary to begin a skills journey. These initial processes were scaffolded as part of the Wellspring demonstration project. The steps that are provided below are neither simplistic nor linear. These are action items that organizations of all "types" (education provider or employer) can take to begin a skills journey. Some tasks rely heavily on "human" intervention, much like the Wellspring framework development process, technological solutions support others, and the end deliverable will be customized to align with institutional vision and purpose. The use of the CASE standard is an example of the technological facilitation of the process. Of particular import are steps one and two, which were noted in this project's work. Other portions of the Wellspring project respond to step four, with prototypes to support the transmission and sharing of skills data described in step five.

1. **Formulate skill statements.** Break down academic credentials, learning experiences, and job roles into tangible, demonstrable competency/skill statements. List the knowledge, skills, and abilities that express learning outcome expectations or demonstration of skills in work function. These can be broad

¹ DeMark, S., & Kozyrev, J. (2021). [Enabling pathways to opportunity through a skills-based architecture. Journal of Competency-Based Education](#), 6(1).

occupational frameworks created by industry groups, accrediting bodies, and licensing/certification boards or specific to an organization's academic credentials and position descriptions. Where possible, the broader representations of skills can inform the more granular applications in an individual organization. The lack of coordinating bodies within a discipline (e.g., many liberal arts) or the developmental maturity of a field (e.g., data analytics) may limit access to discipline-based standards or skill frameworks. Ideally, with the increased adoption of open standards like CASE for publishing skills frameworks, this will improve over time.

2. **Organize the skills.** Catalog these skills in ways that allow for context, tracking, and reporting. There are multiple ways to do this, but establishing frameworks to organize these skill statements and formats shared within and between organizations is critical. This information and associated skills data become the connective elements to the myriad of existing published frameworks in the skills ecosystem.
3. **Deploy skills in learning, work structures, and advancement processes.** Linking skill statements to learning activities (work-based and those provided by education providers) allows tracking the skills addressed in learning experiences, assessments, and reporting of skills mastered. In addition, within the workplace, this relates to mapping skill lists to job descriptions, performance evaluations, and career progression options for upskilling, reskilling, and outskilling.²
4. **Capture and document skill achievement.** Creating a means of documenting achieved skills requires more detailed information (meta-data) than previously reported on a traditional academic transcript or in work and training record systems. Digital microcredentials are one means of making achieved skills visible. Another way is through comprehensive learning records,³ including information about achieved digital microcredentials, academic achievements such as course completions and grades, demonstrated skills and experiences (i.e., internships, work experiences, service, and engagement). Digital microcredentials using the Open Badges and CLR standards work in tandem and provide the packaging, recording, and distributing skills in a digital, verifiable, validated format.
5. **Transmit and share.** The transfer of accomplished skills directly to the learner, rather than being "owned" and hoarded by education providers and employers, is an *empowerment imperative* in the skills process. While the offering or awarding party maintains and validates the records previously described, the earning individual should have the "rights" to collect, store, share, and promote their achieved skills. They are, after all, inherent to the individual—the earned degree, certification, training, or the mastered skills aren't the property of the organization that provided the opportunity. The documentation of skills extends beyond a CLR—that is curated by individual organizations and flows into some form of a secure, identity-authenticated, digital wallet—to house the standards-based credentials that the learner-earner assembled from across issuing organizations in the work-learn ecosystem. The learner-earner must have self-sovereign identity⁴ and control over the contents of this wallet and be able to determine what, when, and how the information will flow back into the skills ecosystem (i.e., employment or future academic endeavors).

² Gallup & Amazon. The American Upskilling Study: Empowering Workers for the Jobs of Tomorrow.

³ Comprehensive Learner Record (CLR) is an official standard of IMS Global and a new form of verifiable achievements issued to students, including a variety of academic, co-curricular, and skills-based achievements that the institution verifies.

⁴ "Self-sovereignty is frequently associated with the right of individuals to own and control their own identity online and be the final arbiter of who can access and use their data and personal information." Grech, A., Sood, I., & Arino, L. (2021). Blockchain, Self-sovereign Identity and Digital Credentials: Promise Versus Praxis in Education. *Frontiers in Blockchain: Blockchain for Good*.

As the skills ecosystem continues to evolve, organizations require support to begin exploration in the space of taking broad program learning outcomes into specific credential skill statements. Likewise, as the uproar of a lack of quality talent for positions continues to build, the need for employers to hone the required skills within particular job roles becomes intensified. This is the foundational work of the Wellspring Initiative and the provision of a system for contextualizing, cataloging, sharing, and digitizing the designed competency frameworks.

WELLSPRING PHASE II TIMELINE, PROCESS, PARTICIPANTS, AND RESOURCES

Wellspring Phase II extended over a year and was divided into six segments:

1. Planning, recruitment, and application
2. Selection and onboarding
3. Competency framework workshops
4. Competency framework development
5. Digitization of the competency frameworks
6. Project documentation and reporting

The arc of engagement in Figure 1 below details the activities conducted directly with the teams. Additional details links to resources and documentation and noted findings from each of the six segments are further described in the following section.

