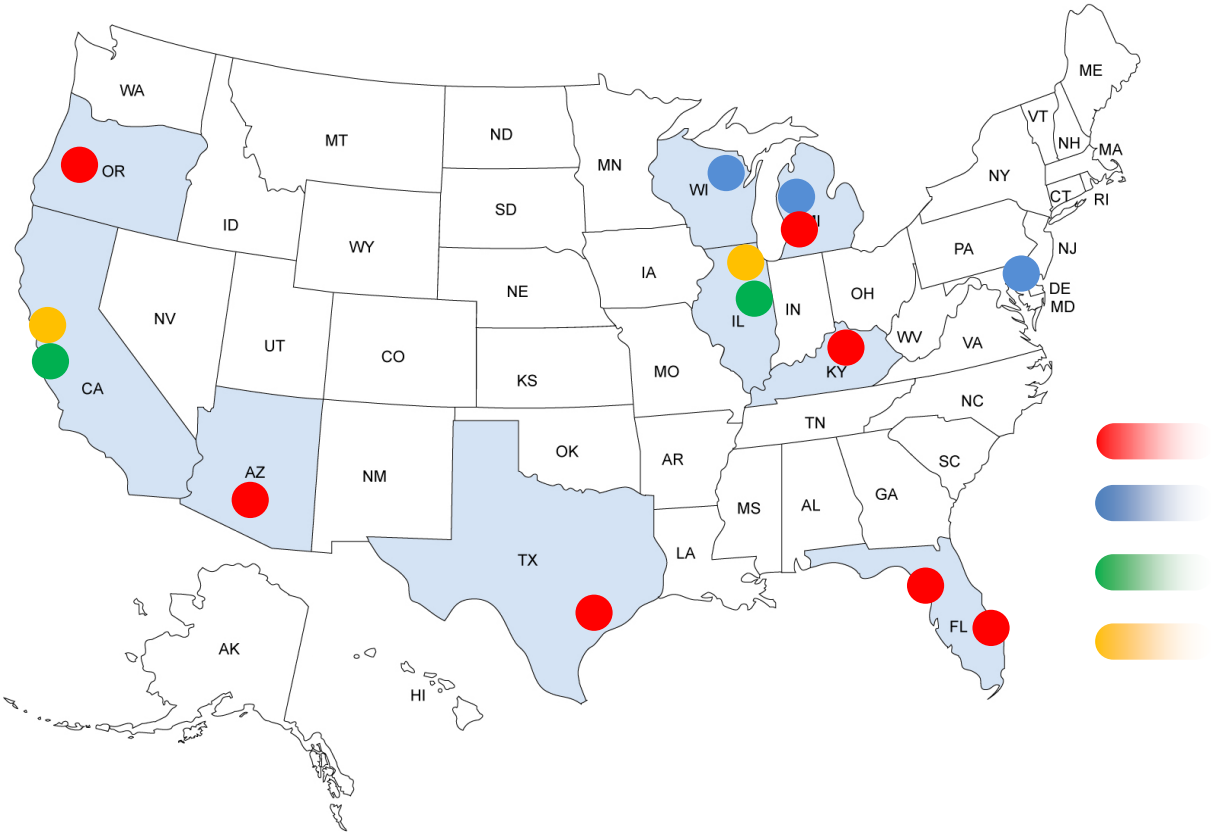
The Skills Market Network™



The National Laboratory for Education Transformation
The Corporation for a Skilled Workforce

THE SKILLS MARKET NETWORK

Skills gaps matter. With steady declines in the middle class, rapidly accelerating changes in the workplace and historic levels of unemployment, the right skills make all the difference. Employers, job-seeking learners and education institutions agree. What is missing is a modern infrastructure and market structure to drive up the quality of training and assessment, speed up program development and raise the level of alignment between employer demand and education supply.

A special team has been assembled to build new, cloud-based solutions to jump-start a skills market that will accomplish these goals. By linking together the trendsetters in demand-driven certifications, assessment, and community college program development with the developers of modern standards-based technology for education and training, a new system can emerge from the old. But that system cannot emerge in a vacuum, without coordinated change. It needs to be incubated and launched within a network of highly capable community colleges.

What follows is a business planning document designed to create a functioning skills marketplace. It begins with the formation of a network of carefully selected colleges, universities and employers which will serve as test partners and customers. We then develop systems for the network with experts in their fields, including a standards-based cloud system that co-manages certificate programs and credentials between employers and educators. These systems support a new market for standards-based, employer demanded competencies and credentials that will continuously attract the best suppliers to meet market demand.

Introduction

> *"…the Bill & Melinda Gates Foundation seeks to take advantage of this present momentum around sub-baccalaureate credentialing and engage interested public-private partnerships in designing a business plan/proposal for the scaled delivery of industry-validated certificates/certifications in a manner that leverages technology, (e.g. cloud-based services) to deliver shared content, instruction, and credentials with high-touch, wrap-around student supports offered amongst multiple colleges and educational providers."*

-- Page 4, Scaled Models for Certificate Delivery RFP

The National Laboratory for Education Transformation (NLET) and its partner, the Corporation for a Skilled Workforce (CSW), have assembled a unique consortium to rapidly convert unmet employer demands into competency-based credentials. Our initial collaboration includes a national leader in research and analysis of workforce systems, six geographically diverse community college and employer ecosystems, one state workforce agency, several universities that are offline and online education leaders, two national-scope certificate and certification center providers, two established technology companies with experience in education, training and labor systems, a Silicon Valley based open learning technology platform provider and several other startups from Silicon Valley and elsewhere.

This "Skills Market Network" collaboration will develop new "Skills Market Systems" to jumpstart a self-sustaining and growing "Skills Marketplace". Our initial plan focuses on automated and semi-automated processes to detect and respond to skills gaps and on the technology to develop, stack, scale and share

certificates and credentials with clearly demonstrated demand by employers and industry alliances. Granular demand data will be collected from a broad set of employers using fast and easy automated interactions. Community college members will be able to develop and share their standardized certificate and skills gap-filling credential programs nationally across the Network.

