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# **Harnessing Micro-credentials for Teacher Growth: A Model State Policy Guide**

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We are dedicated to renewing the promise of America by continuing the quest to realize our nation's highest ideals, honestly confronting the challenges caused by rapid technological and social change, and seizing the opportunities those changes create.

## **About Education Policy**

We use original research and policy analysis to help solve the nation's critical education problems, crafting objective analyses and suggesting new ideas for policymakers, educators, and the public at large.

## **About PreK-12 Education**

The PreK-12 initiative works to ensure that all children attending public elementary and secondary schools have access to and receive high-quality educational experiences, with a particular emphasis on improving equity and outcomes for traditionally underserved students.

## **Contents**

Introduction	5
Model State Policy Proposals	8
Teacher Advancement	8
License Renewal and Ongoing Professional Learning	9
Model Phase 1 MC Initiative Rollout	13
Phase 1A: Educator Advancement	13
Phase 1B: License Renewal	14
Phase 1C: Ongoing, Personalized Professional Learning	16
Conclusions and Recommendations	18
Final Considerations	22

## Introduction

Even prior to the emergence of COVID-19, interest in becoming and remaining a teacher was declining, and local educational agencies (LEAs) increasingly have faced difficulties in finding qualified teachers.<sup>1</sup> As with many intransigent public issues, pinpointing solutions is complex. But one thing is clear: current approaches to helping teachers engage in ongoing skill development, and to equitably rewarding teachers with particular skill sets aligned with advanced career opportunities, are often woefully ineffective<sup>2</sup>—and sometimes even non-existent.

Micro-credentials (MCs) are a recent addition to the mix of solutions being proposed to address these issues. Like many buzzwords in education, this term has been used to describe a variety of different activities related to the recruitment, development, and retention of educators. For the purpose of consistency and clarity, New America defines an educator MC as follows: ***A verification of a discrete skill or competency that a teacher has demonstrated through the submission of evidence assessed via a validated rubric.*** Educator MCs are similar to other credentials, like degrees or diplomas, in that they provide public recognition and signaling of knowledge and/or skills held, but they differ in their format and scope: a demonstrated application of one very small, specific competency in practice.

Micro-credentials first began to take hold in the technology sector of the U.S. economy around 2011. As employers' need for workers with digital coding skills expanded rapidly, many individuals became interested in becoming coders.<sup>3</sup> Coding boot camps and other short-term training programs proliferated to help build the necessary skills, but candidates still needed a way to demonstrate these skills to employers in order to land a job. MCs arose as the solution to this problem, because individuals could earn them by demonstrating, via a performance assessment, the application of a discrete skill in a real-world or simulated setting.

A variety of organizations—those providing the boot camps, software companies that developed coding language, and even would-be employers—lined up to offer MCs. Employers placed value on the respective MCs based on whether they could ensure that the MC assessment process was high-quality (i.e., a reliable and valid measure of skills/knowledge held), or they trusted the issuing organization to only bestow MCs on individuals who had truly demonstrated the competency being assessed. The credential earned was typically shared as a “**digital badge**” that incorporated verifiable data about the performance assessment.

There are three key takeaways from micro-credentials' origin story:

1. MCs are a way for people to gain recognition and value for holding specific, narrow competencies that are relevant to employment in their current or intended field even if they do not hold a formal credential, such as a college degree or technical certification, in the field.
2. While MCs may be offered in conjunction with professional learning opportunities, their primary function has not historically been as a tool for acquiring new skills and knowledge.
3. People earn MCs by engaging in an assessment of a small, discrete demonstrated competency.

Digital Promise saw the potential for applying MCs in education and joined with BloomBoard to introduce the first micro-credential platform for K-12 educators in 2015. Since then, the number of entities offering MCs to engage teachers in professional learning and offer career growth has multiplied exponentially. As of fall 2020, at least 26 states had begun to use—or experiment with using—MCs to help educators meet requirements for professional development (PD), license renewal, new endorsements, and/or advancement in some fashion.<sup>4</sup>

There are valid reasons for the enthusiasm around high-quality MCs' potential for educators: they hold potential to move the profession toward a more competency-based model of identifying and rewarding knowledge and skills. But, as with any single tool on which the hope of education improvement is hung, there is also reason for caution. In particular, the number of entities providing offerings labeled “micro-credentials” is growing rapidly, and many do not reflect the definition of educator MC outlined above. And even among those that do, many are still not high-quality, as they do not fully align with best practices.<sup>5</sup> As such, New America has been working to identify the potential and challenges of educator MCs in order to help educators and decision-makers at all levels make choices that will meet educators' needs, and even more importantly, the needs of the students they serve.

This brief draws upon its companion report, *A National Review of Early Best Practices*,<sup>6</sup> as well as New America's previous work on educator micro-credentials,<sup>7</sup> to outline a set of model policy proposals for states to effectively incorporate *high-quality* MCs\* into educator policies and practices for ongoing PD, license renewal, and advancement.

These proposals do not preclude other evidence-based, high-quality systems of educator PD and advancement that may already exist. Rather, this brief should be read first as an acknowledgement that in vast swaths of the educator human capital ecosystem—such high-quality structures and programs do not exist, and second, as a demonstration of how systems could be strengthened and supported, with the implementation of MCs as part of the solution.

