

# THE EMERGING LEARNING SYSTEM

Report on the recent convening and new directions for action

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*Artwork by Up Your Creative Genius*

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# FOREWORD

In February, Lumina Foundation hosted more than 40 national experts in a discussion central to Goal 2025. With nine years remaining to reach Goal 2025 and growing concern about the learning that stands behind postsecondary credentials in the U.S., we're pleased to share the discussions from the convening and proposed next steps to advance what is coming to be known as *learning systems reform*.

Lumina is committed to Goal 2025 – *increasing the proportion of Americans with degrees, certificates and other high-quality postsecondary credentials to 60 percent by 2025*. Lumina defines high-quality credentials as those with *transparent learning outcomes leading to further education and employment*. Since adopting Goal 2025, we have hosted a number of conversations related to learning – most recently, the convening that is described in this report. We've also supported a series of conversations which are part of an evolving national dialogue on credentialing summarized in *Connecting Credentials: Lessons from the National Summit on Credentialing and Next Steps in the National Dialogue* (see [www.ConnectingCredentials.org](http://www.ConnectingCredentials.org) for further background).

What is increasingly apparent from these conversations is that they are converging around learning as central to the national effort to increase postsecondary attainment. Many higher education institutions are using the *Degree Qualifications Profile* (DQP) to guide efforts to strengthen the quality of their associate, bachelor's and master's degrees. There are other learning and skills frameworks that apply to other credentials (e.g., certificates, industry certifications, badges, apprenticeships, micro-credentials) to help clarify the learning/skills outcomes behind them. These include the beta Credentials Framework, employability skills frameworks, and a number of industry sector frameworks.

The National Summit on Credentialing held in October 2015 led to the appointment of work groups that have been meeting since February to address five focus areas to advance the credentialing effort. The work groups' goal is to create an action plan for a coherent, connected and clear credentialing system that works for *all* students. The groups comprise roughly 100 national experts in the credentialing area, some of whom are also part of the learning systems group described in this report. The five focus areas dovetail in many ways with the directions for action emerging from the Learning Systems convening.

The table on Page 3 outlines excerpts of important areas of commonality between the recommendations in this report and those offered in an earlier report: *Connecting Credentials: Lessons from the National Summit on Credentialing and Next Steps in the National Dialogue*.

We are heartened to see these important conversations about learning and credentialing converge. Educators, employers, learners, policymakers and researchers are increasingly asking the same questions: *Do our degrees, certificates and other credentials stand for high quality? What is the learning – the skills – that our credentials signify? How do we know learning has occurred and that skills have been acquired? Which credentials have the most value?*

There is growing recognition that credentials must stand for high-quality learning and skill development; that several key steps are needed to advance the creation of a more transparent, connected credentialing system in the U.S.; and that we must not advance these actions in silos. Rather, progress requires partnerships and collective action. That's the only way to achieve our shared vision and leverage resources for the long journey ahead.

We have many groups to thank for their leadership in the conversation about learning systems reform. Key among them are the Association of American Colleges & Universities (AAC&U) and the National Institute for Learning Outcomes Assessment (NILOA). These organizations ably assisted us in identifying resources to inform the convening discussions on learning systems and the national experts who are leading major efforts to strengthen learning outcomes.

Finally, our sincere appreciation goes to the more than 40 national experts who joined Lumina Foundation and our colleagues from the Teagle Foundation and the Bill & Melinda Gates Foundation at the February convening. These individuals informed the growing community of individuals and organizations committed to learning systems work and urged us all to consider thoughtfully the type of collaboration necessary to advance this work. The insights from these experts have strengthened Lumina's own commitment to connect high-quality credentials to learning – and we invite others to join us in the critical work ahead.

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## CONVERGING PERSPECTIVES FROM TWO GROUPS

### CONNECTING CREDENTIALS

- Develop a common language so that we have a common way of explaining credentials in terms of the competencies – the knowledge and skills – that each represents.
- Use technology and real-time data to empower credential users including learners, employers and advisers to make informed decisions about credential options, pathways to them, and their value in the labor market.
- Create nimble quality-assurance processes to ensure the credentials people earn are of high quality so that workers enter the workforce prepared to thrive, and all stakeholders trust the validity of the credentials being used.
- Develop scalable ways of engaging employers to ensure credentials are relevant in the workforce, in the creation and use of those credentials.
- Build credentialing pathways to increase equity so that quality credentials are linked to career pathways and the pathways are increasing attainment among first-generation and minority students. This will lead to greater social equity and better outcomes for those who have not been well served by our higher education system.

### EMERGING LEARNING SYSTEM

- We need a shared language to talk more widely about the reforms needed in our learning systems. A specific next step is to create a shared glossary of terms. A shared glossary will help us avoid disagreements about what some terms mean and make the case for changes needed.
- Every professional is important – advisers, course designers, registrars, faculty, staff, and employers – and each uses technology in helping students learn what they need to succeed in the 21st century economy and society.
- Curriculum is redesigned to ensure students' educational experiences create personalized learning pathways toward the learning outcomes associated with the high-quality credential they seek.
- Research informs us that integrated, interdisciplinary learning requires faculty to move beyond a discipline-based orientation to work with educators across the institution and practitioners in the employer world.
- Shift the public policy narrative from 'postsecondary education is a private good' to the equity-minded view that 'postsecondary education is a public good.' Jobs providing a living wage will require post-secondary credentials. This underscores the urgency that Americans from every background pursue a high quality postsecondary credential.

# INTRODUCTION

## WHY A ‘LEARNING OUTCOMES’ CONVENING?

For more than two decades, higher education leaders and associations, employers and policymakers have been asking tough questions about how well our nation’s colleges and universities prepare graduates to contribute successfully to a changing global workforce and society. Business leaders often express frustration that college graduates are not achieving the broad, cross-cutting learning outcomes they need at high enough levels to fuel a technology-rich, innovation-driven economy. They also complain that – whatever levels of learning graduates might be achieving – transcripts, resumes, and other current forms of documentation do not provide information that enables anyone outside the academy to understand clearly what students actually learned in college. They often don’t know what a specific degree or credential signifies in terms of *learning* – what students know and can do.

“We have no idea what our nation is getting substantively in exchange for an enormous public investment in higher education and constantly rising private tuition.” - *The Hill*

Given how important a highly educated citizenry has become to our nation’s economic vitality, it is not surprising that policymakers at both the state and federal levels also have been asking tougher questions about how well our colleges and universities are performing. While policymakers have until very recently been primarily focused on access, affordability, attainment rates, and average salaries of graduates, business leaders have been more concerned – and vocal – about actual learning outcomes. A recent op-ed in *The Hill* (Barry 2015) noted that “for all the rhetoric and angst about increasing college prices, the dirty little secret of higher education is that a college degree doesn’t actually represent any particular set of knowledge or skills. We have no idea what our nation is getting – substantively –

in exchange for an enormous public investment in higher education and constantly rising private tuition. Do students leave with just a piece of paper or do they leave intellectually with something appreciably greater?”

Higher education leaders have not ignored these critiques. Many educators also have been concerned – especially in the face of changing demographics and changing patterns of college attendance – about the intentionality of curricular pathways and the actual levels of learning of students. In the past, students relied on one institution for their degree program and institutions hoped to deliver a logically sequenced education. While coherence may have been illusory even then, newer attendance patterns place greater responsibility on students themselves to create meaningful learning from a supermarket of choices (AAC&U 2002). This trend toward “student swirl” has only increased. It emphasizes the need for institutions and systems of higher education to collaborate on clarifying expected learning outcomes and demonstrating students’ achievement as they progress.

These pressures and concerns all drive a steady increase in attention to learning outcomes – how we define them and measure how well students are actually achieving them in and across all kinds of institutions and educational experiences. Dozens of projects and many reports have been issued in the last decade addressing the need for greater clarity about learning outcomes and the need to assess them more effectively.

Lumina Foundation’s Goal 2025 seeks to *increase the proportion of Americans with degrees, certificates and other high-quality credentials to 60 percent by 2025*, defined as those that are based on transparent learning outcomes **and** that lead to further education and employment.

With Goal 2025 in mind, and aware of growing concern about student learning outcomes, Lumina Foundation invited more than 40 practitioners and leaders working in the learning outcomes space to a convening in early February 2016. The goal of the convening, called “It’s All About the Learning,” was to strengthen collaboration among a variety of efforts advancing quality learning, equity, and completion; the use of credential/learning outcomes frameworks; the creation of transparent,

flexible and guided learning pathways; and recognition of credentials based on competencies. The objectives of the convening were to:

- Create a shared understanding of initiatives focused on enhancing high-quality learning, equity and completion, including what is working or not working.
- Identify opportunities for collaboration in advancing initiatives focused on learning, equity and completion, as well as expanding cross-initiative support.
- Develop plans for how to move forward on opportunities of shared interest and discuss the potential for a more organized community of policy and practice to support this work.

The accompanying table outlines six likely categories of the emerging concept of a learning system. The categories were identified following an analysis of nearly 200 resources (e.g., reports, books, tools, bibliographies) that inform higher education institutions, systems and state leaders about how to engage in learning systems work. A key criterion for including an item in the resource list was that it had been published within the past five years. The first supplemental document appended to this report (*It is About the Learning*) contains more information about the key categories of a learning system and resources reviewed, by categories.

## SIX COMPONENTS OF AN EMERGING LEARNING SYSTEM

### Quality Learning Frameworks

- Common Core and higher education alignment
- Degree Qualifications Profile and Tuning
- Essential Learning Outcomes

- Beta Credentials Framework
- Employer engagement in quality
- Additional learning frameworks

### Pathways

- Competency-based education
- General education and major program redesign
- Remediation/developmental education

- High-impact practices
- Guided pathways
- Transfer

### Assessment

- State of assessment
- Approaches to assessment
- Prior learning assessment
- Assignments as assessment

- Rubrics
- Co-curricular assessment
- General education assessment

### Recognition of Credentials

- Transcripts and badges
- Credential registry
- Comprehensive student records

### Equity

- Inclusive excellence
- Equity-minded practice
- Culturally relevant curriculum design

### Leadership and Change

- Senior leaders
- Change initiatives
- Faculty



## IDENTIFYING THE PARTICIPANTS

In planning for the convening, Lumina worked closely with two leading organizations in learning outcomes work – the Association of American Colleges and Universities (AAC&U) and the National Institute for Learning Outcomes Assessment (NILOA). These organizations suggested resources to inform the discussions and also helped identify national experts who lead major projects on learning outcomes, approaches to teaching and learning, frameworks, pathways, equity, assessment, and documentation of learning.

The attendees represented research centers, higher education systems and institutions (community colleges and universities), assessment offices, regional accrediting bodies, and intermediary organizations with expertise in policy and technical assistance. Experts represented six categories that constitute the emerging learning system (see accompanying chart and Appendix A).

Because this was an initial gathering, the participant list was not exhaustive. For example, employers and policymakers – groups that clearly have essential roles

to play in the learning outcomes reform movement – were not included. The intent was not to exclude them but to first gain clarity from educators about how to move forward before bringing them more directly into the evolving national dialogue.

The great deal of work already underway in many locations (e.g., within individual colleges/universities and among interinstitutional and regional compacts, national online collaboratives and national disciplinary associations) was reflected in the pre-conference reading materials. Much of this work focuses on the use of learning outcome frameworks and credential frameworks, the creation of guided learning pathways, and the recognition of credentials based on competencies and other learning outcomes. It was also evident that these efforts are often disconnected. A key purpose of the convening, therefore, was to encourage attendees to look for ways to combine and/or expand their efforts in order to scale these changes to a larger group of learners.

# KEY DISCUSSIONS



Two “TED-style talks” opened the convening to frame the discussions.

## LEARNING OUTCOMES — WHAT DO WE KNOW?



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Watch a video of the full presentation: [https://youtu.be/Q\\_1OsqMEOkk](https://youtu.be/Q_1OsqMEOkk)

Humphreys opened her talk by drawing on David Foster Wallace’s commencement speech, “This Is Water.” Talking about learning – what it is, how teachers accomplish it, and what it is supposed to impart to students – may be like fish trying to describe the water they swim in. “Sometimes the most obvious, important, ubiquitous realities are often the ones that are hardest to study and talk about.” Postsecondary educators need to be able to explain the work and goals around learning and actual students’ levels of achievement to students, faculty, media, policy shapers, lawmakers and society – everyone who benefits from education as a public good.

It is important to acknowledge that we have made great strides in understanding which learning outcomes are most important for graduates. For instance, the Essential Learning Outcomes defined through the Liberal Education and America’s Promise (LEAP) Initiative embody work with employers and faculty distilling the learning outcomes most essential for student success.

Soon after, the Degree Qualifications Profile (DQP) took us one step further by defining what students need to do to demonstrate that they have the learning signified by their credential – be it an associate, baccalaureate or master’s degree, and regardless of college major. There is a growing consensus among employers, faculty and students that high-quality credentials must identify the learning behind the credential. Notably, the vast majority (85 percent) of individual institutions report progress in defining their learning outcomes, and most also report they’re assessing these outcomes.

So, if there is growing agreement on learning outcomes, what’s the problem? **Too many students do not achieve**

the desired outcomes. “We need more students to have these outcomes and at higher levels,” Humphreys said. “Furthermore, too many students do not graduate and too many who do graduate do not have the breadth of learning at the level of learning they need.”

One question before us is whether we are now able to bring together educators, employers and policymakers to create coherence among these initiatives and form a coordinated group that can accelerate progress. Humphreys outlined five big issues for such a group to consider:

- How well we define, operationalize and map outcomes.
- How we design the curriculum to advance outcomes — how students actually make their way through the curriculum.
- How we communicate about the outcomes.
- How we collect data, and on which students.
- How we assess outcomes and use the results to improve learning and completion rates.

While progress is clearly being made, relatively few higher education institutions have established effective “cultures of evidence” that produce enough *actionable information* about student learning to fuel institution or system-wide improvements, including those at the course, assignment and program levels. Such improvements would require an understanding of equity gaps. Data on achieving institutional learning outcomes and high-impact learning experiences is often not disaggregated by race, ethnicity, income or parental level of education. This means instructors and institutions often don’t know if there are gaps in attainment or if efforts to improve instruction are benefiting all learners.

Going forward, faculty must act as “partners in change” if real progress is to be made on learning. Educators must be engaged and believe this is work worth doing. “None of this will get done without faculty,” Humphreys noted. This will require working directly with cohorts of faculty as they evolve from a mindset of “my work/my course” to “our work/our curriculum.” Faculty must also have access to meaningful assessment data, and to national organizations that are coordinating work with institutions to increase completion rates and improve the quality of student learning.

## CLOSELY LINKED: QUALITY AND EQUITY



### ALICIA DOWD

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Watch a video of the full presentation:

<https://youtu.be/dStBtZp05b4>

Dowd framed the present-day changes as a “revolution in curriculum design and delivery of education.” While it is true that the new modern era calls on faculty and staff to be student-centered, this is not the only change. The “real revolution” is the movement of capital for the production of curricula from *inside* the academy to *outside*. In the old days, public higher education faculty were given taxpayer dollars to design, teach and grade.

Today, this no longer happens in isolation. Many new ideas for programs, rubrics, technology, and pedagogies come from outside the academy. These new designs – often aimed at educating more students more effectively – typically seek higher quality, greater equity and increased efficiency over current institutional designs. To faculty, this likely sounds like “my curriculum is better than your curriculum.”

To help educators on the front lines of the quality learning movement, we need to consider ways to deliver the ideas at scale while addressing concerns. “The good news is, we’re learning how to produce buy-in and awareness,” Dowd noted. An example is “Equity and Excellence,” administered by the Center for Urban Education in Colorado (<https://youtu.be/FFA4NvYoMgs>).

The math department at the Community College of Aurora is a successful example of how to get faculty engaged and energized by this new model of thinking about the curriculum. In this project, faculty were given disaggregated student data course-by-course and instructor-by-instructor in quantitative literacy, algebraic literacy, and algebra. Faculty members were asked to reflect on the following questions:

- *How am I doing serving students of color?*
- *Am I closing equity gaps or contributing to them?*

By examining student data from their individual courses broken down by student characteristics, faculty were engaged in understanding the problem and creating solutions. The key to success was faculty both examining and taking ownership for their practices. Through meetings to discuss culturally responsive pedagogy and mechanisms that change practices, faculty were able to achieve greater equity. The chair of the math department even began to call himself a “first-generation equity worker.”

“We are learning that quality and equity do not have to be negatively related. We can have a positive impact on equity while maintaining or even increasing quality,” Dowd summarized. She then shared three promises that must be made to faculty if they are to embrace learning outcomes and equity initiatives:

1. *You will not be disrespected or disenfranchised. We want you as a partner.*
2. *You will not be overburdened. This is a collective effort.*
3. *You are going to experience a time of professional rejuvenation. You will look back on this as a time of personal and professional passion. You are in the vanguard of the modern era.*

Rather than tell faculty what they must do, Dowd said, we must engage their heads, hearts, and hands – that is, engage them intellectually in the concepts of their field, emphasize the goal of helping all students succeed, and engage them in their craft of teaching.

We also know that this work takes time. Using disaggregated data to drive reflection and change means faculty need time to dive into the data to make sense of it and the work of improvement, Dowd said. Important questions can be raised: “*What does the data tell me? What does it tell others? What does equity mean? What’s institutionalized racism? How do I know when I see it? What do I do if I see it? Am I going to make it worse? How do I get the tools to know how to improve?*”

If we convey a vision effectively, we can change the conversation from one that doubts the quality of students and loss of status, to one that ensures quality of teaching and learning for our new society. “Equity work done right can make a real difference for students.”

# A GRAPHIC DEPICTION OF THE LANDSCAPE

With the help of a strategic illustrator, Patti Dobrowolski of Up Your Creative Genius, attendees at the convening developed a “big picture” landscape covering three sections:

1. Current reality of learning systems work
2. Desired new reality
3. Bold steps to the desired new reality



# IT'S ALL ABOUT LEARNING

## CURRENT REALITY

CLEAR LEARNING OUTCOMES

CLARITY

SCIENCE OF LEARNING

HIGH IMPACT PRACTICES

DIFFERENT MODELS

TECHNOLOGY

TOUGH TOPICS

FRAGMENTATION

## BOLD STEPS

### REDESIGN CURRICULUM AROUND 21ST CENTURY LEARNING

### WELL PREPARED EDUCATIONAL TEAMS

### SHIFT PUBLIC POLICY NARRATIVE

## DESIRED NEW REALITY

UNDERSERVED STUDENTS

MORE PUBLIC SUPPORT

EQUITABLE

DIVERSE

HERE'S WHAT I KNOW... STUDENT CENTERED

EMPLOYER SUPPORTED

ALL ENTER w/ PRIOR LEARNING

21ST CENTURY ASSESSMENTS

AFFORDABLE

INTENTIONAL

COHERENT

TRANSPARENT & DISCUSS RECOGNIZE THE TENSIONS

EVIDENCE BASED

COMMON LANGUAGE

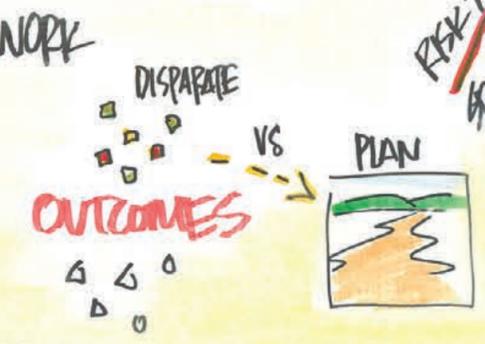
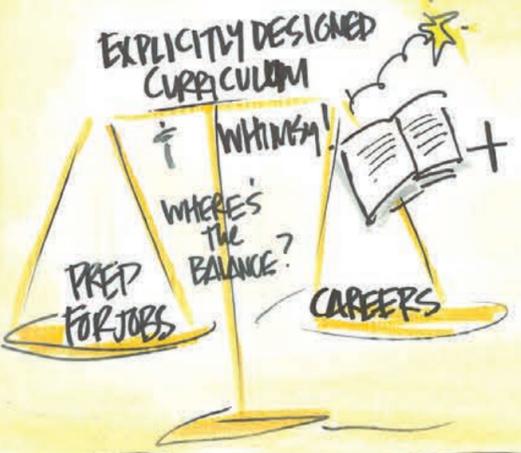
INTERCONNECTED

FLEXIBLE

HIGH QUALITY

COLLABORATION

TECHNOLOGY ENABLED



MODELS w/out INFORMATION

WHICH ONE?

WHAT IS THIS GAME?

NOT RECOGNIZING TENSIONS & UNINTENDED CONSEQUENCES

HOW DO WE CHANGE WHAT WE'RE A PART OF?

NEED FOR CULTURAL CHANGE

EDUCATION PRIVATE? PUBLIC?

RISK TO STUDENT

RACISM

EQUITY

QUALIFICATIONS

WHERE'S CONSENSUS?

HOW TO USE IT?

ROADMAP TO SUCCESS

STUDENT SUCCESS

PERSONALIZED LEARNING

MULTIPLE DEFINED PATHWAYS

WELL UNDERSTOOD INTEGRATED

STACKABLES

INTEGRATED GLOBAL PARTNERS

SUPPORTIVE POLICY

RECOGNIZE

STUDENTS FACULTY

TECHNOLOGY ENABLED

STUDENTS FACULTY

TECHNOLOGY ENABLED

STUDENTS FACULTY

TECHNOLOGY ENABLED

STUDENTS FACULTY

UP YOUR CREATIVE GENIUS

# KEY DISCUSSIONS

## CURRENT REALITY

The current educational system is fragmented. Since postsecondary education was built more to address institutions' needs than students' needs, the learning process is constrained now by disciplinary silos. In preserving these silos, the system fails to consistently produce the interdisciplinary learning needed to secure a good job in the 21st century knowledge economy. Furthermore, this fragmentation hampers efforts to increase student attainment, particularly among first-generation college students, low-income students and students of color. These gaps in attainment are fueling further disparities by race/ethnicity and income level.