To maximize regional, national (and international) portability and sharing, NLET has brought together a highly-specialized team to create a standards-based *competency and assessment management system (*CAMS), with "demanded" competency units (skills, know-how, abilities) as the common currency. At present, there is no technology solution that mediates or manages the interactions between granular employer demands, education supplies at the competency unit level, and learner and employer success. The CAMS will include workflows that guide the definition of standardized competencies from employer demand data and specifications, the translation and manipulation of those competency demand units into competency-based curriculum and credentials, and the sharing of these programs within the network. Subsequent validation of these credentials in training and hiring processes will produce additional real-time data on the quality of suppliers as well as various "Job Signals" of value to learners. With these new employer-driven systems and signals, colleges and learners can bring marketplace levels of efficiency to their decisions and thereby help determine which programs gain market share and which do not.

The Skills Market Network consortium will develop, test, refine and implement the CAMS and other systems in iterative stages to ensure that they serve the needs of regional clusters of employers, educational providers, learners and workforce agencies. As our systems become sufficiently developed, the project will make them available beyond the initial regions. Together with future members, the network will seed and grow a marketplace of gap-filling and other standardized credentialing programs.

In the late 1990's the Workforce Investment Act (WIA) became Federal law, and eventually launched regional Workforce Investment Boards (WIBs), more than 1,000 One-Stop Career Centers, and job-matching sites in states and regions across the country. Since then technology has transformed many aspects of K-20 education. Yet today, no core technology exists to link these processes and to increase the effectiveness and efficiency of the workforce ecosystem. A dedicated network of interconnected community colleges, universities, industry associations, workforce agencies and others is necessary to design, develop and deploy such a solution. We believe that our plan can be that solution.

Consortium Development & Focus

Consortium Leadership

NLET began this business planning process with a three-person, multiple-month review of previous and parallel efforts, including analyses of documents reporting on workforce issues from research, community college, foundation, employer and government perspectives, surveys of grant-funded initiatives and examination of sector-focused startups (see Appendices for document highlights). The NLET team attended key workforce and HR conferences and interviewed a large number of community college presidents, chancellors, workforce experts, associations and employers. In this process, NLET met with the Corporation for a Skilled Workforce (CSW), one of the leading workforce policy and research organizations. CSW's extensive knowledge of workforce organizations, industry needs, community colleges and employer associations leads it to clear conclusions about current needs.

CSW's conclusions and visions for a market have overlaps with those of NLET. Their detailed report, "*Making a Market for Competency-Based Credentials*," was released in October 2013 and makes a clear case for the value of managing competencies as the underlying workforce unit.

High-quality, employer-backed, competency-based credentials can provide more precise information about job requirements and worker proficiencies, particularly for the more technically skilled positions that make up an ever-increasing share of the U.S. labor market. Unfortunately, the current "market" for competency-based credentials is neither fully formed nor functional. A chaotic patchwork of sub-degree certificates, licenses and other credentials is offered by a confusing array of industry and occupational groups, third-party validators, and educational providers. No national framework exists for developing and endorsing these credentials. *(Making a Market for Competency-Based Credentials, CSW, 2013)*

CSW believes that NLET has assembled the missing "Silicon Valley" technology plan that can finally bring a dynamic credentialing market to life. NLET and CSW form an ideal policy, practice and technology partnership to lead this "Skills Market Network" project. Together NLET and CSW have formed a Network with sufficient capacity to test new technology and operate at the level of competencies by (a) selecting network members who were innovation leaders in the community college and university communities, (b) locating and qualifying the best technology development partners and (c) working with and learning from the most successful providers of employer derived-certifications.

Network Members

NLET chose the following community colleges and universities through its contacts together with recommendations and reviews provided by CSW and two foundations:

Broward College, Cabrillo College, Grand Rapids Community College (GRCC), Kentucky Community & Technical College System (KCTCS), Lone Star Colleges, Pima Community College (Pima), St. Petersburg College (SPC), Capella University, Ferris State University, University of California at Santa Cruz, the University of Maryland University College (UMUC) and the Oregon Department of Community Colleges & Workforce Development in coordination with Lane Community College and Mt. Hood Community College.

Each of these institutions brings a high level of innovation and persistence in the workforce field and a willingness to test a more efficient and effective method of working with employers and learners in service of strengthening their regional economies. The universities were chosen because they are leaders in online and on-the-ground degree continuation toward Bachelors or Masters Degrees. Two of these universities have their own certifications.

Technology and Standards Development

NLET's mission is focused on the development of new modern systems to support learning, training and knowledge transfer that are consistent with life and work in the information age. NLET is partnered with centers at the University of California Santa Cruz (UCSC), the Los Alamos National Laboratory and the University of Texas at Austin. NLET and UCSC jointly operate the Center for Learning Architecture Silicon Valley (CLA), designed to search for new means of managing learning and training. NLET's president is one of the leading experts in the development, analysis and business of online learning in K12 and higher education.

Given this background, NLET carefully examined the components necessary for a new standards-based technology to operate with competency units that could be directly, in machine-readable ways, be tied to employer demand information. NLET selected, and CSW confirmed, the need to investigate and include technology components such as:

- ☑ A standards-based technology developer with a considerable track record of developing technology and standards within the corporate, defense, and municipal training markets, including knowledge and experience with the development of competency management, natural language processing, workflow algorithms and learning management integration.

- ☑ A labor data, job-matching, and taxonomy-building service company that supplies stakeholders in the current workforce board and agency communities

- ☑ Cloud-based, open learning platform / learning management system that is devoid of legacy considerations, is low-cost, and whose components can be downloaded or swapped out from an app or systems store.

- ☑ A comprehensive student or learner manager to assist in choosing skills to pursue, to record certifications, and to find parallel resources.

