

# Credential As You Go

## Priority 1 Feasibility Research: Focus Group Summary 2

Author

**Kirk Knestis PhD**

Evaluand, LLC Reston, VA

December 2024



**CREDENTIAL  
AS YOU GO**  
INCREMENTAL CREDENTIALING

# Table of Contents

<b>Introduction</b>	<b>4</b>
Figure 1: Credential As You Go Incremental Credential Readiness Model	5
<b>Focus Group Data Collection</b>	<b>6</b>
Definition of the Study Population	6
Recruiting, Consent, and Scheduling	6
Questioning Protocol	7
<b>Analysis</b>	<b>7</b>
<b>Focus Group Findings</b>	<b>8</b>
External Factors Influencing Incremental Credentialing	9
Factors: Labor Markets	9
Factors: Competition for Credentials	9
Factors: External Certification Processes	10
Factors: Student Life Demands	10
Factors: Student Readiness	11
Factors: Student Dispositions	12
Factors: Student Aspirations	12
Factors: Student Financial Support	13
Institutional Conditions Influencing Incremental Credentialing	13
Conditions: Institutional Finance	13
Conditions: System Policies	13
Conditions: Student Data Systems	14
Conditions: Instructional Design	14
Conditions: Registration Processes and Policies	15
Conditions: Student Costs	16
Conditions: Staffing	16
Actions Taken to Support Incremental Credentialing	16
Actions: Addressing Student Burdens	17
Actions: Registration and Data Systems	17
Actions: Staffing	18
Actions: Learner Advising	18
Actions: Technology	19
Actions: Credential Structures and Definitions	19
Actions: Instructional Design	21
Actions: Student Financial Support	22
Employer Partners	22
Factors: Employers	23
Conditions: Employers	23
Actions: Employers	24
Communication	24
Factors: Communication	24
Evaluand LLC	3

Conditions: Communication	24
Actions: Communication	25
Credential Team Roles and Responsibilities	25
Two-way Student Feedback	25
Human Outreach	25
Describing Credentials	26
Targeted Outreach	26
Operations	27
Web Content	27
Email Strategies	27
<b>Considerations</b>	<b>28</b>
<b>Appendix: 2024 Focus Group Prompts</b>	<b>30</b>
<b>References</b>	<b>31</b>

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305T210063 to the Research Foundation for the State University of New York. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education

## Introduction

This report summarizes analysis of the narrative record collected through the second round of focus groups convened for the *Credential As You Go* initiative's incremental credential feasibility study, named as *Priority 1* for the 3-year grant project funded by the U.S. Department of Education Institute of Education Sciences (IES). This research was designed and executed by Evaluand LLC (Reston, VA) under a subaward by Empire State University, the IES Credential As You Go grantee and an institution of the State University of New York (SUNY) system.

This document complements the August 2023 *Priority 1 Feasibility Research: Focus Group Summary*. That round of focus groups examined the feasibility of developing and deploying innovative incremental credentials at the state higher education system and institutional administration levels. It queried administrators, faculty, and staff charged with conceiving, designing, and securing approval for innovative credentials across 19 higher education institutions in Colorado, North Carolina, and New York. Focus group data collection for that initial study also captured perspectives of representatives of employers and organizations in the work-and-learn ecosystem to address three considerations or domains influencing their efforts:

1. **Factors** external to higher education systems, which either support or confound the development and implementation of incremental credentials or credentialing models at the system and institutional levels of state postsecondary education (Research Question 1.2).<sup>1</sup>
2. **Conditions** internal to higher education systems, at the state or institution level, that enable or constrain development and execution of incremental credentials at the academic area level (Research Question 1.7).
3. **Actions** aiming to influence implementation of new credentials, executed at both the state system and institution levels to support delivery of incremental credentials, considering both external factors and internal conditions that bear on such efforts (Research Question 1.5).<sup>2</sup>

The interplay of these considerations is illustrated in the *Credential As You Go Incremental Credential Readiness Model*/schema framing the Priority 1 feasibility research (Figure 1, following page). External factors—both positive and negative—bear on conditions within higher education entities, which in turn influence the actions (e.g., policies, processes, and programs) necessary for innovation in credentialing.

However, where the first round of focus groups examined credentialing at the system and institution administrative levels, this second series of conversations specifically engaged partner institution staff and instructors responsible for delivering new credentials to better understand their feasibility once new credentials were launched and became available for learner enrollment.

---

<sup>1</sup> Research questions are defined later in this report.

<sup>2</sup> Note that these topics have been recorded here, relative to how they were defined in the original proposal, presenting them in a more logical order based on the research team's evolving understanding of the policies and practices being studied.

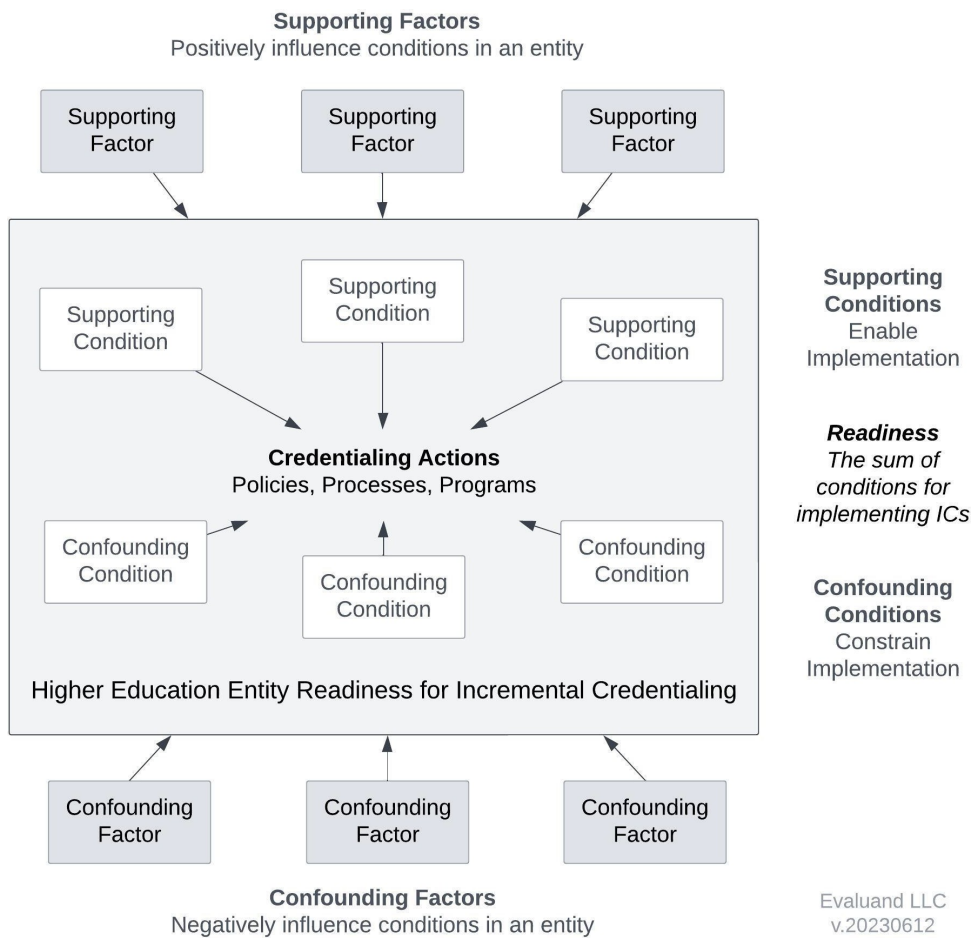


Figure 1: Credential As You Go Incremental Credential Readiness Model

This new phase of the Priority 1 research also differs from the team’s previous focus group analysis in another important way. While that earlier effort did not attempt to fully parse out distinctions among factors, conditions, and actions, instead summarizing what informants described as phenomena to be considered by innovative credentialing efforts, this summary examines what they had to say at the more granular level afforded by the three-element structure of the Readiness Model.