“We have a policy conundrum. We want the future to be born now but current data measures the old notions that only completion matters. We have a misalignment of efforts. Until we align them, learning outcomes will be aspirational at best.” - *Participant*

There is a common public perception that postsecondary education is a private good rather than a public good that deserves public support and demands equity. Many public institutions struggle for adequate funding. With decreased support for public postsecondary education, it is difficult to create the will for necessary policy changes. Many attendees working for change are encountering policies that lock in components of the industrial-based learning system. For example, state policies that seek to facilitate in-state transfer have codified a general education curriculum model from the 1960s; this keeps curriculum in silos and too often incoherent. There is reluctance to use direct assessment of student learning as a measure of quality. Many of the current policies were created to increase accountability for student completion, but they now hamper efforts to redesign the system so that it provides a high-quality learning experience and increases the success of underserved students.

When describing the current reality on campuses, the group recognized the need for cultural change but was also honest about the challenges of changing something of which they are a part. The group agreed that we make assumptions about learning when we should be drawing on the *science* of learning. And, while we do have some successful examples of high-impact practices to improve learning outcomes, the benefit for students cannot be realized without a plan for students to move through the curriculum via intentionally designed, integrated and transparent pathways, which will require significant shifts in teaching and learning practices and new learning by faculty.

The group raised many questions about the role of faculty and staff in the learning system, especially with regard to the organization of pathways and the creation of opportunities to achieve degree-level outcomes. A key issue is that there is no universal understanding for how to prepare postsecondary educators. The creation and use of learning opportunities outside the traditional classroom (e.g., co-curricular learning, employer-based learning), raises important questions about what qualifies someone to teach – and about who decides what and how they should be teaching.

Along a similar thread, while the group identified employer engagement as important, it conceded that the best ways to collaborate with employers are not yet clear. While employers frequently sit on programmatic advisory groups and boards, the lack of a common language between employers and postsecondary institutions hampers communication and limits true engagement. Participants also spoke to the tension between “hearing” what employers say they want in graduates and “ensuring” that the learning behind the credential will keep people employed.

While technology can support innovation, campuses are now presented with many technology solutions and are unsure how to make best use of them in a comprehensive manner. This also complicates the use of data; current systems are often inadequate for compiling the range of data needed to inform decision making. Educators need assistance in understanding data and then actually using it to make changes to curricular designs and/or to teaching and learning practices.

In the end, the group agreed that the work now underway is overwhelmingly aimed at making repairs to a broken system when what is truly needed is a restructured system. Some in the room even called for a “learning revolution.”

“We might not recognize the tensions and unintended consequences of the changes we are trying to make for equity.” - *Participant*

## DESCRIBING THE DESIRED REALITY

Once attendees could see a visual snapshot of the current landscape, they turned their attention to the future – describing the desired new reality. Participants coalesced around the notion of a *learner-centered* system. In such a system, the end result for learners – what they get from their educational experience, including learning and skills development, curricular and co-curricular experiences, and ultimately a credential leading to further education and employment – is what drives the design of majors and degrees.

The system must no longer be designed around what is desirable or easiest for an institution or the people working there, or what has historically been done. The desired and needed educational system is *intentional*, meaning that learning experiences are designed and facilitated using methods proven to create 1) the learning outcomes desired, and 2) conditions for learning that have proven to close equity gaps and serve all students. In this new approach to designing curricula, the discipline is a context for learning, not a silo of content knowledge disconnected from the learner. As students continue down a pathway, credentials are awarded based on competencies – what a student knows and can do – and the kinds of student records (e.g., traditional or extended educational transcripts, e-portfolios) that reflect that learning.

Educational teams teaching coordinated content – not lone faculty members teaching disparate, unconnected courses – are critical to the envisioned learning system. Teams can be composed of faculty, staff, advisors and employers or civic partners well versed in the science of learning to create interdisciplinary and problem-based learning experiences and validate what students have

learned. Furthermore, a new learning-based business model will emerge based on learning progress rather than the time-based measure of the credit hour.

In this new reality, employers are engaged as partners in creating problem-based, real world learning opportunities and in helping evaluate meaningful demonstrations of learning. This would help reduce the mismatch between what graduates think they can do and what employers say they need. More work-to-learn in which learning that happens on the job is connected to formal learning is also recognized and validated.

A shared language must exist among students, employers, and postsecondary education about the learning that credentials represent. With a common language and increased partnership, technology and data systems can be built that will allow these practices to be scaled. Quality-assurance mechanisms will bring together the currently misaligned measures to focus on high-quality learning and completion.

In the desired reality, education will be seen as a public good that benefits society and would gain more public support in terms of resources and political will. Affordable and high quality for all, the new learning system will no longer be a social sorting mechanism that creates a society of haves and have-nots. Underserved students will be prioritized and achieve more equitable outcomes. The quality and kind of education you get, and the employment you get after graduation, won't be determined by your ability to pay.

Hence, more students will complete their education with the skills and knowledge they need to effectively participate in the 21st century workforce.

## THREE BOLD STEPS TO THE DESIRED REALITY

With a visual landscape of the current reality and a desired reality of our learning system, attendees focused on what it would take to realize this desired reality. Participants were asked to do two things: 1) imagine the boldest steps you can think of to move from where we are today to the desired reality; and 2) focus on creating a realistic plan for next steps.

Participants identified three priority steps that reflect the how, who, and why of the quality learning movement.

## Step 1: Redesign curriculum around 21st century learning

This priority step addresses the “how” of a new learning system.

Redesigning the curriculum would put learners at the center of our system by providing learning experiences that help the student progress toward clearly defined degree-level learning outcomes. This differs from the current reality in that most curricula now focus on checking off particular subject-area boxes. In the future, students would move through educational experiences (e.g., courses, co-curricular learning, field- and employment-based learning) to create personalized learning pathways toward the learning outcomes associated with the degree or credential they seek.

The way students engage in learning will be problem-centered. Students will identify a problem and work to resolve it using their knowledge and skills. This would often be done in a team setting by applying interdisciplinary knowledge and cross-cutting skills. An example: Rather than sitting through a series of lectures followed by generic tests, students in a chemistry course could study the lead level in their city drinking water and design a project related to their findings.

This form of applied learning often leads to higher levels of achievement because students are more motivated to *own* the learning process. When students are asked what problems they want to study and solve, they can see the reasons behind the courses they are taking instead of seeing them as something to check off in order to get the credential that they need to get a job. This kind of learning is also more transparent. Rather than use course names and credit hours as proxies for learning, which can be confusing or misleading, students are shown what they need to learn to earn a credential and how they can learn it.

This approach is already showing positive results in closing equity gaps for underserved students. For example, AAC&U is sponsoring a pilot project called “Transparency and Problem-Centered Learning” at several minority-serving institutions. It is designed to make learning outcomes and teaching practices transparent and examine how faculty may deepen student learning by intentionally articulating expectations and using problem-centered learning and other active approaches. The University of Nevada-Las Vegas achieved measurable improvement in outcomes for its first-generation, low-income and

underrepresented students when faculty made course assignments more transparent and problem-centered.

## Step 2: Staff with Well-Prepared Educational Teams

This priority step addresses the “who” in the learning system – who serves as the provider of certification, teaching, learning, and assessment in the new curriculum.

This step represents the shift from the idea of teaching as something done by an individual (*my course, my responsibility*) to a team approach (*our curriculum, our responsibility*). If the best postsecondary education is a holistic learning experience, then all the different locations and kinds of learning that contribute to an education (e.g., classroom, work, internships, co-curricular activities, prior learning) must be integrated and acknowledged.

This approach focuses everyone in the postsecondary landscape on the learner and the learning outcomes required. This approach requires a team, as no individual can be solely responsible for teaching every learning outcome. This new type of teaching will require educators to learn how to create problem-based learning activities that are sequenced, creating a learning pathway. This will likely require different preparation for postsecondary educators and cross-institutional partnerships with those not traditionally in the classroom (e.g., co-curricular educators, library educators).

The team aspect is critical. As one participant noted, “Every single person in an institution can make or break a student.” Every professional is critically important – advisors, course designers, registrars, faculty members, staff and employers all play a key role in helping students succeed and learn what they need to succeed in the 21st century economy and society. As another participant noted, “By working together, we can get more students further, faster.”

What will the training of educational teams look like? This bold step requires us to tap into the growing body of research on the science of teaching and learning to incorporate methods that are making a demonstrable difference for learners.

This team approach is by nature interdisciplinary. We know from the research that integrated, interdisciplinary learning benefits learners, but it will require faculty to move out of their traditional, discipline-based orientation and work with educators across the institution – as well as with practitioners in employer-industry settings.

This bold step will raise important but difficult questions:

- Who can be an educator, and how are they prepared?
- Who is best positioned to succeed in educating different kinds of students at different levels?
- How do we redefine training and preparation to teach as a scholarly activity, grounded in the science of teaching and learning?
- How do we engage non-faculty who interact with students?
- Do all instructors need a certificate or a credential certifying that they are prepared to teach? If so, who decides and who will do the training and certification?

“Today’s business model is based on the credit hour, which was never designed to represent learning. How do we build a system that puts learning first?” - Participant

### Step 3: Shift the public policy narrative to ‘postsecondary education is a public good’

This priority step addresses the “why” in the learning system. It’s at the heart of why so many people and groups are undertaking this work.

Shifting from the assumption that high-quality postsecondary education is a privilege or luxury to the idea that it is a public good adds urgency and a reason for the emphasis on high-quality learning outcomes behind credentials. But this movement represents a culture change that will take time and work by diverse stakeholders. It will affect budgets and teaching methods, and require that educators learn new ways of teaching. These changes will have massive impacts on how people do their work, and it is important to acknowledge that.

Regardless of their various perspectives, attendees focused on the priority of this third bold step and that restructured policies and regulatory systems are needed to support this critically important change. They acknowledged that difficult, uncomfortable conversations must take place if these changes are to occur on a wider scale. There will

be a need for evidence – solid reasons why new policies and even laws are needed to put these changes into effect.

This bold step gets to the heart of the equity issue. Educators and institutions need to look closely at equity gaps and find ways to close them. To do otherwise is to deny groups an education. This final step is also the one that can feel the most abstract and challenging. An articulated set of smaller steps may make this seem more achievable to those working on the ground. A theory of change may be helpful in giving people a path toward accomplishing this large but essential goal.

## ROAD MAP TO THE THREE BOLD PRIORITIES

How do we reach these three bold priorities? There was consensus that the steps to advance this work will likely come from the intersection of three buckets of work identified in the pre-reading for the convening – quality frameworks, guided learning pathways, and recognition of credentials (see supplemental document: *Learning Outcomes: Where We Have Been, Where We Need to Go*).

According to the pre-meeting reading material, work in these three areas has not yet been combined in optimal ways to allow for work to be scaled up, nor are there true cultures of assessment to produce sufficient evidence to fuel system- or institution-wide reforms. But there is now more recognition of several areas of action in which alignment of projects and ideas for action are needed. Those areas include the following:

**State policy.** Work in facilitating student transfer between institutions has put policies in place in some states that have locked in the “cafeteria style” list of courses that students need for transfer. These prescribed lists are in opposition, however, to the interdisciplinary learning and teaching that typify a student-centered, learning outcomes-focused system. We must find creative ways to develop new policies that facilitate transfer based on *learning* rather than on simple course completion or credit accumulation.

**Structural barriers.** Institutional budgets and funding formulas are typically based on the number of courses or faculty members in a department. While discipline-based departments can be a structural barrier, other policies can also work against interdisciplinary courses or team-teaching.

**Decision-makers.** Who gets to be at the table when discussions about learning outcomes are taking place and decisions about frameworks, pathways and credentials are made? Are we talking to the right people? For example, with employers, are we talking to the people in the right positions – not just managers but also human resource personnel who examine credentials and often make the hiring decisions?

**Contingent faculty.** It will be a challenge to engage contingent faculty, who may not be exposed to the complete curriculum and who may be low-paid and limited in the hours they can devote to this work. But it is important not to leave them out, because defining competencies and making sure that students achieve them must consider the full sequence of learning experiences. Contingent faculty represent a large and growing number of postsecondary educators.

**Time.** Culture change takes a long time. We need to give faculty time to study the data and make sense of it. Still, there is an urgency to this work. Balancing the time needed to do this right with the sense of urgency to serve students and reach Goal 2025 will be difficult but must be accomplished.

**Trust.** Faculty, who are at the heart of any learning efforts, may not trust initiatives that come from administrators or outside parties. If change moves at the speed of trust, how do we overcome these issues?

**Initiative fatigue.** Too many separate efforts at the institutional level can cause initiative fatigue, limiting the resources, energy, and attention of those on the ground who will be critical to this work – faculty, staff

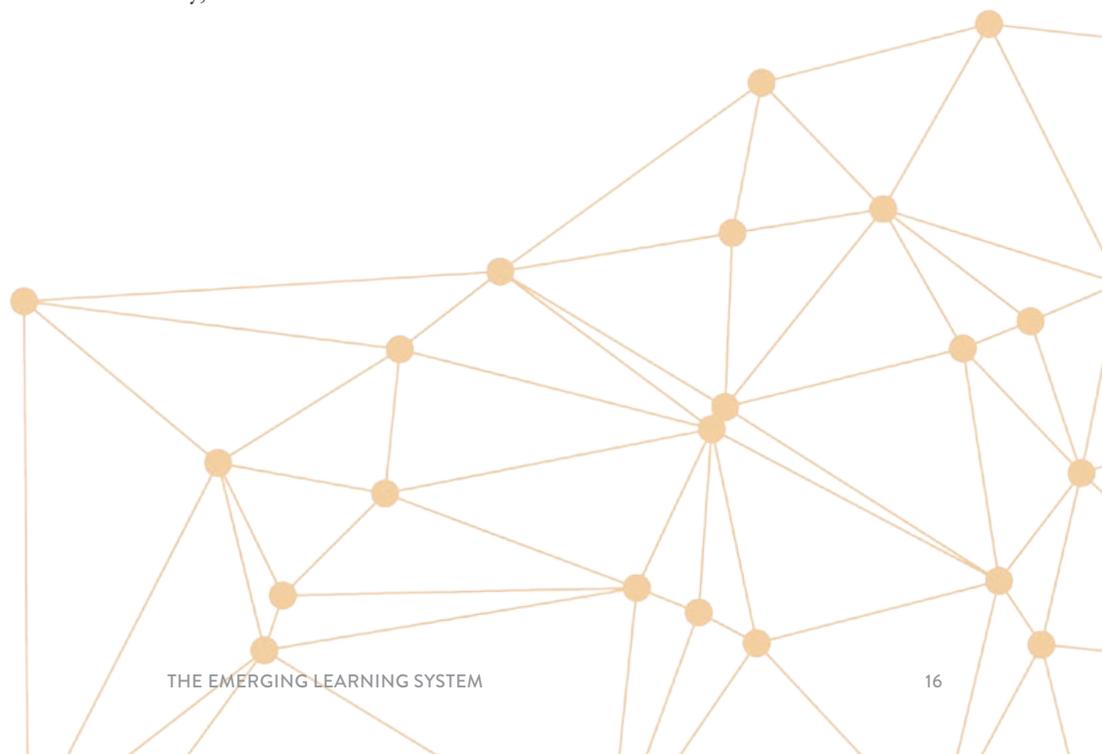
and administrators. It is imperative to show connections between the various initiatives and ways to approach the large-scale change needed.

**Unintended consequences.** There are typically unintended consequences in making big changes and we expect this to be the case in the emerging learning systems work. For example, in an effort to ease transfers, policy-makers have codified certain courses in state regulations and laws, with the unintended consequences that are now making it difficult to respond to 21st century needs.

**Communicate a theory of change.** It will be important for those working on the ground to be mindful that their particular project is part of a larger vision and goal tied to others' projects. A unified "theory of change" might help articulate the next steps that educators working on learning outcomes should take.

Participants also raised many questions and concerns that will need to be settled as educators and reforms consider the path to advance the three bold steps, including:

- Who will be qualified to teach in this new learning system and who will qualify them?
- In working with various learning frameworks (e.g., DQP, Essential Learning Outcomes, Lumina's beta Credentials Framework, employer frameworks), how might we best work with the national disciplinary associations and employers on defining competencies? How can we assure that enough people know the learning frameworks and what they are best used for?
- How will advising – and the faculty role in that – be addressed?



# GETTING ON THE ROAD: NEXT STEPS



# A NEW ROAD MAP

We have drawn a new road map to point us in the right direction. In the middle of our learning system landscape is where we are now (current reality), where we need to go (desired reality), and three bold priority steps to get us to the future. While this work must focus especially in three areas – learning frameworks, guided learning pathways and recognition of learning – there are three fronts of action to best focus learning system reform efforts:

**HOW** we get there will be by focusing on redesigning the college and university curriculum around 21st century learning.

**WHO** will be critical to implementing the new learning system will be well-prepared educational teams.

**WHY** we must commit to this shared journey on our road map: Shifting the public policy narrative is our best hope for recognizing that a culture change is needed.





# GETTING ON THE ROAD: NEXT STEPS

At the convening's outset, participants noted they are working on many projects to improve learning frameworks, guided learning pathways or credentials for students, and all agreed that this work is contributing significantly to the advancement of the learning agenda. Unfortunately, these various efforts are not connected and therefore fail to maximize the energy, resources and knowledge needed to reach full scale.

After articulating what participants believe is at the heart of their work, a new view began to emerge: We must *work together* to take these reforms to many more institutions and students. Specifically, the group expressed a need for a shared language to talk more widely about these reforms. But more than a shared language, the group indicated that what they need – what the education reform movement needs – is a shared *vision*. We all need to see how these three bold steps in particular come together so that we can go out and show others. Developing the desired reality and three bold steps to get there are important moves toward a clear, shared vision.

Though discussions focused primarily on how these changes will affect educators and institutions, the prevailing view was to put students at the forefront. There was widespread recognition that putting learners at the center – their needs, interests, abilities and the best ways to reach and teach them – is what this 21st century education model is truly about.

The group also acknowledged that there are other reform movements in education – toward completion and greater accountability, especially – that take up considerable attention and resources. These movements are important and can complement work to improve learning and teaching. Those working on redesigning curriculum, building learning pathways, and creating credentials based on learning outcomes should remember (and explain to others) that putting learning outcomes at the center will positively affect completion rates and transparency, which in turn improves accountability. Demonstrating how improvements in learning outcomes can contribute to completion is an essential area of research going forward.

Finally, the group recognized that partnerships are key to advancing the learning systems movement. Future

conversations must include policymakers and employers, and faculty must be part of these discussions.

As the convening came to a close, participants identified several short-term actions to help move us forward together:

**Create a shared glossary.** One item that participants deemed crucial to future work is an accepted glossary of terms. Even among the experts in attendance, all of whom have knowledge of these concepts, there was disagreement about the meaning of some terms. This lack of common understanding can easily lead to disagreements that delay or derail progress. A shared glossary will be necessary for doing the public work of explaining these changes and making the case for them to wider audiences.

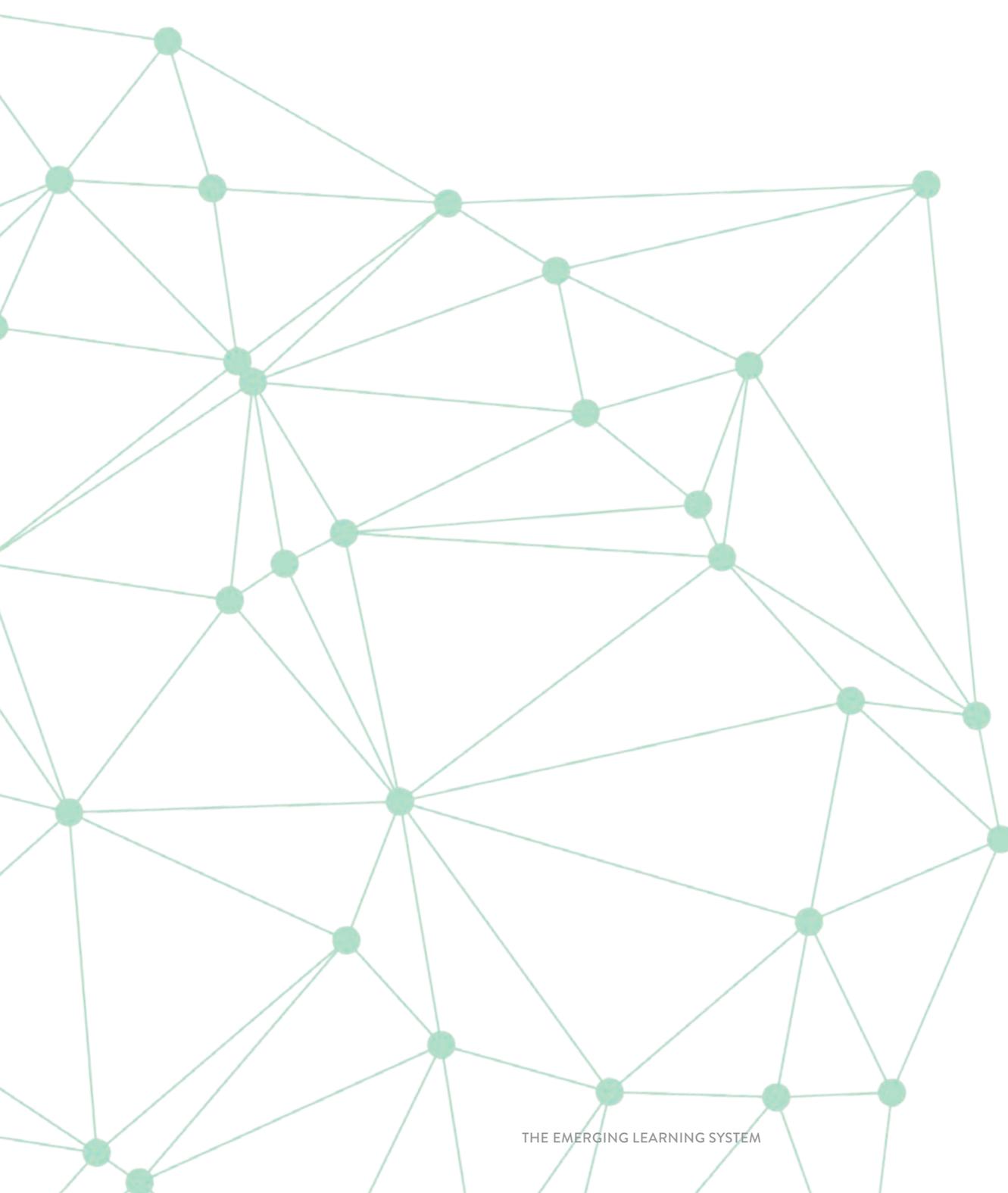
**Form work groups to help steer the action.** Groups might focus on how the various projects might be connected. For example, one group might look at the connections between quality frameworks and guided learning pathways while another could do a thorough mapping of efforts.