To meet these needs, NLET located and qualified an outstanding group of companies, with leading-edge cloud services, compelling business and service histories, and an interest in working together to revolutionize how skills are developed, acquired and applied.

These include: Eduworks (www.eduworks.com) as the lead developer with deep experience in competency management, learning management, resume parsing, natural language processing, as well as standard and product development for commercial and government training organizations. Geographic Solutions (www.GeoSolinc.com) as the labor data and job-matching firm that supplies the largest number of workforce boards and one-stops. Course Master (www.course-master) is developing a privately-supported instance of the EdX MOOC system (MIT, Harvard, Stanford) that can be deployed as a low-cost learning management system across the network and will interact easily with the competency manager.

Eduworks is currently assisting the Department of Defense's primary learning standards body, the U.S. Advanced Distributed Learning (ADL) initiative, to develop a competency management system and has contributed to multiple international standards development efforts aimed at supporting skills management systems in the U.S., UK, and European Union. Eduworks also has advanced natural language processing and text analytics technologies that can do fine-grained analysis of documents like resumes, competency definitions, job postings, and curricula. NLET and CSW believe that several training standards and systems developed by the military can be adapted for use in competency systems for the workforce world and Eduworks has this unique capability.

Geographic Solutions has a leadership role in serving state and regional workforce labor boards and their One-Stop Career Centers. Geographic Solutions routinely "spiders" the Web, crawling and searching for new job postings, taking the new job information and codifying it in taxonomies that expand upon the Department of Labor O*NET job codes. NLET and CSW believe making the competency and assessment-based management system job-linked will require linking each competency to labor codes and that Geographic Solutions is the ideal partner for this.

For the student tool, NLET has chosen to experiment with a product from a non-profit spinoff from Lone Star Colleges that has developed the ECPS "educational and career positioning system" with funding from the Bill & Melinda Gates Foundation. This system allows students, and employers, to search for jobs, discover their education gaps, find programs and track this information on a personalized system. It is designed to make secure connections to existing Learning Management Systems, Student

Information Systems, Enterprise Resource Planning, Applicant Tracking, Human Resource Information and other systems operating in both corporate and educational institutions.

Network Models

Two examples of non-profit organizations that link employer demand directly to education provider supply, assuring highly-aligned certificates and credentials that can be stacked, shared and scaled are the National Coalition of Certification Centers, (NC3), a core advisor to the Skills Market Network www.NC3.net, and the Cisco Network Academies, www.netacad.com. Each provider works closely with employers and industry alliances to provide certificates and assessments built from credentials for smaller competencies to larger more encompassing credentials. While the Network is not modeling itself after Cisco or NC3, it is carefully studying their organization and operations as examples of processes to be emulated on a more general basis across the Network while using the CAMS technology to anchor our Skills Marketplace.

Shared Consortium Vision

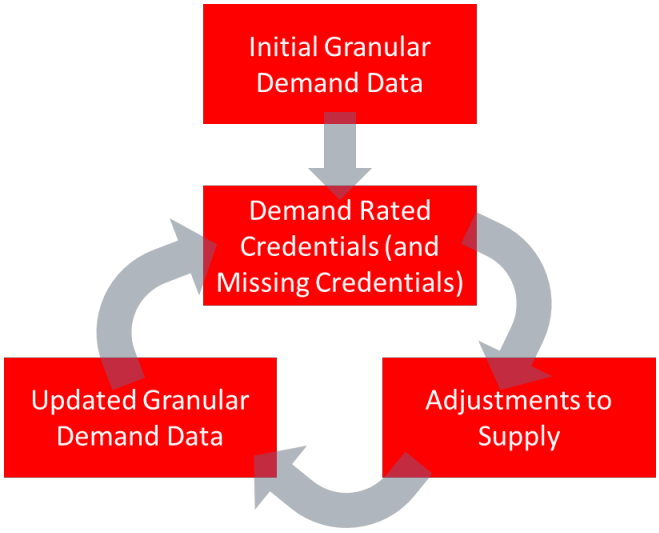
The Skills Market Network brings together many of the most success-minded and innovative participants on all sides of the employer-educator-learner equation. Each participant has committed to help develop, test and/or advise on one or more of the new Skills Market System' modules that will support our dynamic collaboration engine for eliminating skills gaps. Together we will form the core of an expanding cooperative for identifying, validating, collaborating and rapidly creating valued skills training built on standardized competency building blocks. The goal is a technology-enabled workforce system that identifies and eliminates skills gaps in real time on local, regional and ultimately, national scales.

The network will start and grow with community colleges but should eventually feed data and membership back into K-12 systems, especially high schools, and forward into 4 year programs, especially pioneers in competency-based education such as College for America and Southern New Hampshire, Brandman, and Western Governor universities.

Our plan is to collectively jump-start a new market segment in post-secondary education that is uniquely responsive to employer demand, to automatically identify and plug skills gaps.

This plan begins to unify the inputs and outputs in a measurable and predictable way and will eventually move a much higher rate of utility for all participants.

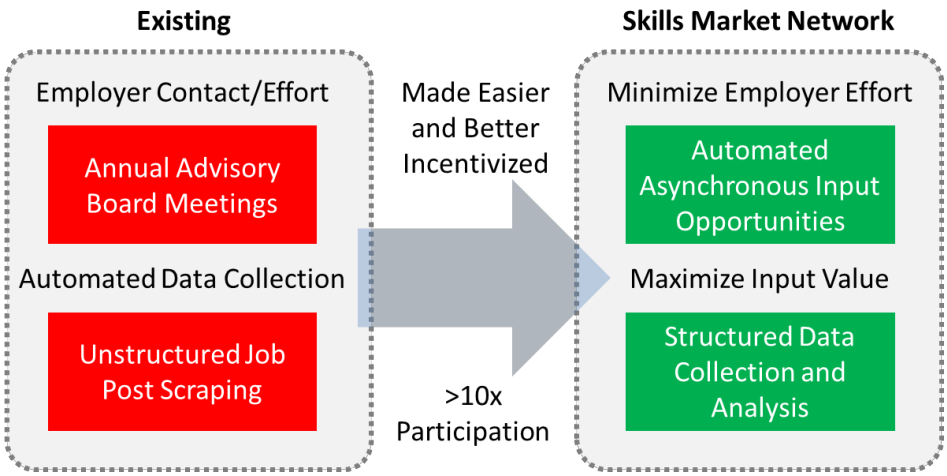
- Employers will be incentivized to routinely provide "demand" data to identify missing competencies or future needs at a granular and actionable level.
- Community colleges and other members will respond rapidly with "supply" in the form of existing, modified or new training that is precisely matched to demanded



JUMPSTARTING A DEMAND-DRIVEN SYSTEM

competency units.