Arc of the Engagement

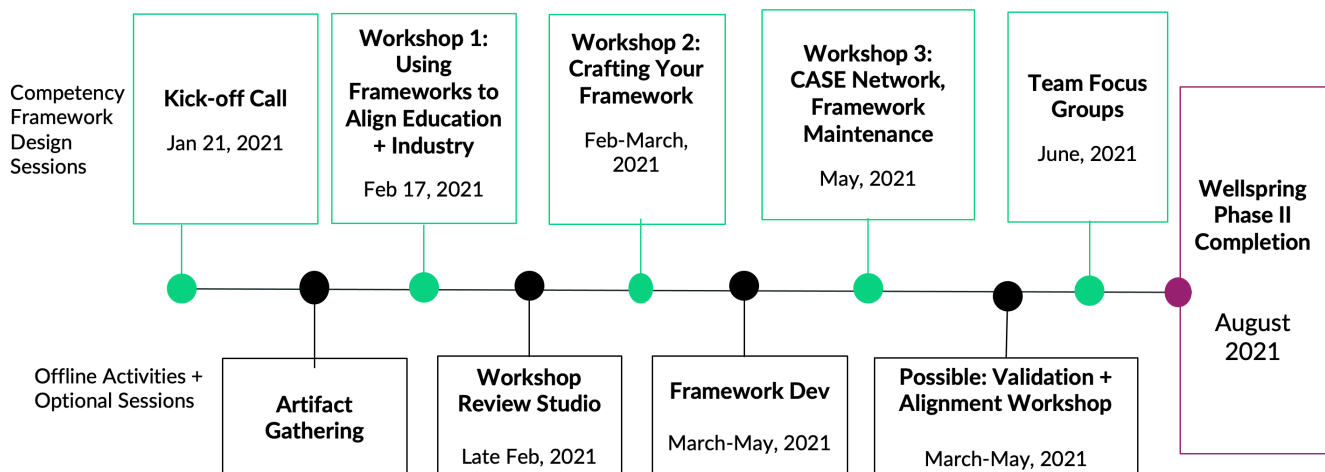


FIGURE 1. WELLSPRING TEAM ARC OF ACTIVITIES

September–November 2020: Planning, Recruitment, and Application

Based upon learnings from Wellspring Phase I, shifts occurred in the recruitment process for Wellspring Phase II to anticipate some of the complexities in identifying strong design teams. Rather than solely focus on a lead higher education partner, outreach was done to include industry partners, higher education institutions, and employers to identify those with an affinity for participation. In addition, the expectations of who should participate at all phases of the project were much more clearly defined.

Over 39 institutions were invited to apply for the Wellspring Phase II Project, 19 were engaged in additional outreach, and ten institutions were interviewed for project fit. Ongoing communication in the form of emails, introductory webinars (exploration webinar hosted on October 26, 2020), and recorded sessions were shared with potential participants.

Recruitment and Applicant Insights

- During follow-up interviews, the participating teams shared that the relationships and team composition were absolutely critical to their success.
- Understanding the value add for all stakeholders was critically important. Institutional capacity and leadership support were also key components to the teams' completion of deliverables.
- Each team's motivations, maturity in the skills strategy process, and structure were distinct and required an individualized approach.
- Thinking beyond the education entity as the primary contact to connect industry associations and businesses in the lead role was useful to the diversity of team perspectives.
- The project was a competency-based education leveraging mechanism that served as the foundation for additional program development and innovative, alternative academic design.

December–January 2020: Selection and Onboarding

While the project had anticipated hosting between four and six teams, due to great interest, eight teams—inclusive of an education institution, employer partner, and in some cases, a third-party standards or membership organization—were brought on. Teams were selected based upon the following criteria:

- Experience with competency-based education
- Experience with digital microcredentials
- Experience with comprehensive learner records
- The targeted learners-earners
- Depth of identified partnerships
- Ability to participate in a comprehensive project
- Institutional leadership support

Table 1 includes a listing of the teams, the organizations represented on the teams and the credentials targeted for the work. [View the Wellspring Phase II Participant Directory.](#)

TABLE 1. WELLSRING II TEAM PARTICIPANTS AND COMPETENCY FRAMEWORK TOPICS

Team	Participating Members	Academic Credential	Job Role	Additional Resources or Frameworks
Community Connections Career Partnership Opportunity (C3PO)	<ul style="list-style-type: none"> ▶ Wichita State University ▶ Sedgwick County Developmental Disability Organization ▶ InterHab ▶ ResCare ▶ Ohio Association for Direct Support Professionals ▶ National Association for Direct Support Professionals 	<ul style="list-style-type: none"> ▶ Direct Support Professional ▶ Certifications ▶ Basic Proficiency Initial Proficiency Advanced Proficiency ▶ 8 Associated Digital Microcredentials 	Direct Support Professional	<p>National Association of Direct Support Professionals (framework)</p> <p>Ohio Association of Direct Support Professionals (curriculum)</p>
University of North Texas/TD Ameritrade	<ul style="list-style-type: none"> ▶ University of North Texas ▶ TD Ameritrade 	Data Analytics Certificate	Data Analyst	NA
College Unbound Little Rhody Cohort	<ul style="list-style-type: none"> ▶ College Unbound ▶ United Way ▶ Providence Community Health Care Centers ▶ Alumni 	Big 10 Learning Outcomes	<ul style="list-style-type: none"> ▶ Switchboard Supervisor ▶ Medical Front Desk Manager 	United Way Worldwide Core Competencies
Team St. Louis	<ul style="list-style-type: none"> ▶ Maryville University ▶ Keeley Companies ▶ Rung For Women 	<ul style="list-style-type: none"> ▶ Certificate in Customer Service ▶ Concentration in Project Accounting (Construction) 	<ul style="list-style-type: none"> ▶ Customer Service Representative ▶ Project Accountant (Construction) 	<ul style="list-style-type: none"> ▶ CPA's Guide to Accounting, Auditing and Tax for Construction Contractors, 2nd Ed ▶ O*NET Standards
University of Arkansas at Pine Bluff/Con-Real CBE Team	<ul style="list-style-type: none"> ▶ University of Arkansas at Pine Bluff ▶ Con-Real, LP 	Construction Engineering Technician Certificate	Project Engineer	NA
EPCE Collaborative*	<ul style="list-style-type: none"> ▶ Energy Providers Coalition for Education (EPCE) ▶ Bismarck State College ▶ XCel Energy 	Electric Power Program	<p>Energy</p> <ul style="list-style-type: none"> ▶ SubStation ▶ Lineman 	NA

Cape Cod Navigators*	<ul style="list-style-type: none"> ▶ Cape Cod Community College ▶ Outer Cape Health Services ▶ Massachusetts Association of Community Health 	Community Health Worker Certificate	Community Health Worker	NA
Cape Cod Green Wave*	<ul style="list-style-type: none"> ▶ Cape Cod Community College ▶ Cape Cod Mosquito Control ▶ Association of Massachusetts Wetland Scientists 	Environmental Technology	Mosquito Field Technician	NA

*The light gray shading denotes Wellspring teams that exited the project or remain in process with full deliverables at the time of this report.

