Wellspring Initiative
Phase II Projects Results

Bridging the Gap - a Better Way to Hire
Wellspring Purpose

The Wellspring Initiative is a multiyear program that seeks to **create an open**, scalable foundation for a **lifelong learning ecosystem** based on verifiable **digital credentials** capturing learning achievements **and skills** to empower individuals to find jobs; and help to transform the education system from one valuing seat-time to a focus on outcomes, competencies and skills.

[imsglobal.org/about/wellspring]
Wellspring Phase II Sponsors & Partners, 2020-21

Sponsored by the 1EdTech Foundation in affiliation with IMS Global

With generous support from the Charles Koch Foundation and Walmart

Key project partners include

Education Design Lab
Wellspring Phase II Participating Institutions

- Bismarck State College
- Cape Cod Community College
- College Unbound
- University of Arkansas at Pine Bluff
- Maryville University
- Wichita State University
- University of North Texas
- IMS Global
- 1EDTECH Foundation
Wellspring Phase II Projects

Collaborating on Competency Frameworks

Research Employer Readiness

Build Demonstration Software

Northeastern University
Center for the Future of Higher Education and Talent Strategy

IMS GLOBAL
1EDTECH Foundation
Vision for a Connected Skills Ecosystem

- **Curriculum and Competency Framework**
- **Industry Competency Framework**
- **Education Provider**
- **Learner-Worker**
- **Employers**
- **Open Skills Network**
- **JEDX Jobs and Employment Data Exchange**

Supports CASE
Wellspring Initiative
Collaborating on Competency Frameworks
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2020-21 Wellspring Participants

*Association of Massachusetts Wetland Scientists
Bismarck State College
Boys & Girls Clubs of Greater St. Louis
*Cape Cod Community College
Cape Cod Mosquito Control
College Unbound
Con-Real, LP
*Energy Providers Coalition for Education
ExecOnline
Integrity Web Consulting
InterHub, Inc.
Keeley Companies
Massachusetts Assoc. of Community Health Workers
Maryville University
Ohio Alliance of Direct Support Professionals
Outer Cape Health Services
Providence Community Health Center
ResCare Central Kansas
Runge for Women
Sedgwick County Developmental Disability Organization
TDAmeritrade
United Way of Rhode Island
University of Arkansas at Pine Bluff
University of North Texas
Wichita State University
Xcel Energy

*Started but did not complete

- Large group kickoff call and orientation (January 21, 2021)
- Large group 3-hour virtual workshop (February)
- 8 virtual workshops for individual cohorts (March-April)
- Develop, align, validate and finish competency frameworks (April-May)
- Publish frameworks in CASE format via IMS labs platform (June-July)
- Interview and assemble key findings across eight cohort teams (Aug-Sept)
- Document key learnings, issues and opportunities for the community in a final report and publish six short case studies for key topics (October-November)
## Collaborating on Competency Frameworks

<table>
<thead>
<tr>
<th>Education Provider</th>
<th>Academic Program</th>
<th>Employer</th>
<th>Job Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bismarck State College</td>
<td>Electric Power Program (Apprenticeship)</td>
<td>Xcel Energy</td>
<td>Substation Helper</td>
</tr>
<tr>
<td>*Cape Cod Community College</td>
<td>Environmental Technology certification</td>
<td>*Association of Massachusetts Wetland Scientists</td>
<td>Environmental Technician</td>
</tr>
<tr>
<td>College Unbound</td>
<td>Institutional Learning Outcomes - Big 10 graduation requirement</td>
<td>United Way Rhode Island</td>
<td>Switchboard Supervisor</td>
</tr>
<tr>
<td></td>
<td>Institutional Learning Outcomes - Big 10 graduation requirement</td>
<td>Providence Community Health Centers</td>
<td>Medical Front Desk Manager</td>
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### Collaborating on Competency Frameworks

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<tr>
<td>Maryville University</td>
<td>Customer Service Representative certificate</td>
<td>Rung for Women</td>
<td>Customer Service Representative</td>
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<tr>
<td></td>
<td>Construction Project Accountant</td>
<td>Keeley Companies</td>
<td>Project Accountant</td>
</tr>
<tr>
<td>U. of Arkansas Pine Bluff</td>
<td>Construction Engineer Technician Certificate</td>
<td>Con-Real</td>
<td>Entry Level Project Engineer</td>
</tr>
<tr>
<td>University of North Texas</td>
<td>Data Analytics certificate</td>
<td>TD Ameritrade</td>
<td>Data Analyst</td>
</tr>
<tr>
<td>Wichita State University</td>
<td>Direct Support Professional - 8 micro-credentials</td>
<td>Sedgwick County Devel Disability Org/InterHab</td>
<td>Direct Support Professional (Basic Entry Level)</td>
</tr>
</tbody>
</table>
Highlighting Selected Frameworks