**Create new partnerships to leverage resources.** Participants received a list of projects that others are working on that can be used to identify where participants might collaborate. Serving on one another's advisory groups or special project committees is another useful partnership opportunity.

**Work regionally as well as nationally – and hold inclusive conversations with diverse voices.** Meetings, conferences and webinars are avenues to hold inclusive conversations around emerging learning systems reforms – and a key idea is to work regionally in order to bring more people, voices and perspectives

to the table in less time and with less cost than holding national meetings. This would also help bring more diverse voices to the table, including federal and state agency representatives, employers, and assessment bodies. We should recognize that big changes often involve competing interests and not all discussions will be easy or comfortable.

**Learn from international colleagues.** Learning systems approaches are advancing beyond U.S. shores. We should bring in lessons learned from similar work in other nations to inform our considerations.



# SUPPLEMENTAL DOCUMENTS



## **It Is About the Learning – Resources to Inform the Field about the Emerging Learning System**

Many resources are available to the field about how to engage in learning systems work— at an institution, in systems and as state leaders. This inventory categorizes nearly 200 resources (e.g., reports, books, tools, bibliographies) within six categories that we believe comprise the emerging system of learning<sup>1</sup> The inventory may be used to identify where resources exist, where resources can cross reference one another, and where gaps exist as part of an effort to identify what may be missing and how to create a shared understanding of the emerging learning system with the goal of better informing the field (e.g., faculty, educational leaders, researchers, and policy leaders).

The following graphic portrays the level of activity (number of resources) within the six categories, further broken down into subcategories:

### **Quality Learning Frameworks (31)**

- Common Core and Higher Education Alignment
- Degree Qualifications Profile and Tuning
- Beta Credential Framework
- Additional Learning Frameworks
- Employer Engagement in Quality

### **Pathways (61)**

- Competency-based Education
- Curriculum and Teaching
- Remediation
- High Impact Practices
- Guided Pathways
- Transfer

### **Assessment (51)**

- State of Assessment
- Approaches to Assessment
- Prior Learning Assessment
- Assignments as Assessment
- Rubrics
- Co-curricular Engagement
- General Education

### **Recognition of Credentials (7)**

- Transcripts and Badges
- Credential Registry

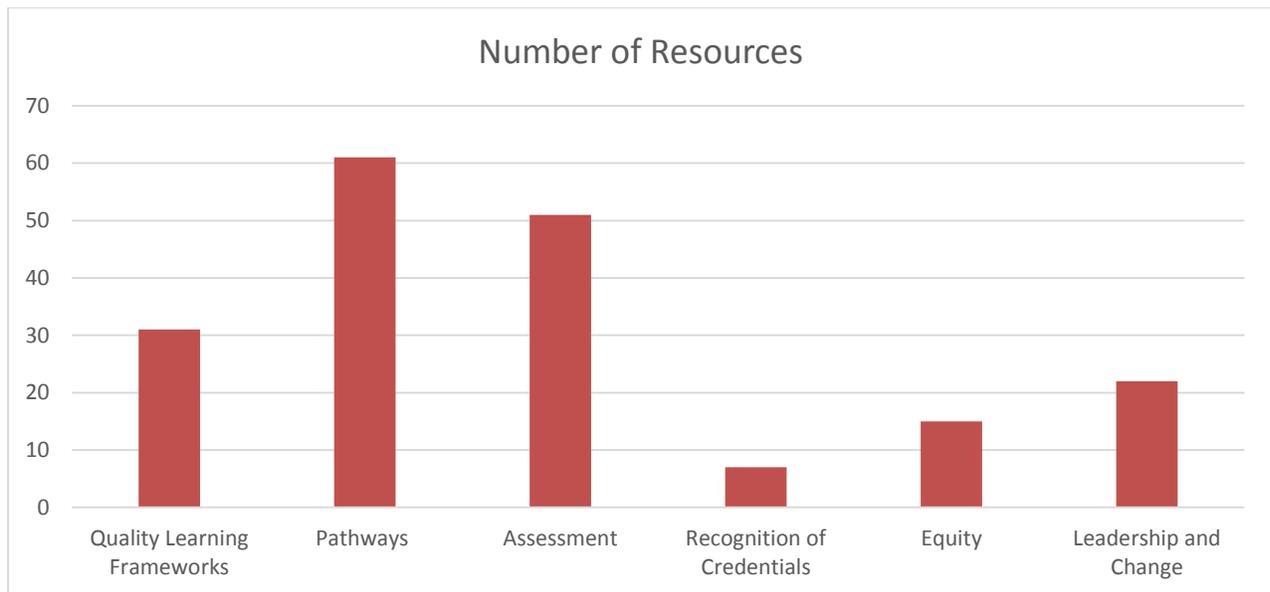
### **Equity (15)**

### **Leadership and Change (22)**

- Senior Leaders
- Change Initiatives
- Faculty

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<sup>1</sup> Resources are categorized within one “bucket” (the bucket of “best fit”) for purposes of this inventory, but they may fall within others as well. Parameters for selection of resources include: published by the organizations at the convening, focus on practitioners, and recency (published within the last five years).



## Quality Learning Frameworks

### Common Core and Higher Education Alignment

- Conley, D.T., & Gaston, P.L. (2013). *A path to alignment: Connecting K-12 and higher education via the Common Core and the Degree Qualifications Profile*. Indianapolis, IN: Lumina Foundation. Retrieved from: [http://degreeprofile.org/press\\_four/wp-content/uploads/2015/04/A\\_path\\_to\\_alignment.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2015/04/A_path_to_alignment.pdf)
- King, J. E. (2011). *Implementing the common core state standards: An action agenda for higher education*. Washington, DC: American Council on Education. <http://www.acenet.edu/news-room/Documents/Implementing-the-Common-Core-State-Standards-2011.pdf>
- Barnett, E.A., & Fay, M. P. (2013, February). *The Common Core State Standards: Implications for community colleges and student preparedness for college*. (An NCPR Working Paper). New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/common-core-state-standards-implications.html>

### Degree Qualifications Profile and Tuning

- Humphreys, D., McCambly, H., & Ramaley, J. (2015). The quality of a college degree: Toward new frameworks, evidence, & interventions. *Association of American Colleges and Universities*. Retrieved from <https://secure.aacu.org/store/detail.aspx?id=QCDEGREE>
- Institute for Evidence Based Change. (2012). *Tuning American higher education: The process*. Encinitas, CA. Retrieved from: [http://degreeprofile.org/press\\_four/wp-content/uploads/2014/09/Tuning-Higher-Education-The-Process.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2014/09/Tuning-Higher-Education-The-Process.pdf)
- Examples of Use at DQP institutions: 25 ranging from accreditation to general education to entire institutional redesign <http://degreeprofile.org/examples-of-use/>
- Berg, L., Grimm, L.M., Wigmore, D., Cratsley, C.K., Slotnick, R.C., & Taylor, S. (2014). Quality collaborative to assess quantitative reasoning: Adapting the LEAP VALUE rubric and the DQP. *Peer Review*, 16(3), 17-21. Retrieved from: <https://www.aacu.org/peerreview/2014/summer/berg>
- Ewell, P. (2013, January). *The Lumina Degree Qualifications Profile (DQP): Implications for assessment*. (Occasional Paper No. 16). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Jankowski, N. A., & Marshall, D. W. (2014, October). *Roadmap to enhanced student learning: Implementing the DQP and Tuning*. Urbana, IL: National Institute for Learning Outcomes Assessment (NILOA) and Institute for Evidence-Based Change (IEBC). [http://degreeprofile.org/press\\_four/wp-content/uploads/2014/12/RoadmapFinal.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2014/12/RoadmapFinal.pdf)
- Resource kit: <http://degreeprofile.org/resource-kit/> includes literature and examples on various topics

- Adelman, C. (2015, February). *To imagine a verb: The language and syntax of learning outcomes statements*. (Occasional Paper No. 24). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Hutchings, P. (2014). *DQP case study: Point Loma Nazarene University, San Diego, California*. National Institute for Learning Outcomes Assessment. Retrieved from [http://degreeprofile.org/press\\_four/wp-content/uploads/2015/08/DQP-Case-Study-Point-Loma.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2015/08/DQP-Case-Study-Point-Loma.pdf)
- Hutchings, P. (2014). *DQP case study: Kansas City Kansas Community College*. National Institute for Learning Outcomes Assessment. Retrieved from [http://degreeprofile.org/press\\_four/wp-content/uploads/2015/08/DQP-KCKCC.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2015/08/DQP-KCKCC.pdf)
- Kinzie, J. (2014). *DQP case study: University system of Georgia—Georgia State University and Georgia Perimeter College*. National Institute for Learning Outcomes Assessment. Retrieved from [http://degreeprofile.org/press\\_four/wp-content/uploads/2015/08/DQP-Case-Study-Georgia.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2015/08/DQP-Case-Study-Georgia.pdf)
- Kinzie, J. (2015). *DQP case study: American Public University System*. National Institute for Learning Outcomes Assessment. Retrieved from [http://degreeprofile.org/press\\_four/wp-content/uploads/2015/08/APUS.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2015/08/APUS.pdf)
- Project specific webinars: ACCJC: <http://degreeprofile.org/webinars-videos/>
- Faculty Collaboratives DQP and Tuning Explored webinar November 19, 2015: Susan Albertine, Dan McInerney, James Robinson, and Peggy James [Download Webinar](#) (.arf file), use the [Webex Player](#) to play the webinar video. [Download the PDF](#) version of the webinar slides.
- Webinar on October 5, 2012: Pat Hutchings, Natasha Jankowski & Jillian Kinzie, NILOA [Assessment and the DQP](#) (mov) [Assessment and the Degree Qualifications Profile PowerPoint](#) (pdf)
- Webinar on March 29, 2013: Carol Geary Schneider & Peter Ewell, DQP Authors [DQP and Implications for Assessment](#) (mov) [PowerPoint](#) (pdf)

#### **Beta Credential Framework**

- A beta Credentials Framework <http://connectingcredentials.org/framework/>
- Beta Credentials Framework Guidebook (in press)

#### **Additional Learning Frameworks**

- AAC&U Essential Learning Outcomes <https://www.aacu.org/leap/essential-learning-outcomes>
- AAC&U Essential Learning Outcomes VALUE Rubrics <https://www.aacu.org/value/rubrics>
- The Interstate Passport Initiative – Framework [http://www.wiche.edu/passport/knowledge\\_skills](http://www.wiche.edu/passport/knowledge_skills) Framework to help support success of transfer students, which includes discussions of learning outcomes for transfer students.
- Employability Skills Framework <http://cte.ed.gov/employabilityskills/>
- National Network of Business and Industry Associations (2014). Common employability skills: A foundation for success in the workforce. Retrieved from: [http://businessroundtable.org/sites/default/files/Common%20Employability\\_asingle\\_fm.pdf](http://businessroundtable.org/sites/default/files/Common%20Employability_asingle_fm.pdf)

#### **Engaging Employers in Quality**

- Annotated bibliography for resources on evaluation of employer engagement: <http://ocrl.illinois.edu/files/Projects/CCTCI/employer-engagement-bibliography.pdf>
- “Moving Success From the Shadows: Data Systems That Link Education and Workforce Outcomes” <http://www.aacc.nche.edu/Publications/Briefs/Pages/rb03162010.aspx> Makes connections among community colleges, student learning outcomes, and employment
- Wilson, R. (2015). *A Resource Guide to Engaging Employers*. Retrieved from Jobs for the Future: <http://www.jff.org/sites/default/files/publications/materials/A-Resource-Guide-to-Employer-Engagement-011315.pdf>
- Soares, L. and Perna, L.W. (2014). *Readiness for the learning economy: Insights from OECD’s survey of adult skills on workforce readiness and preparation*. Washington, DC: American Council on Education Center for Policy Research and Strategy. <https://bookstore.acenet.edu/products/readiness-learning-economy-insights-oecd%E2%80%99s-survey-adult-skills-workforce-readiness-and>
- Community College-Industry Partnerships [http://www.aacc.nche.edu/AboutCC/Pages/college-industry\\_partnership.aspx](http://www.aacc.nche.edu/AboutCC/Pages/college-industry_partnership.aspx) Examples of partnerships between community colleges and industries

### Competency-Based Education (*design principles and implementation*)

- Book, P.A. (2014, May). *All hands on deck: Ten Lessons from early adopters of competency-based education*. Boulder, CO: WICHE Cooperative for Educational Technologies (WCET).  
<http://www.cbenetwork.org/sites/457/uploaded/files/AllHandsOnDeckFinal.pdf>
- Klein-Collins, R. (2012). *Competency-based degree programs in the U.S. Postsecondary credentials for measurable student learning and performance*. Washington, DC: Council for Adult and Experiential Learning.  
[http://www.cbenetwork.org/sites/457/uploaded/files/2012\\_CompentencyBasedPrograms.pdf](http://www.cbenetwork.org/sites/457/uploaded/files/2012_CompentencyBasedPrograms.pdf)
- Cleary, M.N. (2015, December). *Faculty and staff roles and responsibilities in the design and delivery of competency-based programs: A C-BEN Snapshot*. Competency-Based Education Network.  
<http://online.flipbuilder.com/cvra/fhkz/>
- Public Agenda (2015). *Shared design elements and emerging practices of competency-based education programs*. New York, NY: Public Agenda.  
[http://www.cbenetwork.org/sites/457/uploaded/files/Shared\\_Design\\_Elements\\_Notebook.pdf](http://www.cbenetwork.org/sites/457/uploaded/files/Shared_Design_Elements_Notebook.pdf)
- CBE online design planner: <https://projects.invisionapp.com/share/P24CQ11A6#/screens>
- Thibeault, N., Amato, C., Siefert, D., & Richie, D. (2015). *Strategies for transformative change: Adopting and adapting competency-based education*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from:  
<http://occr.illinois.edu/files/Projects/CCTCI/sinclair.pdf>
- Adelman, C. (2014). *Competence: What do we need to read and think about?* Washington, DC: Institute for Higher Education Policy. Retrieved from: [http://degreeprofile.org/press\\_four/wp-content/uploads/2014/09/COMPETENCYARIEL.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2014/09/COMPETENCYARIEL.pdf)
- Klein-Collins, R. (2013, November). *Sharpening Our Focus on Learning: The Rise of Competency-Based Approaches to Degree Completion* (Occasional Paper No. 20). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- CBE resources on DQP website: <http://degreeprofile.org/resource-kit/competency-based-education/>

### Curriculum and Teaching

- Umoja Community. (n.d.). *Culturally responsive pedagogy*. Retrieved from: <http://umojacommunity.org/training-resources/culturally-relevant-pedagogy-2/>
- Ginsberg, M. & Wlodkowski, R. (2015). *Diversity & motivation: Culturally responsive teach in college* (2<sup>nd</sup> edition). San Francisco: Jossey-Bass.
- AACC Curriculum Tools.  
<http://www.aacc.nche.edu/Resources/aaccprograms/horizons/Pages/curriculumtools.aspx> Provides resources on curriculum tools for civic responsibility, syllabus and course design, course templates, and assessment
- Mordica, J., & Nicholson-Tosh, K. (2013). *Curriculum alignment module*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from:  
<http://occr.illinois.edu/files/Projects/ptr/Curriculum-Alignment-Module.pdf>
- Buttner, A. (2015). *Finding the way in the assessment landscape: Developing an effective assessment map*. National Institute for Learning Outcomes Assessment (NILOA).

### Remediation

- (November, 2015). *Core Principles for Transforming Remediation within a Comprehensive Student Success Strategy: A Joint Statement*. Retrieved from:  
[file:///C:/Users/aduncan/Downloads/core\\_principles\\_joint\\_statement.pdf](file:///C:/Users/aduncan/Downloads/core_principles_joint_statement.pdf)
- Center for the Analysis of Postsecondary Readiness: <http://ccrc.tc.columbia.edu/research-project/center-analysis-postsecondary-readiness.html>
- Complete College America. (2012). *Remediation Higher education's bridge to nowhere*. Washington, DC: Author.  
<http://completecollege.org/docs/CCA-Remediation-final.pdf>
- CCA has a "Know this" and then a "do this" model: example of corequisite remediation:  
<http://completecollege.org/the-game-changers/#clickBoxTan>
- Blog on corequisite remediation: <http://completecollege.org/the-results-are-in-corequisite-remediation-works/>
- Complete College America. (2015). *Core principles for transforming remediation within a comprehensive student success strategy: A joint statement*. Washington, DC: Author. <http://completecollege.org/wp->

[content/uploads/2015/12/Core-Principles-2015.pdf](http://content/uploads/2015/12/Core-Principles-2015.pdf) More information is available here: <http://www.core-principles.org/>

- “ACE Convening Highlights Research on Developmental Education Reform Efforts” highlights both Tennessee’s and Connecticut’s education reform. Several recommendations from panelists are mentioned, including easing the top-down approach of legislative reform and identifying at-risk students. <http://www.acenet.edu/news-room/Pages/Best-Practices-Credit-for-Prior-Learning.aspx>
- Quint, J., Jaggars, S.S., Byndloss, D. C., & Magazinnik, A. (2013, January). *Bringing developmental education to scale: Lessons from the developmental education initiative*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/lessons-from-developmental-education-initiative.html>
- Barnett, E.A., Cormier, M.S. (2014, June). *Developmental education aligned to the Common Core State Standards: Insights and illustrations*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/developmental-education-aligned-to-the-ccss.html>
- Hodara, M., Smith Jaggars, S., & Mechur Karp, M. (2012, November). *Improving developmental education assessment and placement: Lessons from community colleges across the country*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/developmental-education-assessment-placement-scan.html>
- Fox, H. L., & Richie, D. (2014). *Strategies for transformative change: Developmental education redesign*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from: <http://ocrl.illinois.edu/files/Projects/CCTCI/Reports/dev-ed-redesign-fr-ccd.pdf>
- Council for the Advancement of Standards in Higher Education. (2008). *Learning and developmental outcomes: Domains, dimensions, and examples*. Washington, DC. Retrieved from: [http://degreeprofile.org/press\\_four/wp-content/uploads/2014/09/COUNCIL-FOR-THE-ADVANCEMENT-OF-STANDARDS-IN-HIGHER-EDUCATION-11-08\\_Adelman.pdf](http://degreeprofile.org/press_four/wp-content/uploads/2014/09/COUNCIL-FOR-THE-ADVANCEMENT-OF-STANDARDS-IN-HIGHER-EDUCATION-11-08_Adelman.pdf)
- Scott-Clayton, J., & Belfield, C. (2015, July). *Improving the accuracy of remedial placement*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/improving-accuracy-remedial-placement.html>
- Barnett, E.A., Fay, M.P., Trimble, M.J., & Pheatt, L. (2014, January). *Reshaping the college transition: Early college readiness assessments and transition curricula in four states*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/reshaping-college-transition.html> Interviews with stakeholders in several states describing how states have established early college readiness assessments and transition curricula. Also addresses issues of implementation of policies.
- Designing meaningful development reform practitioner packet: <http://ccrc.tc.columbia.edu/publications/designing-meaningful-developmental-reform.html>
- Improving the accuracy of remedial placement practitioner packet <http://ccrc.tc.columbia.edu/publications/improving-accuracy-remedial-placement.html>
- Kalamkarian, H.S., Raufman, J., & Edgecombe, N. (2015, May). *Statewide developmental education reform: Early implementation in Virginia and North Carolina*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/statewide-developmental-education-reform-early-implementation.html> In this report, the authors provide an overview of the developmental education redesigns in both states, including their rationale, planning, design, launch, and early implementation.
- Wachen, J., Jenkins, D., Belfield, C., & Van Noy, M. (2012, December). *Contextualized college transition strategies for adult basic skills students: Learning from Washington State’s I-BEST program model*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/i-best-program-final-phase-report.html>