A project kickoff virtual session was hosted on January 19, 2021, and recorded for those unable to attend. The majority of the teams were represented. The session agenda and [slide deck](#) provided an overview of the topics covered, and additional individual team sessions were held to respond to questions and prepare for the anticipated competency framework training workshop. As part of this work, teams were asked about their project expectations, which are captured on these boards. [Board 1](#) | [Board 2](#) In addition, the teams were assigned to collect resources for the workshop session scheduled for three weeks following the kickoff meeting. Job postings, position descriptions, performance evaluations, organizational value statements, course syllabi, and learning outcomes, and other materials were requested to be gathered and placed in a shared Google folder for team access.

Selection and Onboarding Insights

- The teams all felt as if the right mix of participants was included.
- It was suggested that engagement of the registrar in the process could be valuable.
- One employer, TD Ameritrade, had been hopeful that the process would have involved more than one employer so that the developed competency frameworks would be industry-based, which is lacking in the data analytics field.

February–March 2021: Developing Competency Frameworks Workshop Webinars

All about Competency Frameworks, T-Profile Sessions, and Modeling Development

Wellspring Phase I included a full-day face-to-face workshop for team level setting, learning about how to create competency frameworks, and actionable work time with expert support. In contrast, due to program design and the global pandemic, the "workshop" session had to be redesigned to accommodate a virtual delivery. Aligned to best practices in distance learning, the workshop was broken into two sessions formatted to support the "type" of content that was to be covered. All resources utilized in the sessions were made available to the participants in a shared Google drive folder, serving as a workspace for the teams.

WORKSHOP 1 – FINDING COMMON GROUP: USING FRAMEWORKS TO ALIGN EDUCATION AND INDUSTRY

What and Why of Frameworks, Framework Types, Job/Program Analysis, and T-Profile

This session included all Wellspring teams, and there were representatives from all but the University of North Texas. The session lasted three hours and included hands-on, engaging activities. There was a significant national weather disruption that impeded participation for some, and as a result, additional "make-up" sessions were scheduled to accommodate the unique needs of each group. C3PO, University of Arkansas Pine Bluff, and the University of North Texas had team follow-up sessions to support their customized needs.

The materials utilized as a part of the session were:

[Agenda](#) | [Deck](#) | [Workbook](#)

[Virtual T-Profile](#) | [T-Profile Slide for Moderators](#)

The first workshop provided the foundational knowledge for the development of the frameworks. Background on how and why competency frameworks are important, the existing frameworks that they might build upon, and the components of a strong competency list were shared with participants.

A "T-Profile" session, an Education Design Lab tool and process, was facilitated as part of the workshop. Participants were asked to use the resources that were gathered in their homework to analyze: 1) The highest priority 21st-century skills in a particular job role or academic credential, including the rank order of the sub-competencies, and 2) identify the technical skills, certifications, and requirements associated with the job role/academic credential. The session utilizes a virtual template that is individually completed ([virtual T-Profile](#)) by each participating member. This information then serves as the base for developing the competency statements that will comprise the competency framework.

Figure 2 provides an example of the C3PO team compiled T-Profiles for the Direct Support Professional Role. This process can determine commonalities and differences in rater perceptions across academic, employer, and support agencies. The core priority competencies included in the framework, job role, and program design.

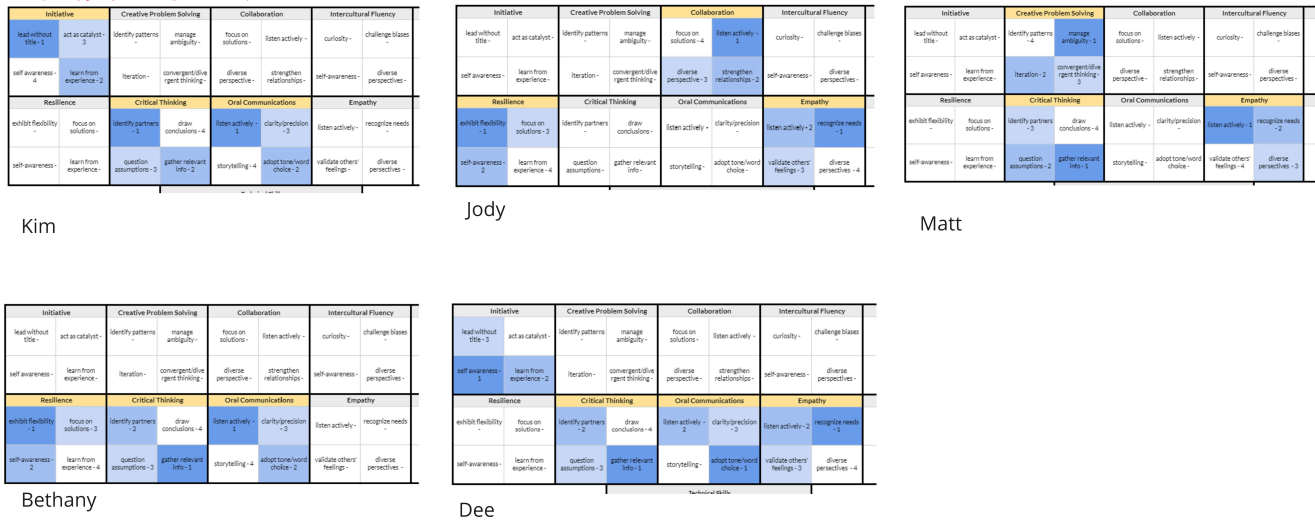


FIGURE 2. T-PROFILE ANALYSIS EXAMPLE OF 21ST CENTURY SKILL PRIORITY TRENDS ACROSS MULTIPLE PERSPECTIVES

In addition to the visual compilation, the technical skills and certifications noted by the participating team members were combined into a document for the team to find themes and trends. [View the T-Profile Technical Skills and Certifications Team Compilations.](#)

WORKSHOP 2 – T-PROFILE CONTINUED, BEGINNING TO BUILD YOUR FRAMEWORK, ALIGNING FRAMEWORKS, AND VALIDATING FRAMEWORKS

The second workshop was scheduled individually with each team and designed uniquely to meet the needs of that team. The following activities were included in this session:

- Persona empathy mapping
- Completion and review of the previous T-Profile exercise
- Demonstration of how competency statements could be built
- Beginning assembly of the competency framework using the competency framework template
- An overview of the validation process

- An overview of the framework alignment process
- A brief overview of CASE Network Labs

Materials that were utilized in this session were:

[Presentation Deck](#) | [Workbook](#) | [Competency Framework Template UNT Example](#)

[Persona Mapping Example](#)

All eight teams participated in these individualized sessions and left Workshop 2 with examples to leverage as they began the construction of their frameworks. Some had more to build from than others, and a number of follow-up sessions were scheduled to provide additional support in the design process.