*\*Note: From hereafter, all references to educator MCs in this model policy guide assume that they have been adequately vetted, and ensured to be of high quality. For more details on the elements of a high-quality educator MC, see [New America's companion research report](#).*

# Model State Policy Proposals

## Teacher Advancement

### *Goal*

Create a human capital system that rewards teachers for taking on advanced roles while remaining in the classroom or in other non-administrative school leadership roles based on demonstration of competence in relevant skill areas, effectiveness, and overall fit.

### *Issue to Solve*

Often, schools and local education agencies (LEAs) have no clear, consistent way to determine or assess the relevant skills needed for effective teacher leadership, so instead they rely on less impactful criteria, such as years of experience or advanced degrees to identify individuals for these roles.

### *Proposed Solution*

The state should develop and pilot a list of clearly defined advanced teacher roles and designations that would bestow defined responsibilities, recognition, and rewards, including a significant bump to base salary. The goal should be to create a career lattice within the profession, as countries with high-performing education systems do,<sup>8</sup> that would have some applicability to all LEAs in the state. Specific MCs, or a series of MCs, could lend themselves well as an option for fulfilling some aspects of eligibility for advanced roles, or perhaps even full pathways to advancement.

### *Recommendations*

A set of state-designed and approved descriptions of advanced teaching roles and the responsibilities necessary to attain them would help promote portability across LEAs. The state should start by assessing which roles and designations are going to have the most impact on students, in part by surveying LEAs and by looking at data surrounding the advanced roles/designations already available. It can also review research and data from other states and nations that have done work in this area.<sup>9</sup>

To determine the best approach(es) for demonstrating fit for a role, the state entity(s) responsible for educator talent and professional advancement must first identify the requisite skill set and expectations.<sup>10</sup> In addition to being good practice, this approach will enable pathways to advanced designations to be delineated into required competencies that could be demonstrated using MCs. As part of this work, the state must also determine where earning specific stacks



of MCs would locate teachers within such a career lattice, and ensure it makes sense relative to other roles in the system. The system should deprioritize master's degrees as an approach to recognizing teacher advancement in salary schedules, given that these degrees, as currently configured, have largely not been found to translate into improved teacher performance or student achievement.<sup>11</sup>

Some advanced teaching roles or designations could be attained by completing curated “stacks” of evidence-backed MCs that clearly match the responsibilities of the roles in conjunction with a behavioral interview vetting process that assesses the soft skills and overall fit for the role.<sup>12</sup> Attaining these MCs would not necessarily require engaging in new learning, but could demonstrate skills teachers have developed over time, often on the job. Other roles and designations might be attained by demonstrating skill or effectiveness in other ways, such as National Board certification.<sup>13</sup> Stakeholders (including but not limited to LEAs, school leaders, and teachers) would provide input in determining the curated list of teacher leader designations, roles, and related responsibilities, and how they relate to each other within the career lattice. The state should limit the number of roles, within reason, in order to ensure portability within the state. And it should commit to “hold harmless” educators who have previously attained advanced designations or roles via other avenues.

As part of this process, states should also recommend, and help fund, substantial increases in compensation for individuals who are hired into various leadership and other advanced positions that provide teachers with increased status without becoming an administrator.

## **License Renewal and Ongoing Professional Learning**

### ***Goal***

Create an educator human capital system where there are explicit and distinct purposes for, and a clear separation between, PD that is required as part of ongoing license renewal, and the largely self-directed PD that happens as part of educators’ ongoing efforts to serve students as well as possible

### ***Issue to Solve***

Substantial behavioral science 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>14</sup> Once employees perceive a task they typically enjoy doing as something that they have to do, they begin to view their completion of the task as unrelated to their own desire, and instead as being

in response to the requirement (or in the case of an external reward, in response to the “carrot” attached to the task).

States must revisit the true purpose and ultimate objectives of both license renewal and ongoing PD processes through this lens. Despite recent attempts by a handful of states to reimagine license renewal to be more closely related to teachers’ everyday work,<sup>15</sup> it remains a high-stakes endeavor. License renewal requirements determine an individual’s ability to teach in public schools. And—because renewal requirements exist to ensure that educators can demonstrate that they continue to meet the minimum benchmarks a state deems necessary to teach—these *should be the same for every educator holding a given license*, not personalized to meet individual goals or preferences.<sup>16</sup> Ongoing personalized PD, on the other hand, serves to help teachers strengthen their individual knowledge and skills in order to better meet the needs of the students they serve. Conflating these two distinct purposes and processes can undermine the culture and perceptions around ongoing personalized PD, by turning something that is intrinsically valued by most teachers into a compliance exercise.

### ***Proposed Solution***

As Cathy Stakey, an instructional coach at South Hamilton Community School District in Iowa explained, “there is a role for both ‘PD’ (professional development mandated to teachers) and ‘developing professionally’ (chosen by teachers)....Both are necessary [to achieve certain goals], and MCs could be a natural fit for both.”<sup>17</sup> States should move to make the license renewal process and the ongoing PD processes distinct, and the way that MCs factor into each process distinct as well.

### ***Recommendations for Designing License Renewal Policies and Processes***

In most professions, license renewal processes are in place to ensure that those working in the field stay up to date with the latest research and evidence-based practice. The same should be true for educators. Licensure should be focused solely on those areas deemed by the state and LEAs as essential for addressing widespread gaps in educator skill and knowledge (often in burgeoning areas of research and/or need, like teaching in a virtual environment, promoting social-emotional learning, or engaging in culturally responsive pedagogy).

