



## Transforming Educator Learning in North Carolina: Realizing the Potential of Micro-credentials

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# Introduction

#### Why do NC educators need more options for professional development?

Large-scale research reinforces the commonsense understanding that a well-prepared, highly skilled and caring teacher is the most important in-school influence on student success.<sup>1</sup> While LEAs (Local Education Agencies) and states have invested significantly in professional development for educators over many decades, evidence of improved teaching skills or student learning is, at best, mixed and, at worst, disappointing.<sup>2</sup> In any case, the results seem incommensurate with the time and money that LEAs, states, and educators commit to various professional development activities.

Not all professional development has been or is uniformly effective. Some educators find value in traditional professional development opportunities and feel it improves their practice. However, they seem to be in the minority.<sup>3</sup> This raises questions about the strategy that many LEAs and schools typically adopt: Identify an area of need and provide teachers, in groups, the same learning opportunities without regard to their skill level, needs, or interests. Therefore, it is little wonder that many teachers hold negative views

of professional development.<sup>4</sup> At a time when many schools are struggling to hire and keep teachers, offering options for professional growth that more educators find engaging and satisfying seems essential.

Like educational leaders in other states, those in North Carolina have recognized the imperative to improve professional learning options as a strategy both to retain educators and improve teaching practices and student learning. Beginning in 2017, the NC Department of Public Instruction funded digital learning grants that include micro-credentials as a priority. As teacherdirected, competency-based professional learning experiences, micro-credentials offer educators options to more traditional forms of professional development and greater control over their learning experiences. The



self-directed and competency-based features of micro-credentials can potentially help schools attract and retain high-quality educators. Although the challenges of recruiting and retaining educators are multiple and complex, among the factors that lend themselves to policy solutions are educators' working conditions. Nine out of 10 teachers believe that the media largely ignores this issue while over-focusing on the role of standardized tests and teaching about race.<sup>5</sup> Results from a recent national poll suggest:

"... a deep disillusionment of many teachers who feel overworked, underpaid, and underappreciated, with potential implications for a once-in-a-generation shift in the teaching profession. For example, just 12 percent of teachers, the survey found, are very satisfied with their jobs, with more than four in ten teachers saying they were very or fairly likely to leave the profession in the next two years."<sup>6</sup>

The trends are discouraging, at best, and alarming, at worst. Whereas 62 percent of teachers reported being very satisfied with their jobs in 2008, by 2022 teachers who reported being very satisfied had dropped to a mere 12 percent. Even more discouraging, only 9 percent of early-career teachers reported being very satisfied.<sup>7</sup> In addition, fewer and fewer young people are choosing to become educators: only 8.1 percent of those who earned B.A. and M.A. degrees in 2019 were education majors, down a third over the past decade.<sup>8</sup>

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Contributing to this wide-spread dissatisfaction is a sense among many teachers that control over their professional lives has diminished. Decades of research has shown strong relationships between job autonomy and motivation, job satisfaction, and productivity.<sup>9</sup>

"... research indicates that the best way to incentivize employees to pursue experiences that will promote their professional growth, as well as the growth of their organization, is to give adequate compensation, time, and space to do their jobs...and nothing more."<sup>10</sup>

This research also suggests that greater autonomy for teachers translates into greater retention.<sup>11</sup> Unsurprisingly, when people can choose their own work goals and how to achieve them, they work harder and are more motivated and efficient.<sup>12</sup>

Traditionally, state departments of education, Local Education Agencies (LEAs), and schools have largely controlled formal professional development opportunities. Typically, these authorities decide on the topics and skills on which educators should focus, sometimes with input from teachers but sometimes not. In addition, they also dictate the time and place for educators to learn. The results of this approach have often been, as noted above, disappointing.

Recently, several states and many LEAs around the country have encouraged and incentivized educators to take advantage of micro-credentials—a relatively recent innovation in education. Micro-credentials afford educators more autonomy in choosing the teaching skills they feel they need to improve—or, in

some cases—demonstrate their competency. In addition, unlike most traditional professional development that relies on the metric of "clock-hours" (the number of hours spent in a course or workshop or participating in an LEAapproved professional activity), educators who wish to earn micro-credentials must provide evidence of successfully using the target skills in their classroom.

Decades of research show that adults learn best when the information or skills have immediate applicability in their context, and they can choose for themselves what and where to learn as well as the pace of learning.<sup>13</sup> Earning microcredentials conforms more closely to these characteristics of adult learners than do most traditional professional development activities.

# Organization of this Report

To help decision-makers determine the best strategy for formally integrating micro-credentials in the professional learning system for NC educators, we offer information on:

- what micro-credentials are;
- how they differ from more traditional professional development;
- what is the potential of micro-credentials to improve educator practice and retention and student learning;
- what we have learned from others who have implemented micro-credentials as part of their professional learning systems;
- what assets that NC already has in place;
- what we recommend for a state-supported micro-credential system; and
- how such a system might be rolled out.

## The Professional Learning Tales of Three Teachers

Perhaps a useful approach to understanding micro-credentials is to describe the experiences of three imaginary teachers who are engaged in different learning opportunities.

DARNELL, a National Board Certified, 20-year veteran third grade teacher, is sitting with colleagues in a large conference room at the

district office. Also in the room are colleagues from the other elementary schools in the district. This is the fourth of six two-hour sessions designed to ensure that all teachers in the district know best practice in teaching early reading. Darnell is familiar with best practices in teaching reading: Across his career, he has been successfully helping readers, especially those who struggle, to learn to read. The instructor is a professor from a nearby university recruited by the district to present the most recent



research on reading instruction and the recommendations for practice from the National Reading Panel. She has asked the teachers to keep a log of their efforts to incorporate the recommendations into their practice, to read several research articles on effective reading practice, and to be prepared to discuss the findings from the research with others in the workshop.

When Darnell returns to his building, he meets with colleagues after school and makes a PowerPoint presentation of the content of the reading workshop. Darnell also offers to coach any of them who want it. Darnell's principal tells the teachers that she will be looking for evidence of the recommended practices when she does twice yearly classroom observations. Her district has provided her with a checklist of effective practices to look for during her observations. Based on his attendance, participation, and the professor's assessment of his log, the district awards Darnell continuing education units (CEUs) toward license renewal. The district personnel office adds the CEUs to Darnell's personnel file and notifies the Department of Public Instruction that he has earned the necessary 80 hours of courses and workshops to have his license renewed. MICHELLE is sitting in her classroom with her third grade colleagues after school. Their principal had arranged the class schedule to ensure that the four teachers present had a common planning period to enable them to meet as a Professional Learning Community (PLCs). PLCs are groups of educators who meet regularly to collaborate to improve their practice and student learning. After discussing the disappointing results of their students' most recent reading scores, they decide to collaborate on learning more about research on teaching reading effectively in the early grades. They discover that the district is offering a stack of micro-credentials in early reading. As an added attraction, the micro-credentials would count toward license renewal. In turn, each teacher discusses the "Big 5" skills they believe they need to improve. They also discuss the evidence needed to show their proficiency in teaching reading. Michelle identifies the teaching of phonics and phenomics skills as the area she most needs to improve. She listens as a veteran colleague, who is recognized as effective in teaching phonics, describes

her approach and recommends a video that demonstrates the skills involved. Another colleague recommends a summary of recent research of teaching phonics and phenomics available online.

