Midwest Credential Transparency Alliance (MCTA) Pathways Action Team: A Brief

October 2021

As more and more workers pursue multiple types of credentials and combine earned credentials from multiple states and institutions to secure and advance their careers, the public needs quality information about career pathways.[1] State agencies, regional workforce boards, and postsecondary education providers have supported these needs by creating career pathways specific to their geographic context. Like helpful transit maps that lay out relevant destinations, routes, and connection points, these pathways help everyone identify career goals and form career plans based on sequences of required credentials, competencies, jobs, courses, and more. These pathways are more useful when components are supplemented with enrollment-relevant information such as admissions requirements, costs, assessments, competencies, transfer value, historical earnings and employment outcomes, labor market forecasts, and more. Staff from multiple organizations and state agencies are involved with the documentation and management of pathway information.

All of this rich pathway information needs to be well communicated to users in forms that they can easily use to make relevant decisions. Modern transit maps are available to the public in multiple forms and integrated with a variety of helpful apps, such as Google Maps and Waze. These apps are made possible by agreements on defined terms and supportive data sharing practices. The Credential Registry[2] enables this functionality for pathways using linked open data strategies. If used consistently across the Midwest region, multiple stakeholders stand to benefit:

- Students and learners can see all of their options for securing and advancing their career.
- Workers can explore how their earned credentials and achievements connect to existing and emerging pathways.
- Education and training providers can communicate that the credentials they offer are connected into valuable pathways.
- Curriculum developers can contextualize their instructional, assessment, and credentialing innovations.
- Employers can articulate specific job requirements, competencies, and career progressions using the same language as credential providers.
- State agencies can promote student success via credential connections within their state and across the region.

Collectively, these benefits have the potential to help address inequities that continue to plague America by building a stronger foundation for individuals to maximize their own human potential. Career pathways can be tailored to a variety of users and functions, such as programming for first generation learners, credit for prior learning to support the attainment of a college degree, military-connected populations with documented competencies, working professionals diversifying their competencies (e.g. an engineer adding a management certificate), and more. For example, formerly incarcerated individuals have unique challenges in accessing supportive educational programming and building effective careers. By intentionally researching, organizing, and communicating career pathways that are effective, this population can transition more effectively into local economies that benefit from increased labor market participation and reduced repeat incarceration. Such pathway information will not address all structural racism and the systemic inequities that disproportionately affect people of color and people with disabilities, but it is a critical first step to addressing such inequities.

More immediately, modernizing pathway business practices could also reduce current costs associated with creating and managing pathway information. As administrators across the Midwest region reach consensus on pathway terminology and data sharing practices, multiple product and service providers will work towards supporting these technical and business requirements and compete to better support pathways. These market dynamics can be accelerated through regionally-planned procurement practices.

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[1] The Credential Transparency Description Language (CTDL) schema defines pathway as a "resource composed of a structured set of PathwayComponents defining points along a route to fulfillment of a goal or objective." https://credreg.net/ctdl/terms#Pathway
[2] The Credential Registry is a cloud-based library that collects, maintains, and connects information on all types of credentials, from diplomas to apprenticeships and from licenses to PhDs. https://credentialengine.org/about/credential-registry-overview/

Midwest Pathway Maturity Model

An MCTA Pathways Action Team identified and analyzed pathways between July 19, 2021, and August 19, 2021. The team identified **692 pathways in the Midwest** and analyzed their properties based on public information. Almost all pathways contained credentials (97%) with other common components, including courses (62%), occupations and jobs (52%), organizations (49%), transfer value and credits (46%), and competencies (41%). Despite these consistencies, almost no pathway referenced other pathways or out of state offerings. Technically, almost all pathways (91%) were communicated as unstructured text using either pdf documents (62%) or webpages (29%).