- Demanded units of skills, know-how and abilities and unsupplied gaps will be standardized as part of a workflow that enables them to be easily offered and credentialed.
- By making the new gap-filling credentials competency-based and standardized to demand units, learners get universal portability, stackability and known career value. Once in motion, these market processes will continue over time in a natural feedback loop.

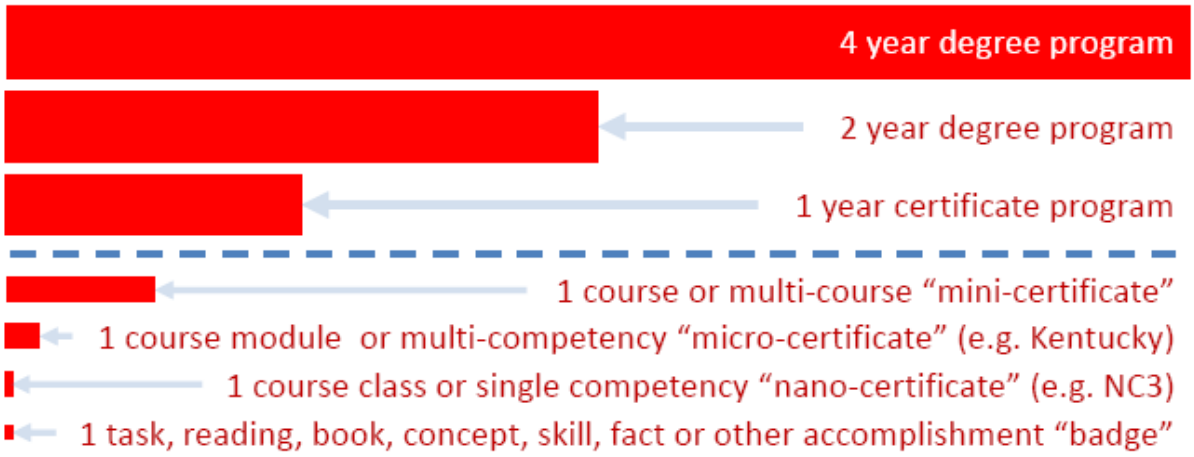


NEW GRANULAR DEMAND INPUTS

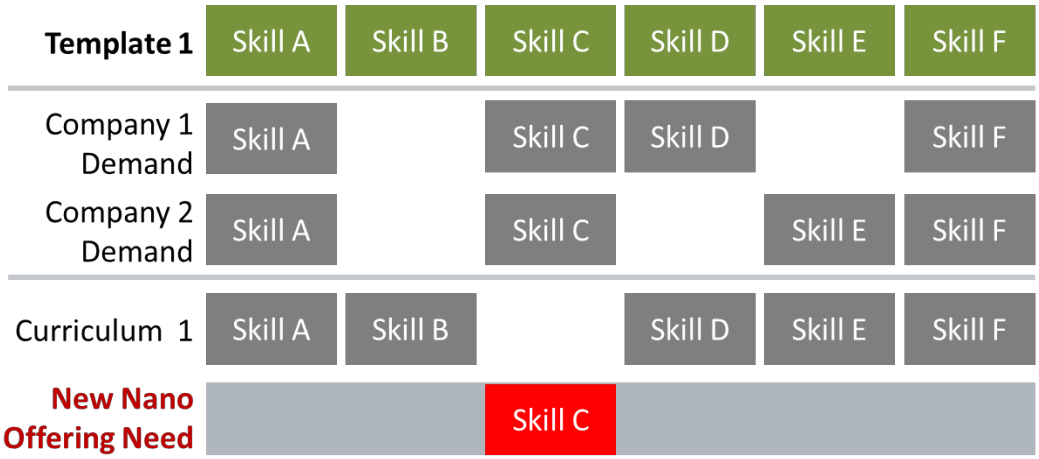
Employers, working through industry associations and in collaboration with community colleges and regional workforce organizations, will power the system with structured and granular demand inputs that can be conveniently submitted and regularly requested by computer or mobile phone. These new machine-readable responses will be captured much more frequently and in a more structured way from a much broader range of employers and employer touch points than is currently available. Results will be aggregated and processed into actionable signals to community colleges that can also be made available to learners and pathway systems. Employer feedback will come in at multiple credential levels, and will eventually be digested down to demanded and missing competencies.

To induce and reward employer participation, participating community colleges may commit to various levels of employer-valued incentives. These may range from basic rewards for individual inputs, such as course vouchers, to threshold-based initiatives such as new or improved training offerings that plug existing holes in local supply relative to local demand.

New and improved offerings will be standardized around competencies that emerge from combining the inputs of multiple participants in the demand gathering stage. Codified workflows will be developed for easily creating new credentials based on the normalized and “missing” competency demands. The resulting learning objectives and assessment metrics for gap-filling credentials, as well as default curriculum and materials, will made available to other network participants to plug similar gaps in their own local training supplies.