After viewing the videos, reading research summaries, and discussing her developing understanding with her PLC, Michelle gradually begins applying what she is learning in her practice. She plays an audio recording of her teaching and presents the results of an assessment of her students' understanding of phonics to her colleagues. They offer suggestions for improving her practice and evidence portfolio, just as she does for them. When each teacher feels they are ready, they submit the evidence online to micro-credentials portal on the district website.



The district sends the evidence to a trained and paid assessor, who is an expert in early reading skills instruction. Using a standards-based scoring rubric, the assessor determines that all but one member of the PLC is "proficient" in the reading skill they identified as needing improvement. Michelle and the other teachers offer to help their colleague improve her skills and resubmit her evidence portfolio. The district awards the successful PLC members micro-credentials and credit toward renewing their teaching licenses. In a subsequent meeting, Michelle and her colleagues, encouraged by their positive experiences, discuss pursuing the next micro-credential in the Early Reading Skills stack the district offers. NEZ After reviewing disappointing results from an assessment of her students' reading skills, Inez is worried. She realizes that she needs to improve her teaching of phonics and phenomics skills as well as the other "Big 5 Skills" recommended by the National Reading Panel. Her teaching schedule and multiple outside-of-school obligations limit her options. Taking a university course either online or face-to-face is not



manageable—and expensive. The district offers a workshop that meets weekly after school, but this conflicts with her familial responsibilities. Considering her options, lnez recalls that her principal had recently announced that the district is offering teachers the opportunity to earn micro-credentials to demonstrate or improve specific teaching skills. Earning micro-credentials is a win-win for lnez: She can improve essential skills and her students' performance through learning opportunities that fit her busy schedule and, at the same time, fulfill continuing education requirements.

Checking the district intranet, lnez discovers a micro-credential for phonics and phenomics skills that is part of a stack of micro-credentials for Early Reading Skills. A link takes her to a video guide to micro-credentials, describing what they are and the process for earning them. Clicking on the micro-credential icon, she finds descriptions of the expected learning outcomes and the evidence she would have to submit to show her competency in teaching phonics. Also on the webpage is a list of learning resources that includes videos of researched-based teaching, scholarly articles on effective practices, ideas and suggestions from expert teachers, and a phone number for a central office staff member who can provide more information and advice. Another link enables her to visit a virtual chat room where she can meet colleagues working on the same micro-credential. After watching videos and reading about researchbased practice, lnez gradually implements these practices in her classroom. She collects evidence of her students' skills frequently to gauge how successfully she is implementing the recommended practices. Several times, she calls the support line to ask about additional resources and to check to see that she is collecting valid evidence and organizing the evidence as expected. During a visit to the chat room, she learns of additional learning resources and compares her experience with that of her virtual colleagues. After a few weeks, she tests her students again and finds marked improvement. Per the online instructions, she organizes her evidence—lesson plan, audio of her teaching, reflections on the lesson, and her students' test results—and submits her portfolio to the online portal. Within the week, she receives an email from the assessor, who congratulates her on successfully earning the micro-credential. Receiving the same information, the district office records the achievement on her personnel record. Encouraged by her success and the comments of the assessor, lnez decides to pursue the other micro-credentials in the Early Reading stack with the goal of earning a badge for Early Reading Skills.

#### How do the experiences of these teachers differ?

Darnell's experience of professional learning reflects that of many teachers, for whom professional development consists of accumulating required clock-hours from courses, workshops, or other sanctioned activities. LEAs often mandate professional development activities with the goal of improving teaching practices and students' learning. Typically, however, LEAs do not require verification that educators have transformed what they learned into applied skills that actually improve student learning.

Darnell's experiences contrast with that of Michelle and Inez. These educators self-assessed their practice and identified areas needing improvement. This led them to identify learning opportunities that targeted the very skills that their self-assessment showed they needed to improve. In Michelle's case, her PLC helped her identify learning resources that included a colleague who was already proficient in the needed skill. Michelle benefited significantly from her principal who created common time for PLCs to meet because of awareness of research showing the potential of PLCs to improve teaching practice and student performance.

Inez relied on the resources that her district offered online. She took advantage of the helpline and chat room to support her as she worked to improve her practice. Both Michelle and Inez had much more control over what, when, and where they learned than Darnell. At the same time, they were held to a higher level of accountability, as they had to show proof that they successfully implemented their targeted skills and that these skills benefited their students. Although Darnell may have learned new skills through his experience, he was not required to demonstrate competency in his classroom. Not to diminish his experience, but he got credit toward license renewal merely for showing up.

Darnell's experience	Michelle's experience	Inez's experience
The district decided the topic of professional development	Michelle and her learning community chose the topic based on assessing their and their students' needs	Chooses her own learning goal based on her self-assessment using student data
Learning occurs outside his classroom	Learning occurs within the classroom and school	
Learning is mostly passive	Learning is active as she engages with learning resources including colleagues	Learning is active as she engages with learning resources online
Expected to learn at the same rate as others	Learning at her own speed	
Learning occurs largely in isolation	Learning with colleagues and engaging external supports	Learning on her own and engaging external supports
Application and effectiveness of target skill is not evaluated	Required to provide evidence of applying skill successfully in her classrooms	
Credit awarded based on "clock-hours" and doesn't require demonstrated competency	Credit award based on externally verified demonstration of competency	

#### The table below summarizes and compares the experiences of the three teachers:

#### What are micro-credentials?

Micro-credentials are not just the latest trend in education. With rapidly advancing information and communication technologies, they represent a way for individuals or teams to digitally document what they know and can do in their profession.

A common misunderstanding is that micro-credentials are themselves learning opportunities, like those Darnell experienced. Rather, micro-credentials verify that an educator has demonstrated proficiency in a particular skill or competency. This distinction is evident in the definition recently developed by the Micro-credential Partnership of the States—or MPOS (a digiLEARN initiative):

#### micro-credentials

A high-quality micro-credential is a verification of proficiency in a job-embedded discrete skill or competency that an educator has demonstrated through the submission of evidence assessed via defined evaluation criteria.

#### Several phrases in this definition are worth a closer look:

Require external "verification of proficiency"	Signals that micro-credentials require an <u>external assessor</u> , who has relevant expert knowledge and training must validate educators' competency in applying a skill.
Use of "defined criteria"	To verify proficiency, the assessor will use a <u>rubric</u> based on <u>accepted</u> <u>standards</u> of effective practice in the relevant domain to evaluate the evidence submitted to document competency.
Focus on a "discrete skill or competency"	Micro-credentials focus on skills that can be individually identified and assessed.
Require "submission of evidence"	To earn a micro-credential, an educator must assemble and submit for assessment evidence (including lesson plans, digital recordings, examples of student learning, reflections, or other data) that demonstrates that they have successfully implemented the target skill in their classroom.
Learning is "job-embedded"	The skills that are the focus of a micro-credential must be demonstrated by evidence from an educators' actual classrooms or school.