Such an approach keeps the focus of license renewal on ensuring that baseline skills and knowledge reflect the most recent, highest quality evidence and approaches, since renewal is a compliance-focused process. However, LEAs should play a key role in determining what the essential skills and knowledge are for their educators (with these skills being differentiated by role), with the state providing guidance and oversight.

MCs could be used as a tool to measure competency in these essential areas.

**Instead of placing value on the time spent engaging in license renewal**

**activities, the MC process would place value on ensuring that individuals know and are able to incorporate key concepts and skills into their practice.** When data highlight particular areas of practice to be ones of importance and/or need, the state might promote completing a stack of MCs in this area to build a stronger skill base, as Tennessee did, for example.<sup>18</sup> The list of MC stacks should not be static but should also not shift too quickly. A few MCs or stacks of MCs could be added or subtracted each year<sup>19</sup> as labor needs and research on best practices evolve.

A high-quality MC is a more rigorous approach to ensuring teachers are up to speed on the latest evidence and most impactful practices than most typical license renewal activities, such as attending a few unrelated workshops. As the field learns more about the criteria for high-quality, high-impact MCs, the state may consider associating differential and customized values to attaining different MCs, but for now the goal should be to have as many educators as possible begin to engage and benefit from them. To promote this goal, **license renewal policies should allow a predetermined number of relevant, vetted, high-quality MCs to be used to fulfill requirements outright, without any conversion into credit hours.** Creating a time-based exchange rate for MCs misses the opportunity for fundamental change, from time spent in a seat to the demonstration of competency—a change with the potential to positively shift the culture of professional learning as well as teacher practice and student learning.

High-quality MCs include an application and reflection process, which promote learning in and of themselves. As such, even teachers who are already skilled in particular competencies can benefit from MCs in a way that they currently do not with traditional sit-and-get workshops. A license renewal process incorporating MCs also serves to reward teachers who are early adopters of evidence-based practices, as those who already possess a given set of competencies will not have to spend the same amount of time on fulfilling relicensure requirements as those who were behind the curve.

States can also consider providing additional endorsements to teachers who go deep on one particular stack relevant to their students. For example, Delaware plans to take this approach with its 29 MCs across seven stacks focused on teaching early literacy.<sup>20</sup>

### ***Recommendations for Designing Ongoing Professional Learning Policies and Practices***

As Jennifer Carroll, activating catalytic transformation lead at Kentucky Valley Educational Cooperative, explained, “micro-credentials should be one tool in the teacher professional learning toolkit, not the entire toolkit.”<sup>21</sup> While MCs provide a learning experience because they encourage educators to curate and reflect on evidence of practice, currently, most MCs are not designed with the primary goal of providing a deep level of initial training. Instead, MCs are primarily designed

to assess a set of competencies through a process in which reflection and learning occur.

As a result, individualized professional growth plans (PGPs) that set goals for improvement and identify aligned development opportunities are a more appropriate tool for driving ongoing educator professional learning than micro-credentials alone are. These personalized PGPs can provide increased agency for educators and encourage them to seek out scaffolded professional learning that is responsive to the needs of the students and the context they work in, loosely following the approach taken by Georgia, for example.<sup>22</sup>

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Every teacher would be required to create a PGP and be presented with various options for how to fulfill them. However, the state would provide a small stipend<sup>23</sup> if teachers successfully complete a relevant MC that is part of the state's curated database, as an incentive to put their learning into practice in fulfilling their PGP. Teachers who wanted to engage in a MC outside of that database could, but it would not provide the salary stipend. The state should provide an online form where teachers could share the rationale for engaging in a MC not in the database to fulfill their individualized PGP. This could be vetted to ensure quality alignment with other MCs available in the database and added if it passed muster.

Additional details surrounding the process for PGPs would have to be worked out based on available resources and capacity, as well as other policies and practices currently in place (e.g., who would be the PGP reviewer, how would teachers arrive at growth goals and work toward attaining those goals, how would they be pointed to relevant resources, etc.). But, done well, PGPs are a high-leverage tool that has the potential to promote teacher voice and choice while also moving toward a more goal-oriented approach to professional learning.

## Model Phase 1 MC Initiative Rollout

Careful and iterative implementation of human capital policies and practices that incorporate micro-credentials enables issues to be addressed before attempting to scale up. However, it is best to try to prevent avoidable issues in initial design, communication, and implementation, as these can alienate educators and reduce trust and engagement in future iterations.<sup>25</sup>

Design steps to consider:

- Determine what the objective is and what success looks like and work backward
- Engage and collaborate with stakeholders in the policy development process to address concerns and incorporate ideas up front; in states and LEAs with teacher contracts and/or collective bargaining, bringing educator associations into the conversation early will be important
- Clearly communicate about educator MCs and their purpose
- Ensure resources are in place to support implementation during the initial rollout and beyond<sup>26</sup>

Following are three complementary, synergistic, but separate proposals for implementing the first phase of a comprehensive professional learning and advancement initiative that incorporates MCs in a high-leverage way, while avoiding potential perverse incentives and other pitfalls.