**Project Accountant | Maryville University**

- Express an understanding of the concepts, processes, and...
- Appreciate the breadth and responsibility of the...
- Use decision modeling skills with appropriate technology...
- Professionally communicate financial information...
  - Apply teamwork, communication, technology, and research...
  - Complete tax return forms for IRS reporting and prepare...
  - Perform tax research and analyze tax options...
  - Apply auditing procedures and tests to actual scenarios...
- Demonstrate the desire and ability to follow emerging...
- Safety
- Cost Estimation
- Project Management
- Contracts
  - Understand principles of construction contracts.
  - Be able to analyze construction contracts and projects.
- Understand contract law.
- Have basic negotiations skills.
- Understand ethics in and of contracts.
Framework Collaboration Case Studies

Click on images to open case study or report.
Framework Collaboration Case Studies

Mapping the Liberal Arts to Real World Jobs

- College Unbound and employer partners from Providence Community Health Center (PCHC) and United Way of Rhode Island

- Updating a liberal arts curriculum to meet the needs of diverse learners and align to the requests of employer partners

- Competency framework deliverables will inform the “College Big 10,” a unique set of competencies demonstrated for graduation and instrumental to learner flourishing and workplace professional behaviors.
Microcredentials for Professional Pathways

- Community Connections Career Partnership Opportunity (C3PO) team: Wichita State University, Sedgwick County Developmental Disability Organization, InterHab, Inc. ResCare Central Kansas, and the Ohio Alliance of Direct Support Professionals

- Team incorporated broad employer and educational representation to inform, design, validate, and adopt a regional system for attracting, retaining, and upskilling direct support professionals (DSPs).
Framework Collaboration Case Studies

Skills on the Horizon: Scaling the Communication of Skills

- Participating teams of educators and employers of the Wellspring Phase II Project 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.
Framework Collaboration Case Studies

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

- University of Arkansas at Pine Bluff (UAPB), and Con-Real, LLC, a large construction company

- Power and necessity of partnerships in design and development of competency frameworks as foundation of institutional competency-based education strategy

- Result: future skill-validated certificate program, with industry certification, serving talent needs of business partners

Click to open
Framework Collaboration Case Studies

Making Skills Visible for Learners and Employers

- University of North Texas/TD Ameritrade, and Team St. Louis

- Highlighted competency framework deliverables as the mechanism to communicate achievement of skills in an academic credential to employers seeking talent in a particular job role
Closing Gaps to Implement Skills-Based Hiring

- Three teams: Team St. Louis, UAPB-Con-Real CBE Team, and UNT Data Analytics
- Highlights value of identifying and validating skills for career pathways
- Teams exemplified importance of relationships in forging skills-based learning and hiring practices
Wellspring Initiative
Employer Readiness
Research Employer Readiness

Survey of 750 employers on readiness for digital credentials, skills frameworks and skills-based practices

Activities Completed

- Collaborate with IMS staff, author, develop and vet 23 survey questions with feedback from industry and academic experts (October-February 2021)
- Submitted to Northeastern’s Institutional Review Board (March)
- Survey opened (April)
- Data reviewed and analyzed; report written (May-June)
- Finalize report content (October)
- Report published by 1EdTech, IMS and Northeastern (November)
75% of HR leaders report that they have some type of technology system or bank of competencies and roles to use when creating job descriptions.

Some type of skill or competency frameworks are commonly used for hiring, assessing candidates or employees’ and staffing and resource planning.

69% agree industry-led competency frameworks could be beneficial in creating a more fluid market for talent in their industry.

A majority of organizations (73%) reported some level of dedicated talent analytics efforts reflecting the availability of people analytics technology tools and the maturation of this emerging area within HR organizations.
Skills-based Hiring

- Only 44% of HR leaders considered traditional transcripts very or extremely useful.
- 34% of HR leaders organizations are operating with a skills-based hiring strategy, an increase from 23% in a similar survey question three years ago. An additional 42% of respondents say that their organization is exploring and considering these approaches.
- The top motivations for skills-based hiring include more rigorous and better hiring outcomes (66%) and diversity, equity, and inclusion (62%).
- The most common skills-based hiring approaches include pre-hire testing/assessment (67%) and emphasizing structured interviewing (58%), among other approaches.
Digital Credentials