#### What do we know about traditional professional development and its effects?

- States and Local Education Agencies (LEAs) have long invested substantially in improving teachers' classroom practice.
- A recent study revealed that a representative sample of large LEAs spent \$18,000 per teacher annually for professional development.
- The 50 largest LEAs collectively spend about \$8 billion a year on professional development.
- The cost is not merely in dollars: After a decade in the classroom, the average teacher will have spent the equivalent of a school year in professional development activities.<sup>14</sup>

Critics have long questioned whether improvements in teacher practice are worth the sizable investment in professional development that states and LEAs make. While two-thirds of teachers report being satisfied with their professional development, only 44 percent say it was worth their time. Recent research shows that, among teachers whose students have shown improvement on standardized tests, only 11 percent report that one-time professional development experiences (often called "sit-and-get"), and only 6 percent report that higher education courses helped them improve. In contrast, 43 percent of these teachers identified informal peer collaboration and independent learning contributed most to improving their practice.<sup>15</sup>

These data suggest that we focus more of our limited resources on expanding opportunities for teachers to work with colleagues, pursue skills based on self-assessment, have access to targeted "just-in-time" supports, and learn at their own pace. Micro-credentials, as the vignette above illustrates, are intended to do just this.

# What challenges does North Carolina face in integrating micro-credentials into the current system of educator professional learning?<sup>16</sup>

Over the last several months, we have reviewed dozens of policy and research reports and interviewed North Carolina educators at all levels. Below are some of the greatest challenges—posed in the form of questions—that the State faces in shifting to a professional learning system that incorporates micro-credentials:

- How can micro-credentials be integrated into current the professional learning system to avoid teachers viewing micro-credentials as another requirement—"just one more thing" they must do rather than opportunities to self-assess and identify skills they wish to demonstrate or improve? The current system that requires 80 clock hours every five years for license renewal is deeply entrenched, institutionally and culturally. Micro-credentials offer a very different option to professional learning than the current system and must be treated as such.
- How should micro-credentials be preserved into the professional learning system so that their original intention is preserved?

The role of micro-credentials in the State's professional learning for teachers needs to be further specified. This will require redesigning the current system to enable educators to earn license renewal, career advancement, and increased compensation without converting micro-credentials into CEUs. Research is critical to understanding the impact that earning micro-credentials has on educators' competency to provide an empirical basis for advancing professionally.

• How can the State invest in professional learning that encourages educators to continue learning and seek to advance and remain in the profession?

Over the past decade, LEAs and schools have lost much of their funding for teachers' professional learning, with a negative impact on teaching working conditions. Although some funding has been restored, resources to create a competency-based system are essential.

• How can the State provide more flexibility in how funds are used, especially for educators continuing development?

Most funding for teacher professional learning lacks flexibility in how these funds may be used. For instance, LEAs may want to offer increased compensation for educators who pursue microcredential and stacks, particularly if these lead, as they should, to advancement to positions of greater responsibility. Will the existing funding regulations enable such incentives?  How can the State help build the human and technology infrastructure needed to incorporate microcredentials as effective, trusted, and value-added options for professional learning?
 Structures and supports are needed to help guide educators along the path of self-directed, competency-based learning that requires self-assessment, setting learning goals, learning resources, and time and opportunity for reflection. Self-directed learning requires both an organizational and cultural shift. Few LEAs and school currently have the infrastructure and resources required for an effective and equitable micro-credentials system.

#### What would building a high-quality micro-credentials system require?

The table below offers definitions of the roles that individuals and organizations play in a micro-credentials system. Taken together, these constitute the infrastructure a micro-credentials system would require.<sup>17</sup>

Key lerm	Description
Developer and Provider	The organization(s) or individuals that identify and establish the expected knowledge and skills to be recognized through the micro-credential (often the same entity as the issuer).
<b>Earner</b> (s)	The individual or team who submits evidence demonstrating their learning competency to earn a micro-credential.
Supports	The human infrastructure at the State, district, and school levels required to ensure that earners have the resources, guidance, time, and collegial cooperation need to succeed.
Assessor	The individual(s) that review evidence submitted by earners and apply criteria to assess and determine each earner's proficiency. Assessors should be independent from the issuer and recognizer. They must be trained, compensated, and monitored for reliability and transparency in scoring.
lssuer	The organization(s) or institution(s) that formally award the micro- credential to earners who have successfully met the proficiency criteria (often the same entity as the developer).
Recognizer	The organization(s) or institution(s) that recognize and give currency or value to the micro- credentials and allow them to be used by earners for various purposes.

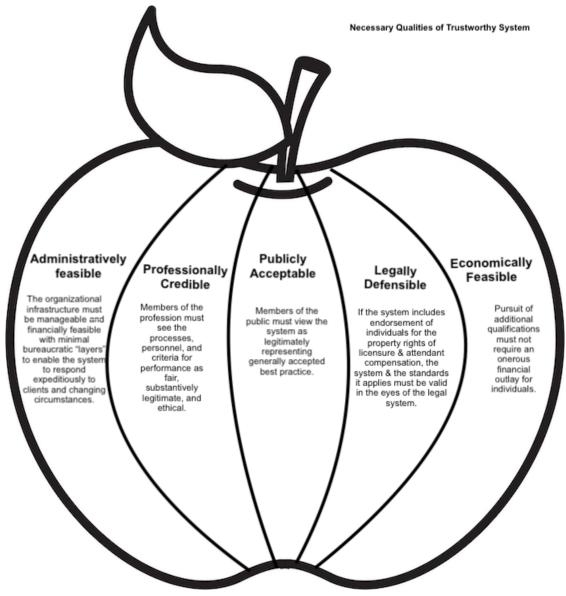
# What are the necessary features of a trusted system of competency-based assessment of learning?

North Carolina has been a national leader for decades promoting competency-based or "performancebased" assessment of learning by and for teachers. As the first state to test the nascent system of National Board Certification (NBC) in the early 1990s, North Carolina teachers' experiences informed the evolving design of the system—and its many adaptations—over a decade. The initial research validating the NBC system was conducted primarily in North Carolina. With thousands of teachers who have earned National Board Certification, the State also has hundreds of NBC teachers who have served as assessors for the National Board.

Just as North Carolina led the nation in shaping the design and implementation of National Board Certification, NC is now clearly ahead of the game with micro-credentials, as it has already ventured into the use of micro-credentials for professional learning and license renewal (see more on this below). As North Carolina builds on this pioneering work, the State can further capitalize on its recognition as a national leader in performance-based assessment for educators. By supporting micro-credentials as a competency-based form of professional learning, the State will more fully engage teachers in the continuous improvement of teaching practices and schools that is the key to better outcomes for students.

For this to happen, educators and schools must trust the process of earning a micro-credential and the system that supports this innovation. This trust must be earned before an incentive structure is established to promote the use of micro-credentials for professional learning. Such trust is also necessary if micro-credentials are to become, potentially, part of the professional career pathway that includes initial preparation and licensure.

The model used to establish the system of National Board Certification offers a useful framework for North Carolina to consider. Just as the National Board started, the roll-out of a statewide micro-credential system should begin with experienced teachers who possess a foundation of teaching practice developed during preparation programs.



Using these features as a framework, below we offer recommendations for a micro-credentials system that addresses the three "I's": infrastructure, intentional scaling, and incentives.

#### How are micro-credentials viewed by NC educators?

We interviewed leaders of major educator organizations in NC as well as others whose views of microcredentials seemed pertinent. Our resources did not allow us to conduct a systematic survey of the nearly 95,000 teachers in NC. (Such a survey of a sample of NC teachers would provide valuable data to inform educational leaders and policymakers.) We focused on leaders and organizations that we felt represent educators' perspectives. Below we summarize what we learned from our informants:

• Educators who have experienced earning micro-credentials report that they believe their practice improved, and they are interested in additional opportunities to earn micro-credentials. We heard from LEAs and others, such as the Friday Institute for Educational Innovation (FI), that teachers who have earned micro-credentials report that the experience was generally positive and feel they have improved their classroom practice. In addition, as data from Guilford County shows, principals' evaluations tend to bear out teachers' subjective evaluations of their practice. As a result,

these teachers, like those who availed themselves of the micro-credentials offered by FI, are likely to want to earn more micro-credentials.