In addition, periodic emails and calls were held to answer questions, provide support, and guide the teams towards a final deliverable.

Cape Cod Navigators, who were focused on building frameworks around the Community Health Professional Role, exited the project due to local conditions. The employer partner, Outer Cape Health Care, was taxed by a lack of internal capacity to continue due to COVID issues. Cape Cod Community College attempted to shoulder the responsibility of development, but without the availability of the employer partner, drafting the framework for the job role was not possible. Unfortunately, this great and productive team fell victim to the stressors caused by the global pandemic; however, they do hope to continue the work to build this program as this remains a high-need job role for the region.

The Role of 21st Century Skills in Competency Framework Development and the T-Profile

Education Design Lab's (the Lab) [21st Century Skills Competency Framework](#) was integrated into the process of developing the broader competency frameworks to ensure that both technical and 21st-century skills were incorporated into the deliverables. The 21st-century skills competency framework was co-designed with 20 colleges and 60 employers to address the sought-after in-demand skills identified as lacking by employers in entry-level positions. Eight associated digital microcredentials support the delivery, assessment, and digital verification of these coveted "soft skills."

- | | |
|-----------------------------|--------------------------|
| 1. Oral communication | 5. Resilience |
| 2. Critical thinking | 6. Empathy |
| 3. Collaboration | 7. Intercultural fluency |
| 4. Creative problem solving | 8. Initiative |

Identifying the highest priority 21st-century skills in any job role becomes a key data point for education in determining the content to include in the curriculum or competency frameworks. The Lab utilized the "[T-Profile](#)" [tool](#) and process with Wellspring teams to surface the most important competencies, sub-competencies, technical skills, credentials, and certifications.

Developing Competency Frameworks Workshop Webinars Phase Insights

- In the case where a team was not present in its entirety for the workshop sessions, it was a detriment to the progress and coordination.
- All teams commented in the final interviews that the T-Profile process was exceedingly helpful and important in their work. One team utilized the tool with an industry association (InterHab) to add different voices to identify the priority skills aligned to the direct support professional job role.
- The workshop format (two virtual sessions spread over time with limited “head down” work time) reduced team momentum. Several teams suggested that a face-to-face workshop with time for teamwork would have helped focus attention rather than juggle the development of competency frameworks in the usual workday. They also expressed that the time between sessions—due to the scheduling of groups—forced the need for a lot of repetition because of learning loss between sessions.

April–June 2021: Competency Framework Development, Support, Alignment, and Validation

As each team concluded their final individualized workshop, they moved into the project's framework development phase. Virtual access to the resources, templates, and support materials allowed teams to move at their own pace and within the governance structure aligned to each team's unique design.

Periodic emails, phone calls, and virtual meetings were held to keep teams on task. COVID conditions and member illness impeded some teams and slowed progress. The majority of the teams did complete their frameworks by the end of June to move into the next phase. The Wellspring project team did the final review, and edits were coordinated to improve the final digitized templates. Most revisions were on the topics of framework alignments and clarity on industry-standard citations.

The teams each used a different process for validating their frameworks. In most cases, both additional faculty review was conducted, and employer representative feedback was garnered. In the case of the C3PO team, the InterHab association's larger membership also provided feedback for validation through a team process.

The EPCE Collaborative completed the academic competency framework, but the employer and industry association were broadly impacted by illness, the resulting impacts, and workplace demands caused a significant delay in deliverables. It is anticipated that they will complete the final deliverables but will be beyond the scope of the project.

On the other hand, the Cape Cod Green Wave team experienced significant leadership and organizational shifts that impeded their continuation in the project. Initiating their work with a strong and active team, they were wholly vested in the outcomes and the importance of work, but the conditions they were facing made it difficult to remain engaged. In fact, Cape Cod Community College was so excited by what they learned and the tools made available to them that they began a similar process beyond the environmental focus of the Wellspring Initiative to begin work with the Manufacturing industry.

Competency Framework Development Insights

- The development of the frameworks takes significant focused time to craft the competency statements associated with the credential or job role. The teams suggested that having a focused, shared, extended

work time would be more conducive to the process than splitting the activity of weeks or months. The loss of momentum and task memory between sessions was a bit daunting.

- A number of the teams built in additional outreach to broader subject matter experts to help validate and design the framework to limit a myopic focus in the final product. Some included students, alumni, additional providers, and association members. One employer commented that they would have liked to have had different employers on his team to get a broader non-organizational perspective into the development of the framework.
- While the alignment and association process was tedious, most did not express any issues with the task; whereas, the “directionality” data element was very confusing for the team. Greater clarity as to what is meant in the alignment process regarding “directionality” between frameworks for associations and linkages is required.

June–July 2021: Digitizing Frameworks in CASE, CASE Network Participant Workshop, Team Interviews

The IMS Wellspring Program Manager utilized the Google Sheet templates to upload the data in the CASE format to the CASE Network Lab system. There was ongoing communication with each team to garner clarity where needed and iterate the frameworks to the best quality product.

A session was hosted by IMS Global on July 7, 2021, to provide training on the [CASE Network Labs](#) so that the teams and individual organizations would have the knowledge to maintain and update their competency frameworks in the future. This established a structure for sustainability and currency of digital information.

CASE Network Labs Team Training Resources

[Presentation Deck](#)

[CASE Network Labs Wellspring Training PDF](#)

[CASE Network Wellspring User Manual](#)

Each team had an individual interview utilizing a [Wellspring Team Final Interview Protocol](#) to gather both process, outcomes, and future plans. The interviews were conducted via Zoom, using IMS Global’s accounts with transcription abilities.