SCALING CREDENTIALS DOWNWARD



NANO-COMPETENCY HOLES

Learners at network community colleges will get improved quality and value in their training as it becomes more completely and explicitly mapped to employer needs through demanded competency units. Learners will also get job signals through demand data mapped to existing courses and programs of study.

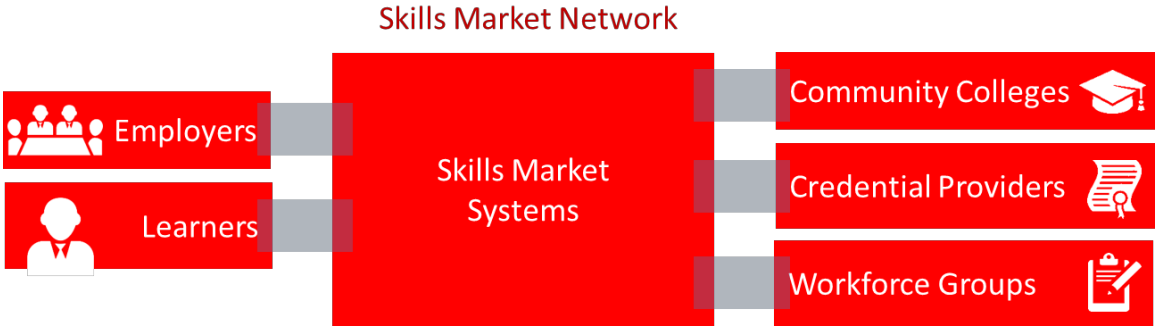
➔ More specific scenarios for employers, colleges and learners can be found in Appendix A.

Initial Scope of Work

(Note that there will be significant overlaps of stages and participants in more detailed planning.)

Our planning group has worked through many iterations to converge on the plan described in this proposal. We expect to continue to evolve and adapt components as part of the process of iterating

with our collaborators and customers. Our initial model for the project scope of work is presented below in five major stages. Key partners are highlighted at the stages at which they join or are expected to make major contributions to the project.



The five scope of work stages correspond to:

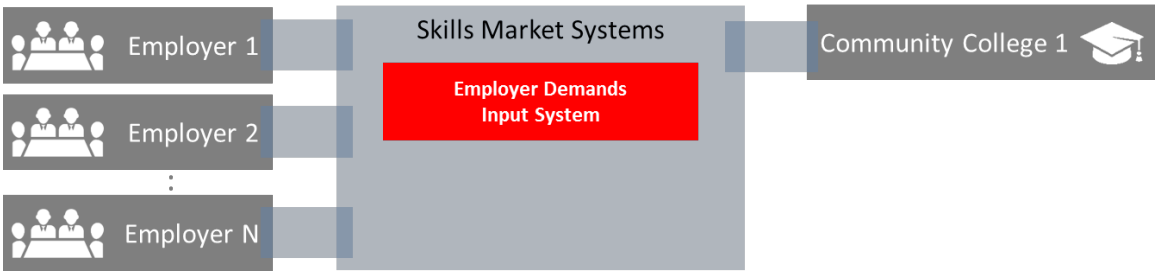
1) ***Capturing demand*** inputs more broadly and regularly by moving from existing advisory process to frequent, continuous employer input, supported by automated technologies
2) ***Translating the demand input*** data into common competency definitions
3) ***Moving from standardized competency demand*** units to maps of where they overlap (or not) with existing training supplies and credentials
4) ***Enabling new credentials to be rapidly constructed*** from demanded competency units to fix missing and redundant competency training
5) ***Engaging diverse educational providers and credentialing organizations*** to even better serve demand and accelerate cost, time and quality improvements over time

Stage 0: Initial Planning Meetings – Ongoing

Stage 0 Work Summary

Meet and hold conference calls with partners to refine and update detailed action plans for participation within the proposal vision and plan.

Stage 1: Quantify Employer Demands – 6 months



Stage 1 Work Summary

Customize technology to automate, regularize and expand employer feedback, employer demand inputs and other valuable employer interaction modes with community colleges.

Key Tasks

- Engage with first community college development partner(s) and regional employer groups. Develop data input models and interaction flows (surveys, credential rating engines, specific demand inputs). Customize and test system tools for managing input across multiple community colleges. Launch the employer feedback system with second and third community college development partners and their employers. Implement data mining on job boards and for job descriptions input by local employers to cluster descriptions and identify common granular competencies.

Key Education/Workforce Partners

- Pima Community College is in the beginning of a major turnaround under a new Chancellor that includes upgrades to its employer engagement processes. St. Petersburg College has an exceptional offline system for employer engagement and competency data structures as a basis for capturing feedback. Grand Rapids Community College has an exceptional workforce ecosystem and a culture of serving employers (17,000 students and 600 corporate customers). All of these provide models from which we can learn.

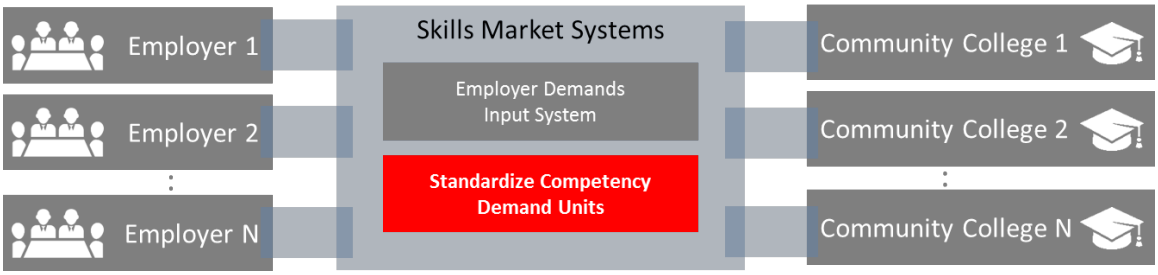
Key Technology/Methodology Partners

- The team has access to a unique cloud tool for online polling and other automated interactions that has been developed to bring structured demand data into local government and other group governance applications, by internet, text and phone. It has been tuned with customers on multiple dimensions to achieve very high input response rates in very short periods of time (e.g. 30% in one hour, 70% in 2 days) and will be a valuable data collection platform.