**Implications:** Perhaps the best testament to the value of any product is repeat customers. Most teachers want to improve their practice and results in their classrooms. When they see this happen through earning micro-credentials, they become keen for more of the same.



• Knowledge and understanding of micro-credentials—what they are, how they differ from other professional development activities, and how they fit into the current professional learning system—is uneven across the State. Some educators in early-adopter LEAs, such as Guilford, are knowledgeable both about the process of earning micro-credentials and their place in the district's professional learning system. In other LEAs, such as Pitt County, educators have heard of micro-credentials but may be unsure of the details as their district has yet to embrace fully micro-credentials as part of the professional learning ecosystem. Even leaders at North Carolina Center for the Advancement of Teaching (NCCAT), the primary state-funded teacher professional development organization, had limited knowledge of micro-credentials.

**Implications:** When the SBE decides on a plan for implementing a micro-credentials system, DPI is the obvious resource for informing LEAs—especially superintendents and principals—and educator organizations about micro-credentials and the plan going forward. DPI, LEAs, and NCCAT can reach out to educators to clarify what micro-credentials are, the process for earning them, and their value.

• Wariness about micro-credentials use for initial licensure or to qualify for additional

**compensation.** The introduction of the <u>North Carolina Pathways to Excellence for Teaching</u> <u>Professionals</u>—presented to the State Board of Education in early 2021—has been controversial. (See <u>here</u> for a September 2022 draft). Numerous concerns have been raised about the plan since it was presented, including a detailed critique from <u>NC Policy Watch</u>. As a result, some teachers and higher education leaders who are aware of this controversy are cautious about micro-credentials and their intended role, especially in initial licensure. Although Pathways retains the traditional routes to initial certifications, we heard concerns about the role that micro-credentials might eventually play.

**Implications:** This suggests the need for <u>PEPSC</u> (Professional Education Preparation and Standards Committee), the SBE, and DPI to clearly communicate the purposes of micro-credentials and how they fit into the Professional Pathways. If incorporating micro-credentials into initial licensure is considered a possibility, more conversations with higher education and others are needed. As one education dean, who favors the gradual inclusion of micro-credentials into preparation programs, noted, moving toward a competency-based system for recognizing skills is a major departure from the credit-hour system that has existed in higher education at least since the 19th century. At the same time, as the Friday Institute and the Empowering Teacher Learning Project (ETLP) at Appalachian State University (ASU) have demonstrated, higher education has the potential to play a central role in a micro-credential system.

• **Opportunities for collaborative learning:** As we learned from Guilford County's work, microcredentials afford teachers opportunities to work and learn with colleagues. Studies have shown that teachers prefer professional development that allows them to work in learning communities on common goals.

**Implications:** Many schools in NC currently have PLCs. These could become a vehicle for introducing micro-credentials into such schools. The Guilford project provides one model for how this can be done.

• Establishing quality standards and requiring micro-credentials to meet these standards is essential if educators, policymakers, and the public are to trust that they represent genuine competency. Currently, several NC LEAs are creating their own micro-credentials, and educators are earning CEUs based on successfully meeting criteria that the LEAs themselves set. Although some of these are of sufficient quality, we currently have no way of knowing which are.

**Implications:** Adopting and applying quality standards is essential for a trusted system. The Micro-credential Partnership of the States, led by digiLEARN and RTI International as an expansion of the NC Partnership for Micro-Credentials, will publish its quality standards in January 2023. The State should consider adopting these and create a mechanism for vetting current and future micro-credentials.

#### What have we learned from the experience of others?

Below, we attempt to summarize and condense the findings and recommendations from various reports on micro-credentials as well as the views and experiences of educators and others we interviewed for this report. We have organized these using the micro-credentials system components we described above.

#### Developers, Providers, and Quality Assurance

» Quality standards are essential. Whatever the source, micro-credentials must be researchbased and aligned to state and national educator standards and meet the ESSA definition of high-quality professional development. This is essential for both legitimacy and transportability.<sup>18</sup>

#### Implementation of micro-credentials system

- » Be clear on the purpose of micro-credentials and "communicate, communicate, communicate": Make the definition, purpose, and role of micro-credentials clear to everyone, especially teachers, principals, and superintendents.
  - Currently, awareness and knowledge of micro-credentials are uneven across LEAs.
  - Local champions who can advocate for micro-credentials are essential. They can be central office staff and/or school-based advocates—administrators or teacher-leaders.<sup>19</sup>
  - A statewide information campaign is needed. Educators and policymakers should understand:
    - · How are micro-credentials different from conventional professional development?
    - · Are they for professional learning or professional advancement—or both?
    - If they are for professional advancement, what roles are available to educators who aspire to greater responsibility but wish to maintain their connection to classrooms?
    - How are they connected to improving student learning?
    - · What is their "value-add" for educators and students?
- » Begin small. "Road-test" the system and evaluate all the components. Roll out a microcredentials system gradually and carefully with a clear purpose. Choose a few LEAs that have already begun to fold micro-credentials into their professional learning options.<sup>20</sup>
- » Forefront equity. Access for educators in LEAs that serve low-wealth communities should be a commitment in the roll-out. The system must be accessible to educators regardless of zip code.
- » Preserving the core purpose of micro-credentials. A pervasive concern is that micro-credentials will be absorbed into the existing professional development policy that confers license renewal based on the accumulation of "clock-hours" credits rather than demonstrated competency. Rather than arbitrarily converting micro-credentials into CEUs, educators should be allowed to earn a "predetermined number of relevant, vetted, high-quality MCs to be used to fulfill requirements outright without any conversion into credit hours."<sup>21</sup>

The author of a major study of micro-credentials who reviewed an early draft of this document wrote:

"A major reason that professional development has a bad rep is because it's viewed as a compliance activity, and that's because it IS a compliance activity as part of license renewal. This (point) is critical to the success of micro-credentials as part of teacher professional development and if it isn't paid attention to, I will go on record as saying that micro-credentials won't have the impact that is hoped for in North Carolina."<sup>22</sup>

» Leverage technology. In addition to making micro-credentials available online, other supports such as those for guidance in using micro-credentials, coaching, multiple learning resources, and virtual professional learning communities can be made readily accessible. The affordances of technology underlie the flexibility and convenience of micro-credentials for educators who are typically under various time-pressures.<sup>23</sup>

#### Earners

- » Micro-credentials have a strong appeal for educators. Earners endorsed the possibility of alternatives to conventional "clock-hours" professional development. Micro-credentials are viewed as more valid means of determining career advancement and pay raises as well as more personalized and flexible to accommodate teachers' schedules and learning needs.<sup>24</sup>
- » Offer incentives to educators. These can be stipends and credits toward career advancement that leads to new roles and compensation increases as well as professional recognition. Digital badges that are awarded for earning micro-credential stacks include data such as the rubrics used to evaluate evidence of competency. This affordance of badges facilitates transportability and transparency.<sup>25</sup>
- » Guidance for teachers in essential. Many teachers will need assistance in navigating the microcredentials system, including identifying appropriate micro-credentials, collecting, organizing, and annotating evidence of the target skills, and finding colleagues.<sup>26</sup> Micro-credentials in the absence of strong supports are unlikely to produce the desired outcomes. A leader of a pilot study of micro-credentials in North Carolina cautioned:

"Many teachers (in our experience) haven't had much experience with self-directed learning and have appreciated having a very structured framework to scaffold them through the process. The micro-credentials are a critical component of the self-directed learning process, and our teacher participants have appreciated that the MCs they're completing for our program have been combined with a self-assessment tool, clearly defined goals, and ongoing reflection. The transition to using MCs will require a culture shift in teacher professional learning (by everyone)."