*Factors* raised are broken out into conceptual “buckets” in the findings; *conditions* bearing on implementation of launched credentials are organized similarly. *Actions* are framed more narrowly, clustered topically in the findings to produce results intended to be generalizable beyond the separate incremental credentials described by informants and implemented with Credential As You Go support. This shift in emphasis is intended to give the findings provided in this report greater utility, as they might more practically inform planning and execution of other innovative credentials.

Finally, it should be noted that, as with the previous report, results here do not aim to compare or contrast one state system, institution, academic program or unit, or individual credential with another. Ideas shared here were developed by looking for commonalities among credential implementations described in focus groups, from among the more than 150 certifications, microcredentials, diplomas, badges, stackable credentials, licenses, degrees, and various types of certificate developed under the grant and enrolling students as of the time of data collection.

## Focus Group Data Collection

### Definition of the Study Population

Focus group participants were recruited through referrals from institution-level administrators active in the Credential As You Go project, many of whom were participants themselves in the 2023 focus groups. Individuals were prioritized for participation based on their roles working “boots on the ground” with students enrolling and engaged in delivery of incremental credentials that had been launched and were accepting student registrations. The list of referrals included instructors, facilitators, a variety of “navigators” responsible for guiding new students’ experiences, as well as others with credential-level management responsibilities or intimate knowledge of day-to-day interactions with students.

Participants were not grouped by job as was the case for the cross-institutional, role-alike organization of the previous focus group data collection. Instead, the research team organized institution-based groups, all of whom would be questioned using the same generalized, credential-focused protocol. Data collection and analysis were grounded in the assumption that useful information would most likely come from considering credentials from the perspectives of multiple roles and responsibilities within each institution.

### Recruiting, Consent, and Scheduling

Initial contact with potential informants was orchestrated through an email request for a “warm handoff,” emailed by the Credential As You Go project State Coordinator to key institution contacts at each partner higher education institution. The Evaluand research manager followed up to schedule each institution’s online meeting group and secure informed consent necessary prior to engaging human subjects in education research. Approximately 50 individuals were recommended as potential focus group participants, noting that some partner institution administrators did not provide referrals in response to State Coordinator’s outreach in mid-January, 2024.

Collection of online consent forms was delayed by review of renewal documentation by the Empire State University Institutional Review Board (IRB) charged with ensuring appropriate protections for research study participants. Once IRB approval was finalized, consent forms were collected. Each institution team proposed a list of dates and times all participants were available, from which a final Zoom-facilitated group meeting was scheduled. When it was not possible for all potential group members at an institution to meet at the same time, they were convened across multiple Zoom meetings. A handful of participants found it necessary to reschedule due to conflict or illness so were interviewed separately using the same questions applied to the rest of the groups. All focus groups were eventually convened between 29 January and 30 July 2024.

All told, a total of 39 individuals (78% of those recommended) representing 10 institutions actively contributed to 13 separate focus groups for this portion of the feasibility study, in sessions including from one to five individuals. Among the states actively involved in the IES-funded Credential As You Go project, 20 individual participants were from Colorado, 4 from North Carolina, and 15 from New York State. The focus groups generated just over 11.25 hours of recorded audio narrative.

Importantly, given the recruiting process described above, findings from analysis of narratives provided by focus group participants must not be interpreted as being a representative sample of the pool from which they were drawn. Findings represent only the perspectives of those who opted to contribute to a focus group.

## Questioning Protocol

A framework for questioning protocols to solicit participants' input was among the materials approved by the IRB at the beginning of 2024. Final prompts were developed by the research team to encourage participants to share their thoughts regarding innovative credentialing based on the structure and terminology of the Readiness Model. (Guiding questions used in the focus groups are provided as an appendix to this report.)

Questions asked participants about factors and conditions influencing their efforts to implement innovative credentials, encouraging them to think about both helpful and problematic considerations. Specific prompts addressed the role of employers in efforts once new credentials had been launched, and actions relating to communication, as each of these two topics are stipulated by particular research questions for the feasibility study (Research Questions 1.3 and 1.4, respectively).

No focus group prompt specifically asked about institution team actions (per Research Question 1.5, introduced with the Readiness Model, above). Instead, the research team extracted and organized descriptions of actions from participants' explanations of what they did to leverage positive factors and conditions, and to mitigate negative ones to optimize delivery of their incremental credentials.

Finally, efforts were made to address—albeit in a very preliminary way—Credential As You Go research *Priority 2: Assessing Promise for Generating the Intended Learning Outcomes*, by exploring focus group participants' perceptions about how learner outcomes are being realized from their new incremental credential offerings. Prompts were included to solicit input about learners' *understanding and valuing of incremental credentials* (RQ 2.2), *commitment to enroll* (RQ 2.3), and *intentions for the future* (e.g., transfer, education continuation, and/or pursuit of employment or advancement (RQ 2.4).

However, focus group participants consistently did not provide much (if any) information about these outcomes. Some were reluctant to share even anecdotal information; some explicitly described challenges inherent to effectively measuring outcomes; and a few described their interest in doing so in the future but admitted to having little to report at this point in implementation. So few shared information that was suitable for analysis that this report does not attempt to address those research questions.

## Analysis

Audio recordings saved through Zoom were archived to secure cloud storage and transcribed using an AI-based speech-to-text application. The resulting text records were reviewed and cleaned by Evaluand’s analyst, who also checked (and corrected as necessary) speakers’ identities in tags assigned by the transcription tool, required to prepare the narrative text files for analysis.

The research team used an *emergent scheme* or *inductive coding* approach (Patton, 2015) to code, categorize, name, and refine topics within the preordinate factors-conditions-actions frame, into which were placed details raised by focus group contributors as pertinent to their incremental credentialing work. All of the narrative content was considered for inclusion in the final analytic narrative, with the research manager deconstructing the text record, then coding and categorizing each bit of information as addressing an external factor, internal condition, or action taken by the team in implementing their new credentials with learners. Empty text—narrative record content not contributing to any of the three domains—was discarded.

Surviving snippets of excerpted text were paraphrased, screened to eliminate identifiable information, and organized topically within each of the three highest-level categories. As clusters of information coalesced, they were named (and renamed as necessary) to identify each. Topical definitions were established to be mutually exclusive to the greatest practical extent. Topical clusters that grew overly large were examined to see if they actually comprised multiple, more narrowly defined categories. The sorting and naming process continued iteratively until the narrative content was exhausted and all informant ideas were sorted into topical clusters that represented an overall structure potentially useful to understanding phenomena associated with implementing the project partners’ incremental credentials.

Mentions of activities that a team did not undertake or might pursue in the future were not considered to be actions for the purposes of this analysis. To avoid overrepresentation in the results of ideas from the few institutions broken into two or three separate focus group sessions, any factors, conditions, or actions mentioned in more than one of those institution subgroups were included in the analytic record only once. This mirrors the standard applied for institutions convened in a single group, of not duplicating in the final record any factor, condition, or action raised twice or more in a single online conversation.