Stage 1 Outcome

An automated system for collecting timely and granular employer demand inputs that has been optimized with employer users and community college users.

Stage 2: Standardize Competency Demand Data – 3 months



Stage 2 Work Summary

Track and catalog filled and unfilled competency demands that emerge from employer inputs across multiple regions and standardize them in a shared database.

Key Tasks

- Refine demand inputs to produce clear demand signals for competencies. Make adjustments for any regional usage variations. Map skills and credential demands to the competency level.

Restructure demand data inputs as appropriate around standardized competency units to test and verify specific demands. Discuss, define and develop ways to deliver and present the aggregated competency demand data to learners as "Job Signals." Add system features to expand from local feedback groups to regional community college and employer ecosystems.

Key Education/Workforce Partners

- Kentucky Community and Technical College System is the leader in offering fractional course modules and has an exceptional workforce solutions system (100,000 students and 5,000 corporate customers) to learn from that aims to "provide anytime, anyplace customized training and support services for business and industry". Lone Star College System has excellent vertically organized employer engagement processes to learn from and has developed an award winning student facing pathway guide (ECPS) based on open standards into which our competency demand data can be incorporated.

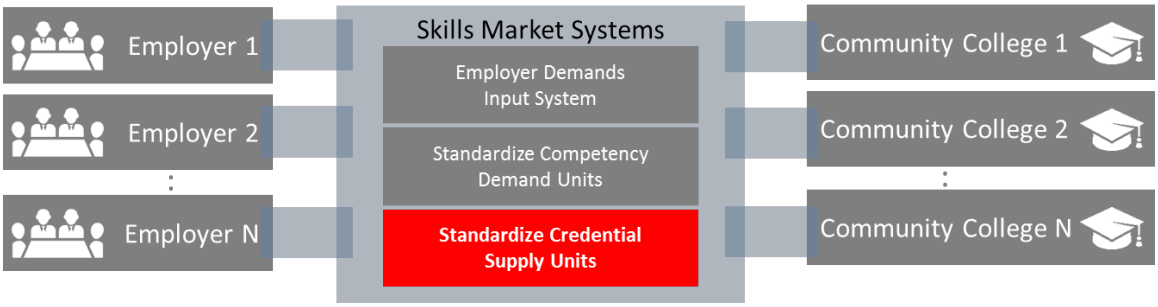
Key Technology/Methodology Partners

- Corporation for a Skilled Workforce uses DACUM and SCID derived models and other competency frameworks to ensure that demanded knowledge, skills and capabilities can be mapped to competency-based credentials with standardized assessments. The DACUM (**D**eveloping **A** **C**urricul**UM**) process produces a DACUM chart listing the duties, tasks, and related information about a job, and SCID (**S**ystematic **C**urriculum and **I**nstructional **D**evelopment) is designed to quickly and systematically produce relevant, high-quality, competency-based instructional materials based on the job/occupational analysis developed using the DACUM process. In this and other stages, we will be codifying and automating DACUM-like and SCID-like processes that any employer can use. CSW has created a framework for breaking learning outcomes into discrete levels that can be used to align information about competencies consistently across industries and credentials, increasing inter-operability. Using standardized assessable skills as the basis for competency-based credentials makes the resulting certifications inherently stackable, latticed and portable. Geographic Solutions has deep experience doing sophisticated job to competency mapping. Lone Star College System will work with us on integrating and leveraging their ECPS product.

Stage 2 Outcome

A standardized, growing database of demanded competencies that can serve as the "currency" within the Skills Market Systems.

Stage 3: Standardize Credential Supply Data – 3 months



Stage 3 Work Summary

Map demanded competency units to existing supplies of training and credentials to create granular understanding of how "missing competencies" (skill gaps) can be plugged from existing, modified or new training offerings and whether existing credentials are applicable or new ones need to be created.

Key Tasks

- Upload and map the in-network community college supplies of training and credentials to standardized competencies: "We are currently offering A, C and D". Search in-network and out-of-network for existing credentials that can be mapped to demanded missing competencies. Create automated processes that identify the gaps and overlaps between supply and demand at the levels of single employers, single community colleges and up to the whole network. Create reporting dashboards that highlight demand data and skills gaps. Add system features to expand from regional feedback groups to state level community college and employer ecosystems.

Key Education/Workforce Partners

- The Oregon Career Pathway Roadmaps is an exceptional pathway system and Oregon also a leader in offering short-term certificates stacked to an associate degree, with more than 400 short-term certificates offered across the state in one to three terms. Ferris State University is a leader in regional pathways.

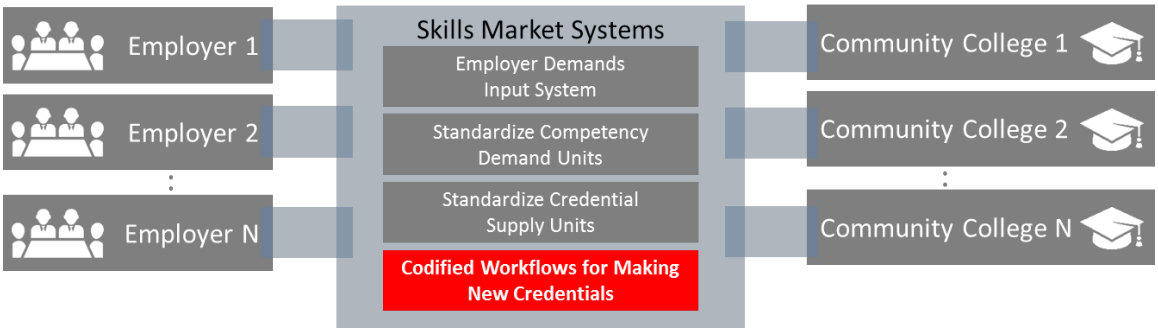
Key Technology/Methodology Partners

- Network member UMUC has a team that specializes in ensuring that technology and competency mappings meet IMS Global standards for integrating with all learning management systems. Capella University is a world leader in mapping competencies to educational programs.