Pathways Communication Methods

■ PDF   ■ Webpages   ■ Database
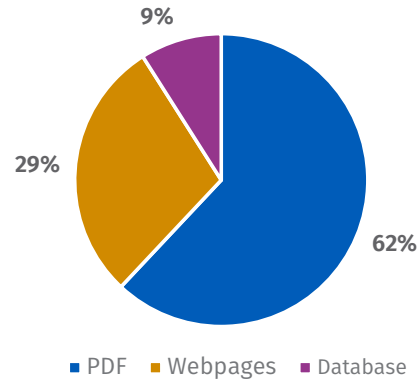
Pathways Properties
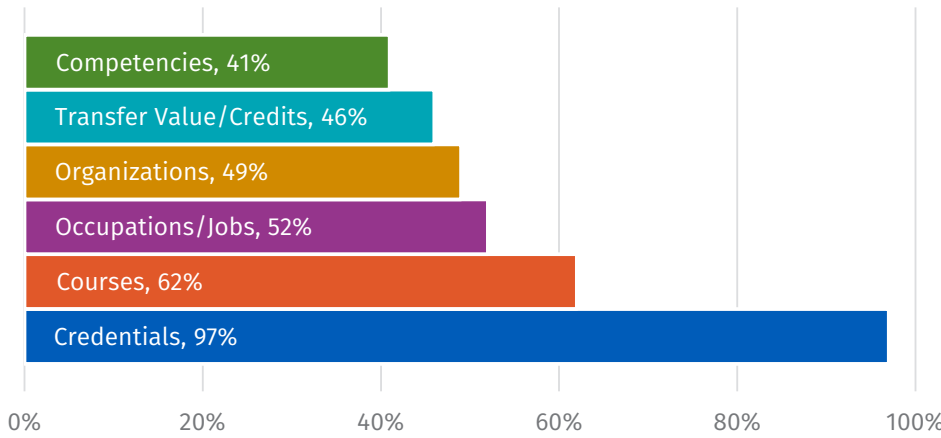
Most administrators appear to use templates to maintain some consistency across pathways, although significant caveats were common, especially related to prior learning assessment and transfer. As one state agency colleague put it,

> *This is the direction we want to go, but we do not currently have the resources to move there without significant hands-on time......meaning doing each pathway by hand and as a PDF. We are working toward automating this process, but it has been slow.*
> *-Midwest pathway administrator, August 2021*

All identified pathway information could be described using the CTDL schema and the Credential Registry. Two reference implementations verified this functionality using a cybersecurity pathway in North Dakota and a nursing pathway in Indiana.

Our research findings show that progress towards pathways is occurring at multiple levels across the Midwest region. The emerging challenge is to ensure that these pathways are consistently articulated, well connected, and supported by policies, practices, communications, and role responsibilities. To help guide these developments, the action team articulated the following pathway maturity model for the Midwest region.

Current	Future
Pathways are hard to create and manage	Pathways are part of workflows
Pathways are outdated	Pathways are linked to labor market
Pathways are hard to find	Pathways are ubiquitous and widely accessible
Pathways are hard to understand	Pathways are understandable
Pathways have gaps	Pathways have logical steps from entry to exits
Pathways are disconnected	Pathways are connected
Pathways are for 'generic' users	Pathways support everyone

During the Fall of 2021 and the Winter of 2022, the Pathways Action Team will:

1. **Accelerate publishing all pathways and pathway components to the Credential Registry.** All Midwest pathways should be published and available to the public using the Credential Registry. The action team will support publishing pathways via consulting, training, resources, webinars, workflows, and other identified means.
2. **Develop interstate pathway connections.** The action team will organize and promote meaningful connections amongst emerging pathways, beginning with careers in cybersecurity and autonomous vehicles. Pathways can be connected in several ways, including through the use of competency frameworks, industry certifications, quality assurance claims, assessments, transfer articulation agreements, dual credit courses, and more.
3. **Identify opportunities for pathways to better support incarcerated populations.** The action team will discover the unique pathway needs of incarcerated individuals to identify and advance supportive credential transparency practices.
4. **Define requirements for managing and visualizing pathways.** The action team will coordinate with state partners and the Midwestern Higher Education Compact (MHEC) to solicit technical and business requirements and promote supportive credential transparency procurement practices. For example, the team will develop supportive RFP elements by translating the model's high-level objectives into a targeted scope of services and necessary product specifications.
5. **Recommend policies supporting Midwest pathways.** The action team will research policies that could better support Midwest pathways amongst industry associations, compacts, philanthropic organizations, quality assurance organizations, state agencies, and the federal government.

About Us

The Midwest Credential Transparency Alliance (MCTA) is a regional alliance focused on advancing credential transparency in service of learners, workers, educators, employers and policymakers across the Midwest. Credential transparency is an approach to making essential information about credentials and competencies public, easily accessible, and actionable so that credentials can be better understood and pursued based on what it takes to earn them, what they represent, and the jobs they can lead to. We seek to reduce barriers to information, ensuring that all individuals have equitable access to the full range of learning, advancement, and meaningful career opportunities in the region. For more information, see the MCTA's webpage.

About MHEC

MHEC brings together Midwestern states to develop and support best practices, collaborative efforts, and cost-sharing opportunities. Through these efforts it works to ensure strong, equitable postsecondary educational opportunities and outcomes for all.

MHEC is comprised of member states from the Midwestern United States. MHEC works with and for a variety of stakeholders within and across member states, including higher education system leaders, state policymakers, legislators, and institutional leaders, while always maintaining a focus on students and their success. MHEC is a 501(c)3 entity statutorily-created in each of its member states which include: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. MHEC's office is headquartered in Minneapolis.
https://www.mhec.org

About Credential Engine

Credential Engine is a non-profit whose mission is mapping the credential landscape with clear and consistent information to fuel the creation of resources that make it easy for people to find the pathways that are best for them.
https://credentialengine.org

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