Interview Sessions

[College Unbound Little Rhody’s Interview](#)

[Team St. Louis Interview 1](#) | [Team St. Louis Interview 2](#)

[UAPB Con-Real CBE Team](#)

[University of North Texas/TD Ameritrade](#)

[C3PO Interview 1](#) |

[C3PO Interview 2](#)

There were 22 competency frameworks designed as deliverables of Wellspring Phase II that are now in [CASE Network Labs](#). Some of these were created by the teams; others were existing discipline-based standards that were imported.

Figures 3-6 provide examples of the project deliverables for the C3PO team but have also been included for easier viewing.

Figure 3 presents the Google sheet that was used to map relationships and explicitly shows the academic credential alignment.

Figure 4 demonstrates one competency framework and the metadata with a particular competency.

Figure 5 illustrates the association between the Wichita State University academic certificates and badges and the Ohio Alliance of Direct Support Professionals.

Figure 6 provides an example of the service provider job role (Sedgwick County Developmental Disability Organization/InterHab) and the association with the academic credential offered by Wichita State University.

Google Sheet Competency Framework Template

	A	B	C	D	E
1	WSU College of Applied Learning	Relationship	Directionality	DSP Basic Competencies / JOB ROLE (Sedgwick)	Labs ENTRIES
2	Explain what a developmental disability is and how it is similar/different from an intellectual disability.	isPartOf	→	Describe the types of developmental disabilities and their most common causes.	7/8/2021
3	Describe the history of services to people with disabilities	exactMatchOf	↔	Discuss history and trends in public care for people with developmental disabilities	7/8/2021
4	Practice using ethics on the frontline	exactMatchOf	↔	Describe the nine areas of the NADSP Code of Ethics and apply them to work situations.	7/8/2021
5	Explain core elements of basic health and safety including the identification of risks to persons served and how to address them.	isPartOf	→	Explain the best practices for medication administration and importance of monitoring possible side effects.	7/8/2021
6	Explain core elements of basic health and safety including the identification of risks to persons served and how to address them.	isPartOf	←	Basic knowledge of abuse, neglect & exploitation	7/8/2021
7	Explain core elements of basic health and safety including the identification of risks to persons served and how to address them.	isPartOf	→	Discuss the importance of management and tracking of health care delivery, health status and health related assessments	7/8/2021
8	Explain core elements of basic health and safety including the identification of risks to persons served and how to address them.	isPartOf	→	Explain the benefits of following a healthy diet	7/8/2021
9	Explain core elements of basic health and safety including the identification of risks to persons served and how to address them.	isPartOf	←	Perform basic first aid	7/8/2021
10	Explain core elements of basic health and safety including the identification of risks to persons served and how to address them.	isPartOf	←	Recusitate clients when necessary	7/8/2021
11	Explain the importance of direct support professionals as teachers.	isPartOf	→	Understand how intellect functions, identify learning styles and apply to working with individuals to support the development of new skills.	7/8/2021
12	Explain the importance of direct support professionals as teachers.	isPartOf	→	Describe the benefits multi-sensory instruction and identify "multiple-intelligences".	7/8/2021
13	Explain the importance of direct support professionals as teachers.	isPartOf	→	Identify methods for helping individuals to express their preferred lifestyle	7/8/2021
14	Explain the importance of direct support professionals as teachers.	isPartOf	→	Describe the success triangle and effective techniques for paid and natural supports.	7/8/2021
15	Develop an individual service plan that supports self-determination	isPartOf	→	Explain the components of an individual service plan and planning process and the role of natural supports.	7/8/2021
16	Develop an individual service plan that supports self-determination	isPartOf	→	Understand the four principles of self-determination and identify obstacles for individual supported.	7/8/2021
17	Provide positive behavioral supports and demonstrate principles of positive intervention culture	isPartOf	→	Describe the functions of behavior for a person with IDD and the purpose of behavior analysis	7/8/2021
18	Provide positive behavioral supports and demonstrate principles of positive intervention culture	isPartOf	→	Understand the importance of data collection and the tools used for that purpose related to positive behavior support planning	7/8/2021
19	Provide positive behavioral supports and demonstrate principles of positive intervention culture	isPartOf	→	Discuss behavior support techniques, the importance of a positive supportive relationship for effective behavior support and	

FIGURE 3. C3PO COMPETENCY FRAMEWORK TEMPLATE, ACADEMIC CREDENTIAL FRAMEWORK ALIGNMENT TO THE JOB ROLE FRAMEWORK

Wichita State University Competency Framework

Item: Explain what a developmental disability is an how it is...

Unique ID (highlighted)

identifier: 3a853d56-cfa4-11eb-8860-0242ac140003

uri: <https://casenetwork.imsglobal.org/uri/3a853d56-cfa4-11eb-8860-0242ac140003>

lastChangeDateTime: 2021-06-17T19:43:02+00:00

abbreviatedStatement: Explain what a developmental disability is an how it is...

fullStatement: Explain what a developmental disability is an how it is similar/different from an intellectual

CItem Type: Competency

CItem Type URI: Competency (1416ea17-a03a-584e-9604-73c4f6a62051)

statusStartDate: 2021-06-17

SHOW JSON

Associations

Origin	Association Type	Destination
Explain what a developmental disability is an how it is...	isPartOf	Destination node
Explain what a developmental disability is an how it is...	exactMatchOf	Destination node
Origin node	exactMatchOf	Explain what a developmental disability is an how it is...

SHOW FRAMEWORK INFO

- ▼ Certificate
 - ▼ Basic
 - ▼ Badge 1
 - Explain what a developmental disability is an how it is...
 - Describe the history of services to people with disabilities
 - Practice using ethics on the frontline
 - Explain core elements of basic health and safety...
 - Explain the importance of direct support professionals...
 - ▼ Badge 2
 - Initial Proficiency
 - Advanced Proficiency
 - Course Names

FIGURE 4. WICHITA STATE UNIVERSITY DIRECT SUPPORT PROFESSIONAL ACADEMIC COMPETENCY FRAMEWORK IN CASE NETWORK LABS WITH THE METADATA OF AN INDIVIDUAL SKILL HIGHLIGHTED

Wichita State University Association with Ohio Alliance for Direct Support Professionals

Direct Support Professional | Wichita State University (Certificate) [Tree View] [Association View] [Verified]

Search...