## Focus Group Findings

Analysis of responses from focus group participants addresses five research questions defined *a priori* in the grant proposal to IES, to address the overarching question, *How feasible is the Incremental Credential (IC) Framework across higher education systems and institutions?*<sup>3</sup> Findings are organized here by research question, elaborated topically within each of the first three questions by factors, conditions, then actions. Because they are the subjects of separate research questions, the topics of Employer Partnerships and Communication are organized first under each of those topics, then by the three Readiness Model domains.

Credential As You Go research effort.

---

<sup>3</sup> Other research questions will be addressed through additional data collection and analysis designed for the broader Credential As You Go research effort

## External Factors Influencing Incremental Credentialing

**Research Question 1.2:** *What factors influence implementation of [incremental credentials] at, and between, the system and institutional levels of state postsecondary education?*<sup>4</sup>

For the purposes of answering this question, *factors* are defined as influences external to higher education institutions and state systems, noting again that such factors may either support or confound implementation of new incremental credentials or credentialing models. For this round of focus group research, it is useful to remember that factors emerging in analysis are those evident to institutional staff responsible for executing incremental credentials through interactions with students, their work framed by but not regularly dealing with higher-level considerations.

### Factors: Labor Markets

- Labor market demand influences what matters to students (e.g., a certificate might be preferred by employers in one technical discipline, while a degree is preferred in another similar content area).
- Similarly, if a credential is preparing students for an external certification, the latter might be the priority (i.e., if that is what the marketplace is looking for) thereby making the internal credential (e.g., a certificate of proficiency) less attractive
- Workforce needs may be seasonal in some locales (e.g., driven by tourism or travel industries), influencing credential programs in multiple ways, including (1) driving course scheduling to accommodate changing demand, (2) influencing patterns of enrollment behaviors (e.g., increases during off-peak months)
- Industries have very specific hiring needs; these will vary by geography and may be very localized
- Major events can quickly change existing opportunities for employment or advancement, completely out of the control of credential developers or managers
- If an industry values a noncredit certificate program, that might be enough to make it successful and popular for students
- Some professions with staffing needs that might be effectively met with incremental credential solutions do not pay well, influencing the economics of staffing and delivering learning in those disciplines

### Factors: Competition for Credentials

- New credentials may face competition from—or create competition for—more traditional credentials (e.g., a certificate and an associate degree) if they are not substantially different
- Institutions may be prohibited from competing with one another (e.g., online offerings competing with face-to-face programs, community colleges tied to geographic areas), limiting credential offerings and flexibility

---

<sup>4</sup> Research questions as initially proposed referred to the Credential As You Go Incremental Credential “Framework.” As the study progressed, the research team determined that informants were better able to talk about incremental credentials or credentialing processes in terms not necessarily specific to the Credential As You Go model. Given this, elements particular to the Framework model were set aside for data collection and analysis.

- Institutions may be competitors for some career domains but work cooperatively on others (e.g., by referrals across geographic boundaries)
- Interest across incremental credential offerings may be increasing; correspondingly, interest in traditional degrees are perceived by credential managers to be waning
- Related programs may be disinclined to collaborate, viewing one another as competitors for limited pools of learners
- When unemployment is low, programs may lose students to work opportunities in fields completely unrelated to the credential they are providing
- A student may select an option that grows skills (e.g., freely available YouTube content) or one that documents those skills (e.g., an incremental credential awarding a badge) depending on their priorities
- Freedom of online programs to set their tuition based on competitive analysis of demand and competition is a factor that can benefit students through lower costs
- Policies for out-of-state tuition complicate the competitive landscape for credentials

#### Factors: External Certification Processes

- Certification requirements still drive hiring in some fields, which in turn influences perceptions of value among learners
- Accreditation requirements might differ by level (e.g., national accrediting bodies versus state standards), which can be a substantial frustration for all stakeholder groups
- In some states, a certification based on noncredit trainings expires and must be renewed while a degree is permanent
- Employers may not understand that (or how, or if) an institution's internal certificate is aligned specifically with an external certification
- Institutional finances—how an institution pays to deliver coursework—might influence whether an external certification can be embedded in an internal credential delivery (i.e., not requiring students to take a certification exam externally after course completion); exams can be expensive at external testing agencies, relative to subsidized course tuition and fees
- Industry requirements (e.g., state licensing exams) may change, requiring updates to credentialing programs aligned with those standards; a challenge or an opportunity depending on whether requirements get tougher or easier, as well as timing and the substantive capacity of credential program designers and managers
- External exam providers do not regularly provide information about who has taken (or passed) certification tests for which a credential was intended to prepare students—even if the institution is paying for the test
- In instances where students receive a voucher to cover the external certification testing cost, that voucher may time out before a student uses it; or may not cover the cost to retake an exam if not passed

#### Factors: Student Life Demands

- Students pursuing non-degree credentials vary demographically (e.g., by age, from mid-teen to 80+ years old); it may have been a long time since they had any higher education experience, if they had any at

all. The need to work can limit the time and effort a student can spend on education—even if that work is an opportunity afforded by the incremental credential itself

- Students working full time will have difficulty with scheduling and priorities required for academic success
- Students in low-paying positions will likely have to work many hours to support themselves while pursuing a credential in hopes of securing advancement; persistence and completion may suffer as a result
- Students with children will require schedules that do not directly conflict with their need to get children to or from school or childcare
- Students are always going to potentially face “real life” challenges that interrupt educational activities so threaten completion

#### Factors: Student Readiness

- Incremental credential students typically come to offerings without substantial experience, therefore missing information and cultural acumen about how the labor market will recognize or appreciate any given credential when time comes to select one
- Students without substantial higher education experience may face steep learning curves for a variety of reasons
- Nontraditional students may lack the experience and understanding to even know what they are looking for when they contact a higher education institution
- Prospective students may well not even understand what some credential career options are, or know what opportunities are available near where they live
- Students new to an institution will not understand that institution’s systems, even if they have higher education experience
- Students entering new incremental credentials may not be prepared for the rigor the coursework entails, even in programs targeting nontraditional students
- Incoming students may have inaccurate perceptions of their own skills, relative to what might be required for course success, particularly absent formal prerequisite course requirements
- Working students coming into a credentialing program might well already have substantial expertise in terms of the competencies required for their professional responsibilities
- Students, particularly in nontraditional populations, may have difficulty with, or reluctance to sit for, certification exams—even if they are successfully complete preparatory coursework
- Anxiety or lack of follow through when required to sit for proctored internal exam or external certification testing may be more of an issue for students in online courses than for those in in-person settings
- Dual enrollment (secondary and post-secondary) students may be increasingly interested in incremental credential offerings
- Students may still lack the reliable internet connectivity required for incremental credentials delivered online
- Students who are familiar with traditional higher education may be confused by non-degree credentials

and the variety of ways they might be implemented and differ from their experience

### Factors: Student Dispositions

- Students may simply be anxious about returning to school, particularly if they have been in the workforce for some time
- Students may be conflicted about opting for an incremental credential if it feels like they are foreclosing on completion of a larger (typically degree) credential
- Students may perceive flexibility as complexity, potentially confounding their decision making
- Students may think of themselves as having “moved on” when contacted about reengaging and completing a credential
- Some students are inclined to seek out navigation or other supports; others simply not so much
- Some students are clear—and willing to proactively communicate with staff—about their goals and intentions; others are not
- A student who is successful completing one incremental credential might be encouraged to return for another if they are substantially complementary in the discipline where the student is employed or wants to be employed
- Anecdotally, students may be more inclined toward persistence in courses that are shorter and for-credit, than in those that are longer and not-for-credit
- Some students will actually register and pay for credential coursework, then never engage with the content
- Students who disengage (for whatever reason) may well not inform the instructor; they will just stop participating (e.g., they may be embarrassed about an emergent personal issue)
- Demand (so value for) incremental credentials will likely be higher in fields where members of the public already understand that they can secure gainful employment, often in terms of advancement in the field they are most likely to understand; that in which they are already employed
- Ultimately, students must see the value a credential will bring and workforce outcomes they will realize before they will commit to it; confidence that employers will understand their credential is part of that