Stage 3 Outcome

An employer-validated supply database of courses and bundles of courses (certificates/degrees) that are mapped to underlying building blocks of demanded (and not-demanded) competencies and an analysis engine that suggests how existing, modified or new competency-based credentials can meet demand.

Stage 4: New Credential Provisioning – 6 months



Stage 4 Work Summary

Create codified workflows for aggregating competency demands, automatically requesting, rapidly assembling and broadly deploying competency-based nano-certification, micro-certification and traditional (macro) certification programs with an emphasis on plugging skill gaps.

Key Tasks

- Discuss and define threshold demand measurements (number of hires, value of competencies, etc.) that would trigger alerts, formal requests and commitments to provide new competency-based course modules, courses, certificates or degrees. Create SCID-like workflows for converting demand specifications into standardized assessments (knowledge tests, practical tests, and projects), default curriculum, and default materials and instructor training for new competency based credentials. Create a drag and drop interface for assembling standardized micro-certificates and traditional certificates from standardized nano-certificates corresponding to specific competency demonstrations. Create tools for uploading, sharing/ordering and downloading new credential assessments, curriculum and materials. Add system features to expand from state level feedback groups to national (vendor sponsored, industry association sponsored) community college and employer ecosystems.

Key Education/Workforce Partners

- Broward will join as the first post-beta member for the CAMS. Jobipedia is a career guidance question and answer platform offered by employees of 28 large employer members the HR Policy Association and these members will be invited to use our employer demand data input system.

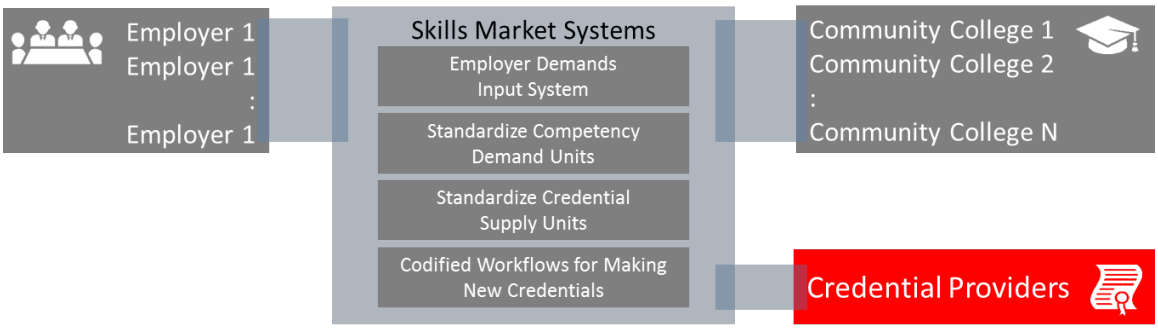
Key Technology/Methodology Partners

- National Coalition of Certification Centers (NC3) and Cisco.

Stage 4 Outcome

Workflows and wizards with drag-and-drop ease-of-use for rapidly creating and assembling new credentials from standardized demand specifications for valued competencies, based on industry-validated curricula.

Stage 5: Open Credential Provisioning – 6 months



Stage 5 Work Summary

Create a standalone competency-based learning management system option for delivering and managing competency training from college and non-college members.

Key Tasks

- Customize the CourseMaster MOOC system to allow non-college members to post new credential training programs. Create workflow for non-college members to respond directly to demanded competency training. Create workflow for college members to outsource bundles of competency training (skill, course module or course) to non-college members.

Key Education/Workforce Partners

- Additional community colleges and non-community college members including UCSC, Cabrillo College, NIU and Harpers College will be invited to join as beta-test and post-beta members.

Key Technology/Methodology Partners

- The CourseMaster platform will be customized to function as a competency-based MOOC that can be used to offer training chunks of any size, independently of and without interfering with existing institutional LMS installations.

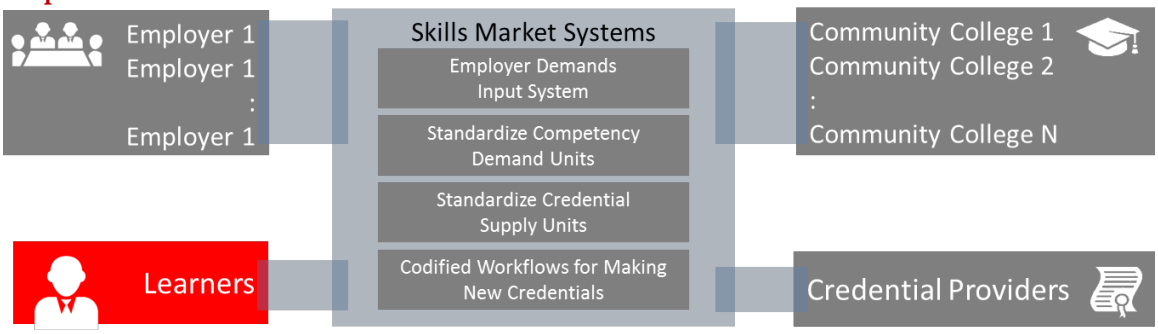
Stage 5 Outcome

Credentialing programs are opened up to provision by non-college network members and may be offered as outsourced courses to network community college students or as direct-to-learner training.