- ▼ Direct Support Professional | Wichita State University (Certifi...
 - ▼ Certificate
 - ▼ Basic
 - ▼ Badge 1
 - Explain what a developmental disability is an how it i...
 - Describe the history of services to people with disabil...
 - Practice using ethics on the frontline
 - Explain core elements of basic health and safety...
 - Explain the importance of direct support professional...
 - ▼ Badge 2
 - Initial Proficiency
 - Advanced Proficiency
 - Course Names

Overview of Intellectual and Developmental Disabilities This class discusses the causes of five common developmental disabilities as well as their potential physical and intellectual consequences. The class begins with an overview of four general types of developmental disabilities nervous system disabilities, sensory-related disabilities, metabolic disorders, and degenerative disorders) and their most common causes. Next the class reviews five types of developmental disabilities, including intellectual disabilities, erebral palsy, autism spectrum disorders, Down Syndrome, and epilepsy. Finally, the class will instruct students in the basics of Medicaid Waiver Funding for people with developmental disabilities.

Ohio Alliance of Direct Support ...

Is Part Of

Relationship to external framework item (highlighted)

Ohio Alliance of Direct Support Professionals - OADSP | Certificates [Tree View] [Association View] [Verified]

Search...

- ▼ Ohio Alliance of Direct Support Professionals - OADSP | Cer...
 - ▼ Certificate of Initial Proficiency (CIP)
 - ▼ Basic Certificate
 - Overview of Intellectual and Developmental Disabilities
 - History of Services to People with Disabilities
 - Ethics on the Frontline

Overview of Intellectual and Developmental Disabilities

Full Statement:
Overview of Intellectual and Developmental Disabilities
This class discusses the causes of five common developmental disabilities as well as their potential physical and intellectual consequences. The class begins with an overview of four general

FIGURE 5. WICHITA STATE UNIVERSITY, CASE NETWORK LAB ASSOCIATION WITH THE OHIO ALLIANCE DIRECT SUPPORT PROFESSIONALS RELATIONSHIP HIGHLIGHTED

Sedgwick County Developmental Disability Organization + InterHab (Job Role) Association to Wichita State University Academic Credential

The screenshot displays two panels in the CASE Network Lab. The top panel, titled "Sedgwick County Developmental Disability Organization / InterHab Direct Support Professional", shows a search bar, a tree view with a selected item, and a "Verified" status. The bottom panel, titled "Direct Support Professional | Wichita State University (Certificate)", shows a similar interface with a detailed description of the credential. An orange arrow points from the selected item in the top panel's tree view to the corresponding item in the bottom panel's tree view.

Top Panel: Sedgwick County Developmental Disability Organization / InterHab Direct Support Professional

- Tree View: Sedgwick County Developmental Disability Organization / Int...
 - Basic
 - Badge 1
 - Describe the types of developmental disabilities and th...
 - Discuss history and trends in public care for people...
 - Describe the nine areas of the NADSP Code of Ethics a...
 - Explain the best practices for mediation administration...
 - Discuss the importance of management and tracking o...
 - Explain the benefits of following a healthy diet
 - Perform basic first aid
 - Recitate clients when necessary
 - Understand how intellect functions, identify learning...
 - Describe the benefits multi-sensory instruction and...
 - Badge 2
 - Initial Proficiency
 - Advanced Proficiency

Bottom Panel: Direct Support Professional | Wichita State University (Certificate)

- Tree View: Direct Support Professional | Wichita State University (Certifi...
 - Certificate
 - Basic
 - Badge 1
 - Explain what a developmental disability is an how it i...
 - Describe the history of services to people with disabil...
 - Practice using ethics on the frontline
 - Explain core elements of basic health and safety...
 - Explain the importance of direct support professional...
 - Badge 2
 - Initial Proficiency
 - Advanced Proficiency
 - Course Names

Full Statement: Describe the types of developmental disabilities and their most common causes.

Identifier: 5ba0bdd2-cfa7-11eb-b29d-0242ac140003

Type: Competency

Overview of Intellectual and Developmental Disabilities: This class discusses the causes of five common developmental disabilities as well as their potential physical and intellectual consequences. The class begins with an overview of four general types of developmental disabilities: nervous system disabilities, sensory-related disabilities, metabolic disorders, and degenerative disorders) and their most common causes. Next the class reviews five types of developmental disabilities, including intellectual disabilities, cerebral palsy, autism spectrum disorders, Down Syndrome, and epilepsy. Finally, the class will instruct students in the basics of Medicaid Waiver Funding for people with developmental disabilities.

Is Part Of: Individuals who can speak with clarity and precision add value in the 21st century workplace by communicating ideas and information effectively and minimizing unintended confusion, misinformation, and offensiveness.

FIGURE 6. SEDGWICK COUNTY DEVELOPMENTAL DISABILITY ORGANIZATION + INTERHAB (EMPLOYER JOB ROLE) ASSOCIATION IN CASE NETWORK LAB TO THE WICHITA STATE UNIVERSITY DIRECT SUPPORT PROFESSIONAL ACADEMIC CREDENTIALS

Digitizing the Frameworks Insights

- It is recommended that citations be requested for the incorporated “industry” or “standards” competency frameworks as this was important for accurately uploading the frameworks in the CASE system and verifying the content for these 3rd party resources.
- The ability to make the frameworks public and shareable was seen as a positive attribute to the teams. They requested the ability to share widely.
- The majority of the teams were using the frameworks to leverage other institutional priorities, such as the initiation of competency-based education programs, comprehensive learner records, digital micro-credentials, and skill documentation for accreditation and outcomes reporting.