### Factors: Student Aspirations

- Potential students may increasingly be looking for lifestyle-friendly careers (e.g., cybersecurity) that they perceive as being feasible opportunities to work at a distance, (1) expanding opportunities geographically, (2) allowing lifestyle choices possible only through remote work
- Equally, however, potential students may hold misconceptions about how realistic such work-lifestyle aims might be
- Career-changers may be looking for training for jobs that are more future-proof, or less physically strenuous or stressful; some of those opportunities do not require degrees, making an incremental credential an attractive (i.e., faster) route to employment
- Different demographic groups may value aspects of credentials differently (e.g., time-to-completion, where data at one institution suggests male students may prefer shorter credentials than females); though this may be related to the content/career focus prevalent in short-term

credentials

- Students may not see incremental credentials that stack to a larger (perhaps degree) credential as necessarily valuable if they are primarily interested in pursuing the latter option from the outset (i.e., “Why bother with the incremental credentials if I’m working toward the associate degree?”)

#### Factors: Student Financial Support

- A lack of financial support (e.g., student aid, grants) applicable to a given credential can be an insurmountable barrier for some portion of the individuals who might benefit from enrolling in it
- Financial aid eligibility in some states is tied to a minimum number of credits, making too-small credentials ineligible for support
- Financial aid in some institutions may in fact be inapplicable to noncredit course enrollments, irrespective of credential type
- Some employers have programs in place to reimburse employees for continuing education; these can be the only support available to some students
- Legislated aid programs provide opportunities but do so inconsistently (e.g., geographically, over time) or are sometimes targeted at specific student groups

#### Institutional Conditions Influencing Incremental Credentialing

**Research Question 1.7:** *What conditions (e.g., existing student information and degree auditing systems) enable or constrain development and execution of ICs at the academic area level (within institutions), particularly for similar content at different institutions? At the institutional level? At the state (and system) level?*

*Conditions* are defined for this analysis as influences on credentialing actions internal to institutions of higher education. They may be thought of as either supporting or confounding an institution’s ability to implement innovations in incremental credentialing, influencing and framing readiness as illustrated in Figure 1 and defined for the broader Credential As You Go research effort.

#### Conditions: Institutional Finance

- How money flows to departments and programs influences what can be offered to students, and how—*which is probably self-evident*
- Higher-ed departments or divisions may have to be self-sustaining, requiring that credential offerings make financial sense (i.e., implemented at scale sufficient for them to survive)

#### Conditions: System Policies

- Changes at the state system level can disrupt implementation of incremental credentials, even if institution-level conditions are effectively managed during design introduction of a credential
- Within state systems, higher education institutions are simply not as flexible as they could be or might want to be
- State system requirements (e.g., limits to the number of credits for an associate degree) can constrain

the flexibility of incremental credential designs

- States may set minimum contact hour and learning activity requirements for licensure (e.g., required hours to become a licensed Emergency Medical Responder), limiting flexibility within credential programs
- Certificates (or other non-degree credentials) may be capped at a maximum number of credits, or may require some number of credits to be “upper level” courses, limiting opportunities for some groups of students
- Siloed functions continue to be a challenge for institutional program staff when implementing an innovative credential, even after it is designed and approved through dedication of substantial effort and resources
- Units charged with executing innovative credentials may be elements of a larger institution that is not organizationally and/or culturally aligned with what is necessary to achieve those programmatic aims
- Credentials generally cannot be conferred (or a physical certificate delivered) if students have any outstanding tuition or fee balance owed to the institution; this might be the case for returning students or those eligible for retrospective award of a credential

#### Conditions: Student Data Systems

- When re-engaging students for retro-award of newly developed credentials, it will be common for contact information in their records to be obsolete
- A student may have an identifier number from prior enrollment in a higher education system, even in a system that might have changed, complicating current recordkeeping
- Students may have past credentials that are not documented in current systems
- Difficulty with credential intent declaration requirements are potentially aggravated if a student already in an institution’s data system returns to continue with additional coursework for a newly offered incremental credential
- Policies postponing award of a non-transcripted supplemental credential (e.g., a certificate of proficiency or completion) until a degree is awarded complicates processes and decreases the likelihood that the supplemental credential will be finalized—or that it will be valued by students on its own merit
- Using enrollment as a measure of institutional success can be misleading, particularly if a credential makes an outsized difference to relatively few enrollees
- Shorter-term credentials are easier to document and track (persistence, completion) than are longer ones; as are those that are more narrowly specified, offering less flexibility
- Particularly with credential pathways or stacks with multiple on- and off-ramps, it can be difficult for credential staff and instructors to collect evidence of student intentions, beyond the most anecdotal of examples
- Realities of the transition from school to work continue to make it difficult to collect employment outcome data

## Conditions: Instructional Design

- For-credit degree courses might well be more rigorous than noncredit credential learning, even if the core discipline content is the same
- The same competencies being learned in a college course might well come with additional work (e.g., formal writing, collaborative skills, project management), arguably not central to performance of the job in question, even if they are potentially of interest to employers
- Professional “in-service” trainings may not be particularly rigorous and employees may not be held accountable for the content of those trainings; this matters as they are part of the labor-training marketplace
- Industry- and academic-facing elements within a career area might use very different terms for the same things (e.g., proficiency outcomes); this can complicate program and course design
- A credential intended to prepare students for an external certification exam cannot be guaranteed to align perfectly; integrating noncredit and for-credit components complicates this further
- The existence of an undergraduate degree program simplifies introduction and execution of complementary incremental credentials in the same discipline
- Test-taking requirements and assumptions built into course curricula might well be at odds with how competencies translate to on-the-job settings
- Timing of when a student enrolls—or can enroll—in a credential can influence completion (e.g., if content priorities do not align with where the student is in their education progress)
- Implementing credentials around active cohorts of participants (i.e., rather than as independent, asynchronous courses) may encourage commitment and completion
- Where apprenticeships are available as part of a program, they may attract learners of all ages, complicating design and delivery of coursework to meet differing needs
- Attrition over a series of multiple courses can impact an institution’s ability to schedule those later in the series, as enrollment drops off and economies of scale prevent listing sections likely to be undersubscribed

## Conditions: Registration Processes and Policies

- Multi-step processes required of a student before they begin a program can be a substantial barrier to enrollment; such systems are difficult to change for a specific program or credential
- Well designed processes to manage enrollment tracking, completion of student work, or other aspects of delivery will promote good management practices (e.g., updating student contact information), particularly if outside of traditional institution student-management systems
- Different processes might be required for managing different student groups (graduate, undergraduate, non-degree seeking, incumbent professional development), with constraints and affordances coming from within an institution
- A requirement that students take a separate step to request or petition for a non-transcribed certificate may be enough to prevent them from receiving the credential even if they complete the work to earn it; automatic awarding ought to resolve this
- Any requirement that a student take a substantive step to “declare” or notify the program of

advance intent to pursue an incremental credential introduces another barrier in the process of earning a credential