As this quotation suggests, ongoing reflection is a key to maximizing learning.<sup>27</sup> Earners report that the micro-credential process caused them to reflect on their practice and improvement.<sup>28</sup>

- » Collaboration with colleagues enriches the experience and increases success. Evidence shows that teachers prefer professional development that allows them to work in learning communities on common goals. Some evidence also shows that schools that integrated micro-credentials into their professional learning most successfully were those with the highest number of functioning learning communities.<sup>29</sup>
- » Principal understanding and support are essential. Principals need to ensure that educators have the time and support needed time to develop and document the skills that microcredentials require. Dedicated time for teachers to work with colleagues on micro-credentials or other self-directed learning activities increases the likelihood they will complete the microcredentials process.<sup>30</sup>
- » Earners are motivated to earn more. Educators who have experienced earning microcredentials feel their practice improved, and they are interested in additional opportunities to earn micro-credentials.<sup>31</sup>
- » Evidence of positive impacts on educator practice and retention is growing. Preliminary data suggest that micro-credentials have positive effects on teacher practice, their sense of efficacy, and retention.<sup>32</sup>
- » Changes are required in professional learning policies: To be treated as opportunities for educators to develop and demonstrate the new competencies or skills they have mastered requires changes in the current professional development policy which credits "clock-hours" rather than demonstrated competency.

#### Assessors

» Assessor should be independent of the providers, if possible. In some cases, commercial providers also assess the evidence. The process of ensuring that scorers all use the same standards for evaluating evidence and determining competency is critical but time consuming. Independent assessors reduce the threat of conformation bias—this is, "seeing what they want to see." Independent evaluation of evidence helps ensure everyone—educators, LEAs, policymakers, and the public—that the scores are valid, reliable, and potentially educational.<sup>33</sup>

#### **Evaluation & Research**

» Data on educators' experiences with micro-credentials, their success rates, and their perceptions of the impact that earning micro-credentials has on their practice and their students' learning need to be collected from the beginning. In addition, rigorous empirical research is needed to learn whether micro-credentials have the impact that advocates claim. These data should be made available to providers, assessors, earners, principals, PEPSC and the SBE.



# What would a supportive infrastructure for a statewide micro credential system include?

New America, an organization playing a leading role in micro-credential policy, recommends as an initial step identifying the roles and positions that have the greatest impact on student success. In addition, identifying the skills required for these roles and positions, such as teacher-leaders, would guide decisions about which micro-credentials to promote. To incentivize educators who wish to pursue these micro-credentials or demonstrate their competency would receive increased compensation.<sup>34</sup>

# Building a trustworthy system of micro-credentials for NC Educators

- 1. The NCSBE should authorize the State Superintendent and NCDPI to continue developing and implementing a statewide initiative for micro-credentials.
  - 1.1 A well-designed, research-based, state-recognized system of competency based microcredentials that is integrated with other human capital policies should drive teacher quality, retention and ultimately improve student outcomes.
- 2. The NCSBE should recognize high quality or effective micro-credentials as another option for professional learning.
  - 2.1. Initially, to make micro-credentials appealing and low-pressure, micro-credentials should be an option for evidence of professional learning. After micro-credentials have been empirically proven to improve teacher practice and student learning, they could be officially recognized as an alternative to Praxis content exams and/or the edTPA. Unless this happens, micro-credentials will likely be pulled into the current route based on "clock hours" that encourages a "compliance" mindset. However, they should not become a substitute for completing an educator preparation program.<sup>35</sup>
  - 2.2. Currently, the only option available to LEAs that offer micro-credentials is to convert them into CEUs. No state-wide policy exists to regulate this exchange. As others have recommended, policymakers must recognize micro-credentials as an option to license renewal in addition to the conventional "clock-hours" pathway.
  - 2.3. LEAs should recognize state-approved micro-credentials as part of educators' professional learning record and credit toward professional progression, including license renewal and faculty leadership roles with commensurate increased compensation.
- 3. The North Carolina SBE should adopt a definition of micro-credentials and quality assurance standards such as those developed by the Micro-credentials Partnership of the States (MPOS) and informed by the MPOS National Advisory Group.
  - 3.1. All stakeholders need to be assured that micro-credentials are evidence-based and aligned with the national and state teaching standards.
  - 3.2. This is critical to the legitimacy and portability of micro-credentials across LEAs—and, potentially, across cooperating states.
- 4. The NCSBE should seek funding from the NC General Assembly for NCDPI to create a process to evaluate the quality of micro-credentials and establish a clearinghouse of approved micro-credentials.
  - 4.1. Establishing micro-credentials as trustworthy signifiers of competency is essential if they are to be transportable and regarded as legitimate. To assure NC educators of the quality of micro-credentials from all providers, both a process for evaluation and a clearinghouse are needed—the latter, to host those that meet InTASC Standards developed by the CCSSO and the NC Professional Teaching Standards.

- 4.2. NCDPI should encourage a variety of micro-credentials providers to develop and offer microcredentials—but vet all micro-credentials regardless of source.
  - 4.2.1. DPI should provide online guidance to developers/providers including the microcredentials clearinghouse criteria and rubric to evaluate submissions.
  - 4.2.2. In the initial roll-out, the number of micro-credentials offered should be limited and focused. This will make the roll-out more manageable and simplify the research design.
  - 4.2.3. Going to scale will involve both breadth and depth. Breadth addresses an anticipated increase in the number of users. Depth addresses an increase in the number of high-quality and vetted micro-credentials. Because educator choice is a critical and defining feature of micro-credentials-based professional learning, an array of high-quality providers is essential to a strong infrastructure.
  - 4.2.4. Teachers and LEAs may choose to use micro-credentials that are not part of the DPI Clearinghouse. Individual educators or LEAs may choose to pursue skills that are locally valued. They can submit these micro-credentials to DPI for vetting. To be used for license renewal of career advancement, micro-credentials and stacks must first be approved by the NCSBE and have DPI approval.
  - 4.2.5. DPI in collaboration with NCCAT should offer annual "design labs" for potential providers to guide them as they develop new micro-credentials to ensure the resulting product meets the MPOS quality standards and align to InTASC.
- 5. The NCSBE should seek funding from the NC General Assembly to fund independent evaluations and research to ensure that micro-credentials are being implemented and supported as designed and that they are producing the desired improvements in teaching and learning.
  - 5.1. To establish trust in micro-credentials and to ensure that the system continues to improve, evaluation data are critical. Longer-term, rigorous research is also required to determine the impact that micro-credentials have on teaching practice and retention and, ultimately, on student learning. This information is critical for NC decision-makers who are responsible for funding future professional development activities.

# Developing the infrastructure required to establish micro-credentials as trusted and effective professional learning options ...