August–September 2021: Project Documentation, Case Studies, and Final Report

The culminating phase of the project was to gather and provide process documentation representative of Wellspring Phase II. The six case studies below represent the significant learnings that can inform the practice of organizations wishing to begin a journey to catalyze skills and competencies. All of the work previously described, the team interviews and current literature informed the content of the case studies.

Case Study Summaries

Microcredentials for Professional Pathways

In response to the national deficiencies in recruiting, training, and retaining individuals as direct support professionals, the **C3PO**⁵ team worked on building an innovative, collaborative, and sustainable model to cultivate a diverse talent pipeline and keep those already in the field. To address this need, a tiered academic program of six digital microcredentials, packaged into three leveled certificates, was developed and planned for deployment with a variety of learners, including traditional-aged students, reskilling adult learners, advancing current direct support professionals, and high school dual enrollment students. Participating employers indicated the intention to hire and advance those with the credentials. Faculty noted that while the program was being integrated into a particular department at Wichita State University, there were many opportunities for other departments to adopt the program. Kansas provider organizations anticipate a targeted statewide approach to the professional structure that was created.

Closing Gaps to Implement Skills-Based Hiring

Wellspring demonstrated tremendous value in both cross and inter-organizational relationships as part of the competency framework development process. This case study highlights the value of identifying and validating skills for career pathways and shares the stories of three teams, **Team St. Louis**,⁶ **UAPB/Con-Real CBE Team**,⁷ and **UNT Data Analytics**,⁸ that exemplified the importance of relationships in forging skills-based learning and hiring practices.

⁵ C3PO included representatives from Wichita State University, Sedgwick County Developmental Disability Organization, InterHab, Inc., ResCare Central Kansas, and the Ohio Alliance of Direct Support Professionals.

⁶ Team St. Louis included Maryville University, Rung for Women, and Keeley Companies.

⁷ UAPB/Con-Real CBE included the University of Arkansas Pine Bluff and Con-Real, LP.

⁸ UNT Data Analytics included University of North Texas and TD Ameritrade.

Competency-Based Education as a Catalyst for Closing Equity and Skills Gaps

The **University of Arkansas at Pine Bluff** (UAPB), a Historically Black University, and **Con-Real, LP**, a large construction company, demonstrated the power of a partnership in designing and developing competency frameworks as a foundation and an initial step toward an institutional competency-based education strategy. The competency frameworks that emerged from the work will serve as a springboard to implementing a skill-validated certificate program with an industry certification that will immediately serve the talent needs of business partners.

Making Skills Visible for Learners and Employers

This case study shares the practical experiences of the participating teams as it relates ways to use competency framework deliverables as a foundational mechanism to communicate the accomplishment of skills in an academic credential to employers seeking talent in a particular job role. Two teams—the **University of North Texas/TD Ameritrade** and **Team St. Louis**—are showcased to demonstrate how different institutions are using competency frameworks to signal to employers that are hiring what a completer will know and be able to do.

Mapping the Liberal Arts to Real World Jobs

College Unbound, with employer partners United Way and Providence Health Care, students, faculty, and alumni, leveraged their Wellspring participation to update and align the liberal arts curriculum to meet real-world workforce and life needs. The competency framework deliverables served as a foundation for modifications to the Big 10, a unique set of demonstrated competencies for graduation, which support workplace professional behaviors and the lived experiences of learners.

Skills on the Horizon: Scaling the Communication of Skills

The initiation of a competency-based structure can serve as a catalyst to respond to the emergent skills-based economy. The foundational work and deliverables of the teams provide key insights regarding the existing challenges to the widespread adoption of a skills strategy. The Wellspring team experiences and recommendations for minimizing barriers and increasing organizational skills momentum are shared in this case study.

KEY FINDINGS

Throughout the twelve-month project, in dozens of interactions with project participants, and a final structured interview concluding the project for each team, a number of lessons were taken away that the 1EdTech Foundation and the Wellspring Initiative sponsors hope will help to inform and assist the community at large and the reader's project in pursuit of a learner-earner skills initiative.

- **Initiation of a skills strategy.** Many of the teams described participation in the Wellspring work as instrumental in the creation of an institutional skill strategy, whether that be through the fostering of competency-based education, expansion of digital micro-credentials, or documentation of accomplished skills through comprehensive learner records.
- **Relationships.** Both cross-organizational and inter-organizational relationships were critical to success. This included members engaged in the Wellspring process and others that were engaged to further the work, particularly in the validation process. These relationships facilitated greater competency framework adoption, employer buy-in, and advocacy for the design of additional competency frameworks. It should also be noted that identifying a team lead that facilitated scheduling and communication and managed the process of designing the competency frameworks was key to success.
- **T-Profile.** The previously described T-Profile tool and process provided a means to unpack the job description/role identifying the skills needed for success, including technical job functions and 21st-century skills. Beyond the specific T-Profile completion, which informed individuals, the analysis by the session facilitator of similarities, trends, and key elements allowed for team-rich dialogue and a means of interpreting alignment between academic and employer roles. All Wellspring teams noted the tremendous value and usefulness of the exercise.
- **Time intensive.** Many of the teams shared in the final interviews that the Wellspring Phase II work, specifically creating the competency framework final products, was extremely time-consuming and required both content and instructional design expertise and a detailed eye. The development process took significant effort to write the individual competency statements, coordinate between the different participating partners, and then align the various frameworks. The manual nature of the process would lend itself well to technology tools that could recommend statements from supportive materials like syllabi or job descriptions, limiting the human time investment of the organizations and the tedious nature of the work.
- **Alterations to the workshop schedule.** Designing competency statements is the type of work that "heads down" time is essential. Given that many teams were meeting in shorter bursts over time, reacquainting themselves with the work after periods of time (usually weeks) then reduced efficiency and necessitated additional project support and facilitation.
- **Framework template/CASE improvement.** The Wellspring teams were provided with a Google sheets template to assist in the design of the competency frameworks. The project aimed to keep the tasks of the teams void of complex technology tools to limit the introduction of an additional barrier to the process. To align with the information that is required as part of the digitization process, teams were asked to identify the "directionality" of the framework relationships in the alignment process—in other words, determining

which framework was the source framework that is the basis of the other linked framework. Conceptually, this was difficult for the teams to understand. The Wellspring team will need to describe this CASE data element better to communicate its meaning and use more effectively.