- Institutions may be able to define through policy the option of allowing non-graduate-degree-seeking students to enroll in a graduate-level certificate program, post-baccalaureate
- Institutions may be prevented by policy from listing prerequisites for some types of course; they may describe skills requisite for success but cannot enforce specific entry qualifications
- Dual enrollment students might be prevented (by formal policy or tradition) from enrolling in upper-level courses; confounding their opportunity to pursue noncredit credentials that include such coursework
- Dual-enrollment student opportunities may be complicated by prerequisite course requirements

### Conditions: Student Costs

- Institutional fees and expenses may impose additional financial burdens (or barriers to enrollment) on top of tuition (e.g., registration processing, certificates or badges to be awarded, credit-by-exam)
- Innovative credentials may be offered within an institution driven by established processes (e.g., a student fills out a credit-seeking application, registers themselves into courses, has tuition charged to their student accounts, then pays their balance through full payment grants, a payment plan, or other means); this complicates any solution that offers financial support to incremental credential learners
- Institutions that allow programs or units to adjust pricing of credentials better accommodate credential-level efforts to braid funding to develop and deliver no-or low-cost credentials to students
- A credential that can enroll students at a low or no cost will almost certainly attract more students than other options for which students bear costs

### Conditions: Staffing

- Substantive and organizational capacity can allow credential managers to be responsive to changing needs of students and the labor market
- Noncredit divisions or departments may be able to innovate more quickly than the “for-credit side”
- Institutions may lack the instructional capacity of staffing (expertise and/or volume) necessary to deliver credentials in specialized content areas
- Higher education staff salary levels can often be much less than what instructors might earn working in the industries for which institutions need them to train students
- Institutions may not be able to offer instructors full-time employment
- Engaging instructors matter to student course persistence
- Postsecondary instructors coming from industry will have technical understandings necessary for a credential targeting their discipline but may well lack instructional skills
- Labor conditions in the private sector will almost certainly bear on the staffing available to teach in in-demand content areas
- Adjunct faculty coming to institutions from industry are unlikely to initially understand internal systems (e.g., processes, technologies)

## Actions Taken to Support Incremental Credentialing

**Research Question 1.5:** *Which actions support implementation of the [incremental credentials] and corresponding policies and processes across different levels of state postsecondary education system stakeholder groups, and in what ways?*

For this study, *actions* include activities, policies, or procedures enacted by credential-level staff with the aim of influencing the implementation of new offerings. Actions under consideration here are at the sub-institution (program, department, or unit) level, effectively because participants for this round of focus groups were recruited from—so have agency at—that level. Actions are influenced by external factors and internal conditions, or more likely both, but equally may be intended to ameliorate negative influences as they are believed to bear on enrolling students and supporting their academic success in innovative credentials.

### Actions: Addressing Student Burdens

- Providing students with non-academic “wrap-around supports” (e.g., transportation, technology) can make a substantial difference in persistence and completion of incremental credentials
- Considering public transportation options when scheduling in-person learning can head off that common impediment to persistence and academic success
- Considering school and childcare pickup and drop-off times when scheduling credential learning activities helps avoid conflicts as barriers to enrollment and persistence
- Making schedules flexible is important for add-on credentials useful and inviting to degree-seeking students; making these offerings available asynchronously online helps achieve this
- Building respected credential offerings can potentially influence perceptions of professionalism for low-paying fields
- Meeting labor force requirements in very high-need areas helps realize subsequent social benefits in the communities where those workers live and are employed

### Actions: Registration and Data Systems

- Developing simplified, credential-specific (or just credential-friendly) online “application” processes simplifies processes for students and decreases barriers to enrollment (e.g., by not triggering counterproductive automated processes built into institution-level registration processes)
- Coupling simplified systems with an “online store” experience to register leverages students’ familiarity with common e-commerce models to ease them into an incremental credential offering (e.g., payment can be handled outside of typical bursar’s office functions, allowing greater flexibility for student funding)
- Implementing student-friendly advising and registration systems shifts work onto program staff (e.g., to actually register students into a institutional data system), though new management systems may mitigate this problem
- Offering long timeline windows for registration might increase enrollments
- Documenting and awarding credentials “in house” or otherwise separate from student management systems affords flexibility that existing systems (policies and technologies) may limit or not allow
- Tracking students who complete credit-by-exam options for introductory credentials can illuminate

if they transition to enrollment in for-credit offerings

- Aligning internal systems, units, and/or functions (e.g., student affairs and academic affairs) can streamline execution of incremental credential over the entire learning lifecycle
- Eliminating complexity or inefficiency in internal systems can be helpful, particularly to nontraditional student populations for whom incremental credentials might be a good fit
- Actively connecting functions in an institution (e.g., by staff responsibility or technology) lays a foundation to maximize responsiveness to students' needs
- Simplifying paperwork eliminates barriers to enrollment (e.g., an application for retro-award that requires only basic contact information), although this shifts work burdens to program staff

#### Actions: Staffing

- Hiring and retaining subject matter experts from industry gives a program the capacity necessary to design and launch quality incremental credentials
- Providing instructors with professional development opportunities and supports to optimize their instructional skills can realize benefits in terms of engaging course delivery and student persistence

#### Actions: Learner Advising

- Establishing a student single point of contact (a “concierge,” “mentor,” or “coach”) who understands how to manage internal institutional processes—credential options, requirements to complete, prior learning assessment options, grants or other funding supports available—will likely be very valuable to students' decision-making, so academic outcomes
- Defining navigators as staff entirely separate from instructors provides opportunities for relationship building and other person-to-person benefits; both of these roles might effectively be served by individuals different from those responsible for recruiting and signing students
- Having separate staff for a “student and registration team” to assist and follow up with students (e.g., checking activity in a content management system), helps learners and reduces the load on instructors who may not follow up as well if left unsupported
- Employing specialists who understand specific requirements that might bear on a credential (e.g., apprenticeship requirements) simplifies entry processes for students, and may be crucial to getting them placed (e.g., organizing required documentation from both student and employer on very tight timelines) and agreements signed by all parties
- Facilitators convening regular conversations with students provides predictable opportunities for them to seek assistance and build relationships
- Hurrying to implement a new credential might leave navigation, mentoring, or other support systems for enrolling students insufficiently prepared or staffed for startup, even if budget is available to support hiring
- Supporting students through complex credential landscapes (e.g., with both credit/noncredit options, multiple levels of credential, interdependencies with licensing agency exams) is a labor-

intensive exercise, even as it appears to be appreciated by students

- Executing effective handoffs across multiple support roles (where they exist) is crucial and requires a responsive tracking system to manage who is doing what to support learners
- Having an actively involved facilitator within a credential opportunity (versus a purely independent, asynchronous course) can encourage persistence and completion
- Committing to relatively intensive, comprehensive (or “holistic”) advising processes can pay real dividends in terms of student success once they start pursuing an incremental credential

#### Actions: Technology

- Leveraging technology can create academic or career communities among learners, potentially structured around a stack of credentials that engages learners over time
- Setting up systems to effectively track progress can inform communication and support for students, increasing the likelihood of success
- Tracking progress (e.g., via internal dashboards or business intelligence-style reporting) can also inform program improvement decision-making
- Wrapping management of an incremental credential in a comprehensive student information management system (e.g., Campus CE) can substantially improve efficiency and student access (e.g., exploring, registering, and paying for credentials)
- Utilizing automated management system features can improve outreach email communication and decrease burdens for advising staff members
- Delivering credential content as asynchronous online learning allows students to work at their own pace, but that freedom might be too much for some students, hurting the likelihood that they will finish
- Providing students with—or arranging for others to provide—required technology hardware and software (e.g., laptop computers) at low or no cost eliminates a potentially crucial barrier to enrollment and persistence
- Adopting new technology solutions can automate credential awards, track students’ progress and increase convenience and accuracy of awarding processes
- Transitioning to a new data system can create potentially insurmountable difficulties for students during or following any major change (i.e., not resolving, or even perhaps creating, additional confounding conditions)
- Securing a dedicated customer management system (e.g., Constant Contact; as opposed to content or learning management systems) can automate and streamline communication with students, particular through follow-up and information support on the heels of an initial inquiry about a credential