- Respondents see value in making educational credentials more verifiable and trusted.
- Awareness and experience with digital badges appears to have grown modestly, with 87% of HR leaders reporting that they have at least heard of digital badges, almost half have seen them in hiring but “don’t know much about them.”
- When described, the value propositions of digital credentials to improve hiring, skill assessment, and training strongly resonate with HR leaders.
- Top barriers of technical integration with other HR systems, lack of budget or time or coordinating with colleges and universities are surmountable problems - not based on deep policy, cultural or legal concerns.
Wellspring Demo Software

- Achievement Hub
- Digital Wallet
- Talent Search, Applicant Tracker and Ranking Algorithm
Wellspring Demonstration Software

Short Videos

A BETTER EDUCATION AND EMPLOYMENT ECOSYSTEM

ALIGN LEARNING OUTCOMES TO SKILLS EMPLOYERS NEED

DIGITAL CREDENTIALS SHOWCASE LEARNING & WORKPLACE ACHIEVEMENTS

Click to Open
Applications

- **Achievement Hub** - Used by achievement “publishers” to publish learner-workers’ Comprehensive Learner Records

- **Digital Wallet** - Used by learner-workers to collect their achievements and share them with interested parties such as employers, the military, and schools

- **Talent Tracker** - Used by employers to discover talent and track applications using machine readable achievement data
Demonstration Scenarios

- **Nursing Assistant** - This demonstration uses the Achievement Hub and Talent Tracker. It demonstrates a simple use case with a low barrier to entry.

- **Master Mechanic** - This demonstration uses the Digital Wallet, Talent Tracker, and CASE Network. It demonstrates a simple use of CASE Network for precision hiring.

- **Cybersecurity Analyst** - This demonstration uses the Achievement Hub, Digital Wallet, Talent Tracker, and CASE Network. It demonstrates a more complex use of CASE Network to discover candidates from external partner institutions, internal employees, and job applicants.
Achievement Hub Features

- Conformant implementation of the IMS CLR Standard Provider certification
- Learner-workers can track their progress against program requirements
- Learner-workers can control who has access to their data and track who has accessed their data
- Learner-workers can export their CLR to a “1clr” or Verifiable Credential file
- Self-contained code that can easily be adapted and used
- Forms-based “backend” interface to define and issue any kind of achievement
  - Easily replace the forms with data from internal systems over time
Wellspring Demonstration Software

Digital Wallet Features

- Conformant implementation of the IMS CLR Standard Host certification
- Import CLRs, Open Badges, and Verifiable Credentials
- Create self-issued achievements and self-issued CLRs
- Export self-issued CLRs to “1clr” or Verifiable Credential files
- Learner-workers can control who has access to their data and track who has accessed their data
- Self-contained code that can easily be adapted and used
Talent Tracker Features

- Uses the CLR Standard Consumer interface
- Supports both talent discovery using a CLR Standard API and applicant tracking
- Supports customizable scoring algorithms
  - Candidate scoring is broken down by qualification
  - For each qualification the scoring algorithm uses the highest scoring matching achievement in the aggregate score for the candidate
A number of elements impact candidate scoring:

- **Qualification priority** - High priority qualifications rate higher than low priority ones
- **Type of CASE alignment associations** - Reciprocal alignments rate higher than 'one way' associations
- **Achievement Type** - Achievement Types are categorized to place emphasize on types the reflect credentials, knowledge or experience
- **CLR properties add additional value to a candidate's CLR** - Evidence, Results, Endorsement, Level, Field of Study and Specialization all contribute additional value
Configurable Scoring Algorithm

```json
{
    "qualificationWeights": {
        "weightLow": 10,
        "weightMedium": 30,
        "weightHigh": 50
    },
    "alignmentValues": {
        "oneWayAssociationWeight": 20,
        "exactMatchWeight": 20,
        "reciprocalAssociationWeight": 30,
        "mutualAssociationWeight": 20,
        "mutualAssociationWithClrReciprocalWeight": 30
    },
    "achievementTypeValues": {
        "credentialWeight": 20,
        "strongCredentialWeight": 30,
        "knowledgeWeight": 10,
        "strongKnowledgeWeight": 20,
        "experienceWeight": 20
    }
}
```
Communicating Phase II Results and Resources

- Employer Readiness Research
- Case Studies (6)
- Short Video Demonstrations
- 3 Wellspring Sessions
  - Including a Technical Workshop
- Collaboration Project Report
- Website Access to Resources
- Code Libraries
Wellspring Initiative
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A Better Way to Hire