- **Transformational motivations and future plans.** The Wellspring teams all had different expectations of project participation; however, all hoped to leverage their accomplishments for transformational change.
 - ▶ The University of Arkansas at Pine Bluff (UAPB) was particularly focused on adding a constructional engineering certificate to its existing construction management program. They hoped to use the process to begin a competency-based education academic approach more broadly within the University. The employer partner, Con-Real, LP, was interested in investing in UAPB as alumni and cultivating a talent pipeline for their construction engineering role. Con-Real, LLC indicated that they would hire certificate completers as they now had a strong sense of the skills they would be demonstrating upon graduation.
 - ▶ The University of North Texas (UNT) already had work underway to create digital microcredential pathways for degrees and credentials. This project nurtured the process for the data analytics program and continued UNT's momentum toward this goal. The employer partner, TD Ameritrade, actually underwent a merger during the project with Schwab and was hoping to fill their talent pipeline and establish a set of industry standards for the data analysis, which was outside the project's scope, but a worthy future target. Interestingly, UNT underwent organizational shifts and personnel changes during the project duration, and organizational priorities regarding learner records, digital microcredentials, and competency frameworks may no longer be a priority.
 - ▶ Team St. Louis was coordinated by Maryville University, which had expectations to design competency frameworks for credit and non-credit credentials while further supporting the academic work to capture experiences into a comprehensive learner record. The original plan was to focus on four competency frameworks as part of the project; however, two of the four employer partners required additional time before initiating the design process. With the academic representation from the academic and continuing education perspectives, coupled with highly collaborative and vested employer partners, Maryville University completed two separate occupation frameworks (customer service and construction project accounting). Of particular interest to this team and substantiated in this work was the responsiveness to local workforce needs and creating a skills-focused approach to credential additions. It was reported that many other employer partners (outside of the Wellspring Initiative) were willing to either implement the products of this work and hire completers or create a shared skills approach to collaborative credential creation.
 - ▶ College Unbound uniquely included alumni, who also represented large employers, and students on the project team to provide both employer and learner perspectives. Given the team's intention to update the existing Big 10, which are liberal arts, transferable, professional skills that must be demonstrated through documentation for graduation requirements, the engagement of College Unbound alumni elevated within United Way and Providence Health Care was brilliant. The accreditation alignment and academic governance input into the encompassing Big 10 learning outcomes that all completers will demonstrate also made the inclusion of faculty in the validation process critically important. The work of Wellspring and alignment of the Education Design Lab 21st century skills competency framework has propelled the College Unbound team to explore the implementation of digital microcredentials and comprehensive learner records in the future.

- ▶ The most ambitious motivation came from the C3PO team, as they sought to transform an entire professional pathway for the direct support professional job role. Wichita State University provided the academic vision, flexibility, and innovative spirit to address the statewide need. Local providers, state agencies, and national/regional direct support professional associations contributed workplace insight, legislative advocacy, financial support, curriculum, standards, and a common voice. Exhibiting leadership and primary content expertise, the representative from Sedgwick County Developmental Disability Organization was key to competency framework design, engagement of InterHab Association members in the validation process, and the plan for deployment in alternative settings such as adult learning and dual-enrollment situations. The resulting product of this project responds to a Kansas legislature identified critical talent shortage.

NEXT STEPS FOR WELLSRING TEAMS

Each of the Wellspring teams is at a different stage of maturity in implementing their skills-based strategy. All the teams indicated the project to be productive and effective with plans to implement the designed competency frameworks. They were all also very interested in publicly sharing the final products of their work with the broader profession and access through local web searches.

The Wellspring Teams are to be commended for their engagement, hard work, and resulting products. Even those teams that were redirected due to current events and organizational shifts committed time and resources to this project without direct incentive or financial support. Of common interest to all academic institutions was the need for learner-earners to tie accomplished learning to employment opportunities and the resulting economic mobility for learners and the community that emerges as a result.

As the teams continue on the skills journey, it is suggested that additional support be provided through the following activities:

- Operationalizing the competency frameworks into practice via academic deployment
- Adaptation of hiring practices and modifications to job descriptions
- The digital capture of demonstrated skills via digital microcredentials and comprehensive learner and employment records, and scaling of the development of decentralized, publisher-controlled competency frameworks based on open standards

As 1EdTech Foundation and IMS Global Learning Consortium conceptualize future directions of the Wellspring Initiative, consideration should be given to expansion and springboarding those further along in the skills strategy process to pilot prototypes designed in other Wellspring projects.

Support mechanisms for practical "how-to" application of a skills strategy will be very advantageous for those wishing to engage in the skills economy. IMS open standards are fostering foundational portions of the emergent skills ecosystem by providing a technical data bridge between academia and the workforce.

The Wellspring Initiative's Phase II project to build collaborative skills frameworks successfully met the anticipated core deliverables and served as a catalyst toward skills strategies in participating organizations. This final report represents the shared accomplishments of the project team. Education Design Lab is pleased with the opportunity to contribute to this meaningful work and looks forward to continuing the collaboration with 1EdTech, IMS Global, and the Wellspring network to optimize the ecosystem of skills based on open standards and advance more sound and equitable hiring practices.

Acknowledgments

1EdTech Foundation and IMS Global Learning Consortium recognize the contribution of **Naomi Boyer, Ph.D.**, Senior Director, Skills and Data Ecosystem at Education Design Lab and Wellspring Project Manager, who authored and submitted this report.

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>.

About IMS Global Learning Consortium

IMS Global Learning Consortium is a non-profit partnership of leading educational institutions at all levels, government organizations, and edtech suppliers that enable better digital teaching and learning by collaborating on interoperability and adoption initiatives. Together, we are committed to achieving an open and inclusive education technology ecosystem that powers learner potential. IMS hosts the annual [Learning Impact conference](#) and other engagement opportunities throughout the year to recognize the impact edtech innovation has on access, affordability, and scalability while advancing the leadership and ideas to shape our future. View the interactive IMS Annual Report at msglobal.org/about/annual_report/2020.

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