### High-Impact Practices

- AAC&U High-impact Practices: <https://www.aacu.org/resources/high-impact-practices>
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: AAC&U. <http://secure.aacu.org/store/detail.aspx?id=E-HIGHIMP>
- Brownell, J.E. and Swaner, L.E. (2010). *Five high-impact practices: Research on learning outcomes, completion, and quality*. Washington, DC: Association of American Colleges & Universities. <http://secure.aacu.org/store/detail.aspx?id=FIVEHI>
- Kuh, G., O’Donnell, Reed, S. (2013). *Ensuring quality & taking high-impact practices to scale*. Washington, DC: Association of American Colleges and Universities <http://secure.aacu.org/store/detail.aspx?id=HIPQUAL>

### Student Voices

- Klein-Collins, R., & Baylor, E. (2013). *Meeting students where they are, profiles of students in competency-based degree programs*. Washington, DC: Center for American Progress and the Council for Adult and Experiential Learning. <http://www.cbenetwork.org/sites/457/uploaded/files/CAELstudentreportcorrected.pdf>

- Shoenberg, R. (2008). *What will I learn in college? What you need to know now to get ready for college success*. Washington, DC: AAC&U. <http://secure.aacu.org/store/detail.aspx?id=WHATWILL> Guide for high school students interested in college on what they will learn and what is expected of them
- Lester, C., & Robinson, G. (2007). *An American Mosaic: Service Learning Stories*. Retrieved from American Association of Community Colleges: [http://www.aacc.nche.edu/Resources/aaccprograms/horizons/Documents/american\\_mosaicfinal4-07.pdf](http://www.aacc.nche.edu/Resources/aaccprograms/horizons/Documents/american_mosaicfinal4-07.pdf)

### Guided Pathways

- Mapping pathways to success for underserved community college students: <http://ccrc.tc.columbia.edu/research-project/underserved-community-college-students.html?pstatus=complete>
- Complete College America. (2012). *Guided pathways to success: Boosting college completion*. Washington, DC: Author. [http://completecollege.org/docs/GPS\\_Summary\\_FINAL.pdf](http://completecollege.org/docs/GPS_Summary_FINAL.pdf)
- Johnstone, R. (2015). *Guided Pathways Demystified: Exploring Ten Commonly Asked Questions about Implementing Pathways*. Retrieved from: <http://www.inquiry2improvement.com/attachments/article/12/PWs-Demystified-Johnstone-110315.pdf>
- *Completion by Design: Pathway Analysis Toolkit* <http://www.completionbydesign.org/our-approach/step-3-diagnose-the-issues/pathway-analyses-toolkit>
- Kadlec, A., Immerwahr, J., & Gupta (2014). Guided Pathways to Student Success: Perspectives from Indiana College Students and Advisors. *Public Agenda*. 1-35. <http://www.publicagenda.org/pages/guided-pathways-to-student-success>
- AAC&U (n.d.). Guided learning pathway: <https://www.aacu.org/sites/default/files/files/LEAP/GuidedPathways.pdf>
- Public Agenda. (2012). Student Voices on the Higher Education Pathway: Preliminary Insights & Stakeholder Engagement Considerations. San Francisco, CA: WestEd. <http://www.publicagenda.org/pages/student-voices-higher-education-pathway><http://www.publicagenda.org/pages/student-voices-higher-education-pathway>
- Association of American Colleges and Universities. (Fall 2014). *Developing a community college student roadmap*. Washington, DC.: Author. Retrieved from <https://www.aacu.org/sites/default/files/files/Roadmap/RoadmapFall2014Newsletter.pdf>
- McPhee, S. (2006). *En Route to the Baccalaureate: Community College Student Outcomes*. Retrieved from American Association of Community Colleges: <http://www.aacc.nche.edu/Publications/Briefs/Pages/rb09182006.aspx>
- AACC Pathways <http://www.aacc.nche.edu/Resources/aaccprograms/pathways/Pages/default.aspx> Discusses AACC's pathways project, which includes a link to ideas that relate to the role of assessment for student learning
- Western Interstate Commission for Higher Education. (2006). *Accelerated Learning Options: Moving the Needle on Access and Success* (Report. No. 2A358). Retrieved from Western Interstate Commission for Higher Education: <http://www.wiche.edu/pub/12758>
- David, D. (2015). Giving California students a compass. Retrieved from <https://www.aacu.org/sites/default/files/files/publications/GivingCaliforniaStudentsaCompass.pdf>
- MDRC (2015). Doubling graduation rates: Three-year effects of CUNY's accelerated study in associate programs for developmental education students. Retrieved from: <http://www.mdrc.org/publication/doubling-graduation-rates>
- Dennen, V.P. & Burner, K.J. (). The cognitive apprenticeship model in educational practice. Retrieved from: [http://www.aect.org/edtech/edition3/ER5849x\\_C034.fm.pdf](http://www.aect.org/edtech/edition3/ER5849x_C034.fm.pdf)

### Transfer

- Transfer and articulation resources on DQP website: <http://degreeprofile.org/resource-kit/transferarticulation/>
- Jenkins, D., & Fink, J. (2015, January). *What we know about transfer*. New York, NY: CCRC. Retrieved from: <http://ccrc.tc.columbia.edu/publications/what-we-know-about-transfer.html>
- Western Interstate Commission for Higher Education. (2009). *Best Practices in Statewide Articulation and Transfer Systems: Research Literature Overview*. Retrieved from: <http://www.wiche.edu/pub/14203>
- The Interstate Passport Initiative <http://www.wiche.edu/passport/home> Relevant initiative for concerns regarding transfer students.
- Mullin, C. (2012). *Transfer: An Indispensable Part of the Community College Mission*. Retrieved from American Association of Community Colleges: <http://www.aacc.nche.edu/Publications/Briefs/Pages/pb10082012.aspx>
- Taylor, J. L., & Bragg, D. D. (2015). *CWID DATA NOTE: Increasing state associate's degree attainment: The potential of reverse transfer*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from: <http://ocrl.illinois.edu/files/Projects/CWID/cwid-data-note-4.pdf>
- Transfer student success resource hub: <https://www.aacu.org/resources/transfer-student-success>

- Kadlec, A., & Gupta, J. (2014). Indiana Regional Transfer Study: The Student Experience of Transfer Pathways between Ivy Tech Community College and Indiana University. *Public Agenda*. 1-32. <http://www.publicagenda.org/pages/indiana-regional-transfer-study>

## Assessment

### State of assessment

- Schneider, C. G., & Maki, P. (2015). *Assessment that works: A national call, a twenty-first century response*. AAC&U. <https://www.aacu.org/publications/assessment-that-works> case studies
- Hart Research Associates. (2009, May). *Learning and assessment: Trends in undergraduate education*. Washington, DC: Association of American Colleges & Universities. Retrieved from [https://www.aacu.org/sites/default/files/files/LEAP/2009MemberSurvey\\_Part1.pdf](https://www.aacu.org/sites/default/files/files/LEAP/2009MemberSurvey_Part1.pdf)
- Sullivan, D., Schneider, C., Rhodes, T., O'Shea, L., and Humphreys, D. (2012). *A sea of change on student learning assessment* (Working Paper). Retrieved from Association of American Colleges & Universities website <https://www.aacu.org/sites/default/files/files/publications/AACUAssessmentConceptPaper.pdf>
- Kuh, G. D., Jankowski, N., Ikenberry, S. O., & Kinzie, J. (2014). *Knowing What Students Know and Can Do: The Current State of Student Learning Outcomes Assessment in US Colleges and Universities*. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).
- Ewell, P., Paulson, K., & Kinzie, J. (2011). *Down and in: assessment practices at the program level*. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

### Approaches to Assessment

- Sternberg, R.J., Penn, J., Hawkins, C., and Reed, S. (2011). *Assessing college student learning: Evaluating alternative models, using multiple methods*. Washington, DC: Association of American Colleges & Universities. <http://secure.aacu.org/store/detail.aspx?id=ASSESSCSL>
- Chen, H.L. and Light, T.P. (2010). *Electronic portfolios and student success: Effectiveness, efficacy, and learning*. Washington, DC: Association of American Colleges & Universities. <http://secure.aacu.org/store/detail.aspx?id=VALEPORT>
- Fuller Hamilton, A. N. (2015). *Work-based learning programs: Providing experiential learning opportunities for all students*. Champaign, IL: Pathways Resource Center, University of Illinois at Urbana-Champaign. Retrieved from: <http://pathways.illinois.edu/wp-content/uploads/2014/04/WBL-Brief-green1.pdf>
- Prentice, M., & Robinson, G. (2010). *Improving Student Learning Outcomes with Service Learning* (Report No. AACC-RB-1—1). Retrieved from American Association of Community Colleges: [http://www.aacc.nche.edu/Resources/aaccprograms/horizons/Documents/slorb\\_jan2010.pdf](http://www.aacc.nche.edu/Resources/aaccprograms/horizons/Documents/slorb_jan2010.pdf)
- Benjamin, R., Miller, M. A., Rhodes, T. L., Banta, T. W., Pike, G. R., & Davies, G. (2012, September). *The Seven Red Herrings About Standardized Assessments in Higher Education* (NILOA Occasional Paper No.15). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- NILOA Resource library: <http://www.learningoutcomesassessment.org/publications.html> Articles, etc. on various topics, over 700

### Credit for Prior Learning/Prior Learning Assessment

- Lakin, M.B., Seymour, D., Nellum, C.J., Crandall, J.R. (2015). *Credit for prior learning: Charting institutional practice for sustainability*. Washington, DC: American Council on Education. <http://www.acenet.edu/news-room/Pages/Credit-for-Prior-Learning-Charting-Institutional-Practice-for-Sustainability.aspx>
- Council for Adult and Experiential Learning & Excelencia in Education. (2014). *Accelerating degree completion for Latinos through prior learning assessment*. Retrieved from: [http://www.cael.org/pdfs/latinos\\_and\\_pla\\_2014\\_policy\\_brief](http://www.cael.org/pdfs/latinos_and_pla_2014_policy_brief)
- Ryu, M. (2013). *Credit for prior learning from the student, campus, and industry perspectives*. Washington, DC: American Council on Education Center for Policy Research and Strategy. <http://www.acenet.edu/news-room/Pages/Credit-for-Prior-Learning-From-the-Student-Campus-and-Industry-Perspectives.aspx>
- Council for Adult and Experiential Learning. (2011). *Underserved students who earn credit through prior learning assessment (PLA) have higher degree completion rates and shorter time-to-degree*. Retrieved from: [http://www.cael.org/pdfs/126\\_pla\\_research\\_brief\\_1\\_underserved04-2011](http://www.cael.org/pdfs/126_pla_research_brief_1_underserved04-2011)

- Student guide to Credit for Prior Learning (CPL), including benefits and examples, methods of evaluating CPL, choosing institutions with CPL programs, and any pitfalls to avoid. <http://www.acenet.edu/news-room/Pages/Student-Guide-to-Credit-for-Prior-Learning.aspx> This ACE page is for Best Practices for Credit for Prior Learning. It includes developing best practices and tools for getting started on outreach. <http://www.acenet.edu/news-room/Pages/Credit-for-Prior-Learning-Implementation-Matrix.aspx>
- The Credit for Prior Learning Implementation Matrix was designed by ACE and crosswalks institutional stages with definitions and activities. <http://www.acenet.edu/news-room/Pages/Toolkit-for-Veteran-Friendly-Institutions.aspx>
- This is a webpage intended to help military personnel understand their military transcripts and ACE credit recommendations. <http://www.acenet.edu/news-room/Pages/Transfer-Guide-Understanding-Your-Military-Transcript-and-ACE-Credit-Recommendations.aspx>
- The Alternative Credit Project through the American Council on Education (ACE) has partnered with 40 institutions and three systems to accept students' alternative credit. About 100 low-cost or no-cost courses will be available online with ACE's credit recommendation. <http://www.acenet.edu/news-room/Pages/Alternative-Credit-Project.aspx>
- Credit recommendation services. This webpage has: Military evaluations, faculty evaluators, and credit links with additional information <http://www.acenet.edu/higher-education/Pages/Credit-Recommendation-Services.aspx>
- Transcript Services. This webpage highlights transcript services for several programs offered by ACE. <http://www.acenet.edu/higher-education/topics/Pages/Transcript-Services.aspx>

### Assignments as Assessment

- Multi-State Collaborative: [http://www.sheeo.org/projects/msc\\_dy](http://www.sheeo.org/projects/msc_dy) (includes link to download slides on results of pilot year)
- Multi-State Collaborative webinars: <http://www.sheeo.org/mscwebinars>
- AAC&U (n.d.). *Integrating signature assignments into the curriculum and inspiring design*. Retrieved from: <https://www.aacu.org/sites/default/files/Signature-Assignment-Tool.pdf>
- Hutchings, P., Jankowski, N. A., & Ewell, P. T. (2014). *Catalyzing assignment design activity on your campus: Lessons from NILOA's assignment library initiative*. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA). Retrieved from: [http://www.learningoutcomesassessment.org/documents/Assignment\\_report\\_Nov.pdf](http://www.learningoutcomesassessment.org/documents/Assignment_report_Nov.pdf)
- NILOA Webinar: December 17, 2014, Hutchings, P., & Jankowski, N. [Assignment Design](#) (mov).
- NILOA Webinar: April 26, 2013, Adelman, C. [Assessment Implicit; Assignment Explicit: Tuning and the DQP](#) (mov).
- Features of excellent assignments identified by charrette participants: <http://assignmentlibrary.org/uploaded/files/Faculty%20Charrette%20Participant%20List%20of%20Other%20Desirable%20Characteristics%20of%20Assignments%20doc.pdf>
- List of additional resources for assignments: [http://assignmentlibrary.org/uploaded/files/Assignment\\_Resources.pdf](http://assignmentlibrary.org/uploaded/files/Assignment_Resources.pdf)
- This page includes a description of Scientific Thinking and Integrative Reasoning Skills (STIRS) case studies, examples of STIRS cases, and a supplemental resource. <http://www.aacu.org/stirs/casestudies>
- Eubanks, D., & Gliem, D. (2015, May). *Improving teaching, learning, and assessment by making evidence of achievement transparent*. (Occasional Paper No. 25). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- NILOA Course-embedded assessment resource list: <http://degreeprofile.org/resource-kit/course-embedded-assignments/>

### Rubrics

- Finley, A., & Rhodes, T. (2013). *Using the VALUE rubrics for improvement of learning and authentic assessment*. AAC&U. <https://www.aacu.org/publications/using-value-rubrics> Development of rubrics, examples of use, and faculty training.
- Rhodes, T.L. (2010). *Assessing outcomes and improving achievement: Tips and tools for using rubrics*. Washington, DC: Association of American Colleges & Universities. <http://secure.aacu.org/store/detail.aspx?id=VALRUBRIC>
- Sullivan, D. F. (2015). *The VALUE breakthrough: Getting the assessment of student learning in college right*. AAC&U. <https://www.aacu.org/publications/gems/value-breakthrough> assignments
- Case studies of VALUE Rubrics: <http://www.aacu.org/value/casestudies>
- VALUE Rubrics: <https://www.aacu.org/value>
- Rubric resourced from the DQP website: <http://degreeprofile.org/resource-kit/rubrics/>

### Discipline-level assessments

- Measuring College Learning papers (when available): <http://www.ssrc.org/programs/measuring-college-learning/>
- Community College Views on Nursing Accreditation [http://www.aacc.nche.edu/newsevents/News/articles/Pages/12052013\\_2.aspx](http://www.aacc.nche.edu/newsevents/News/articles/Pages/12052013_2.aspx) Addresses the role of assessment in assessing student learning outcomes within nursing accreditation

### Co-curricular Engagement

- Cruise-Harper, C. (2015). *Measuring student learning in the co-curricular: Developing an assessment plan for student affairs*. National Institute for Learning Outcomes Assessment (NILOA).
- Keeling, R. (2006). *Learning reconsidered 2: Implementing a campus-wide focus on the student experience*. Washington, DC: American College Personnel Association & National Association of Student Personnel Administrators.
- Keeling, R. (2004). *Learning reconsidered: A campus-wide focus on the student experience*. Washington, DC: American College Personnel Association & National Association of Student Personnel Administrators.
- Nuun-Ellison, K., Kapka, L., Myers, J., McGrew, H., Bernheisel, J., & Cutler, J. (2015). *Practice what you preach*. National Institute for Learning Outcomes Assessment (NILOA).
- Schuh, J.H., & Gansemer-Topf, A, M. (2010, December). *The role of student affairs in student learning assessment*. (NILOA Occasional Paper No. 7). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Bresciani, M. J. (2011, August). *Making Assessment Meaningful: What New Student Affairs Professionals and Those New to Assessment Need to Know* (NILOA Assessment Brief: Student Affairs). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Council for the Advancement of Standards in Higher Education. <http://www.cas.edu/>
- AACC. (2005). Position Statement on Student Services and Library and Learning Resource Center Program Support for Distributed Learning. Washington, DC: Author. <http://www.aacc.nche.edu/About/Positions/Pages/ps02102005.aspx> AACC position statement that addresses the role of assessment within student services and library programs
- Escobar, H., & Gauder, H. (2015). *On the "write" path to student learning: Library and writing center collaboration*. National Institute for Learning Outcomes Assessment (NILOA).
- Gilchrist, D., & Oakleaf, M. (2012, April). *An essential partner: The librarian's role in student learning assessment*. (NILOA Occasional Paper No. 14). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Lippincott, J., Vedantham, A., & Duckett, K. (2014). Libraries as enablers of pedagogical and curricular change. *Educause Review*. Retrieved from: <http://er.educause.edu/articles/2014/10/libraries-as-enablers-of-pedagogical-and-curricular-change>
- Student affairs and co-curricular resource list on DQP site: <http://degreeprofile.org/resource-kit/student-affairs-and-co-curriculum/>

### General Education

- Gaston, P. L., & Gaff, J. G. (2009). *Revising general education – and avoiding the potholes: A guide for curricular change*. Washington, DC: AAC&U. <http://secure.aacu.org/store/detail.aspx?id=POTHOLES> Practical guide for gen ed reform committees and faculty senate curriculum committees
- Gaston, P.L., Clark, J.E., Ferren, A.S., Maki, P., Rhodes, T.L., Schilling, K.M., and Smith, D. (2010). *General education & liberal learning: Principles of effective practice*. Washington, DC: Association of American Colleges & Universities. <http://secure.aacu.org/store/detail.aspx?id=GEDLL>
- Hart Research Associates. (2009, May). *Trends and emerging practices in general education*. Washington, DC: Association of American Colleges & Universities. Retrieved from: [https://www.aacu.org/sites/default/files/files/LEAP/2009MemberSurvey\\_Part2.pdf](https://www.aacu.org/sites/default/files/files/LEAP/2009MemberSurvey_Part2.pdf)
- Gaston, P. (2015). *General education transformed: How we can, why we must*. Washington, DC: Association of American Colleges and Universities. Retrieved from: <http://secure.aacu.org/store/detail.aspx?id=GMSTRANS>
- Association of American Colleges & Universities. (2015). *General education maps and makers: Designing meaningful pathways to student achievement*. Washington, DC. <https://secure.aacu.org/store/detail.aspx?id=GMSG>
- GEMS design principles: [https://www.aacu.org/sites/default/files/files/gems/gmsg\\_p3\\_designprinciples\\_flier.pdf](https://www.aacu.org/sites/default/files/files/gems/gmsg_p3_designprinciples_flier.pdf)

## Recognition of Credentials

### Transcripts and Badges

- Parnell, A., & Green, T. (2016). Linking learning inside and outside the classroom: Cocurricular experiences add value. *Leadership Exchange*, 13, 4, Retrieved from: <http://www.leadershipexchange-digital.com/lexmail/2016winter?folio=9&pg=1#pg1>
- Parker, H.E. (2015). *Digital badges as effective assessment tools*. National Institute for Learning Outcomes Assessment (NILOA).
- Hynes, S., Pope, M., Loughlin, P., & Watkins, S. (2015). *The student transformative learning record at the University of Central Oklahoma: A commitment to improving student learning*. National Institute for Learning Outcomes Assessment (NILOA).
- AACRAO and NASPA (2015). A framework for extending the transcript. Retrieved from: <http://www.aacrao.org/docs/default-source/PDF-Files/extending-the-transcript-framework-final-draft-.pdf?sfvrsn=2>
- Achieve, Inc. (2015). Postsecondary support for competency-based high school transcripts. Retrieved from: <http://www.achieve.org/publications/postsecondary-support-cbp-transcripts-brief>

### Credential Registry

- Credential Transparency Initiative (n.d.). From chaos to clarity: A vision for the U.S. credentialing marketplace. <http://www.credentialtransparencyinitiative.org/>
- Soares, L. & Tyszko, J. (2015). How to navigate the credentialing maze. U.S Chamber of Commerce Center for Education and Workforce. Retrieved from: <https://www.uschamberfoundation.org/blog/post/how-navigate-credentialing-maze/43577>