#### Actions: Credential Structures and Definitions

- Starting with market assessment (e.g., through Lightcast) will clarify needs before credential design begins—market segment, specific jobs and levels
- Vetting initial credential offerings with a board of industry advisors can help validate that it will meet labor force market needs
- Re-validating a credential’s definitions regularly will help maintain its relevance and value for students (and employers)

- Understanding target employers' hiring practices can translate into greater utility for students and increased potential for success
- Aligning an incremental credential with an industry-standard set of competencies (versus traditional course or content breakdowns) can be an effective way to accommodate first principles of industry employment and student job-seeking
- Complementing incremental credentials with parallel credit-by-exam options (internal assessments, not external certifications) enhances flexibility and efficiency for students
- Designing credentials that allow easy “on-ramps,” “quick-start” options or other opportunities to “test the water” can overcome student reluctance or anxiety
- Creating “fast-track” pathways into starting positions in an industry even as students are pursuing education in their new field can overcome barriers related to money
- Creating true pathways of opportunities to pursue education in smaller pieces—what makes incremental credentials incremental—affords flexibility for students to tailor learning to varied (and changing) needs
- Offering pathways or stacking structures that include optional opportunities external to that particular credential can enhance value to students
- Designing shorter term credentials may increase engagement if speed of completion is a priority for student a student
- Offering co-curricular credentials can encourage enrollments by students who underestimate how much effort they will actually require to complete
- Piloting a generalist (cross- or inter-discipline) credential in one department or content area supports its replication in others
- Providing a noncredit incremental credential can be a promising way to prepare incoming students for a formal program start
- Creating pathways to traditional degrees may create conflicts between a mission of accessibility and maintaining standards of rigor perhaps central to an institution's culture or intended to professionalize a career
- Providing alternative pathways for individuals who are overqualified for internships allows more students to have their specific needs met
- Allowing non-degree seeking students into some certificate programs lets them work toward credit-bearing, transcribed certificates (or transcriptable, if student action is required), which they can then take with them
- Combining programs or establishing collaborations between related programs in an institution can increase efficiency of credential delivery
- Designing credentialing options so they recognize and grant credit for experience may help a returning student to be more comfortable undertaking a new credential
- Tying stacked credential structures to recognized tiers of employment helps students understand and connect learning with earning power
- Leveraging internship placements as part of a credential gives students the benefit of increased efficiency; getting education credit for work in the field

- Offering an introductory noncredit learning experience that can be converted through credit-by-exam can engage students who might otherwise not make the commitment to register for the resulting for-credit course by traditional means
- Bundling credentials so they add up to the set of proficiencies required for an external industry exam prepares students for certification in a way that can be trackable by students
- Aligning credentials with natural levels defined by the industry that will hire completers helps all parties be on the same page about proficiencies and expectations
- Unitizing noncredit incremental credentials so they align with for-credit course offerings eases transitions to degree programs, particularly if they can be converted to credit (e.g., through credit-by-exam)
- Developing programs and funding to facilitate introductory credentials along with first steps into employment can realize dramatic changes in education and employment outcomes in a sector; vision executed collaboratively among legislatures, state agencies, higher education institutions, and other partners are probably necessary to realize desired outcomes
- Aligning those credentials so they stack to existing associate and bachelor's degrees makes them all the more valuable to students
- Trusting higher education subject matter experts, along with whatever input can be gained from employers during design of a new credential, empowers students to choose what they think will be most beneficial to them

#### Actions: Instructional Design

- Getting learners reluctant to commit to typical college learning expectations into lower-pressure learning opportunities can lead to them committing to more education
- Providing a live orientation or informational session before asking for a commitment to enrollment can ease students into their academic experience
- Designing media content to be as “evergreen” as possible (i.e., not quickly outdated) allows coursework to stay current with limited additional expense
- Building in social connections or community-building can increase student emotional engagement, including perhaps (or particularly) if engagement is with others outside of their existing groups
- Implementing a new credential on a short timeline for introduction can leave details unresolved and compromise existing systems and supports (e.g., typical student orientations) that might improve the student experience
- Delivering similar credentials being through multiple modalities (online, in-person, hybrid/blended) might confuse learners, even as it offers flexibility
- Offering options for different delivery modalities can be important to students' decision making to accommodate their individual needs (e.g., scheduling to accommodate work hours)
- Offering online or internship-based programs allows rural community participants to attend efficiently
- Providing celebration is valuable (e.g., plaques or physical certificates) as shareable recognition of periodic achievement and ongoing progress

- Structuring credential learning activities around internships alleviates some issues with older or returning students being anxious about going back to education or struggling to picture themselves as a student
- Establishing incremental credentials around internship placements in instances where licensure requirements include accumulated hours of experience is essentially mandatory to credential aligning with industry expectations
- Allowing students in online credential courses longer periods to complete can accommodate students who are slow to finish, although they may lose faculty or staff support before they are able to finish
- Leveraging portfolio assessment models allows students to curate a body of work that (1) builds skills (e.g., communication), (2) gives them a tool for sharing their work internally, and (3) provides a mechanism to demonstrate proficiency to potential employers
- Establishing Pass/Fail grading systems for exploratory credential offerings simplifies assessment and saves instructor time
- Retaining flexibility to accommodate changes in student needs (e.g., family or health emergencies) by pushing registration to a future term can keep students from simply giving up on a credential
- Offering credit-by-exam options meets the needs of some students
- Incorporating dynamic (so-called “high impact”) practices in coursework and instruction continue to be important to learners
- Meeting needs particular to subgroups (e.g., English language learners) can realize outside benefits for those students, but can also help drive success of the broader program within which that group is served

#### Actions: Student Financial Support

- Identifying and facilitating multiple sources for funding students (e.g., foundation, workforce agency, or private sponsorship; typically specific to a given incremental credential) directly addresses cost to the student (likely the most important issue to students)
- Developing a credential to utilize open educational resources (OER) materials rather than traditional textbooks can save learners substantial money and eliminate a barrier to enrollment and success
- Making incremental credentials free (e.g., noncredit professional skill-building offerings) encourages enrollment but perhaps including students for whom the content is not a good fit
- Offering a credential free of charge to students already enrolled in other coursework makes the ability to fund tuition a prerequisite for that particular offering
- Unifying all sources of student financial support under a single application for the student improves efficiency and flexibility in how funds are awarded and used
- Dedicating supporting staff with the necessary expertise is necessary for any comprehensive student financial support model (e.g., to optimize how available funds are distributed equitably; not over- or underspent)
- Piecing together funding from multiple sources requires substantial work by staff responsible for delivering an introductory credential, but can radically increase access to educational and work opportunities

## Employer Partners

**Research Question 1.3:** *To what extent are **employers** partnered with participating institutions aware of, valuing, and using the emerging array of ICs in their hiring and advancement practices?*

The three Credential Readiness domains are not equally represented in the information gleaned from institution program managers during their focus groups, about how employer patterns related to their work once institutions were implementing their innovative credentials. Descriptions of external factors were dominant in the narrative record about employer partners; conditions were raised regularly in response to the research manager's questions as well. Descriptions of actions implemented by credential managers were, however, rare.