### Phase 1A: Educator Advancement

A pragmatic and effective state MC phase-in should start with educator advancement for several reasons. First, a relatively small proportion of educators are likely to be interested in or qualify for advancement, and hence this aspect of the initiative should be the easiest to get off the ground. Second, the license renewal and ongoing PD segments of the Phase 1 rollout will be smoother and more successful if there are skilled teacher leaders on hand who have already engaged with MCs to demonstrate their skills, and can guide peers through the process.<sup>27</sup> Third, advancement is the most straightforward application for educator MCs, as MCs are first and foremost an assessment tool for demonstration of competency, rather than for professional learning.

Steps for implementing Phase 1A could look like this:

1. The state conducts an analysis of the current advanced teaching designations and roles available within LEAs to determine the greatest impact and need.
2. The state collaborates with school and LEA leaders, as well as individuals currently in those roles, to map advanced designations and roles into the necessary skills and areas of candidate fit. Where applicable, skills could then be broken into discrete competencies measurable with a MC.
3. The state details a clear pathway(s) to attaining each advanced teaching role or designation, and its responsibilities and compensation. Some of these advanced designations could be attained, at least in part, through completion of a requisite set of MCs.
4. LEAs would determine whether any additional selection criteria would be used in their particular hiring processes beyond the minimum state requirements for holding the advanced teaching designation. Even if a candidate has demonstrated specific skills or effectiveness, candidate fit should always be measured with behavioral interview-style questions.<sup>28</sup>
5. The state would reassess and add new teacher leader roles over time if sufficient demand across LEAs sufficed, as the goal of this initiative is to standardize teacher leader roles to allow for in-state portability as well as transparency about what those roles entail.

### **Phase 1B: License Renewal**

Even experienced, effective teachers can struggle with adjusting to the more proactive and individualized approach embodied by most current high-quality MCs. Implementing educator MCs successfully beyond “innovators” and “early adopters”<sup>29</sup> will almost definitely require providing them with additional time, support, and encouragement. Beginning MC implementation for relicensure in a small subset of LEAs, but implementing them there at scale, serves two goals. First, it allows the state to provide deeper financial support, and more targeted technical assistance to LEAs, and second, the need to serve *every* teacher makes it more likely that LEAs develop the structures and systems most likely to result in positive long-term impacts on teacher talent.

The state would present LEAs with the following two options for teacher license renewal:

1. Current currency and requirements to earn relicensure would continue without modification.

## 2. Opting to replace continuing education units (CEUs) with MCs

LEAs that choose option 2 would no longer follow previous requirements for relicensure, including the use of a Carnegie unit threshold. Instead, LEAs would receive substantial funding and support to facilitate a change toward requiring a number of earned MCs. The number of MCs teachers would be required to earn should be reasonable (e.g., three in a five-year period) with plans to reassess in the future as MCs become better understood. The MC choice set would be specific to the goals outlined by the state and/or LEA. The options should be informed and supported by a LEA's educators.

Before a LEA proceeds with its plan for using MCs for license renewal, it would have to be approved by the state. The state would review proposals to ensure that LEAs have a clear plan to provide teachers the protected time and support needed to complete a MC and collaborate with peers and receive targeted coaching and feedback.

Beyond being exempted from completing the traditionally required PD clock hours for license renewal, the following incentives would be attached to option 2:

- Additional financial and human capital support for program implementation. LEA officials would work closely with the state to ensure that structures are in place to support teachers to be successful with MCs. This includes adequate coaching, protected hours for professional learning, the creation of collaborative professional learning communities (PLCs) with peers, and financial support. If a LEA identifies additional resources that it would need to make the program successful (e.g., additional teachers to accommodate staffing shifts, etc.), the state will enter into a process with the LEA to identify how to meet that need.
- The state and LEA would communicate and provide direct incentives to teachers to promote buy-in. Teachers would no longer have to participate in “traditional” PD, and they would receive more job-embedded professional learning opportunities and support.<sup>30</sup> Teachers should not be expected to pay for their MCs; this cost should be covered by the state. Any relicensure fees should also be greatly reduced.<sup>31</sup> An alternative approach is to ensure that the cost to complete the MC requirements is significantly less than the traditional cost for license renewal.
- Some institutions of higher education may decide to offer graduate credits for completing specific stacks of MCs if they have coursework with which the MCs are aligned.

Teachers employed in option 1 LEAs would be allowed to individually pursue MCs in place of traditional time-based credits to broaden the number of

educators who believe in the potential of MCs and who may become “earlyvangelists,” sharing the benefits of this novel approach with colleagues. It will also help provide states with more robust data about how to improve the initiative moving forward.<sup>32</sup> However, this opportunity should be time-delimited so that teachers encourage their option 1 LEAs to select option 2 in the next phase of the MC initiative rollout. Additionally, to increase the incentive for LEAs to select option 2 in both phase 1 and phase 2, the state should establish a lower relicensure value for MCs earned in option 1 LEAs than is implied for the option 2 LEAs (e.g., would need to earn five MCs in a five-year period, instead of three).

### **Phase 1C: Ongoing, Personalized Professional Learning**

The primary purpose of ongoing, personalized professional learning should be to improve individual teachers’ teaching skills, and with it, students’ learning and other outcomes. Professional growth plans (PGPs) are an approach that enables individualization of professional learning. Through the PGP process, teachers (often in conjunction with their colleagues) identify individual professional growth goals; map out a plan of activities to help achieve growth goals; and complete activities and submit evidence that the plan was effectively completed. A significant portion of states already require or encourage professional growth plans as a way to drive goal-oriented professional development. But in a large proportion of states, these requirements are only for novice and/or low-performing teachers, which inhibits a professional culture where ongoing professional learning and improvement is perceived as necessary for everyone.