- 6. The NCSBE should seek funding from the NC General Assembly to create the organizational infrastructure required for an effective micro-credentials professional learning option.
  - 6.1. Merely making high-quality micro-credentials available through a clearinghouse is not sufficient. NCDPI will require additional resources to create the infrastructure needed to establish a micro-credential as another option for professional learning. This includes:
    - staff to oversee the development and implementation of a micro-credential clearinghouse;
    - human and technical support for earners; and
    - an online learning management platform such as Canvas to provide guidance, learning resources, and user-friendly portals for submitting evidence.
    - Online access to these supports is especially critical for educators in small and more remote LEAs.

#### 7. The NCSBE should support a staged roll-out of the micro-credentials initiative.

- 7.1. Start small, go slow, and communicate. A gradual roll out of a micro-credential system will increase the likelihood of success. This approach allows time to:
  - communicate through multiple channels the purposes and rationale for micro-credentials to educators, educational leaders, policymakers, parents, and other stakeholders;
  - capitalize on existing assets and surface and fix "bugs" that will inevitably arise in any new system; and
  - generate the evaluation and research data needed to test the effectiveness of micro-credential.

# 8. The NCSBE should create the "Transforming Educator Learning in NC" (TEL-NC) Advisory Committee.

- 8.1. This enables coordination of efforts that various organizations and institutions have underway as well as "crowdsourcing" collective learning from experience.
- 8.2. Such a committee should be tasked with developing a plan to fully implement microcredentials into the educator human capital system.
- 8.3. The committee should include representatives from NCDPI, PEPSC, NCCAT, early-adopter LEAs, RTI, Friday Institute, NBCT educators, ETLP-Appalachian State University, NC Partnership for Micro-Credentials, teachers and administrators, NC entities with micro-credential experience and other stakeholders. If deemed necessary to improve educator learning and student performance, the Committee would recommend policy changes to PEPSC.

# 9. The NCSBE should seek funding from the NC General Assembly for NCDPI to hire a Project Consultant to collaborate with NCDPI in overseeing the implementation of the initiative.

9.1. As a new state initiative, new funding is needed to develop and ensure fidelity of such a broad reaching initiative. Currently, NCDPI does not have the capacity in-house to support and oversee the proposed initiative. A "single point of contact" is critical to the success of the initiative.

# Ensuring that educators have the supports needed to maximize the value of earning micro-credentials...

10. The NCSBE should seek new funding from the NC General Assembly to provide additional resources to LEAs and to support organizations such as NCCAT to ensure that the technical and human assets needed to maximize the value of micro-credentials are available.

For educators to get maximum value from micro-credentials, they require guidance to: (1) identify their learning needs, appropriate micro-credentials, expected performance, and learning resources; (2) apply new skills in their classrooms and in collecting and organizing evidence of competency; and (3) submit their portfolio of evidence. If assessors determine that the evidence is inadequate based on a scoring rubric, coaches are needed to help educators improve their performance and evidence portfolio for re-submission. Trained assessors are vital to the trustworthiness and validity of micro-credentials.

To maximize the potential of micro-credentials to strengthen teacher development and practice, educators need evidence-based professional learning supports, such as:

- 10.1. Coaches and Guides: Educators who need help to self-assess, set PDP learning goals, and identify learning resources and opportunities to improve their skills and performance data should be connected to trained coaches (in-person or virtual) who have demonstrated expertise in the appropriate subject matter or developmental level.
- 10. 2. Collaboration Hubs. NBPTS certified teachers often identify, as the most powerful experience in the certification process, opportunities to work with colleagues on assembling their submissions. In some places, "Transformational Hubs" have been created to bring together certification aspirants. NCCAT could host such hubs — virtual and in-person — for educators working on micro-credentials.
- 10. 3. NCB Candidate Support Group. These educators should be encouraged to include microcredentials as part of their preparation.
- 10. 4. A partnership between NCDPI, NCCAT and other teacher development organizations to select, train, support and compensate coaches and assessors.
- 10. 5. Identification of a pool of initial assessors from NBCTs who have been trained as national assessors as well as expert teachers who have served as assessors for the current offerings of micro-credentials in the State.
- 10.6. A team of NBCT-trained assessors to design the assessor training curriculum, including bias training, using scoring rubrics, identifying valid evidence, and templates for providing specific feedback.
- 10.7. A process for ensuring inter-rater reliability. This should be part of the overall evaluation and research design, including initial double scoring of some submissions. This is especially true for new micro-credentials the year they are first offered.
- 10.8. Support assessors. Because they perform a task critical to the legitimacy of micro-credentials, assessors may need "re-calibration" periodically to ensure rubrics are applied fairly and without bias. NCCAT would need to create a timeline and schedule for assessors, including times for a "help line."
- 10.9. Compensate assessors: This is not volunteer work. Current providers pay assessors \$15-20 per hour, consistent with pay for assessors for components of National Board Certification. The State should consider additional compensation for assessors who take on leadership roles in their schools.

#### 11. The NCSBE should consider providing additional funds needed to support incentives

- 11.1. For micro-credentials to become a trusted integral part of the professional learning ecosystem will require clear incentives.
- 11.2. Educators have multiple demands on their time. Unless they see a professional and compensatory advantage to pursuing micro-credentials rather than standard professional development activities, they are highly unlikely to invest the additional time and energy that micro-credentials require.
- 11.3. Potentially, LEAs might offer modest stipends to recognize the additional time educators must invest. Stipends have proven to be effective in incentivizing educator to pursue micro-credentials.
- 11.4. This issue should be on the agenda of the TEL-NC Advisory Committee.

#### How the State could capitalize on existing assets in rolling out a state-supported microcredentials system:

NC is fortunate to have multiple assets that could be leveraged to create a state-sponsored microcredentials system.

- **DPI-supported Digital Learning Initiatives grants**: The 23 LEAs that received funding and have been developing or using micro-credentials for several years. Their collective experience and knowledge are a valuable resource.
- North Carolina Center for the Advancement of Teaching: NCCAT is the primary state-supported provider of professional learning for NC educators. It offers self-paced learning modules that share features with micro-credentials as well as in-school and NCCAT-based residential courses and trainings. Because NC educators trust and value NCCAT and its pool of veteran teachers, it could potentially play a major role in a micro-credentials system. It could provide trained assessors, guides to NC's professional learning system, and coaches to assist educators in successfully earning micro-credentials.
- A large pool of National Board Certified Teachers (NBCT credential): With over 23,000 NBCTs, NC has more NBCTs than any other state. The process for earning NBCT credential requires teachers to document their skills across a range of instructional competencies. Having successfully completed this process, they are uniquely qualified to both evaluate the evidence of others and provide coaching on improving skills and documenting competency.
- State-supported educator learning platform: Currently, Canvas, a learning management system (LMS) is available to educators in all NC public schools. Canvas provides free learning resources including videos of best practice and courses. It also has the potential to house a clearinghouse of State-vetted micro-credentials and a system for earners to submit their evidence portfolios and have these evaluated.
- UNC System institutions and the NC Independent Colleges and Universities: Some higher education institutions are already involved in providing micro-credentials and filling other roles in support of micro-credentials such as instructors and other learning resources. For instance, the <u>Friday Institute</u> at NC State University has offered micro-credentials for several years and collected evaluative data on earners' experiences.
- Research on micro-credentials and evidence-based supports: The Empowering Teacher Learning Project at ASU is in the second year of a 3-year federally funded research project to learn more about the impact micro-credentials have on teacher practice and retention and student learning. Findings from this rigorous study can help us learn more about the use and value of micro-credentials as compared to more traditional professional development. ELT could also: help DPI vet microcredentials; help teachers with self-assessment and Professional Development Plans; guidance on micro-credentials; provide learning resources; train guides and coaches; and help LEAs align microcredentials to the process of achieving NBCT status.
- Micro-credentials Partnership of the States (MPOS): The experiences and activities of the MPOS states (Arkansas, North Carolina, South Carolina, and Wyoming) convened by digiLEARN in partnership with the RTI International are valuable resources. MPOS has agreed on a common definition of micro-credentials and developed quality assurance standards that the participating states will be piloting in 2023.
- Education-focused NGOs and foundations: NC also hosts non-government organizations that provide expertise and funding to support education—specifically, to strengthening and retaining a highly qualified teaching force. Among these are: digiLEARN, RTI, and the Oak, Belk, and Z. Smith Reynolds foundations.