## Equity

- Malcom-Piqueux, L. E., & Bensimon, E. M. (2015). Design Principles for equity and excellence at Hispanic-serving institutions. *Perspectives: Issues in higher education policy and practice*, 4, 1-15. [http://cue.usc.edu/tools/publications/design\\_principles\\_for\\_equity\\_and\\_excellence\\_at\\_hispanic-serving\\_institutions.html](http://cue.usc.edu/tools/publications/design_principles_for_equity_and_excellence_at_hispanic-serving_institutions.html)
- Dowd, A.C., & Bensimon, E.M. (2014). *Engaging the race question: Accountability and equity in U.S. higher education*. New York, NY: Teachers College Press. Case studies on equity scorecard.
- Equity score card – process and data tool: [http://cue.usc.edu/our\\_tools/the\\_equity\\_scorecard.html](http://cue.usc.edu/our_tools/the_equity_scorecard.html)
- Data visualization tools - And in phase two use the Vital Signs tool: [http://cue.usc.edu/our\\_tools/vital\\_signs.html](http://cue.usc.edu/our_tools/vital_signs.html) and the Benchmarking Equity and Student Success Tool: [http://cue.usc.edu/our\\_tools/besst.html](http://cue.usc.edu/our_tools/besst.html)
- Witham, K., Malcom-Piqueux, L. E., Dowd, A. C., & Bensimon, E. M. (2015). *America's Unmet Promise: The Imperative for Equity in Higher Education*. Washington, DC: Association of American Colleges and Universities. <http://secure.aacu.org/store/detail.aspx?id=GMSAUM> (guiding framework and for launching conversations)
- Finley, A., & McNair, T. (2013). *Assessing Underserved Students' Engagement in High-Impact Practices*. Washington, DC: Association of American Colleges and Universities. <https://www.aacu.org/assessinghips/report>
- McCambly, H., & Bragg, D. (2015). *Insights on equity and outcomes*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. Retrieved from: <http://occrll.illinois.edu/files/Projects/ptr/engaging-student-voices-ptr.pdf>
- Step-up and lead for equity: <https://www.aacu.org/sites/default/files/StepUpLeadEquity.pdf>
- Association of American Colleges and Universities. (2015) *Committing to equity and inclusive excellence: A campus guide for self-study and planning*. Washington, DC: Author. Retrieved from <https://www.aacu.org/sites/default/files/CommittingtoEquityInclusiveExcellence.pdf>
- Hart Research Associates. (2015). *Bridging equity and quality learning together: Institutional priorities for tracking and advancing underserved students' success*. American Colleges and Universities. Retrieved from <http://www.aacu.org/sites/default/files/files/LEAP/2015AACUEquityReport.pdf>
- Driving college completion and enhancing equity via transfer: <http://ccrc.tc.columbia.edu/research-project/driving-college-completion-via-transfer.html>

- Bordoloi Pazich, L., & Bensimon, E. M. (2010). *Wisconsin transfer equity study: Final report*. Los Angeles, CA: University of Southern California.  
[http://cue.usc.edu/Research/Bordoloi%20Pazich\\_Wisconsin%20Transfer%20Equity%20Study\\_CUE\\_2010.pdf](http://cue.usc.edu/Research/Bordoloi%20Pazich_Wisconsin%20Transfer%20Equity%20Study_CUE_2010.pdf)
- Association of American Colleges and Universities. (Fall 2014). *Growing knowledge about what works for latino student success*. Washington, DC.: Author. Retrieved from  
<https://www.aacu.org/sites/default/files/files/assessinghips/GrowingKnowledgeNewsletter2014.pdf>
- McNair, T., Finley, A. (2013). *Assessing underserved students' engagement in high-impact practices*. Washington, DC: Association of American Colleges and Universities <https://www.aacu.org/assessinghips/report>
- Montenegro, E., & Jankowski, N. A. (2015, April). *Focused on What Matters: Assessment of Student Learning Outcomes at Minority-Serving Institutions*. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).

## Leadership and Change

### Leaders

- Kuh, G.D., Ikenberry, S.O., Jankowski, N.A., Cain, T.R., Ewell, P.T., Hutchings, P., & Kinzie, J. (2015). *Using evidence of student learning to improve higher education*. San Francisco: Jossey-Bass.
- Kuh, G.D., Ikenberry, S.O., Jankowski, N.A., Cain, T.R., Ewell, P.T., Hutchings, P., & Kinzie, J. (Oct-Nov 2015). Beyond compliance: Making assessment matter. *Change Magazine*. Retrieved from:  
[http://www.changemag.org/Archives/Back%20Issues/2015/September-October%202015/assessment\\_full.html](http://www.changemag.org/Archives/Back%20Issues/2015/September-October%202015/assessment_full.html)
- Soares, L. (2013). Post-traditional learners and the transformation of postsecondary education: A manifesto for college leaders. Washington, DC: American Council on Education Center for Policy Research and Strategy.  
<http://www.acenet.edu/news-room/Pages/Post-traditional-Learners-and-the-Transformation-of-Postsecondary-Education.aspx>
- Kadlec, A., Immerwahr, J., & Currie, M. (2013). Seven Practices of Enlightened Leadership in Higher Education. *Public Agenda*. 1- 11. <http://www.publicagenda.org/pages/seven-practices-of-enlightened-leadership-in-higher-education>
- Johnson, J. (2013). "Will it be on the test?": A closer look at how leaders and parents think about accountability in the public schools. *Public Agenda*. 1-27. <http://www.publicagenda.org/pages/will-it-be-on-the-test-landing>
- Academic Leaders Toolkit: <http://alt.wiche.edu/> Provides a database of assessment related tools for use in measuring student learning.
- Marzetti, H.L. (2015). *Leading enhancement in assessment and feedback at the University of Edinburgh*. National Institute for Learning Outcomes Assessment (NILOA).
- Hersh, R. H., & Keeling, R. P. (2013, February). *Changing institutional culture to promote assessment of higher learning*. (Occasional Paper No. 17). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.

### Change Initiatives

- Bragg, D. D., Kirby, C., Witt, M. A., Richie, D., Mix, S., Feldbaum, M., Liu, S., & Mason, M. (2014). *Transformative Change Initiative*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign. <http://occr.illinois.edu/files/Projects/CCTCI/2014-tci-booklet.pdf>
- Public Agenda. (2011). *Scaling Community College Interventions*. Washington, DC: Author. <http://www.publicagenda.org/media/cutting-edge-series-no-2>
- The Search for the Learning-Centered College  
<http://www.aacc.nche.edu/Resources/aaccprograms/pastprojects/Pages/searchforlearning.aspx> Discusses the difference between an instructional and learning paradigm in the context of constructing learning-centered colleges.

### Faculty

- Faculty: <https://www.aacu.org/resources/faculty>
- Bickerstaff, S., & Cormier, M.S. (2014, December). *Examining faculty questions to facilitate instructional improvement in higher education*. New York, NY: CCRC. <http://ccrc.tc.columbia.edu/publications/examining-faculty-questions-instructional-improvement.html>
- Public Agenda. (2011). Engaging Adjunct and Full-time Faculty in student Success Innovation. *Public Agenda*. <http://www.publicagenda.org/media/cutting-edge-series-no-1>

- Ferren, A.S., & Paris, D.C. (2015). Faculty leadership for integrative liberal learning. *Association of American Colleges and Universities*. Retrieved from <http://secure.aacu.org/store/detail.aspx?id=FACLEAD>
- Kezar, A., & Maxey, D. (2014, July). Student outcomes assessment among the new non-tenure-track faculty majority. (Occasional Paper No. 21). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Gold, L., Rhoades, G., Smith, M., & Kuh, G. (2011, May). *What faculty unions say about student learning outcomes assessment*. (NILOA Occasional Paper No. 9). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Hutchings, P. (2010, April). *Opening doors to faculty involvement in assessment*. (NILOA Occasional Paper No. 4). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Hutchings, P. (2011, April). *What new faculty need to know about assessment* (NILOA Assessment Brief: Faculty). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Cain, T.R., (2014, November). *Assessment and academic freedom: In concert, not conflict*. (Occasional Paper No. 22). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Harper, S. (2009). Race-conscious engagement practices for the equitable distribution of enriching educational experiences. *Liberal Education*, 95, 4. Retrieved from: <https://www.aacu.org/publications-research/periodicals/race-conscious-student-engagement-practices-and-equitable>
- Rhodes, G. (2012). *Faculty engagement to enhance student attainment*. National Commission on Higher Education Attainment. Retrieved from: <https://www.acenet.edu/news-room/Documents/Faculty-Engagement-to-Enhance-Student-Attainment--Rhoades.pdf>



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## **Learning Outcomes: Where We Have Been, Where We Need to Go**

### **Gaining Consensus for Learning Outcomes— A Recent History**

For more than two decades, employers and policymakers have been asking tough questions about how well our nation’s colleges and universities are preparing their graduates to succeed in and contribute to a changing global workplace and society. Business leaders persistently express frustration that college graduates are not achieving the broad, cross-cutting learning outcomes they need at high enough levels to fuel a technology-rich, innovation-driven economy (Hart Research Associates 2007, 2015; Gallup 2014). They also complain that—whatever levels of learning graduates might be achieving—transcripts, resumes, and other current forms of documentation do not provide information that enables anyone outside the academy to understand clearly what students actually learned in college. They don’t know what a specific degree or credential signifies in terms of learning.

Given how much more important a highly educated citizenry is becoming to our nation’s economic vitality, it is not surprising that policymakers at both the state and federal levels also have been asking much tougher questions in recent years about how well our nation’s colleges and universities are performing. However, until very recently, business leaders were far more concerned and vocal about actual learning outcomes, while policymakers were focused more on access, affordability, attainment rates, and, more recently, average salaries of graduates. This situation, though, is beginning to change as policymakers examine how well our accreditation system works. A very recent op-ed in *The Hill* may indicate that some policymakers are turning their attention to the lack of good data on learning outcomes. The author notes that, *“For all the rhetoric and angst about increasing college prices, the dirty little secret of higher education is that a college degree doesn’t actually represent any particular set of knowledge or skills. We have no idea what our nation is getting—substantively— in exchange for an enormous public investment in higher education and constantly rising private tuition. Do students leave with just a piece of paper or do they leave intellectually with something appreciably greater?”* (Barry 2015, emphasis added).

Higher education leaders haven’t ignored these critiques. Educators, too, have been concerned—especially in the face of changing demographics and changing patterns of college attendance—about the intentionality of curricular pathways and the actual levels of learning our institutions are providing to students. As early as 2002, a national panel convened by AAC&U noted in its *Greater Expectations* report that,

*In their progression toward a degree, large numbers of students enroll at two, three, or more institutions, also taking courses online. For them college can be a revolving door. In the past, students relied on one institution to provide degree programs and, they hoped, to deliver a logically sequenced education. While coherence may have been illusory even then, newer attendance patterns place greater responsibility on students themselves to create meaningful learning from a supermarket of choices. (AAC&U 2002, 2)*

This trend toward student swirl has only increased. It ups the ante for institutions and systems of higher education across which students are swirling to *collaborate* on clarifying expected learning outcomes and demonstrating students' achievement as they progress.

These pressures and concerns all have driven a steady increase in attention to learning outcomes—how we define and develop them and how we measure how well students are actually achieving them in and across all kinds of institutions. Dozens of projects and many reports have been issued in the last decade addressing the need for greater clarity about learning outcomes and the need to assess them more effectively (see Jankowski, 2016).

Lumina's Goal 2025 seeks to increase the proportion of Americans with high-quality credentials to 60 percent within 10 years. In addition to its extensive work to develop a highly detailed "Degree Qualifications Profile" (see below), Lumina Foundation has consistently defined "high-quality credentials" as those that are based on transparent learning outcomes and lead to further education and employment. To reach this goal, we need higher education institutions to understand more clearly the links between setting clear and "high" learning goals, students' own actual learning and achievement, *and* students' progress toward completion. Clarity of goals is key to students' understanding of their progress and, thus, their motivation to stay engaged. There are many signs that this connection between quality learning and persistence can be made and can help accelerate progress to increase US credential attainment to 60 percent (see, for example, Bailey et al., 2015).

Among other organizations, regional accreditors have been leading influencers in the learning outcomes movement. They rarely get credit for their work in this area, but for decades they have insisted that their member institutions identify clear learning outcomes for their students and that institutions have some reasonably valid approach to gathering data and using that data to improve student achievement of stated learning outcomes. In fact, Paul Gaston notes in his recent book on this subject that "accreditation has provided an important external motivation for what is routinely described as the 'assessment movement'" (2014, 124). He qualifies this observation with several caveats, however. First, because of differences among the regional accrediting commissions, their influence has been inconsistent. Second, "accreditation has [also] been the beneficiary of a movement institutions and higher education organizations have embraced independently" (124). This is a positive indicator in one respect, but a further complicating factor in the quest for a workable consensus on a shared framework for quality credentials. Finally, while effective assessment requires evidence that specific learning outcomes are being accomplished, the degree of specificity required varies from one accreditor to another. Regional

accreditors may call for outcomes and define processes for assessing them, but they shy away from mandates about specific knowledge and skill areas that are required for quality degrees.

A consequence of this complex picture is that, while many institutions of higher education realized that they needed to be more clear and transparent about their broad learning outcomes (see national data below), they often sought to define and assess learning outcomes in *unique* and therefore incomparable ways—and often only in pockets of their institutions (e.g. certain departments, programs, or schools; or only in general education). Therefore, across higher education, results of the learning outcomes assessment efforts have been diffuse, lacking in rigor, and/or superficial. Results are rarely used to improve student learning (NILOA, 2014).

### **Emergence of Credential Frameworks and Assessment Tools**

The Association of American Colleges and Universities (AAC&U) began focusing attention on clarity of learning goals and ways to advance those goals as early as 2000 when it launched an initiative called *Greater Expectations: The Commitment to Quality as a Nation Goes to College*. In that initiative—which engaged not only educators, but also civic and business leaders—AAC&U began a long-term effort to work throughout higher education on the issue of learning outcomes. In the signature report issued as part of *Greater Expectations* in 2002, AAC&U noted that

*The central question is simple: what should all students be learning in college? No matter their aspirations or prior preparation, what will all graduates require to lead personally fulfilling and socially responsible lives? What learning should result from an undergraduate education of quality, whether gained from study at a selective liberal arts college, an urban university, an open-enrollment community college for part-time adults, online courses, or a combination of them all? (21)*

AAC&U built on its work in *Greater Expectations*, which had involved dozens of colleges and universities that were leaders in intentionality about learning outcomes, when it launched *Liberal Education and America's Promise* (LEAP) in 2005. Through LEAP, AAC&U has continued to test a set of what it came to call “Essential Learning Outcomes,” and has repeatedly documented strong agreement among employers and educators on cross-cutting outcomes such as critical thinking, problem-solving with diverse peers, and communication skills.

Hundreds of colleges and universities and 11 state systems or statewide consortia now have engaged with the LEAP initiative to clarify their own learning outcomes; scale the use of evidence-based, high-impact educational practices; align their curricular pathways to expected outcomes; and develop effective and meaningful ways to assess students’ achievement of those outcomes. Both the National Survey of Student Engagement (NSSE) and the Community College Survey of Student Engagement (CCSSE) have for several years generated very useful data that has informed the LEAP initiative and other learning outcomes reform efforts. NSSE and CCSSE have documented how participation in specific high-impact educational practices correlates with students’ self-reported gains on important learning outcomes and on measures of “deep learning” (Kuh, O’Donnell, and Reed, 2013, and Kuh et al., 2015).

Established in 2008, the National Institute for Learning Outcomes Assessment (NILOA) also represents an important development. NILOA's research and technical assistance to institutions has become an important catalyst for continued improvements in learning outcomes assessment efforts and for ongoing campus work with the DQP and Tuning strategies. The institute administers an annual survey that asks provosts to report on practices which ensure that transparent learning outcomes are in place and assessed regularly, and that evidence is used for improvement. Given the importance of transparency of student learning outcomes and accountability, NILOA has developed a Transparency Framework to help institutions evaluate the extent to which they make evidence of student accomplishment available to various audiences.

As accountability for student outcomes continued to increase, especially in light of Secretary Spellings' Commission on the Future of Higher Education, the American Association of Community Colleges (AACC), the Association of Community College Trustees (ACCT), and the College Board came together in 2009 to create the Voluntary Framework of Accountability (VFA) for the community colleges. Among the criteria for the framework was the expectation for learning outcomes in "critical thinking and writing". Other voluntary accountability plans emerged from National Association of Independent Colleges and Universities' (NAICU's) University and College Accountability Network, and the Student Achievement Measure, a joint project of APLU, AACC, AASCU, the American Council on Education, the Association of American Universities, and NAICU.

In 2011, Lumina Foundation released the beta draft of the Degree Qualifications Profile (DQP), adding yet another important element to this national movement to clarify and measure student achievement of learning outcomes. The DQP was timely in this climate so focused on accountability in higher education because it clearly delineated levels of learning corresponding to specific degrees (associate, bachelor's, master's) and "got specific" about *how* students could and should *develop and demonstrate* their learning. The DQP applied the concept of learning outcomes to the actual design of educational programs and assessment. Since its launch the DQP has been used by more than 500 colleges and universities. As a result, users reported on their experience and gave recommendations for revision. The authors reconvened in 2014 to revise the DQP and the "new DQP" was formally released in October 2014 along with a suite of resources located at the National Institute for Learning Outcomes Assessment (NILOA) focused on curriculum design, assessment, assignment design, and DQP Coaches.

LEAP has now expanded to a large family of projects including several designed explicitly around the DQP. Through those projects (including one involving nine state systems), dozens of colleges and universities have examined the implications of the DQP for curricular, assessment, and assignment design. In addition, eight state systems have either fully adopted the LEAP Essential Learning Outcomes or have used them to develop closely aligned sets of "shared learning outcomes." These outcomes—all critical in the DQP—are now touchstones for continued work on transfer student success and for assessing institution- and system-level outcomes. They also may soon help shape publicly reported accountability systems, providing periodic updates to legislators and the public on how well students in individual institutions and in public systems are achieving learning outcomes important to local economies and communities.

In addition to LEAP and the DQP, other initiatives and organizations also have helped to advance the learning outcomes movement. The Tuning projects Lumina launched in 2009 provided an important avenue through which individual faculty members within their disciplinary groups could begin “harmonizing” their own lists of common learning outcomes across institutions, both within and across states. Lessons from the National Communications Association and American Historical Association as they “tuned” their disciplines, have demonstrated the ability of faculty discipline groups to lead efforts to create transparent learning outcomes. As a result, faculty in these disciplines are now working on gateway course redesign, transfer issues, and faculty preparation that includes teaching and learning.

These various “frameworks for quality credentials” (e.g., LEAP Essential Learning Outcomes and the DQP), appear to be resonating with many institutions – of all sizes and types. Acceptance and use of these frameworks, however, appears to come more easily when they are connected explicitly with faculty members’ interests in student learning and the realities of changing faculty roles (e.g., moving from “sage on the stage to guide on the side”). For example, in its 2013 report to Lumina Foundation summarizing findings from faculty focus groups, Public Agenda noted that faculty considered the DQP a useful potential tool when it was understood as helping “*improve student outcomes, rather than helping policymakers cut funding and punish faculty*” or as “*help[ing] educators solve a problem that [they] care deeply about, namely how [they] know if [their] students are really learning*” (Public Agenda 2013, 1-2).

Another key element of the widespread embrace of the DQP and LEAP is that these frameworks align so well both with employer expectations (Hart Research Associates 2008, 2010, 2013, and 2015) and with what faculty members themselves believe are important outcomes of college learning – outcomes that are essential not only for work, but also for life and for responsible democratic citizenship (Eagan et al., 2014). The LEAP and DQP frameworks have garnered widespread support because they are multi-dimensional and, particularly in the case of the DQP, they recognize the complexity of the learning process and levels of learning along pathways to graduation.

As frameworks for associates and bachelor’s degrees have emerged, so has the proliferation of new sub-baccalaureate credentials. This development also has generated a parallel set of discussions on the need for greater clarity about the learning outcomes of these alternative credentials (see *Connecting Credentials*, 2015). Some industries have stepped up to develop and promulgate their own “employability frameworks” (see Manufacturing Institute’s framework and “M” List of recommended institutions); and the National Network of Business and Industry Associations (more than 20 industry and business associations) have collaborated with the Business Roundtable to create the *Common Employability Skills: A Foundation for Success in the Workplace*, issued in 2015. As a result, a beta Connecting Credentials Framework has been developed to help understand and compare levels of knowledge, skills and abilities that underlie the multiple credentials available.

By using competencies understood both in industry and higher education, the Connecting Credentials Framework could be a unifying way to examine credentials and the learning represented by each credential. This framework will be tested in the next year by 20 community colleges assisted by American Association of Community Colleges through *The Right Signals Initiative*. The goal is to understand if a more expansive quality learning framework can assist colleges in making sense of a highly diverse credentialing

marketplace that includes degrees, certificates, industry certifications, licenses, digital badges and other micro-credentials.