Steps for implementing Phase 1C could look like this:

1. The state would develop an annual professional growth plan (PGP) process differentiated for the various educator roles in a school, and all educators would be required to develop and meet at least one growth goal each school year, depending on their needs and desires. PGPs would be driven by the individual educators themselves, but required to be developed in consultation with peers, coaches, and supervisors. The state would determine the guiding principles and process behind the PGP, including a sample plan template, training for assessors, and a sample rubric for assessing outcomes.
2. Educators would be asked to draw upon classroom, school, and LEA data and objectives in developing annual PGPs and work in consultation with local, regional, and/or statewide teacher leaders to identify strategies and processes for meeting those goals.



3. The state would create and fund teacher leader roles (potentially attained via MCs) to provide coaching and support to teachers as they develop, implement, and assess their PGPs.

The following incentives for LEAs and educators to engage with MCs would be attached to PGPs:

- Demonstrating attainment of a professional goal via a state-vetted MC would mean that an internal assessor would not have to assess the attainment of the goal.
- The state would cover any cost of enrolling and/or submitting documentation for a MC and would provide a small financial incentive attached to earning it (e.g., \$50) to help attract educators unsure of the value of, or concerned with the risk of, trying the novel MC approach.<sup>33</sup>
- A teacher who attains an MC while fulfilling an authentic individual professional growth need that is also part of an advanced teaching MC could potentially achieve two goals at once.<sup>34</sup>

## Conclusions and Recommendations

A model state policy to improve educator professional development and advancement systems, in part through the incorporation of MCs, must take a comprehensive approach to addressing current issues with these systems. The highest-potential strategy includes three separate but synergistic components related to recognizing and rewarding competency through formal advancement, utilizing license renewal as a tool to ensuring teachers hold key evidence-based competencies, and personalizing ongoing PD. These include:

- 1. Career pathways and advanced educator designations accompanied by a significant financial incentive (base salary increase) and clear, defined role and responsibilities.** Prescribed stacks of high-quality MCs could fulfill prerequisites for obtaining some of these roles.
- 2. A short list of MCs recognized for fulfilling license renewal requirements for each endorsement area.** These MCs should focus on standards and/or areas of teaching that are newer (i.e., most, if not all, educators did not learn these concepts in pre-service training) and have a positive expected impact on student outcomes, ideally based on research. Each topic area should include a stack of MCs with the ability to go deeper in a specific area. State resources should be made available for LEAs who choose this approach. The MCs that LEAs propose to focus on should be based on evidence of likely impact in their specific context, determined in consultation with educators and administrators at the school level to ensure relevance. Given that engaging in MCs is likely to result in higher value to teachers' practice than the standard activities used for license renewal, states can also incentivize LEAs and teachers to opt in by only requiring a few MCs to meet relicensure requirements.
- 3. The use of professional learning goals and/or plans to promote ongoing development.** MCs are included as one option for fulfilling aspects of the plan (and are rewarded with a very small stipend). The state will recognize any MCs in its curated database for professional learning purposes, and teachers will have the option to submit other MCs to be vetted for possible addition to the database.

Based on our research,<sup>35</sup> the following criteria must also be in place to ensure success with educator MCs:

### *Process for Ensuring Quality*

For educator micro-credentials to be successful in the long run, they must be portable between schools and LEAs, at least within a given state. This requires that educators and employers alike trust that MCs carry real value, both in impact and in currency—and the most critical condition for building that trust is that the level of quality is relatively high and consistent from MC to MC.

- Quality guidelines should be consistent to ensure that an MC earned for one application (e.g., ongoing professional learning), could also meet requirements for another (e.g., license renewal or advancement requirements).
- The value that MCs hold must be investigated and assured through formal processes. The market is not a sufficient quality control mechanism, as popularity does not necessarily translate to effectiveness.
- Ensuring that digital badges or other MC documentation can be thoroughly verified by potential employers will ensure transparency around quality and allow for MCs to hold currency.

### *Time*

The state and LEAs will need to ensure adequate time is given to teachers to engage in MCs and to collaborate with peers and instructional leaders.

- Consult national resources outlining best practices for allocating teacher time and develop guidance and support for LEAs to put these models in place in a financially sustainable way.<sup>36</sup>

### *Human Capital*

Implementing the various MC system elements will require significant staffing resources, from identifying and training coaches and PGP assessors, to hiring additional staff to cover classes while teachers get dedicated time to focus on skill development.

- Start by using MCs to develop and identify coaches and other teacher leaders who can help lead MC and other professional learning work. Regional networks can help develop virtual learning communities where expert teachers can help support each other.

### *Financial Investment*

Significant investments will need to be made by states, LEAs, and schools to ensure adequate staff time, human capital, and infrastructure.

- Policymakers must take the long view on budgeting. Costs could be offset over time through reduced teacher attrition and reduced outlays on other PD efforts (hiring outside PD consultants, etc.). The state may also require maintenance of effort from non-high-need LEAs after seed funds are exhausted (i.e., LEAs are expected to find ways to sustainably finance the work after a specified period of time).

### *Support for Equity*

Opt-in policies surrounding MCs could further exacerbate gaps in equitable access to quality teaching, if only more affluent and/or larger LEAs have access to the resources to engage in MCs and put the necessary structures around them.