Subsequent Stages

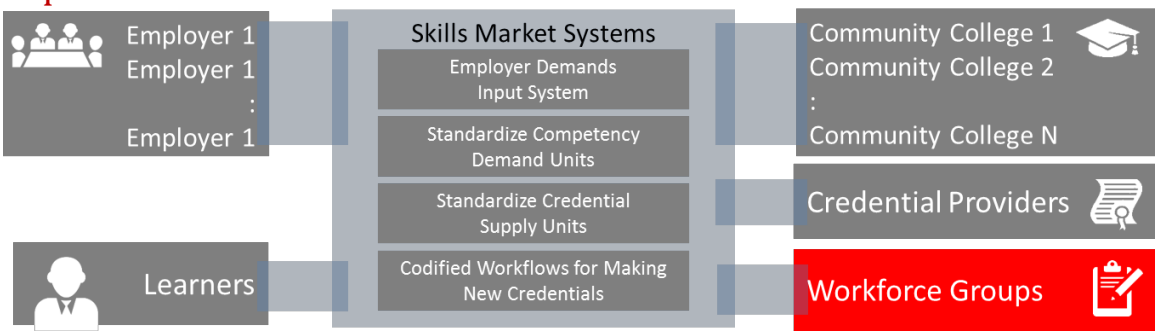
Subsequent Stages will be determined based on product feature demand and other future inputs from members but are likely to include the following.

Expand Learner Connections



Create APIs to push our employer demand data as Job Signals into various student pathway guides and managers including such as Oregon Career Pathway Roadmaps , ECPS, VCN and CourseMaster.

Expand Workforce Connections



Work with Geographic Solutions to geo-tag our competency demand data and incorporate it into their workforce solution products.

Expand Employer Validation Concepts

Create APIs to link employer demand ratings to tuition reimbursement plans and other cash incentives.

Expand Network

Open up network membership broadly to post-development, post-beta users. Grow a large self-sustaining Skills Marketplace with national reach.

Cost and Revenue Models

Once the Skills Market Network is jumpstarted by this proposed grant effort, it is expected to become self-sustaining.

Ongoing Costs

We are building the technology as much as possible on existing cloud applications that only require customization to become products tailored to the needs of the Skills Market Network. This productized architecture spreads costs across a user base that is much larger than that of just network members and saves millions of development dollars and years of previous customer testing and feature iteration. Our new systems will also be cloud based, user friendly and modular to minimize ongoing support costs.

Ongoing Revenues

The Skills Market Systems that are built on existing cloud applications will have a normal SaaS product revenue model with monthly/annual fees paid to the companies responsible for provisioning, updating, maintaining and supporting the software. The Skills Market Systems built from scratch are expected to operate as an independent business unit governed by Skills Market Network members. The Skills Market Network itself expects to charge membership fees tied to a preconfigured bundle of member benefits and software discounts. We also expect to collect a growing number of transaction fees from certain member-to-member activities like the sales of competency training modules.

Self-Sustaining Skills Marketplace

Curriculum development is the most expensive component of new training and credentials. It is also subject to extreme quality variability and duplication across colleges. The Skills Market Network intends to use market dynamics to raise the value and quality, and dramatically lower the costs, of educational offerings. Membership value will grow over time as new members collect data and share new credential programs and as the technology costs per member are spread over a larger user base. As this new Skills Marketplace expands, it will quickly generate self-sustaining revenue by delivering ever-increasing value to members. Future augmentations such as the development of dynamic ratings or “signals” from exchanges and transactions in the Network can be self-funded, and the Skills Marketplace can eventually attract third-party application developers. This proposal, with the support Bill and Melinda Gates Foundation, can be the one-time catalyst for launching a dynamic and rapidly expanding skills-based education market that sends the quality and value of our whole educational system irreversibly upward.

Budget

Our total estimated budget for the two year consortium project is estimated at $7.7 million and is presented below.

Skills Market Network: Budget Estimate Page

Project Component Estimates include personnel, benefits, travel, supplies, etc. (Additional Details Available on Request)

Participants	Project Total Q1-Q8 USD($)	Project Total Q1-Q8 FTE-Years	Stage One Q1 FTE	Stage One Q2 FTE	Stage Two Q3 FTE	Stage Three Q4 FTE	Stage Four Q5 FTE	Stage Four Q6 FTE	Stage Five Q7 FTE	Stage Five Q8 FTE
Stage Zero										
NLET	$ 1,674,500.00	11.00	7.30	6.70	6.50	5.50	4.50	4.50	4.50	4.50
CSW	$ 906,600.00	6.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
NC3	$ 150,000.00	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
EduWorks	$ 1,800,000.00	10.50	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
Stage One										
Pima	$ 279,000.00	2.50	0.50	0.50	2.00	2.00	2.00	2.00	0.50	0.50
GRCC	$ 201,492.50	2.00	0.50	0.50	1.50	1.50	1.50	1.50	0.50	0.50
St. Petes	$ 275,000.00	1.50	0.50	0.50	1.00	1.00	1.00	1.00	0.50	0.50
Stage Two										
Lone Star	$ 553,500.00									
Kentucky	$ 410,500.00	2.50			2.50	2.50	1.50	1.50	1.00	1.00
GeoSolutions	$ 200,000.00	1.50			2.00	2.00	1.00	1.00		
Stage Three										
Oregon	$ 375,665.00	1.30	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
UMUC	$ 200,000.00	2.25			1.50	1.50	1.50	1.50	1.50	1.50
Ferris State	$ 169,000.00	1.25			1.00	1.00	1.00	1.00	0.50	0.50
Capella	$ 175,000.00	1.50			1.50	1.50	1.50	1.50		
Stage Four										
Broward	$ 201,500.00	1.50					1.50	1.50	1.50	1.50
Stage Five										
CourseMaster	$ 150,000.00	1.00							2.00	2.00
Other Advisors and Members with Budgeted Participation as Needed										
Cisco, UCSC, Cabrillo, NIU, Harper, Jobipedia, TBD										
TOTALS	**$ 7,721,757.50**	**46.80**	**17.95**	**17.35**	**28.65**	**27.65**	**26.15**	**26.15**	**21.65**	**21.65**
			Stage One		Stage Two	Stage Three	Stage Four		Stage Five	