### **What impact can we document so far?**

In 2015, AAC&U surveyed chief academic officers (CAOs) at its member institutions and found that

- 85 percent of CAOs reported having a common set of intended learning outcomes for all their undergraduate students. This figure is up from 78 percent who reported this in a 2008 AAC&U survey.
- The intended learning outcomes of these institutions were highly aligned to the original list of LEAP Essential Learning Outcomes. In 2015, 75 percent report that their common learning outcomes address “research skills and projects.” This figure is 10 points higher than it was in 2008.
- From 2008 to 2015, there was a slight increase in the percentage of CAOs reporting that almost all of their students *understand* their institution’s learning outcomes. Nine percent report that in 2015; only 5 percent reported it in 2008.
- 87 percent of CAOs report in 2015 that their institution is assessing learning outcomes across the curriculum beyond the use of course grades. Only 70 percent reported this in 2008.
- While assessment of learning outcomes is still done predominantly at the departmental level, there is an increasing focus on assessing learning outcomes in general education. In 2015, 67 percent report they are assessing outcomes in general education as compared with only 52 percent who reported this in 2008. Another 25 percent also report in 2015 that they are planning to assess learning outcomes in general education. (An even earlier AAC&U survey – done in 2000 – indicated that only 32 percent of institutions were assessing student performance relative to general education goals “very much” or “quite a lot.”) (Hart Research Associates 2008 and 2016)

NILOA also surveyed educational leaders in 2009 and 2013, further affirming the trend toward greater attention to learning outcomes and their assessment. Mirroring the findings above, in NILOA’s most recent survey, released in 2014, 84 percent of institutions reported that they had common learning goals for all their students, up from 74 percent in the organization’s earlier 2010 study. This is clearly movement in the right direction. However, NILOA also reported in 2014 that only four in ten institutions reported that the learning goals of *all their various academic programs* were aligned with the institution’s stated learning goals for *all students*. NILOA’s surveys also affirm the key role that regional accreditation has played and continues to play in motivating institutions to focus on learning outcomes assessment.

As in so many other areas of higher education reform, while progress is being made much more work is needed in the area of closing achievement gaps—and even in documenting what those gaps are in achievement of institutional learning outcomes. For instance, 100 percent of CAOs report in AAC&U’s 2015 survey that that they are tracking retention and graduation rates, 78 percent are tracking participation in engaged or high-impact learning experiences, and 70 percent are tracking achievement of institutional learning outcomes.

However, when asked about whether, in tracking these items, they are disaggregating data by race, ethnicity, income, or parental level of education, few are disaggregating the data related to high-impact learning or learning outcomes assessment results. Sixty percent report that they do not disaggregate by any of these variables students' participation in engaged or high-impact learning experiences; 75 percent report that they do not disaggregate by any of these categories students' achievement of institutional learning outcomes (Hart Research Associates, 2015). Clearly, more work is needed to ensure that underserved students achieve learning outcomes that are widely considered to be fundamental.

Concurrent with the developments noted above, a growing number of institutions have defined their mission as "competency-based learning." They have chosen to focus the degree on what students should know and what they can do with their learning rather than on the units of course time tracked by "the credit hour." Some participants in this movement see competency-based education (CBE) as a new direction applicable to all of higher education. Others see it as primarily appropriate for working adults who can shorten their time to degree by demonstrating degree-relevant learning from non-academic contexts.

While competency-based learning can be traced back to initiatives in the early 1970s, the digital revolution has introduced a new direction. This new approach has students progressing at their own pace through digitally framed course materials and automated tests, with access to course "coaches" but not necessarily to specialists in the field of study. Some CBE schools use the DQP, LEAP, or both as frames of reference. Several institutions are engaged with local employers to define common learning outcomes between degree and career requirements. Others keep their competency frameworks in-house, contending that they are proprietary. And, others also offer industry-recognized certificates or credentials, often resulting in an alignment with professional associations that increase program credibility (Public Agenda, 2015). CBE, however, is clearly a trend that is accelerating. AAC&U's 2015 survey found that 10 percent of CAOs report "offering some programs in CBE format," with another 40 percent reporting that they are "considering developing the option for some programs." A recent survey from Public Agenda (2015) confirms this growth as more than 500 CBE programs are being designed or delivered across the country.

### **The Bridge to Completion Efforts – Clear Learning Outcomes**

In addition to the initiatives mentioned above – those that aim to improve the definition and transparency of learning outcomes, curricular alignment and students' achievement – initiatives have been launched in recent years that seek solutions to the problems students face in trying to complete their credentials. Initiatives in this "student success" thread seek to increase the rate of successful transfer, use evidence of student learning to better guide student decision making on structured learning pathways, and form new types of transcripts that better represent what a student knows and can do. Jobs for the Future is supporting statewide student success centers that help community colleges implement guided pathways. Complete College America just released a report on the impact of corequisite education in four states, with results demonstrating a near 40 percent increase in students completing important gateway courses (Complete College America, 2016).

Additionally, new ways are being developed to deliver academic programs. These initiatives (e.g., the Interstate Passport managed by the Western Interstate Commission on Higher Education, the Competency-Based Education Network and related CBE projects, accelerated degree programs, etc.) are also now beginning to develop more effective ways to clarify and assess learning outcomes.

The time may, indeed, be ripe for connecting all of these various efforts.

### **The Bottom Line**

The various projects associated with LEAP, NILOA, the DQP, Tuning, and CBE build on and further extend the shift toward defining quality learning in terms of demonstrated learning outcomes. However, the various frameworks, curricular pathways, and assessment approaches developed through these efforts are not fully aligned in optimal ways—ways that would enable genuine scaling of learning improvement efforts. There is slow but discernible institutional and cross-institutional progress toward defining and assessing a core set of learning outcomes important for all students. While progress is clearly being made, relatively few higher education institutions have true “cultures of assessment” that produce enough evidence about student learning to fuel institution or system-wide improvements, including those at the course, assignment, and program levels. This will require more work directly with cohorts of faculty—changing their mindsets from “my work/my course” to “our work/our curriculum” and helping them see how meaningful assessment data can be used to improve outcomes. It will also require a more coordinated effort by national organizations working with institutions to improve quality. And it will require bold, ongoing leadership from sponsoring organizations, including Lumina Foundation and other philanthropic entities.

### **What may be holding back the movement?**

One issue clearly hampering the movement is this lack of alignment across the various “frameworks for quality credentials” and concomitant efforts to improve learning outcomes. This isn’t, however, the only thing holding back progress. A recent op-ed in *The Chronicle of Higher Education* and the nearly 100 comments it elicited provides insight into some faculty members’ ongoing skepticism about learning outcomes assessment. Erik Gilbert, in an essay titled “Does Assessment Make Colleges Better? Who Knows?,” notes that, “*I am starting to wonder if assessment may actually do more harm than good*” (2015). He worries that *the way assessment is being done* on too many campuses may affect its potential positive impact on long-term outcomes. He asks, “*Are we using assessment to find minor shortcomings in our teaching and curriculum ... and in the long run having no real positive effect on the quality of our graduates and institutions?*” Without more attention to identifying major, cross-cutting shortcomings and work at the program and institutional levels, this is, indeed, a legitimate concern.

This is precisely the reason, however, why the DQP has become such an important catalyst for change. By choosing very explicitly to focus on program- or degree-level “proficiencies” rather than on course-level “competencies,” the DQP propels a very different conversation on individual campuses and allows for the essential cross-campus, system-level conversations that are so important for ensuring the success

of transfer students. The importance of this shift in focus emerges in one of the nearly 100 comments made in response to Gilbert's article. Richard Sherry notes that

*One of the issues that first came up when a department I worked in began to talk about assessment was the realization that the department had no stated goals for student learning that could be linked to our coursework (this was a long time ago). The second insight was that the courses were not aligned in any meaningful way—not just in sequence, but in any form of continuity, intellectually, conceptually, geographically, etc. This meant that 300-level courses were not guaranteed to be more demanding than 200-level, nor were they guaranteed the foundation of 200-level courses and experiences. Took awhile, but the "assessment exercise" task enabled us to align the curriculum, state learning objectives, develop a strategy for introducing students to the skills they needed, build those skills, and evaluate them at the end of the program. I still, 20 years later, think it was one of the most important community tasks we had as a department.*

Another commentator, Alex Small, affirms another essential but often neglected aspect of effective learning outcomes assessment efforts. None of the LEAP Essential Learning Outcomes or any of the proficiencies described in the DQP can be achieved at graduation levels through only one course. Despite this, assessment efforts often focus *only* on the graduation level rather than on the ways in which students develop capacity through progressively more challenging work. Such work encompasses assignments and levels of learning across multiple educational experiences in and outside the classroom – including experiential and applied learning, which is increasingly important for many students.

Small notes in his comment to Gilbert's article that

*The problem is that the real goals that we have for students in our programs generally take many courses to achieve. I don't know that any one physics class will make my students all that much better at applying fundamental principles and quantitative methods to make predictions about the physical world. (And what I have just stated is certainly one plausible Student Learning Outcome for a physics class.) However, I also observe that by the end of four years (or, realistically, five or six, given graduation rates) most of the physics majors have some reasonable competence at that. No doubt similar things could be said for the intellectual skills that people in other disciplines are trying to help their students develop. Even for less fuzzy things, like mastery of a particular topic, my observation is that most students only sort of get it the first time, but do better at it after using it in a subsequent class, or seeing other examples of it in a subsequent class. It's the repeated exposure that really seems to matter. No doubt similar observations apply in other disciplines.*

Next-generation learning outcomes assessment work must expand the cohort of faculty members who understand and have the capacity to work together with colleagues, not just to produce meaningful

learning (and evidence of learning) at the *program level*, but also to provide feedback to individual faculty that is actionable at the *classroom level*. Both classroom-level and curricular design-level changes are needed to truly move the needle on student learning outcomes.

Cross-institutional efforts also will be very important in the next phase of work. Efforts like the Multi-State Collaborative (MSC) on Learning Outcomes Assessment (using common LEAP VALUE<sup>1</sup> rubrics to assess student work across 12 state systems) may propel the movement to a new level of national impact. For the first time, we actually are beginning to have comparable data on student achievement that reflects how achievement of learning outcomes is actually being demonstrated in real student work products produced in the regular curriculum. This data provides much more information about the key dimensions of cross-cutting learning outcomes than do simple average test scores. Preliminary analyses from this study also show that many students in “traditional” two- and four-year public institutions are not where they need to be on critical thinking, writing, and quantitative reasoning.

The MSC/VALUE approach to assessment can provide valuable feedback to faculty on how well particular curricular paths may be helping students attain certain learning outcomes. Moreover, once faculty evaluate student work samples against the rubric standards, many instructors are motivated to redesign course assignments so that they help students work more intentionally on the expected skills and applications of learning delineated in the DQP. Many faculty members are, indeed, interested in using assessment data to improve their teaching and learning strategies and/or to make changes in curricular requirements. Unfortunately, many traditional systems by which we reward and/or organize faculty work stand in the way of advancing productive changes to advance improvements in achievement of important learning outcomes.

### **Lessons Learned and Moving Forward**

1. There is clear consensus about the broad, cross-cutting learning outcomes all college graduates need to succeed in the workplace. These outcomes are actually the same outcomes that help students become responsible citizens and flourish after graduation. Both in established institutions and in competency-based education we can and must move beyond each institution having a unique set of outcomes completely disconnected from larger national frameworks and largely invisible to those beyond that institution.
2. At the same time, given the traditions of US higher education, we need to show that institutions can put their own “unique” spin on their own outcomes even in transfer settings. To ensure that clarity of outcomes actually results in intentional curricular practices (including at the program, course, and assignment level where they matter most), faculty members themselves need to engage with learning outcomes and “own” the outcomes and approaches that institutions will use to measure student learning and the effectiveness of institutions and programs.

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<sup>1</sup> VALUE (Valid Assessment of Learning in Undergraduate Education) is a campus-based initiative launched by AAC&U that brought together teams of faculty and other educational professionals to create, test, and use sixteen rubrics aligned with the LEAP Essential Learning Outcomes.

3. While one can achieve consensus on outcomes, the work to align programs, courses, and assignments to those outcomes is an essential process that most institutions have only just begun. Moreover, far more work is needed to assess the outcomes of all the other occasions for college-level learning, especially those experienced by nontraditional students (e.g., co-curricular learning, work-based learning, military experience).
4. Many institutions have not yet engaged their part-time and/or contingent faculty in learning outcomes alignment and assessment processes. Many still use a “once-and-done” approach to competencies, in which, for example, a single course in math is taken to satisfy the competency expectation despite abundant evidence that cross-cutting competencies require practice across multiple learning contexts.
5. There are new generations of faculty coming on board who see the curriculum in new ways and are interested, even excited, about using learning outcomes and new forms of assessment to test and improve new curricular models and teaching approaches. But, too often their desire to change the curriculum is hampered by structural impediments (e.g. reward systems, structuring and payment for faculty time in the classroom, etc.). Many faculty, however, especially in the humanities and social sciences are coming to understand that more clarity about learning outcomes and collective work to develop more integrative curricular pathways is essential to the continued support for and vitality of their own disciplines.
6. Even if an institution has clarified a common set of learning outcomes, few have effective, campus-wide practices to ensure that all students fully understand the learning outcomes. Likewise, few institutions have articulated how, exactly, their curricular programs should advance those outcomes and how their own work should demonstrate achievement of those outcomes. Some institutions are beginning to integrate processes to track student learning progress using various technological tools outside of standard learning management systems. Institutions must also do far more to build student understanding of broad learning outcomes and the capacity of academic advisors to communicate about outcomes and how curricular pathways lead to them. For instance, Stanford University and University of Maryland University College have a competency-based transcript where students and advisors can monitor student progress through learning pathways. This work could potentially complement other student data and allow institutions to create predictive models that inform early alert systems.
7. While the consensus on the most important, cross-cutting outcomes is clear, the regional accrediting community is hampered in its ability to advance the movement. Regional accrediting organizations do not use the same language to describe any *common set of outcomes* that all undergraduate degree programs must advance for all students. This is a serious limitation.
8. Our standard methods of assessment, in use for at least a century, are woefully inadequate to actually assess the outcomes that are most important at the levels of learning students need. However, the strong interest in using rubrics and samples of student work, rather than tests, to

discern how well students are doing on key learning outcomes suggests a new direction for assessment and for faculty collaboration around learning outcomes. The time may have come for faculty and institutions to share common frameworks for assessment and share and compare meaningful learning outcomes assessment data tied explicitly to students' own work – done both in academic and experiential settings.

9. It takes time for well-organized campus efforts to educate and fully engage a critical mass of faculty members to clarify outcomes and begin to map programs, courses, and assignments to those outcomes. It then takes additional time and faculty development to gather meaningful assessment data and put it to use to improve instruction and curricular design. It remains a formidable challenge to engage all faculty—including contingent and part-time faculty—in the necessary collaborative work to clarify and assess learning outcomes across the curriculum.
10. As more institutions make use of digital learning resources and opportunities, too little work has been done on how well various online learning resources or settings actually advance the most important learning outcomes for all students.
11. There is much productive work going on in both academic affairs and among student affairs professionals who are developing and using learning outcomes to capture the learning that goes on outside of traditional college classrooms. Unfortunately, there isn't enough integration or cross-sector learning happening to leverage this work to accelerate improvements.
12. Leadership is essential at every level– from faculty, deans, senior leaders, and boards to policymakers. Unless smart, strategic, educationally minded leaders publicly support and lead learning outcomes efforts, results will be minimal and/or marginal.

## **Creating a New System**

What, then, would a more aligned, student-centered, learning-based system of postsecondary education look like? The Connecting Credentials Initiative has proposed a system in which:

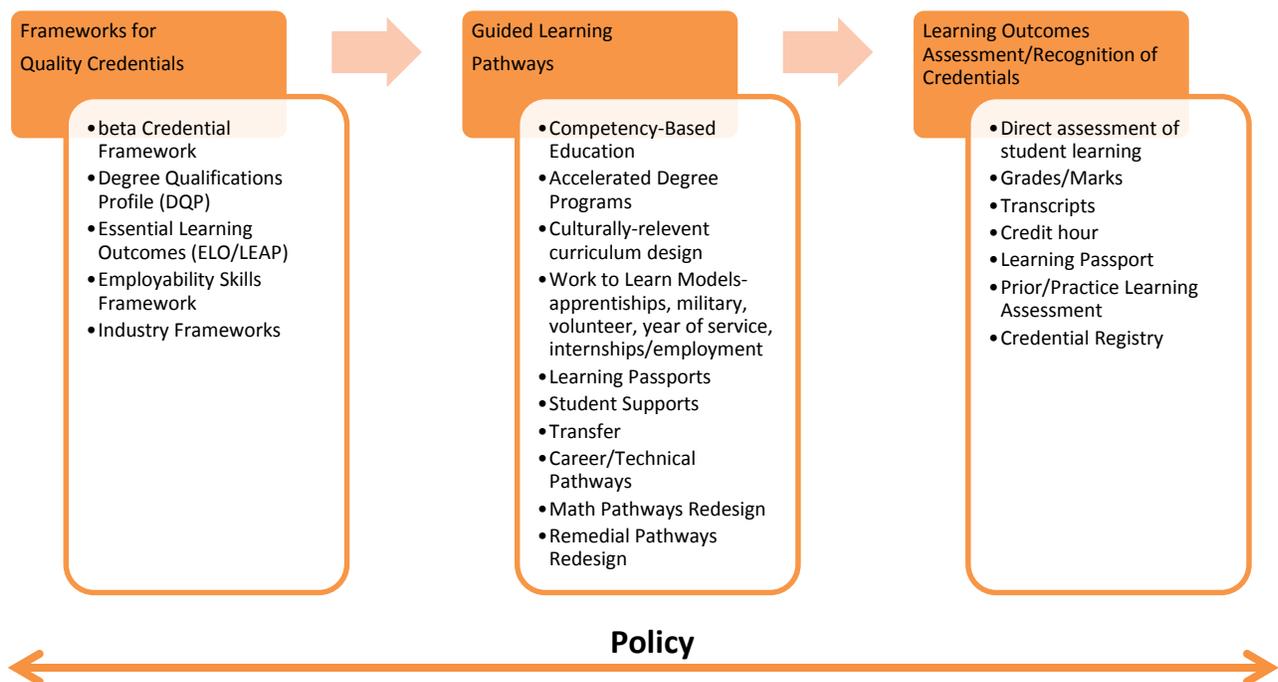
- All postsecondary credentials—including degrees—are fully based on learning outcomes that make them easier to understand and use by employers, educators, and individuals.
- Users can rely on the quality of credentials, including their accuracy in representing the academic achievements of a credential holder.
- Credentials are continually updated and validated to ensure they stay relevant to societal and economic needs.
- Learners understand how credentials are interconnected and clearly see the learning pathways that they can follow to obtain credentials and reach their goals.
- Users can clearly combine micro-credentials in ways that ladder into high-quality degree programs and that can inform their successful educational and career planning transitions.

- There is increased attainment for students traditionally underserved by higher education, particularly students of color, low-income, adult, and first generation students.

As previously outlined, there are many efforts underway that could lead to a more student-centered, learning-based system. These efforts could be grouped into the following categories and interact with each other to create a seamless learning pathway (see Chart 1):

- **Frameworks for Quality Credentials** help organize our disconnected system and make it more transparent. By establishing a common language for defining quality credentials and their associated learning outcomes, a framework can act as a road map for all who must negotiate the education landscape. (See Appendix A for list of frameworks.)
- **Guided Learning Pathways** are the highways, streets and roads on the map of the credentials system. In a transparent and well-organized system, learners can select the pathway(s) that best meet their specific needs. Pathways are clear, connected and aligned so that today’s mobile learners have many points of access and freedom of movement within the system. There is growing understanding that measuring learning by competencies can increase the number of pathways and ease transfer. (See Appendix B for example of principles to design pathways.)
- **Learning Outcomes Assessment/Recognition of Credentials** is based on competencies. This opens up multiple ways to demonstrate/assess learning and translate that learning into credentials whose value is recognized and clearly understood by all. (See Appendix C for discussions of comprehensive student records.)

**Chart 1: Visual of new student-centered, learning based system**



## Realizing a New System

With so many organizations and institutions involved in one or more of the initiatives described above, many more colleges and universities are now at least making clear what their institutional-level learning outcomes are—what they aspire to in terms of what each of their graduates should be learning in order to “earn” their degrees. As yet, despite all of this work and significant accomplishment, far more work is needed. We must build on this new clarity about outcomes and the emerging cross-institutional work on assessing those outcomes to ensure the creation of viable degree program pathways for all college learners.

### **To increase attainment of high-quality degrees, where should leaders in different sectors focus?**

- Foundations could accelerate change by convening organizational and institutional leaders across key sectors (e.g., regional accreditors and their board members, national organizations, state systems, regional compacts, research institutes, and policy organizations) to examine evidence, test hypotheses, and *chart an action agenda*. A new action agenda could address key questions related to aligning frameworks and accelerating momentum as outlined below.
- Follow-up initiatives could focus simultaneously on what quality-assurance leaders can and should do, and on strategic leadership across institutional sectors (public, private, broad access, selective). Particular attention should be given to merging the completion and the learning outcomes quality movements. Questions to pursue in future initiatives include:

### **Equity**

- As the learning outcomes movement proceeds, how can we move issues of equity to the forefront? How can we reform a system in which some students are graduating with the learning outcomes they need and others get credentials of little or no value?
- As more students—including many traditionally underrepresented students—pursue higher education degrees in nontraditional ways (e.g., through CBE or fully online programs), what additional research and practices are needed to ensure that these programs are advancing DQP outcomes for all students?

### **Transitions into and through Guided Learning Pathways**

- Research increasingly suggests the value of well-marked learning pathways to support student persistence and degree attainment. As more institutions gather meaningful data on students’ achievement, how can they use that data to align and implement more effective guided learning pathways – pathways that feature clear connections to entry expectations (e.g., connections to the Common Core), clear on-ramps from developmental education or other sub-baccalaureate credentials to AA/AS or BA/BS credit-bearing courses and experiences, and clearly delineated and integrated general education and majors requirements?
- How can institutions ensure that all students fully understand their institution’s shared learning outcomes and precisely how their own guided curricular pathway will enable them to demonstrate their achievement of the outcomes through meaningful work?

- How can clarity about, and assessment of, learning outcomes smooth the transition from college to career? How can new information (e.g., data from rubric-based assessments of student work in e-portfolios) be included in next-generation transcripts, LinkedIn profiles, etc.?