**States need to consider how to combat potential inequities by providing additional technical assistance and financial support to lesser-resourced LEAs.**

- The state should offer additional resources and support to "high-need" LEAs that it believes would most benefit.<sup>37</sup> Selection criteria could be student academic outcomes, or perhaps schools and LEAs with exceptionally low years of teacher experience.

In addition, longer-term state policy and practice approaches should:

- Consider automatically incorporating stacks of MCs on teacher certificates.
- Consider MCs as a vehicle for demonstrating competency for other educator roles, such as novice school leaders as part of an induction program.
- Require and fund the collection of robust data and use it to study the initial phase(s) of rollout and associated impact and outcomes. The proposed design of the license renewal segment lends itself particularly well to study, with some LEAs continuing with the traditional approach and others moving to a MC-driven approach. States that adopt MCs in support of multiple human capital processes and priorities should evaluate the effectiveness of MCs for these various policy purposes.

State approaches should NOT:

- Assign CEUs or other PD points for all MCs. One primary objective of incorporating MCs into human capital systems is to move away from a compliance-oriented, time-based approach and move toward a focus on what teachers know and are able to do. Any attempt to convert MCs to CEUs would be arbitrary because the length of time it takes educators to

complete a MC depends on a variety of factors, including their initial level of expertise.

- Allow educators in LEAs that are awarded grants through the innovative license renewal initiative to choose between completing MCs and completing a seat-time option to meet license renewal requirements. Doing so would reduce the likelihood that educators would choose the difficult, riskier MC approach. Some teachers may still choose to engage in graduate coursework, attend conferences, and so forth, to gain the knowledge and skills needed to successfully earn the MC, but attending those events themselves would not count toward renewal requirements.
- Offer MCs for demonstrating skills in the use of basic software or hardware, or other administrative skills. While figuring out how to use learning management systems (LMS) such as Google Classroom or Canvas or how to fill out required discipline documentation may be a necessary part of the job, putting these skills on par with MCs for competencies that have a clearer impact on student learning undermines the value of MCs overall. That said, the various training providers may still award a digital badge for successfully completing an assessment on the use of such technical tools.

## Final Considerations

The ultimate goal of revisiting teacher professional development and advancement policies is to improve and retain teacher talent, especially in our highest-need schools. Because these are *model* policies for teacher professional development and advancement, not customized ones, some elements offered here may not make sense within a given state. But, generally, strong evidence-based, high-quality systems of educator professional development and advancement exist only in rare pockets of excellence, and often do not benefit the students most in need of high-quality instruction. The objective of offering these model policies is not to advocate for throwing every baby out with the bathwater, but rather to indicate what an effective, comprehensive approach to high-quality human capital systems would look like if built from the ground up, with MCs incorporated as part of the solution.

The proposals offered here attempt to be realistic about what is feasible within state and LEA budgets under normal circumstances. However, while finding ways to fund new initiatives is always a challenge, this is particularly true right now, in the middle of a pandemic. A more detailed analysis of current state and LEA spending on teacher development and advancement initiatives would be useful to determine the level of funding that states and LEAs may be able to redirect from existing funding streams.

That said, during tough budget times, it is even more important that education leaders and policymakers not just invest in high-potential tools and approaches, but make efforts to ensure that they actually achieve that potential, so that students can benefit from the investment and scarce dollars are not wasted. Policy makers should not expect any tool to be a “silver bullet”: many research studies of teacher PD find that “evidence-based” approaches only work under certain conditions, and MCs will be no different.<sup>38</sup> We will not realize the potential of educator MCs without taking steps toward a comprehensive review—and in many cases, a complete overhaul—of existing policies and systems, with an eye toward ensuring additional support for those schools serving the students with the most need.

Political challenges also exist. Currently, many entities are making money by offering PD for educators, including education consultants, institutions of higher education, software companies, some educator associations, and so on. Any attempt to disrupt or shift the way the current market works will likely be met by pushback. But having a clearly considered theory of action and inclusive process for taking policy steps, such as the one outlined here, will minimize friction.

Another possible source of difficulty is gaining support from educators themselves. Educators may have negative preconceived notions about the value of micro-credentials or be cynical about the staying power of any new initiative,

having watched previous “reforms” come and go. The state should involve principals and teachers from the outset of the MC discussion. States can maximize teacher buy-in by inviting them into the design and implementation process and by offering the incentives listed above. Of particular concern will be teachers who already hold advanced roles or designations or are currently working toward them. States must take measures to ensure that those who currently hold a particular advanced designation, role, or position in a school not be negatively impacted by any changes to advanced designation policies. They must also outline a fair process for those teachers who are already a significant portion of the way on a current path that the state is planning to close in the future.

Moving from the status quo is always difficult. But failing to meet the needs of our educators and, most importantly, the needs of the students they serve is not an option to achieve the society we need, desire, and deserve.