On the following pages, we offer suggestions about how these assets might be deployed as a microcredentials system is rolled out.

# Statewide Initiative for Micro-credentials

This plan should be reviewed annually and adjusted based on lessons being learned with implementation.

#### Stage 1: Getting Prepared (September–December 2023)

Action 1: The NCSBE should authorize the State Superintendent and NCDPI to continue developing and implementing a statewide initiative for Micro-credentials (MCs).

Who: NCSBE | State Superintendent of Public Instruction | NC Department of Public Instruction

 The NCSBE staff and NCDPI staff have been involved in several initiatives including the NC Partnership of Micro-credentials and Micro-credentials Partnership of States to learn more about MCs and are now positioned to begin a statewide MC effort in earnest.

• A new state initiative, especially one as complex as integrating MCs into teacher professional learning, requires thoughtful and clear steps to a phased in approach. An approach that builds on state assets, guided by a well-developed research model to inform about the effectiveness of MCs on teacher practice and student learning and identifying changes needed to laws, rules or regulations to support its successful implementation.

- New initiatives need dedicated staff and resources that are not currently part of the organization's budget.
- As a new initiative, the SBE should seek a new appropriation in the biennial budget to support the work.

#### 2023-2025

Short term-contracted consultants with expertise in developing and implementing statewide policy initiatives and research design using rapid analytics and knowledge and experience in MCs (Cost: \$350,000)

2025 and beyond New full-time staff dedicated to developing and supporting the implementation of the MCs statewide. Costs to be determined by final plan.

#### Action 2: The SBE should Create **"Transforming Educator Learning in NC" (TEL-NC)**

Advisory Committee that includes DPI, PEPSC, NCCAT, early-adopter LEAs, practicing teachers and administrators, RTI, Friday Institute, NBCT educators, ETLP App State, and other MC developers and stakeholders, i.e. the NC Partnership for Micro-Credentials. This group would meet monthly through Stage 1.

WhO: NCSBE | State Superintendent of Public Instruction | NC Department of Public Instruction

- TEL-NC should develop an understanding of the work done thus far in NC with MCs. This also includes the work with the MPOS in developing a definition for MCs and Quality Assurance Standards for MCs.
- Define success for roll-out: What would it look like?
- Gauge the interest, capacities, potential roles, and resources of likely partners. Enable "crowdsourcing"—What has been learned about MCs and how to implement MC initiatives.
- Develop expectations for consultant(s) to coordinate roll-out

Project consultant and DPI contact included as part of \$350,000 budget.

Meeting expenses including stipends and travel reimbursement if meeting in person.

#### Action 3: The Project Consultant and DPI contact should develop a workplan for implementation of MCs.

#### WhO: Project Consultant | DPI contact

The workplan identifies the goal(s) of MCs initiative for NC with clear objectives including the role of the work team (consultant, DPI contact and others needed to do the work) with clear objectives and timeline.	Included
<ul> <li>The workplan will include the role of the TEL-NC</li> </ul>	as part the proposed
<ul> <li>The workplan will utilize state assets, the development of a research model to inform about the effectiveness of MCs on teacher practice and student learning and identify changes needed to laws, rules, or regulations to support the successful implementation of MCs.</li> </ul>	\$3 <i>5</i> 0,000 budget.

ACTION 4: Define roles that organizations will play in the system, i.e., NCCAT seems a logical source of educator supports as well as recruiting and training assessors, (especially from the pool of NBCTs) and Friday Institute and others in IHE could provide assessors as well as evaluators and researchers.

#### WhO: TEL-NC | GC Consultant

- Currently, no "system" for MCs exists.
- Many LEAs offer MCs, some locally created and some from commercial providers.
- Assessors are typically provided by the commercial providers. Guidance and coaching differ from LEA to LEA.

#### Action 5: Recruit and hire consultant(s) as the single point of contact and coordinator(s) for roll out. Will convene and report to the TEL-NC AC.

Who: Contracted consultants with expertise in developing and implementing statewide policy initiatives, research design using rapid analytics and knowledge and experience with MCs

- State agencies including DPI are experiencing demands beyond their current capacities.
- Individuals with expertise in MC systems are required to coordinate the roll-out.

Two-year consulting contract

• Educators need a single point of contact for initiative and programs.

#### Action 6: Continue collaboration with MPOS to develop quality assurance standards and potential further collaboration

#### Who: MPOS NC contacts

All MCs from whatever provider must meet the MPOS Quality Standards if they are used for professional learning and/or compensation increases and are to be transportable.

Action 7: Create a process for vetting MCs

Who: Consultant | DPI | NC entities with MC experience

A trustworthy system requires that earners, recognizers, and policymakers have faith that MCs are research-based and standards-aligned

Action 8: Create a digital clearinghouse platform for accessing vetted MCs, identifying learning resources, and general guidance. Inventory MCs available from providers in NC — LEAs, Friday Institute, others.

WhO: Consultant | DPI | NC entities with MC experience

NC LEAs and others have created dozens of MCs. Needed is a catalogue of vetted & approved MCs that are monitored regularly and easily accessible

Time for DPI Canvas technicians

Action 9: Create NCMC National Advisory Council		
WhO: Project Consultant   DPI contact		
Advice from national experts is invaluable in designing and evaluating the system. Would meet four times yearly to review evaluation data and offer advice.	TBD (may agree to volunteer due to interest)	

#### Stage 2: Launch (January–December 2024)

Action 1: Create RFP and hire Independent Evaluator to collect, analyze, & report data on how the system is working.	
Who: Project Consultant   DPI contact	
Timely and regular feedback from everyone (providers, assessors, earners, issuers) is necessary to continually improve the system.	Three-year contract for evaluator

#### Action 2: Recruit a sample of 10 LEAs from the NC Digital Learning Initiative grantees. Sample should include small and large, rural and urban/suburban LEAs and low-wealth and demographically diverse districts.

V	V	ho:	DPI		Consultant		NCCAT
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Stipends for

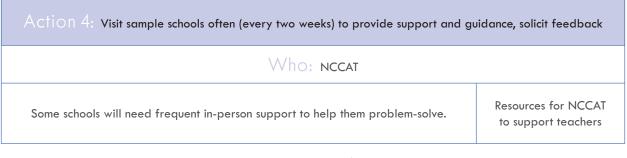
earners in

sample LEAs

- A sample of 10 LEAs would constitute a manageable roll out of the system. This would surface "bugs" before expanding further.
- Sample LEAs would agree to use the MPOS Quality Assurance Standards to assess any MCs they are using.
- Sample LEAs would agree to use MCs, not CEUs, as the currency for license renewal and career advancement.