### Factors: Employers

- Employers are still struggling to really understand some new credentialing models
- Business or industry partners might be reluctant or slow to actively engage in partnerships; inconsistent definitions complicate understanding (e.g., what is a “microcredential?”)
- Employers might have difficulty articulating precisely what skills they are looking for in employees, even for professions historically recognizing traditional degree credentials
- Different employers may have different expectations or definitions applicable to content, even if they are in the same industry—even with students working toward the same competency exams; this complicates design
- Some employers' needs are specialized enough that they do not define a need large enough to warrant a higher education institution's development and delivery of a new credential; this is aggravated in small or secluded locales
- For credentials that leverage apprenticeship placements, some employers may not meet requirements set by state and federal guidelines for true Registered Apprenticeship programs (e.g., wage levels)
- Federally recognized apprenticeship programs will likely require specific application processes outside of the control of credential program managers
- Some apprenticeship programs are targeted narrowly at particular groups, making them valuable for some learners but not sufficiently flexible for others
- If internship-based credentials meet employers' needs and they qualify, they may likely be very supportive of such programs
- Employers may hire degreed graduates and workforce development (noncredit program) completers for the same positions, if both groups can demonstrate that they have requisite proficiencies; external certification is an important part of such considerations
- Employers may hire entry-level positions based on course completion, then require external certification for future advancement
- Employers seem disinclined to use badges as criteria for hiring or advancement—at least in some disciplines—which limits their value to students
- Employers may be leaning increasingly on third-party tools like LinkedIn to connect with learners

(potential employees), leaving higher education institutions out of the loop on hiring data

### Conditions: Employers

- Industry partners can contribute to ongoing delivery of incremental credential programs by placing representatives on program advisory boards
- Faculty from industry may actively pursue hiring students completing the credential that the faculty member is facilitating; a benefit to the student
- Faculty or industry partners may be in the position to provide internship opportunities for students; some may not be
- In a variation on true internships, local businesses can act as “service partners,” for example, sharing real-world problems that students might use as case studies in their learning
- Particularly in technical fields, representatives from industry can advise credential designers and faculty to ensure that facilities, technologies, and content are relevant and current
- It is generally thought to be beneficial to have courses taught by individuals still connected to the industry for which they are preparing students
- Marketing of new credentials may typically rely on instructors and program staff; employers being less likely to be involved

### Actions: Employers

- Partnering formally with industry or agencies as a dedicated workforce “service provider” for training in will likely encourage partners in the sector served to proactively direct students to credentials, easing recruiting burdens on the institution and improving sustainability
- Instructors leveraging their professional contacts can amplify messaging through employers to potential students
- Nurturing active relationships with public agencies responsible for administration of a profession or area of practice can realize practical dividends to learners (e.g., easing licensing requirements)

### Communication

**Research Question 1.4:** *How do grant-funded **communication strategies** (e.g., national campaign, website, communication materials) intended to advance awareness of and value for incremental credentialing further progress toward outcomes among system and institutional stakeholder groups?*

It is important to note that the research question of interest here focused from the outset on communication at the Credential As You Go initiative level, not communication-related actions by project partner institutions relating to their grant-supported incremental credentials. Communication has emerged nonetheless as a crucial aspect of implementing innovative credentialing models so deserves attention here, for eventual consideration in the bigger picture of Credential As You Go efforts to expand awareness, and support implementations, of incremental credentials.

The distribution of ideas among the three Credential Readiness domains was evident for considerations relating to communication, but very much the opposite of the pattern that emerged for employer partners. No team mentioned external factors relating directly to communication, and only a few internal considerations

regarding communication emerged from analysis of the narrative record. Specific references to actions undertaken at the credential level were numerous, however—enough so that eight subtopics were developed during analysis of focus group transcripts.

#### Factors: Communication

No external factors surfaced in this round of focus groups as being specifically related to communication about new credentials. External influences are certainly considered for the list of communication actions described by participants (below) but none were explicitly noted in the narrative record.

#### Conditions: Communication

- Weak channels for communication among organizational elements within an institution (getting the “pieces to talk with one another”) can confound efforts to implement credentials
- Extant systems in higher education may include automated communication processes that are particularly problematic to learner populations served by incremental credentials (e.g., system-generated welcome letters and organizational information delivered as physical mail)
- Effectiveness of pathways or stacking models in place can be compromised if descriptions and understandings of them are not well articulated and shared consistently among all stakeholder groups
- Programs may promote active communication by faculty, and may in fact rely too greatly on that conduit to get information to students
- Institution communications departments may be behind the curve regarding innovation in incremental credentials
- It may be problematic to develop (and fund) communication strategies for a credential that is only targeted (or even available) to a small group of constituent students

#### Actions: Communication

##### Credential Team Roles and Responsibilities

- Establishing open lines of communication, student-to-instructor, can encourage a student facing difficulty to reach out to the instructor rather than disengaging or simply dropping off of the roll
- Establishing lines of communication (e.g., updates on ongoing processes) between students and the same staff member over time can build rapport and trust
- Establishing staff positions specifically responsible for direct communication with students can be extremely beneficial
- Establishing lines of communication during credential completion can facilitate follow-up to collect employment or other outcome data

##### Two-way Student Feedback

- Actively soliciting feedback from students can be important and beneficial to an incremental credential program
- Implementing qualitative interviews of students provides different but useful data

- Embedding surveys in online course management systems simplifies collection of feedback data
- Business intelligence about how many (and what) courses a student is short of to complete a credential focuses and simplifies outreach conversation about the value of a credential
- Actively tracking progress data—and communicating it back to students—can head off their getting stuck and promote academic success, particularly if it happens early in a credential process
- Critically reviewing students’ “journeys” into and through a credential can provide intelligence to inform communication decision making

#### Human Outreach

- Using human outreach is seen as more engaging than distributing collateral materials
- Having high profile individuals speak publicly about a credential offering can realize good outcomes in awareness of, and appreciation for, that credential
- Leveraging community organizations in recruiting efforts can help improve representation of groups not generally included in workforce education programs (e.g., geographic areas of low economic health)
- Presenting at conferences or disseminating widely (even nationally) can have a trickle-down effect reaching secondary audiences (e.g., through interviews in the media)
- In-person events (e.g., so-called *Lunch and Learn* sessions) can be convened to bring together student and employer groups, enhancing relations
- Sending knowledgeable credential program staff into the field to do outreach helps ensure that students—and employers—with questions will get more immediate and accurate answers to questions

#### Describing Credentials

- Engaging in “information marketing” (i.e., sharing samples of free content of a credential) can help prospective students understand how they might benefit from enrolling
- Communicating assumptions underlying any given incremental credential (e.g., what students should already know; what school or work they are doing concurrently) can be extremely important, to help avoid barriers to completion
- Explicitly aligning language (e.g., proficiency outcomes) for incremental credentials with certification requirements where they exist, decreases potential confusion and harmonizes execution of learning programs across agencies and employer groups
- Intentionally framing new credentials in terms of their benefits for students is important, including clear definition of competencies and new learnings the student will achieve, and how they can use them in the workforce
- Visual representations or models of credentials may be useful or even crucial to some learners understanding what they are pursuing
- Effective communication about incremental credential opportunities focuses on the skills and understandings students will have upon completion, rather than simply on completion
- Communicating value in terms of specific skills and understandings may be harder for generalist, broadly applicable incremental credentials than for those with very discipline-specific content
- Having—and communicating—intelligence about labor market demand for a credential will likely help students establish value for that credential (e.g., in terms of potential employment or

advancement)