## Notes

- 1 PDK Poll, *Frustration in the Schools: Teachers Speak Out on Pay, Funding, and Feeling Valued* (Arlington, VA: Phi Delta Kappan, September 2019), <https://pdkpoll.org/wp-content/uploads/2020/05/pdkpoll51-2019.pdf>
- 2 Melissa Tooley and Kaylan Connally, *No Panacea: Diagnosing What Ails Teacher Professional Development Before Reaching for Remedies* (Washington, DC: New America, 2016), <https://www.newamerica.org/education-policy/policy-papers/no-panacea/>
- 3 Melissa Tooley and Joseph Hood, “Schools Take a Lesson from Tech Industry to Develop and Retain Strong Teachers,” *EdCentral* (blog), New America, September 14, 2020, <https://www.newamerica.org/education-policy/edcentral/tech-microcredentials-develop-and-retain-strong-teachers/>
- 4 See Melissa Tooley and Joseph Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices* (Washington, DC: New America, 2021), “Which States Promote MCs and for What Purpose?” for more details.
- 5 See Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*, “How Teacher PD Currently Falls Short,” for more details
- 6 Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*, <https://www.newamerica.org/education-policy/reports/harnessing-micro-credentials-teacher-growth/>
- 7 See New America’s collection page on educator micro-credentials for more of our work on this topic: <https://www.newamerica.org/education-policy/collections/educator-micro-credentials>
- 8 Ben Jensen, Julie Sonnemann, Katie Roberts-Hull and Amélie Hunter, “Beyond PD: Teacher Professional Learning in High-Performing Systems” (Washington, DC: National Center on Education and the Economy, 2016).
- 9 For international examples of teacher career lattices, see Qidong “Alan” Yang, “Singapore’s Educator Career Ladder: A First-Person Account,” National Center on Education and the Economy (website), June 29, 2018, <https://ncee.org/2018/06/singapores-educator-career-ladder-a-first-person-account/>, and United Kingdom Parliament (website), “Retaining, Valuing and Developing Teachers,” Figure 8, Possible Career Paths for Teachers in England, <https://publications.parliament.uk/pa/cm201012/cmselect/cmeduc/1515/151508.htm>
- 10 The specific entity(s) who play this role will differ from state to state.
- 11 Master’s degrees in secondary math are one of the few exceptions to the research largely showing that master’s degrees in education do not improve the quality of teacher instruction or student outcomes. Helen F. Ladd and Lucy C. Sorensen, *Do Master’s Degrees Matter? Advanced Degrees, Career Paths, and the Effectiveness of Teachers*, Working Paper No. 136 (Washington, DC: National Center for Analysis of Longitudinal Data in Education Research (CALDER) at American Institutes for Research, August 2015), [https://caldercenter.org/sites/default/files/WP%20136\\_0.pdf](https://caldercenter.org/sites/default/files/WP%20136_0.pdf)
- 12 For example, LEAs using Public Impact’s Opportunity Culture model have a very robust set of selection and hiring practices at hand. “Teacher and Staff Selection Toolkit,” Public Impact (website), <https://www.opportunityculture.org/selection-toolkit/>. See also Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth*.
- 13 National Board for Professional Teaching Standards (website), “Teacher Continuum—Building a Coherent Path to Accomplished Practice,” <https://www.nbpts.org/teacher-career-continuum/>



- 14 David Burkus, “Extrinsic vs. Intrinsic Motivation at Work,” *Psychology Today*, April 11, 2020, <https://www.psychologytoday.com/us/blog/creative-leadership/202004/extrinsic-vs-intrinsic-motivation-work>
- 15 Melissa Tooley and Taylor White, *Rethinking Relicensure: Promoting Professional Learning Through Teacher Licensure Policies* (Washington, DC: New America, 2018), <https://www.newamerica.org/education-policy/policy-papers/rethinking-relicensure/>
- 16 New America’s Education Policy program is committed to examining new evidence as it arises, and this is a shift in the recommendations outlined in our 2018 *Rethinking Relicensure* report. However, the intent of the recommendations—to encourage a more productive system and positive culture around teacher professional learning—remains the same.
- 17 Cathy Stakey (Instructional/Technology Coach PreK-6), South Hamilton Elementary, in discussion with Melissa Tooley, October 26, 2020.
- 18 Redesign PD Partnership micro-credentials subgroup meeting with Tennessee Department of Education Officials, March 29, 2017.
- 19 There may be instances where new research requires states to remove or update an MC offering. Because teachers’ license renewal cycles vary within a state and LEA, policies will need to allow for any MC to count for renewal that was available as of the start of that renewal cycle, regardless of whether it was still available at the end of the renewal cycle.
- 20 Alison May, “Delaware Department of Education Develops Micro-credentials to Support State Literacy Plan,” Delaware Department of Education (website), <https://www.doe.k12.de.us/site/default.aspx?PageType=3&DomainID=36&ModuleInstanceID=20&ViewID=6446EE88-D30C-497E-9316-3F8874B3E108&RenderLoc=0&FlexDataID=25086&PageID=102>; and Alyssa Moore, “KVEC 2020 Micro-credential Summit Panel” (virtual panel, August 11, 2020).
- 21 Robert Brown (Professional Learning Lead for Micro-credential Policy) and Jennifer Carroll (Professional Learning Lead), KVEC, in discussion with authors, September 21, 2020.
- 22 Georgia took several years to design the initial requirements and gather stakeholder buy-in for the mandate that all teachers create professional learning goals or plans as part of the license renewal process. State education officials then spent a year traveling to LEAs and training school leaders and teachers on what implementation should look like. When stakeholders failed to meet expectations for implementation (e.g., not providing PLC time for their educators), the state tried to learn why and moved to provide additional supports to ensure that LEAs could be successful. Georgia has also worked to curate state-approved, standards-aligned resources that attempt to help teachers access resources that facilitate their personal growth. Shauntice Wheeler (Title II, Part A Program Manager at State Activities and Professional Development), Georgia Department of Education, in discussion with authors, October 9, 2020. See also Tooley and White, *Rethinking Relicensure*.
- 23 Research in behavioral science indicates that it is problematic to provide large extrinsic incentives for employees to engage in behavior that should be intrinsically motivated under normal circumstances. Hence, the incentive should only be large enough to make teachers take a closer look at MCs, not to make them feel compelled to do it (e.g., \$25–100). However, part of those “normal circumstances” requires that employees are receiving adequate base compensation and time to work on PD during regular working hours. At the time of publication, this criterion is not sufficiently met by a substantial number of states and LEAs. See Madeline Will, “Teachers Are Paid Almost 20 Percent Less than Similar Professionals, Analysis Finds,” *Education Week*, September 5, 2018, <https://blogs.edweek.org/>