#### Action 3: Visit sample schools to introduce MCs and available support resources.

Who: DPI   Consultant   NCCAT   NC entities with MC experience	
<ul> <li>Teachers and principals in the sample schools will need information about the MC system and opportunities to ask questions.</li> </ul>	Travel
<ul> <li>Some LEAs and schools will need help merging MCs into their existing professional development opportunities.</li> </ul>	expenses NCCAT
<ul> <li>Professional Learning Communities are well suited to supporting educators who wish to earn MCs.</li> </ul>	support



Action 5: Provide online guidance in using the MC system

Who: DPI Canvas technicians   ETLP	
DPI Canvas specialists will need to provide instructional videos for accessing MCs, finding learning resources, submitting evidence, & coaching.	DPI Canvas technicians' time

Action 6: Recruit and train MC assessors and coaches		
Who: Expert consultants   NCCAT   NC entities with MC	experience	
A program to train assessors should be developed or adopted, i.e. NBCT Assessors must have demonstrated expertise and undergo training and calibration. This is necessary to assure everyone of the fairness and validity of the process and the MCs.	Consulting fees and NCCAT personnel time; stipends for assessors	

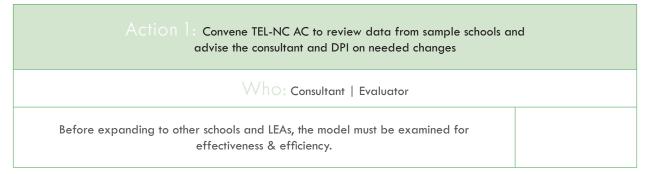
Action 7: Monitoring system roll out			
Who: DPI Canvas technicians   Consultant   NCCAT MC specialist			
Oversight of the clearinghouse and the support system will require constant monitoring.	DPI Canvas technicians' NCCAT MC specialists' time		

Action 8: Collecting evaluation data	
WhO: Evaluator	
The evaluator will need to: monitor traffic on Canvas and collect data from educators at the sample schools and assessors, coaches, etc.	Evaluator
The evaluator must regularly communicate findings to the TEL-NC, the National NCMC Advisory Council, and various stakeholders.	contracted time

Action 9: Convene regular virtual meetings with sample school principals and teachers	
Who: Consultant   Evaluator	
Regular meetings with sample school educators will generate information about how to improve the system.	Evaluator contracted time
Action 10: Create RFP and hire an independent research	er

WhO: Project Consultant   DPI contact		
Research is needed to learn the impact of MCs on teacher practice and retention and student learning. (The ETL project at App State provides a model.)	Funding for research	

#### Stage 3: Course Correcting (January–June 2025)



Action 2: Based on TEL-NC advice and Evaluator progress report, adjust the system

WhO: Consultant | Evaluator

Like all new systems/initiative, will need to "debug" the components

# Action 3: Report to the NCSBE on progress of the MC Initiative Startegies WhO: NCPDI Project Coordinator The report should includes any changes required to policies, rules and regulations needed for initiative implementation including budget and organizational needs.

#### Stage 4: Expansion (September–December 2025)

Action 1: Recruit additional 20 LEAs	
Who: DPI   Consultant   Evaluator	
Need to gradually add more schools from across the state.	Additional funding to support more schools, including stipends

#### Action 2: Orientation for educators in added schools

Who: SPOC | Educators from the "first 15"

As schools come "online," educators will need to learn about MCs and the initiative.

Action 3: Collect	evaluation data
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WhO: Evaluator

Data on the operation of the delivery system as well as the experience of schools and	Continuing
educators needs to be collected, analyzed, and reported.	contract

Action 4: Preliminary research report	
WhO: Researcher	
By this point, the researcher should have enough data to produce a preliminary report on the impact that MCs are having on teachers and students.	Continuing contract

Action 5: Report to the NCSBE on progress of the MC Initiative Strategies	
Who: NCPDI Project Coordinator	
The report should includes any changes required to policies, rules and regulations needed for initiative implementation including budget and organizational needs.	

#### Stage 5: Fully Merged (September 2025–June 2026)

	Action 1: Make system available to all NC schools	
	Who: dpi	
A tho	oughly tested system should be in place that is accessible to every educator in NC.	

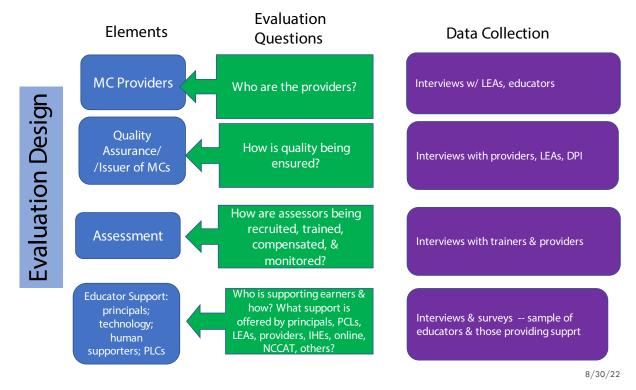
Action 2: Continue monitoring all components		
Who: dpi-spoc		
<ul> <li>MC will need to be continually vetted for quality as more are added to the clearinghouse.</li> </ul>		
<ul> <li>The technology will need continuing refinement and fixes.</li> </ul>	SPOC time, training	
• Assessors will need to be periodically re-calibrated to ensure fairness and validity.	assessors	
<ul> <li>Additional assessors and supports for educators such as coaches will require orienting and training.</li> </ul>		

Action 3: Continue collecting evaluation and research data	
Wh0: Evaluator   Researcher	
Valid and reliable data are essential for maintaining the effectiveness of the MCs and the delivery system.	Continuing contracts

Action 4: Change the consultant SPOC into a regular position at DPI responsible for coordinating and overseeing the MC system		
Who: dpi		
A specialist in professional learning will be needed to oversee the system and merge it with the larger professional learning environment and the Human Capital System.	1 full time employee position + half time administrative assistant	

#### Appendix 1: Possible Evaluation Design

(Note: The research design below is based largely on the work currently underway as part of the Empowering Teacher Learning Project at Appalachian State University.)



#### Appendix 2

(Note: The research design below is based largely on the work currently underway as part of the Empowering Teacher Learning Project at Appalachian State University.)

#### Research for Continuous Improvement

Research Questions	Design	Data	Analysis
Research Question #1: What effects does earning MCs have on individual & collective teacher efficacy, classroom practice, & retention? Research Question #2 What effect does exposure to educators who have earned MCs have on student efficacy, engagement, & academic progress?	3-Year Semi-experimental Sample: 15 treatment & 15 control middle schools drawn from 10 LEAs in roll- out (randomized as feasible) Data collection schedule: Pre-treatment, semi- annual, post-treatment	Teachers/EducatorsPre/Post ClassroomVideoTeacher Efficacy SurveyCollective EfficacySurveyPrincipal observation(pre/post)Classroom observationStudentsSelf-EfficacySurveyClassroom ClimateSurveyEOGs	Qualitative: • Video analysis • Observation analysis <u>Quantitative</u> • Tests of significance of differences (ANOVA) • Regression analysis (if warranted)
			8/30/22

#### Appendix 3

The authors wish to acknowledge and thank the following individuals who graciously gave of their time to speak or correspond with us and several of whom offered valuable responses to earlier drafts of this document:

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