### **Policy and Accountability**

- Policymakers are very focused on key levers related to affordability and to on-time completion rates, especially for low-income and minority students. How can we connect this work to the quality learning agenda? (One example is the work AAC&U is beginning to do—connecting its work on guided curricular pathways that are rich in high-impact practices with the work of Complete College America in its “reduced-choice,” intrusive-advising-focused guided pathways work.)
- Can regional accreditation have a significant impact on both accelerating the learning outcomes movement and building capacity on the part of institutions to assess outcomes in meaningful ways? Can they, themselves, come together and articulate clearly in accessible and common language a commitment to a set of shared outcomes all institutions should advance and measure?
- How can leaders working on learning outcomes positively influence federal policy as reauthorization of the Higher Education Act is debated?
- How can state policy accountability frameworks be reconfigured to address issues of affordability, productivity, completion, but also the quality of student learning? Can integrated policy frameworks help streamline regulatory structures to allow colleges and universities to target resources toward learning outcomes improvements that also increase retention and completion rates?

### **Advancing Institutional Change and Connecting Change Agendas**

- How can we develop ways for institutions to integrate and connect various reform movements, beginning with whatever part of the agenda makes sense for them? (For example, institutions could start with developmental education reform or with high-impact practices or with general education reform or with assessment or with transfer student success. Different tools and projects could help with any or all of these, but institutions need guidance and support to take those individual efforts and connect them into a coherent quality/equity improvement agenda.)
- As efforts intensify to create and make coherent the role of sub-baccalaureate credentials and unbundled educational opportunities, how can educators in different sectors align credential frameworks and connect coherently steps along educational pathways taken by all kinds of students, including returning adult students, less well-prepared students, racial/ethnic minority students, etc.?

### **Faculty**

- Can we generate more lasting impact on learning outcomes by engaging faculty in ways that respect their expertise in teaching and learning and in ways that acknowledge their need and desire for credible and actionable information on how well their students are learning?
- What additional tools or venues are needed to create sufficient engagement among faculty?

- How can institutions involve a critical mass of faculty—including part-time and contingent faculty—in the process of defining, aligning, and assessing key learning outcomes?

## **Leadership**

- What do we need from leaders in different sectors—in institutions, state systems, and national organizations?
- How can we cultivate more collaborative leadership within and across institutions? Coordinating collaboration requires leaders who respect the work of faculty and truly understand the on-the-ground institutional pressures, some of which can slow movement on learning outcomes and some of which can be leveraged to advance movement.

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## Works Cited

- Adelman, Cliff, Peter Ewell, Paul Gaston, and Carol Geary Schneider. 2014. *The Degree Qualifications Profile*. Indianapolis, IN: Lumina Foundation.
- AAC&U (Association of American Colleges and Universities). 2002. *Greater Expectations: A New Vision for Learning as a Nation Goes to College*. Washington, DC: AAC&U.
- . 2007. *College Learning for a New Global Century*. Washington, DC: AAC&U.
- Complete College America. 2016. *Corequisite remediation: Spanning the completion divide*. Indianapolis, IN: Complete College America. <http://completecollege.org/spanningthedivide/#home>
- Bailey, Thomas R., et al. 2015. *Redesigning America's Community Colleges*. Cambridge, MA: Harvard University Press.
- Barry, Mary Nguyen. 2015. "Is Our Children Learning?" *The Hill*, August 18. <http://thehill.com/blogs/congress-blog/education/251317-is-our-children-learning>.
- Eagan, Kevin, et al. 2014. *Undergraduate Teaching Faculty: The 2013-14 HERI Faculty Survey*. Los Angeles, CA: Higher Education Research Institute.
- Gallup. 2014. *What America Needs to Know about Higher Education Redesign*. Washington, DC: Gallup.
- Gaston, Paul. 2014. *Higher Education Accreditation: How It's Changing and Why It Must*. Sterling, VA: Stylus.
- Gilbert, Erik. 2015. "Does Assessment Make Colleges Better? Who Knows?" *The Chronicle of Higher Education*, August 14. <http://chronicle.com/article/Does-Assessment-Make-Colleges/232371/>.
- Hart Research Associates. 2007. *How Should Colleges Prepare Students to Succeed in Today's Global Economy*. Washington, DC: AAC&U.
- . 2010. *Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn*. Washington, DC: AAC&U.
- . 2013. *It Takes More Than a Major: Employer Priorities for College Learning and Student Success*. Washington, DC: AAC&U.
- . 2015. *Falling Short? College Learning and Career Success*. Washington, DC: AAC&U.
- . 2015. *Equity and Student Success: AAC&U Member Priorities for Change*. Washington, DC: AAC&U.
- . 2016. *National Trends in General Education Design, Learning Outcomes, and Teaching Approaches*. Washington, DC: AAC&U.
- Jankowski, Natasha. 2016. "Learning Outcomes Convening Resources." Unpublished resource list, Indianapolis: Lumina Foundation.
- Kuh, George D., et al. 2014. *Knowing What Students Know and Can Do: The Current State of Student Learning Outcomes Assessment in US Colleges and Universities*. Champaign, IL: National Institute for Learning Outcomes Assessment.

Kuh, George D., et al. 2015. *Using Evidence of Student Learning to Improve Higher Education*. San Francisco: Jossey-Bass.

Public Agenda. 2015. *The competency-based education ecosystem framework*. New York: Public Agenda.  
[http://www.publicagenda.org/files/TheCompetencyBasedEducationEcosystemFramework\\_PublicAgenda\\_2015.pdf](http://www.publicagenda.org/files/TheCompetencyBasedEducationEcosystemFramework_PublicAgenda_2015.pdf)

Public Agenda. 2013. "DQP Final Report." New York: Public Agenda.

**Appendix A**  
**Description of Common Learning Outcomes Frameworks**  
**(AACC, Request for Proposals: The Right Signals Initiative)**

<b><i>Name of Tool<sup>1</sup></i></b>	<b><i>Brief Description</i></b>	<b><i>How Can Be Used</i></b>	<b><i>Link for More Info</i></b>
Connecting Credentials: Beta Credentials Framework	The Beta Credentials Framework unifies terminology and breaks learning into knowledge and skills (specialized, personal and social) as well as charts 8 levels that outline the depth, breadth and complexity of learning. The Framework was developed by a team led by the Corporation for a Skilled Workforce (CSW) and CLASP, working with a number of educational providers of credentials with support from Lumina Foundation in 2014-2015. The beta Credential Framework was launched on June 11, 2015, for exploratory use	This framework establishes a “common language” way to examine the competencies associated with any credential. It is a tool intended to help users see how to integrate the use of multiple credentials.	Downloadable at website where there is also a guide describing how the Framework can be used: <a href="http://www.connectingcredentials.org">www.connectingcredentials.org</a>  Print copies of the Framework are available for free from: <a href="http://lumina.go2vista.com/category">http://lumina.go2vista.com/category</a>
The Degree Qualifications Profile (DQP)	The DQP provides a baseline a set of reference points for what students should know and be able to do to earn associate, bachelor’s and master’s degrees – in any field of study. The DQP engages faculty in vital work of improving courses and shaping programs of study. There are 5 broad categories of proficiencies in the DQP – 1) Specialized Knowledge, 2) Broad Integrative Knowledge, 3) Intellectual Skills, 4) Applied Learning and Collaborative Learning, and 5) Civic and Global Learning – which provide a profile of what degrees mean in terms of specific learning outcomes.	This tool offers users a way to think through the learning outcomes associated with degree programs which can help in translating them into terms comparable with other credentials	The DQP as well as resources for implementation can be found at <a href="http://www.degreeprofile.org">www.degreeprofile.org</a>  Print copies are available for free at: <a href="http://lumina.go2vista.com/category">http://lumina.go2vista.com/category</a>
Common Employability Skills: A Foundation for Success in the Workplace: The Skills All Employees Need, No Matter Where They Work	The National Network of Business and Industry Associations has developed a core set of fundamental skills that potential employees need in the workplace—and a common vocabulary to explain them. There are four areas of skills in the Framework: Personal Skills, People Skills, Applied Knowledge, and Workplace Skills.	This tool can contribute to reflecting on whether and where key foundational skills are developed in the context of specific credentials.	<a href="http://www.nationalnetwork.org/wp-content/uploads/2015/05/Common_Employability_Skills-03-30-152.pdf">http://www.nationalnetwork.org/wp-content/uploads/2015/05/Common_Employability_Skills-03-30-152.pdf</a>
Essential Learning Outcomes (ELO)	Developed by the Association of American Colleges & Universities and launched in 2005, the Essential Learning Outcomes seek to define a set of learning outcomes that all students need from higher education in the 21st century. Complimented by a set of rubrics to assess student learning, the ELO’s engage faculty in designing learning experiences and assessments.	This tool offers a way to assess how each of the credentials being employed contributes to learning outcomes all students need.	<a href="http://www.aacu.org/leap/essential-learning-outcomes">http://www.aacu.org/leap/essential-learning-outcomes</a>

<sup>1</sup> Industry sector frameworks are another set of common frameworks set by the Department of Labor, Career and Technical Education, and associations. These frameworks will be well known to specific programs within the colleges – so are not specified in this chart.

## Appendix B

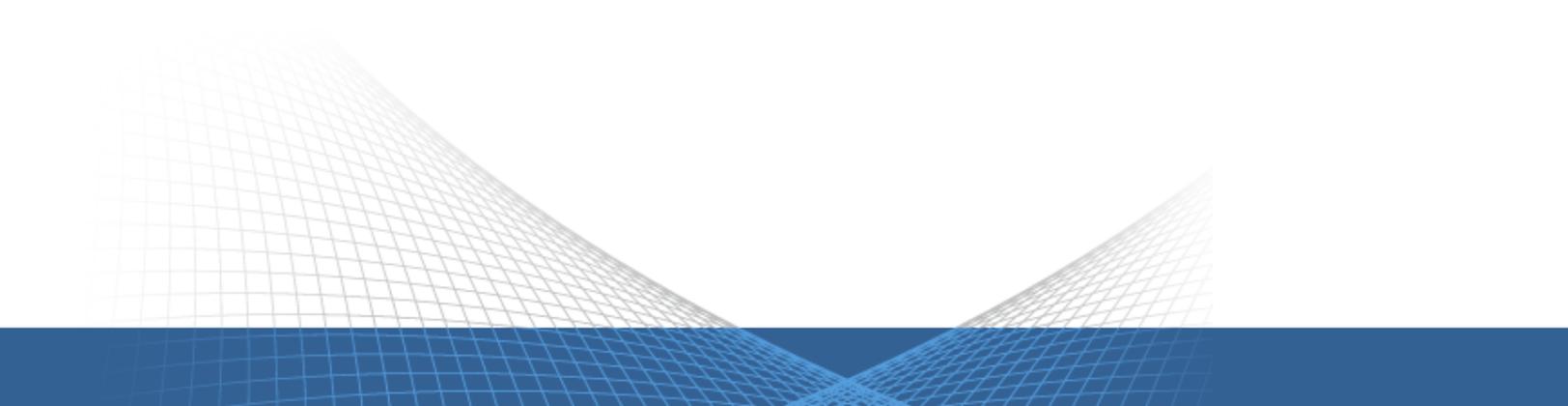
### Designing Guided Learning Pathways for Quality and Inclusive Excellence [AAC&U, 2015]

- **With Equity and Belonging Paramount Values, Institutions Meld High Touch and High Tech to Support and Monitor Student Engagement and Progress, Giving Special Attention to Frequent or Systemic Barriers and Challenges**
  - Build an intentional and welcoming community so that every student feels known, respected, supported and savvy about where to find help
  - High touch: provide mentoring and individualized degree plans to connect degree program pathways (and developmental education, if needed) with students' own goals, lives, and emerging interests
  - High tech: deploy data analytics to provide timely information about student progress and problems, and to address systemic disparities or barriers
- **Faculty Define and Programs Address Essential Learning Outcomes – across Systems and within Institutions**
  - Enable a constant curricular and co-curricular focus on the most important purposes of college learning—preparing students to tackle complex questions, economic, democratic, and personal
- **Sequence Programs, Courses and Well-Designed Assignments to Foster Essential Learning Outcomes**
  - Use the DQP Matrix to map Essential Learning Outcomes across all courses and requirements in the program, at progressively more challenging levels from initial courses to final studies
  - Connect the curriculum visibly with the wider world and students' own questions, while providing clarity, direction and progress points or “markers” for students
  - Provide multiple on-ramps for students in transition and/or who need supplemental work
  - Where relevant, use digital tools to free time for student/faculty work on projects
- **All Students Participate Frequently in High Impact or Active Learning Practices, From First to Final Year**
  - Shift the focus from passive listening and rote assessments to students' own effortful engagement with questions, problems, and projects, including community- or work-based projects
  - Ensure students' constant practice of essential learning outcomes such as analytic inquiry, engaging diverse perspectives, collaborative problem-solving, ethical inquiry, quantitative reasoning, information literacy, communication skills, etc.
- **Every Student Completes Applied Learning Projects—Connected to Program and Student Goals**
  - Connect college learning with unscripted questions important to the student
  - Prepare and enable students to become self-directed learners
  - Embrace AAC&U's LEAP Challenge: which invites higher education to make students' “signature work” a catalyst for their integrative and applied learning
- **Students' Own Work—including Their Applied Learning Projects—Provides the Primary Evidence of their Progress Toward Degree Level Learning and Educational Achievement**
  - Reduce the emphasis on assessments that are disconnected by design from the actual program of study; shift our focus to students' own “best work.” [Use AAC&U's LEAP VALUE rubrics to track student progress on key learning outcomes and monitor equity of learning (see [www.aacu.org/VALUE](http://www.aacu.org/VALUE))]

Appendix C  
Summary of Comprehensive Student Records Project

# SUMMARY OF COMPREHENSIVE STUDENT RECORDS PROJECT CONVENING

October 28-29, 2015—Elk Grove Village, IL



# Summary of Comprehensive Student Records Project Convening

October 28-29, 2015—Elk Grove Village, IL

## Part 1: The CONCEPT of Comprehensive Student Records

### Introduction: Expanding the Student Record

Brad Meyers, the university registrar and executive director of enrollment services at Ohio State University, and the current past-president of AACRAO, provided an introduction and framing for this convening. He explained that the topic of the student record is generating a great deal of interest among registrars, making it important to provide a sense of direction and guidelines for moving forward.

The “student record”—specifically the transcript—is a key educational currency that has been fairly static for a long time. However, while the transcript has been static, the environment for education and work, as well as the needs and expectations of students, employers, and educational institutions, has changed greatly. For example, more than 80% of the incoming freshmen at Ohio State had prior learning credit they brought with them, and more students are engaged in not only “bricks and mortar” enrollment, but also online and experiential learning.

There is increasingly a desire of multiple stakeholders (institutions, governing boards, legislatures, students and families, and prospective employers) to look beyond the courses and grades that appear on transcripts, to also know about a student’s learning outcomes, competencies, and learning outside of the classroom.

In the summer of 2015, at the AACRAO Technology & Transfer Conference, there were several sessions and discussions on the topic of the student record. During these discussions, several critical questions were raised. Ten of them are summarized here:

1. **In addition to courses and grades, what student experiences and evidence of learning should be recorded as part of a more comprehensive student record?** How could the broad range of student experiences be better represented? At Ohio State, a conversation has begun about adding a deeper level of detail which might include the undergraduate research

a student engages in, information about independent study or group study work, information about a student’s honors thesis, publications by a student, and information about a cooperative or internship program. Other examples of content to include might be service experience, academic milestones, out-of-classroom experiences, leadership development experiences, and other information about measurable competencies or learning outcomes.

“Should we, and if so, how should we include that information on the academic transcript?”

*Brad Meyers*

2. **Who is receiving the transcript and what are they using it for?** It is unlikely that a prospective employer and the admissions committee of a graduate program would focus on the same information.
3. **Is one single document and format meeting the needs of all students?** The traditional transcript tends to be designed for other academic programs, though even for this audience additional data would likely provide a more complete picture of a student. However, prospective employers would clearly appreciate additional, but relevant, data.
4. **How is the nature of today’s educational environment changing and should that impact what appears on the transcript?** Already, the demand for experiential and online learning is increasing rapidly, and the environment for instructional delivery is expected to rapidly evolve. It is important to have a framework that provides sufficient flexibility in a rapidly changing environment.
5. **How should enhancements be displayed on the transcript?** What exactly will this enhanced student record look like? Is it anticipated that there will be some standardization of the additional information that is provided?

6. **How will the additional information on the transcript be validated?** One of the values of a transcript is that it is reliable information validated by an institution. But does all additional information added to a transcript need to be validated? Perhaps some information is validated and some is not; if clearly indicated on the transcript, is that sufficient? And, for those things that are validated, who does the validation?
7. **For whatever enhancements are implemented, how is the information managed?** Who is responsible and accountable to collect, manage, and maintain this additional data?
8. **How do we leverage technology to support an enhanced transcript?** An e-transcript provides much greater flexibility to meet a variety of needs, but what matters is what the reader (in particular the student) actually needs and will use.
9. **How do we appropriately engage the faculty in the process of enhancing the transcript?** This is a critical group in the assessment process; their involvement and buy-in is essential.
10. **What is the role of registrars and student life professionals in this process?**

There is unlikely to be a one-size-fits-all solution, but it may be possible to provide a sense of direction and guidance for transcript enhancements.

## Project Overview

AACRAO associate executive director Tom Green provided an overview of the Comprehensive Student Records Project.

### Goals

1. **Accelerate the creation of a *comprehensive student record*.** This is the main goal of the project. Specifically the goal is to serve as a catalyst and to have one or more models of an enhanced student record within roughly one year.

“The main goal is to accelerate the development of a comprehensive student record in a digital format.”

*Tom Green*

2. **Develop a *framework* for the development of these records.** This is about a development process to help guide institutions that are considering the creation of a comprehensive student record.

3. **Document the *operational* and *policy* considerations for registrars, student affairs officers, and other higher education professionals to share with their campuses.** Almost all of the questions to be addressed deal with policies at institutions; it is often policies that stand in the way of progress and that need to be changed. What are the operational considerations that will be encountered during the process that other institutions should consider?
4. **Document ways in which the credit hour limits or fails to limit the development of student records, especially in light of competency-based education.** Traditional transcripts are tied to Carnegie units/credit hours, but don't reflect outcomes or competencies. Will adding these or basing records solely on these be impacted by the need to reflect credit hour accumulation?
5. **Directly assist a group of institutions (originally 8 and has expanded to 12) to develop models of comprehensive student records.** These models include adding competency-based education, learning outcomes, and/or co-curricular learning.
6. **Communicate the project's results to higher education audiences.** This goal involves communicating during the project to discuss challenges and share progress and results, and at the conclusion to provide models institutions may emulate.

“One of the questions is, ‘Who’s the audience for these records?’ . . . The real audience is our students. If we think through that lens first, a lot of the other things will develop.”

*Mike Reilly*

A student record can't simply be a summative document when a student leaves an institution. Students will need to consider the areas of the record that won't be populated by only completing courses. The record must drive formative experiences, and this will require communication and education of students about these records as students enter the academy. Further, because so many students in the United States transfer and earn their first credential at their second institution (44%), we must wrestle with how the work developed at our institutions will be articulated to others.

### What's Already Happening

In the United States, several institutions are already beginning to think about and get experience with some form of an expanded student record. (Examples from University of Maryland University College, Stanford University, and Elon University are summarized later in this report.)

In the United Kingdom, efforts began 15 years ago to represent learning and achievement beyond the traditional transcript. This was driven partly by employers who wanted to be able to differentiate one top student from another, which a transcript didn't effectively do. Two lessons from the UK are: 1) consider the role of vendors carefully and whether having records disseminated by them is preferable to institutional or governmental controls; and 2) the student record has to be a formative document, not a summative document. The experience in the UK has also shown that PR is necessary as students don't automatically understand or gravitate to this new type of record; it has to be promoted and explained.

Other experience with enhanced student records comes from vendors. IMS Global is a vendor that has been interested in engaging with the work of this project to develop ways of taking data across multiple systems and interpreting data. Bringing data together from disparate parts of an institution is an important, complex, and necessary task. Another vendor is Parchment, which is working to create some alternative student records and co-curricular records. There are other vendors that are similarly interested in the work and how student records may evolve.

### Timeline & Project Elements

The timeline below shows the steps in the project. The initial eight institutions have been identified and readiness assessments will begin following the convening. Project scope and internal communication plans will be developed as part of the readiness assessments. Additional institutions will be identified and convene soon and join into this timeline. In early 2016, the project shifts from facilitation to creation and testing of model records, and reporting of outcome information. In parallel, it is important to externally communicate the project to others.



Among key steps are:

- **Readiness assessments.** This involves looking at an institution's current capacity to produce a CSR, where it wants to be, and documenting gaps. This includes policy gaps, operational gaps, infrastructure gaps, and perhaps other types of gaps. Consultants from AACRAO and NASPA will conduct two-day site visits with participating institutions. Plans and goals are reviewed, as is the infrastructure for collecting, recording, and communicating student achievement data through digital student records.

*"The readiness assessments are designed to help each institution form a clear road map to the completion of a comprehensive student record."*

*Tom Green*

- **Project scope plans.** This is documenting what is learned in the readiness assessment, the ambitions of the project, and what has to happen. It includes an operational plan that outlines the deliverables of the project at each institution and the timeline for their completion. It might also include a discussion of potential technology solutions and whether they will involve in-house or vendor solutions.
- **Communication plans.** There needs to be clear communication about intentions and goals of the project to faculty and staff at the institution, so that they understand what is and isn't being considered. Progress must be reported so that team members, institutional leaders, faculty, students, and staff are informed.