edweek/teacherbeat/2018/09/  
teachers\_wage\_penalty.html

24 For more details on PGP, see Tooley and White, *Rethinking Relicensure*.

25 We have intentionally not called the phased-in roll-out a “pilot” even though it will be implemented in a similar way to a pilot and serve many of the same purposes because the language used to communicate the intended longevity of an initiative (e.g., phased-in rollout vs. pilot) matters. As no new initiative to transform teaching and learning will be successful without authentic buy-in from educators, one of the most critical aspects for securing support and engagement from educators (and policymakers) is ensuring a new initiative is not perceived to be the “flavor of the week” that will soon be replaced with something else.

26 See Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*, “Lessons: Necessary Conditions for Successful Implementation” for more details on policy development and implementation recommendations.

27 See Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*, “Support from Colleagues: Coaching and Peer Collaboration Structures” for more details.

28 For example, LEAs using Public Impact’s Opportunity Culture model have access to a very robust set of selection and hiring practices that would not be withdrawn solely because a candidate had completed a set of relevant micro-credentials. “Teacher and Staff Selection Toolkit,” Public Impact (website), <https://www.opportunityculture.org/selection-toolkit/>

29 For more on the categories of new initiative or idea adoption, see Center of Excellence for Infant and Early Childhood Mental Health Consultation, *IEC MHC Cog 3: Diffusion of Innovation Theory*

(Washington, DC: U.S. Department of Health and Human Services, Substance Abuse and Health Services Administration), [https://www.samhsa.gov/sites/default/files/programs\\_campaigns/IECMHC/iecmhc-cog3.pdf](https://www.samhsa.gov/sites/default/files/programs_campaigns/IECMHC/iecmhc-cog3.pdf)

30 Currently, required trainings regarding safety, technology use, and a variety of other local policies are often referred to as “PD” and put on the school or district PD calendar on the same footing as developing key instructional practices. While these types of compliance-oriented trainings are necessary, LEAs could likely shift them to an asynchronous virtual format and achieve the same results, ensuring that they are no longer a core focus of teachers’ scheduled PD time or communicated as “PD.”

31 There are legal reasons why educators must pay a fee (even a nominal one) when taking action on their licenses. Written correspondence with Tom Tomberlin, North Carolina Department of Public Instruction, December 14, 2020.

32 Several leading LEAs using micro-credentials have independently determined that identifying internal “champions” of micro-credentials is an essential factor in broadening teacher engagement, a strategy borrowed from technology start-ups. “Earlyvangelist” is a term first coined by Steve Blank in his 2005 book, *The Four Steps to the Epiphany*, to refer to customers who commit to buying a start-up company’s product before there is a full product available and spread the news of the product to friends, family, or coworkers. For more, see Steve Blank, “Perfection by Subtraction — The Minimum Feature Set,” *Steve Blank (blog)*, March 4, 2010, <https://steveblank.com/2010/03/04/perfection-by-subtraction-the-minimum-feature-set/>

33 The additional financial incentive may not be necessary in the long term but will likely be necessary in the initial stages of the pilot to make the risk and vulnerability of engaging in MCs seem worth it. The incentive should be big enough to hold some value to educators while being small enough that they do not mistake their interest in engaging in the

MC to be solely a result of the incentive. For more details on the rationale for the presence and/or level of financial incentives, see Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*, “Selecting Credential Currency and Appropriate Incentives.”

34 If the MC is eligible for meeting license renewal requirements, it is possible that it could also be counted toward this goal, although teacher supervisors and/or peers will need to review and verify that it is an MC in an authentic professional growth area, not just being pursued for convenience.

35 Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*, <https://www.newamerica.org/education-policy/reports/harnessing-micro-credentials-teacher-growth/>, and *Beyond “Job-Embedded”: Ensuring That Good Professional Development Gets Results* (Santa Monica, CA: National Institute for Excellence in Teaching, March 2012), <https://www.niet.org/research-and-policy/show/policy/beyond-job-embedded-ensuring-that-good-professional-development-gets-results>

36 For best practices on reimagining the use of teacher time in schools, see Claire Kaplan, Roy Chan, David A. Farbman, and Ami Novoryta, *Time for Teachers: Leveraging Expanded Time to Strengthen Instruction and Empower Teachers, Executive Summary* (Boston, MA: National Center on Time & Learning, May 14, 2014), <https://www.timeandlearning.org/sites/default/files/resources/time4teachers.pdf>

37 See Tooley and Hood, *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*, “Sufficient, and Equitable, Allocation of Resources” for more details on Louisiana’s approach.

38 *Beyond “Job-Embedded.”*



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