### Targeted Outreach

- Including efforts in outreach to change potential students' perceptions of their own professional identity can help them see themselves in a new role
- Communicating with student groups that a particular credential is targeted just for them (e.g., PhD candidates) may encourage buy-in and persistence
- Targeted outreach, considering past demographics, can improve enrollment of groups typically underrepresented in program student populations (e.g., with assistance from local nongovernmental organizations)
- Reaching out to students for retro-award of an already-earned incremental credential might re-engage them enough to pursue a degree
- Framing non-degree/noncredit options as "professional development" might allow traditionally academic programming to be more attractive to incumbent workers
- Promoting credentials in high schools can be a productive recruiting approach
- Tapping into students' greater aspirations or personal missions in communications can be helpful
- Outreach can even be valuable when it is not efficient (e.g., going into locales with very modest numbers of employment opportunities)
- Outreach to students in core curriculum courses that are also incremental credential components might effectively encourage them to pursue the credential that includes those courses

### Operations

- Convening regular inter-departmental meetings can improve communication and smooth rough spots in the implementation of innovative credentials, improving students' experiences with them
- Spending time to proactively communicate processes and policies to adjunct faculty will likely head off issues for students
- Providing new students with very specific guidance (e.g., how to create an account and access online learning management systems) can be crucial to success, but does not assure that students will "read the manual" and take advantage of guidance documentation; potentially leaving them in timeline difficulties during crucial early days of a credential offering

### Web Content

- Web-based communications (program landing page content, "one-pager" descriptions on the web or the institution's content management system) are nearly ubiquitous among incremental credentialing programs
- Setting up portal sites on the web at levels higher than programs (institution, external agency, professional organization) can effectively drive traffic of interested parties to specific credential opportunities
- Creating a one-stop web destination with information about all credentials available to a particular audience (e.g., new students seeking non-degree/noncredit experiences) can encourage enrollment

## Email Strategies

- Utilizing well-designed, automated email communication outreach can realize enrollments for little effort
- Leveraging automated management system features for outreach email communication shifts burdens off of advising staff members
- Making email or text communications friendly and informal may better engage students and get them the information they need in a timely fashion
- Utilizing students' existing personal email addresses often results in more open lines of communication, versus using an institutional email that some students will not check regularly

## Considerations

A large majority of the factors, conditions, and actions raised by focus group participants were unique, being surfaced only once in the entire narrative record. Given this, and the too-common risk of making poorly supported inferences with this type of study, no attempt will be made here to generalize recommendations from the available evidence.

However, a number of somewhat larger considerations emerged from analysis of what focus group participants shared with the research team. These are posited as follows, intended to guide possible next steps toward improvements both implementation and study of incremental credentials.

- While some factors are emerging as being particularly impactful, many of the external factors, institutional internal conditions, and actions taken by credential managers and instructors are very particular to the discipline and context in which they are working.
- Additional attention to the cost-competition landscape of incremental credentials might clarify how institutions, individually or collectively, can optimize conditions for implementation of innovative credentials, even looking beyond individual institutions or their systems (e.g., to interstate conditions).
- Commonly, deployment of a new incremental credential is a response to urgent needs in the labor force of a particular sector (e.g., early childhood education, healthcare).
- The high turnover endemic to some urgently needed disciplines potentially impacts persistence in learning pathways leading to jobs in those fields, as students—notably working students or those in internships or apprenticeships—quit or become discouraged by the same factors that affect the field more broadly.
- New credential offerings will inherently be in competition for students, with credentials offered elsewhere and with more traditional degree programs within an institution. Proliferation or a lack of differentiation in the credential marketplace could become problematic.
- The desire to get new, innovative credentials designed, approved, and launched can put them on timelines too short to allow for effective recruiting, and student decision making and enrollment. This potentially compromises their near-term value for students and likelihood of longer term programmatic success.
- Administrators responsible for supporting student success in incremental credentials seem to do their work despite the data systems and technology available to them, not because of them. These higher education staff and faculty are often adept at working around such systems when the technology does not support the needed functions.
- Emerging models for “navigator/advisor” roles are illustrating creative and potentially valuable solutions to challenges across a wide range of external factors and institutional conditions. This is an area of substantial innovation for forward-thinking institutions, which deserves expanded implementation and study.
- Processes for “braiding” available financial support or other funding mechanisms can create opportunities that seamlessly reduce out-of-pocket costs for students. Such optimized cost-containment

approaches are, however, burdensome for staff to develop and manage and highly dependent on contextual factors (e.g., legislated mandates, industry support).

- Flexibility and responsiveness can be beneficial when developing and implementing an innovative credential in response to market needs, but too much flexibility can be perceived as a lack of structure at the program level, and result in confusing students. Responsiveness by faculty or program staff can also be resource intensive, so potentially unsustainable.
- Student readiness and the dispositions required to be successful pursuing an incremental credential are problems similar to those with traditional degree programs, if not more so—accelerated timelines, reliance on technology, and prevailing demographics of students inclined toward such offerings. This is an exceedingly complex problem that deserves ongoing study and effort.
- Until and unless employers actually use incremental credentials—or certifications that can be awarded upon their completion—as real-world criteria for hiring and advancement, the value of those credentials will not be secured for students seeking employment rather than continuing on to a traditional degree.
- Regardless of the influences on the value of any given credential in the labor market, there is still much to be learned about how students come to value nontraditional credentials for themselves, and about how institutions might influence their perceptions.

## Appendix: 2024 Focus Group Prompts

*Note: Prompts were not necessarily used verbatim, nor were they always presented in the order below (e.g., if focus group participants started answering a question that had not yet been asked).*

### 1. Feasibility

We're interested in learning more about the feasibility of implementing your new incremental credentials, once they are developed and available for learner enrollment.

Now, thinking about the credentials you mentioned, let's talk about their IMPLEMENTATION focusing specifically on interactions with learners...

RQ 1.2. What factors external to your institution most influence learners' access to your new incremental credentials—positively and/or negatively? What external factors influence learners' awareness and valuing of your incremental credentials?

RQ 1.7. What conditions internal to your institution, most effectively enable implementation of your new incremental credentials with students, once those credentials have been developed and launched? What internal institutional conditions constrain implementation of your new incremental credentials with students, if any?

RQ 1.3. How—and how effectively—are employers partnering with your institution to support learners' access to, and awareness and valuing of, your incremental credentials?

RQ 1.4. What communication strategies is your institution applying to further learners' awareness and valuing of incremental credentials?

### 2. Learner-level Outcomes

The next few questions aim to get at learner-level OUTCOMES from implementation of your new incremental credentials. For any question, if any learner demographics seem to influence outcomes, feel free to explain how...

RQ 2.2. As you are implementing your new incremental credentials, how are learners' understanding and valuing of incremental credentialing changing? How do learners' understanding and valuing of credentials translate into their actions leading them to actually enroll (e.g., meeting with an advisor, researching program options)?

RQ 2.3. Once learners are actually considering an incremental credential, what is most likely to convince them to enroll? For learners who do not enroll, why do you think they made that decision (speculation is fine)? Once enrolled, what influences learners to persist with, progress through, and complete the incremental credentials we're talking about? For learners who do not persist and complete the incremental credential, what influences do you think created barriers to completion?

RQ 2.4. What, if anything, do you know about the learners' intentions—once finished—to transfer their credentials to another institution, continue their education, and/or pursue/obtain employment?

## References

Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice* (4th ed.). SAGE Publications.



**CREDENTIAL  
AS YOU GO**  
INCREMENTAL CREDENTIALING

[www.credentialasyougo.org](http://www.credentialasyougo.org)