The institutional participants in the project include institutions from all regions of the United States, from public and private institutions, and from two- and four-year schools. Participants include institutions with one campus as well as entire systems.

### Learning Outside the Classroom

In discussing learning outside of the classroom, Kevin Kruger shared the context for what is happening in higher education. He identified crises taking place including the higher cost of college, declining financial support from states, and increasing student debt. At the same time, 40% of institutions are not meeting revenue goals, which will be exacerbated in coming years as there will be fewer high school students and graduates. There are crises related to race and equity issues, use of alcohol and drugs on campus, and sexual assaults. In addition, there are disruptions taking place in the delivery of education and in the demand for jobs, which is pushing institutions to increase their focus on career services.

As these disruptions are occurring, there is a shift in who is coming to college. There remains a sizeable (13 million) 18- to 23-year-old coming-of-age generation in college. But adult learners ages 25-35, many of whom work full or part time and often have family obligations, are increasing rapidly. These students experience education in a different kind of way, requiring greater institutional flexibility. There will be an increase in the number of Hispanic students, who are disproportionately first generation, low income, and from school districts with fewer resources, and who enter college less college ready, particularly in math and English. (Research shows that Hispanic students have lower completion rates, as do African Americans, than other ethnic groups.)

The generational profile of who will be attending college is also changing. Millennials are being replaced by the next generation (referred to by terms such as Next Gen or Generation Z), which is already the largest generation in the United States. This generation behaves and learns differently. They are heavy users of YouTube and learn through video and visuals. They are activists, want purpose, and want to create their own experiences. A few interesting statistics from data from a Northeastern University survey:

- Almost 75% of this generation believe that their higher education institution should allow them to build their own major.
- About 67% think the institution should be teaching them about entrepreneurship, and 42% want to work for themselves.

These habits and preferences create a very different profile of student needs and wants. As students are creating new types of experiences and paths, the way their educational experiences are documented will need to change.

At the same time that student preferences are changing, employers are increasingly emphasizing “soft” skills, referred to as character or social or emotional or 21st-century skills. A Harvard study identified three types of soft skills as most important to employers: listening, collaboration, and cultural awareness—which can’t be put on a transcript. But this interest among employers is another factor driving the need to add information about experiences, skills, and capabilities to the traditional transcript.

“Employers are saying it is less important where you went to college and what your major is. What’s more important are your soft skills.”

*Kevin Kruger*

### Survey findings

To better understand what is happening at different higher education institutions in documenting learning outside of the classroom, Amelia Parnell had conversations with representatives from 20 institutions. Based on those conversations, Parnell generally categorized institutions as falling into two groups:

1. Some campuses are at the **point of getting ready to start documenting** learning outside of the classroom and are struggling with questions such as, what should be documented? What goes in and comes out? Who cares? How do you measure it?
2. Some campuses have **progressed further** and are now having conversations about assessing the learning that has occurred by looking at learning outcomes, skills, competencies, and models to be used.

In addition to breaking institutions into two groups, Parnell identified five general themes from these conversations. They are:

1. **Institutions are addressing co-curricular learning with a committee.** The key players on the committee include the registrar, faculty, and student affairs. Registrars tend to ask, “How can we know what gives value?” “What’s the whole process?” “How can we make this scalable?” The faculty is focused on the assessment of learning. And, student affairs is focused on the depth and breadth of experiences.
2. **The process of categorizing activities and assessing outcomes is *organic* and *iterative*.** This entire undertaking is a process, which takes time, and starts with questions like, “How many outcomes should be measured?” Considerations include short-term engagements, service learning and internships, practical work experience, and prior experiences.
3. **Student buy-in is critical.** Students can’t wait until their senior year to get valuable out-of-classroom experiences. It is important that they think about co-curricular experiences from the outset. This must be a consideration for all students, including part-time students.
4. **Institutions are using several types of technology.** Committees are asking if they have the internal resources to create and customize technology themselves, or if a vendor option makes more sense.
5. **Students are the primary audience for this work right now.** Institutions are considering employers but are more focused on students’ needs.

“Campuses are saying, ‘We need something that will give students an opportunity to marry what they’ve been doing inside and outside the classroom.’”

*Amelia Parnell*

The key takeaways from these interviews are: campuses have a primary goal of creating an institution-wide culture that supports and encourages student engagement and connections between learning inside and outside of the classroom; and institutions need processes that are scalable, which requires that technology play a key role.

### Degree Qualifications Profile (DQP)

The concept of DQP is relevant to the work of the Comprehensive Student Records Project. The idea for DQP is to create a learning-centered framework and connect this framework to as many relevant projects as possible. The focus is to be clearer to all audiences about what a degree represents in terms of learning outcomes. The intent is not to standardize or homogenize higher education, but just to provide a framework that yields greater clarity about what a degree represents in terms of learning.

Key words that are part of DQP are “degree,” “quality,” and “profile.” The DQP is a scaffolding that expresses what graduates of different institutions should know and be able to do. The DQP raises the level and expands the conversation about the goals of higher education enterprises.

“DQP represents a shifting in thinking from what are we going to teach and how are we going to represent what is taught to what should our students learn.”

*Jillian Kinzie*

The DQP framework involves creating a profile that represents the five dimensions of learning, at every level of learning (associate, bachelor, and master): specialized knowledge, broad and integrative learning, intellectual skills, applied and collaborative learning, civic and global learning. All five dimensions are interrelated. The framework is fairly specific and involves demonstrating learning and competencies through use of active verbs, like “describing the context” or “constructing an alternative.”

“DQP can provide some frame for your work. . . . It might give you some language and some verbs and some tools.”

*Jillian Kinzie*

## Part 2: APPLICATION of Comprehensive Student Records

The first part of this meeting focused on the key concepts related to comprehensive student records. The conversation then shifted to hearing from three institutions that are making progress in applying these concepts on their campuses.

### University of Maryland University College (UMUC)

Joellen Shendy described how UMUC is tying competencies and learning outcomes to student records. This effort is in direct response to the problem that UMUC is trying to solve, which is that the current transcript shows what courses were delivered; it does not show the learning that has occurred. At top schools, the value of a degree is based on the institution’s reputation, but at other institutions the value of a degree is based on what a student actually learns and what they can demonstrate to an employer.

UMUC has about 90,000 total students and 54,000 full-time-equivalent students. The institution is primarily online, and most students are working adults age 32 and older, with a large military population. Many students move in and out of the educational experience; many take a long time to complete their degree; and there are many non-completers. UMUC has many campuses, particularly in Europe and Asia.

Trends such as competency-based education (CBE), micro-credentials, and credential stacking have the potential to dramatically impact affordability, access and opportunity, and completion rates. These trends, as part of online learning, can affect where and when learning occurs, and can result in more transparent learning outcomes.

A new type of student record that emphasizes learning and capabilities has the potential to help break the failure paradigm that is prevalent among non-completers, can aid transfer and portability, and can provide greater clarity about credentials. The potential opportunity is to provide greater clarity around credentials and to help students understand the value they are getting from credentials.

“There will be a paradigm shift. In the future, students will have more control over their own academic records, and registrars will be responsible for overseeing the sharing of verified data.”

*Joellen Shendy*

Important insights about competency-based education—which is an approach to pedagogy that emphasizes the mastery of skills and concepts rather than credit hours or seat time, and which is flexible, personalized, and relevant—are:

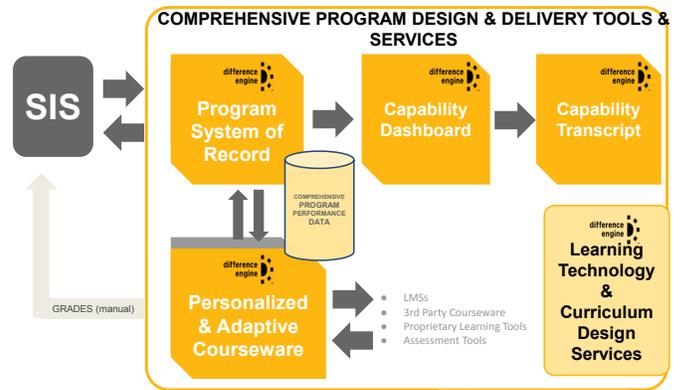
- It’s not just about producing more citizens with degrees. It is about growing talent to meet the challenges of the future.
- It’s not just about universities and colleges. CBE is appropriate at all levels of education to develop a 21st-century workforce.
- It’s not about how fast you can go. It is about a personalized pace and pathway.
- It’s not about delivering discrete, isolated skills. It is about developing broad capabilities for a knowledge economy.
- It’s not just about money. It is about creating value.

With a focus on CBE, UMUC is part of IMS Global’s Work, in collaboration with the Competency Based Education Network, which is engaging in efforts to coordinate multiple pilots and demonstration projects. This includes a technological interoperability project (TIP), with a goal of resolving technical interoperability issues. Demonstration projects include projects focused on:

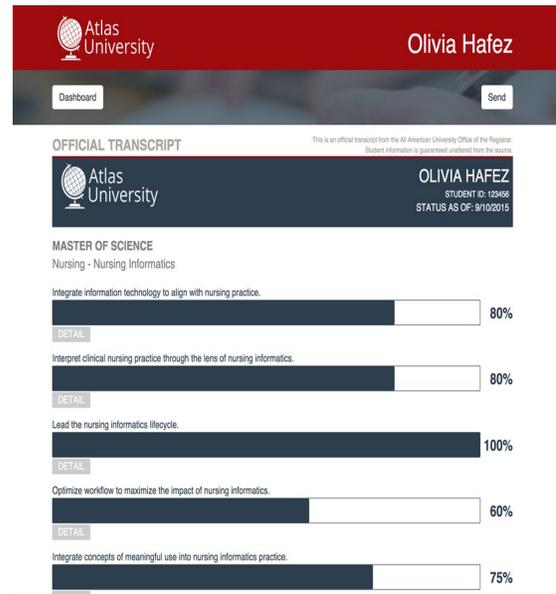
- Managing competencies using a unique key in an integrated database.
- Reporting assessment evaluation results.
- Extracting CBE program information for non-term-based financial aid.
- Measuring components of regular and substantive interaction.
- Producing an extended CBE transcript.

There are multiple registrars and multiple vendors involved with these projects, showing a high level of interest and support. These initiatives have helped identify an entire ecosystem involved in creating a new record and transcript. In creating an extended transcript, one major problem was that all of the players in the ecosystem had differing terminology. To solving this problem a reference hierarchy was created, with eight levels. Also, guidelines were developed. In addition, ideas being pursued include the work being done by Lumina Foundation on the creation of a registry of competencies ([www.credentialtransparencyinitiative.org](http://www.credentialtransparencyinitiative.org)), and giving students agency over their own record.

In assessing the trends, deciding to participate in various pilots, and understanding the entire ecosystem, UMUC is looking at exploring, creating, and piloting a model with a vendor such as Learning Objects. Such a pilot could be personalized and include information about different types of adaptive course work. It could also include a “capability dashboard” and would produce a “capability transcript.”



A system such as this one would allow data extraction at a program level or a student level. It is essentially turning a LMS/course-based model into a more student-friendly program model with more search capacity and capability for students. A prototype of what a capability transcript or extended transcript could look like is shown below.



The prototype is not a document; it is a digital webpage, which can be made into a pdf as desired by employers, including options such as allowing for students and employers to choose the content they pull down. Evidence can be attached to demonstrate competencies and there will be notes to verify information sources. The prototype that IMS Global is developing is all open source code, enabling any university to download the code, tweak it, and use it.

“Employers could pull down the information that they need.”

*Joellen Shendy*

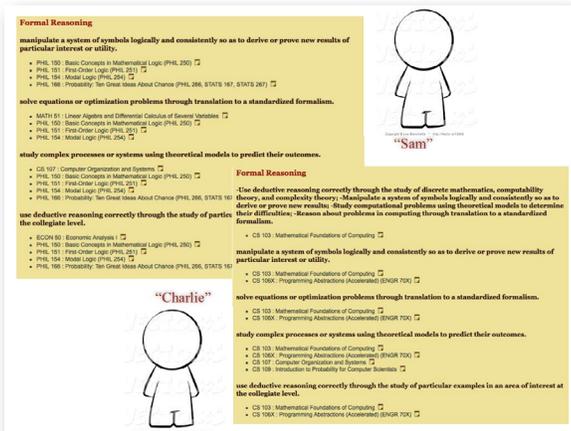
In developing this system, UMUC has seen that vendors can be true partners, but that the institution must be the driving force. UMUC has also learned that institutional buy-in is extremely important to change paradigms, and transparency is critical.

## Stanford University

Tom Black explained that at Stanford, as at most other universities, transcripts have essentially been chronological records showing the courses in which a student has been enrolled. Black provided a quote from *The Chronicle of Higher Education* that said, "College transcripts are horrible . . . we have almost no useful information about what they [students] learned in school." Another problem with previous transcripts is that they were term-based and not grounded around learning areas. In addition, Stanford was experiencing a proliferation of departmental certificates.

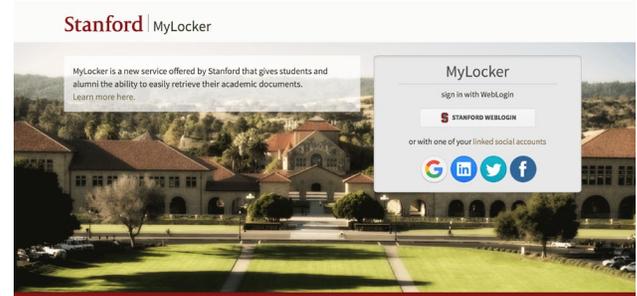
Innovative solutions to the challenges faced include:

- **Centralization of certificates.** Stanford is working to centralize all departmental certificates under the registrar's office. Stanford is offering digital records that are generated by the registrar's office and certified by the recipient through a secure process.
- **Digital Scholarship Records.** Stanford is far along in creating a prototype Scholarship Record that provides information about eight ways of thinking and doing. They are: 1) aesthetic and interpretive inquiry; 2) social inquiry; 3) scientific method and analysis; 4) formal reasoning; 5) applied quantitative reasoning; 6) ethical reasoning; 7) engaging diversity; and 8) creative expression. For each course, the coursework is grouped underneath these learning outcome areas to show the learning achieved from a particular course.



- **A digital student locker.** This locker is a central location for a student's scholarship record, certificates, and other information about learning outcomes to be stored and easily shared. A student can place items

into his/her locker, access it for life, and share or post digital badges or credentials with outside entities, such as LinkedIn or other job-search sites.



## Elon University

Rodney Parks provided a definition of a co-curricular transcript as a record of a student's co-curricular and/or extracurricular activities, as defined by the institution. He pointed out that co-curricular transcripts are not new. They have been around for at least 20 years, as Elon has had a co-curricular transcript since 1994.

At Elon, there are five co-curricular areas, tied to the curriculum, which align with the institutional mission. These areas are service leadership, internship, study abroad, global education, and research. On campus, each student affairs office oversees the certification of these experiences. If a student has an experience that is not tied to an academic experience, which they want reflected on their co-curricular transcript, the student can go to the appropriate center on campus and ask that their experience be verified. The co-curricular transcript provides a way to capture more information to provide a more complete picture of a student.

Elon has found that having a robust co-curricular transcript helps with retention and completion. They help in providing more comprehensive information to employers, and help in designing courses that incorporate experiential learning.

*"We want to begin to paint a comprehensive student record that fully fits the four-year college experience."*

*Rodney Parks*

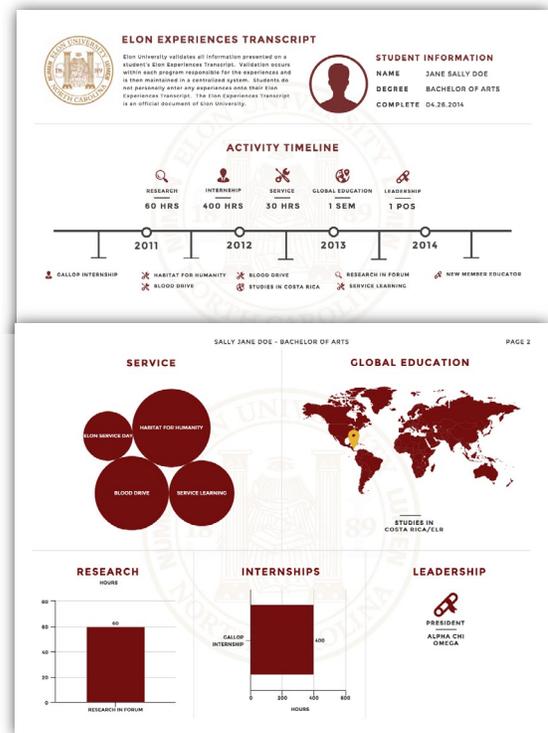
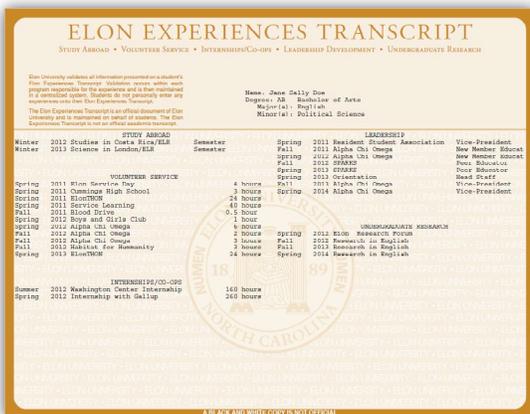
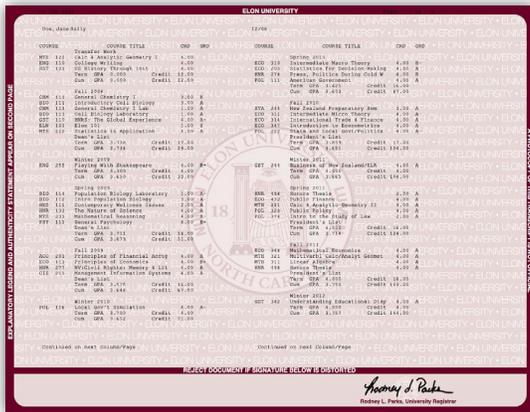
Several factors among them make a great co-curricular transcript. It is reliable and verifiable. It demonstrates depth. It provides relevant contextual information for the audience—including employers and recruiters who spend an average of just 37 seconds reviewing a resume. And, it is meaningful.

At Elon, work has been completed to convert the co-curricular transcript to an electronic artifact. The co-curricular transcript has been revised to match the look and feel of a traditional academic transcript, and Elon has launched a new ordering system that includes the co-curricular transcript. As a result, after three co-curricular transcripts were ordered in 2012, 727 were ordered in 2013.

“If we are going to create these innovations, we really have to think strategically about how we’re going to market and sell these to the students.”

Rodney Parks

Going forward, Elon is beginning to think about the creation of a visual transcript, which uses visual concepts to show a student’s experiences. An example of what this might look like is shown below. Parks’ thinking is to create something not that is Elon-centric, but that could be adopted by other institutions as well. This concept—which has evolved to be a two-page document—is close to being able to test.



At Elon, converting to an electronic artifact is a process that has required significant collaboration—with the Office of Student Life, with the Office of Application Technologies, and with Academic Advising. It also requires involving the faculty, takes training, and requires a culture shift. Beginning in the spring of 2015, all graduates receive a certified electronic diploma, and Elon is moving toward an entirely digital portfolio of artifacts.

Employers, recruiters, and students all have a very favorable view of experiential transcripts, with survey results showing positive reactions around painting a different picture of candidates/applicants than academic transcripts, being more easily verified, and being helpful in the hiring/admissions process.

A lesson at Elon is the importance of marketing this new transcript to students. Elon has marketed this new transcript to graduating seniors as a tool to market themselves differently.

## Conclusions

Themes from this convening included recognition that the historic academic transcript, which has not changed in many years, provides an incomplete picture of students’ learning, competencies, and experiences. The transcript has value within higher education and will retain its value for the foreseeable future. It is unclear to potential employers or graduate programs what students have learned, what competencies they have developed, and what experiences they have had. And, it is often difficult for students to share this unique, differentiating information in a reliable, verifiable way. Emerging is the idea for a new

type of student record that provides additional information on learning outcomes, competencies, and experiences outside of the classroom. However, creation of this new type of document raises many questions, such as who the intended audience is, what information is to be shared, and how this information is gathered, verified, and presented.

While many institutions are wrestling with this subject, some institutions are aggressively moving ahead, leading the way in creating new types of student records.

The Comprehensive Student Records Project is working with participating institutions on readiness assessments, defining project scope, and developing internal communication plans. In early 2016, the testing and production of model records will take place, followed later in the year by the reporting of outcomes, with continual communication throughout the year.

This project, along with the efforts already taking place, has the potential to fundamentally transform student records, resulting in more comprehensive, more valuable documents that better communicate student learning and achievement to all key stakeholders.

In addition to the supplemental documents included in this report, you will find helpful background material in two other publications:

- *Connecting Credentials: Making the Case for Reforming the U.S. Credentialing System*
- *Connecting Credentials: Lessons from the National Summit on Credentialing and Next Steps in the National Dialogue.*

Both of these publications – along with a wealth of other information on reform efforts in postsecondary credentialing – are available on the Connecting Credentials website ([www.ConnectingCredentials.org](http://www.ConnectingCredentials.org)).



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