NEPC Review: Harnessing Micro-Credentials for Teacher Growth (New America, January 2021)

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Executive Summary

New America recently published a report, *Harnessing Micro-Credentials for Teacher Growth*, that champions ways that micro-credentials have been used to allow teachers to move up the career ladder, receive higher pay, or renew their licenses. The report makes ambitious claims about the problems with traditional professional development and about how micro-credentials could address these shortfalls. However, the evidence to support these claims remains scarce. Without demonstrating that micro-credentials can improve teaching or student learning, the report offers guidance on how to implement micro-credentials and integrate them into state human resources systems. The implementation guide starts with an idealistic assumption that states, districts, and school leaders have the capacity to select, vet, and ensure the high quality of micro-credentials before they are offered to teachers. Furthermore, as the primary role of micro-credentials is to assess whether teachers have acquired a particular skill, they require additional resources to provide teachers with opportunities to develop that skill. Since micro-credentials on their own cannot provide opportunities for teacher growth and require the existence of effective professional development systems to work, the report's title and guidelines are misleading. Even if implemented, the report's plan for expanding the use of micro-credentials could not deliver on its promises.

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I. Introduction

With over three million practicing teachers, teaching is one of the largest and most impactful professions.[1] Yet in the last decade, teachers' dissatisfaction with their jobs has grown and teacher shortages have soared. In this context, the search for solutions of how to retain and support teachers has gained new prominence, with professional development (PD) emerging as an area of great policy interest. It has also become clear over the last two decades that teachers rarely feel satisfied with traditional PD opportunities. In response, Melissa Tooley and Joseph Hood's report *Harnessing Micro-credentials for Teacher Growth: A National Review of Early Best Practices*,[2] issued by New America, proposes to individualize PD by deploying micro-credentials (MCs). MCs are assessment tools that verify "a discrete skill or competency that a teacher has demonstrated through the submission of evidence assessed via a validated rubric."[3]

MCs first gained prominence in the world of technology. Promoted as a promising pathway to allow people to upgrade their skills or diversify their professional portfolios, MCs spread through other sectors of the economy.[4] New America's report explores how MCs have been utilized in schools and offers policy guidance on how their use can be scaled up. However, while the report advocates for wider MC use, it is unlikely that the additional costs that MCs require are worth the investment, given that their success largely depends on the effectiveness of already existing PD programs.

II. Findings and Conclusions of the Report

The report's findings, summarized below, address four areas of MC use and are accompanied by an implementation guide.

Designing and Assessing MC Offerings

The report notes great variability in how different providers approach the evidence of the acquired competency, the use of evaluators in the assessment process, and the availability of resources teachers can utilize to develop the competency assessed by an MC. For best practices, the report urges the use of research to inform selection of competencies for MC design, the focus on "narrow, discrete, and actionable skills,"[5] provision of resources and supports, clear standards for evidence use, deployment of rubrics to clarify expectations, and preliminary training of assessors to ensure quality.

Putting MCs into Practice

Surveys show that teachers know little about MCs and it is not clear how widespread MC use is.[6] Teachers' experiences with MCs vary because they require higher levels of motivation, time investment, and effort than traditional PD. Advice for successful implementation calls decision-makers to identify MC "champions"[7] and "earlyvangelists."[8] Administrators have to set aside regular dedicated time for teacher PD and create coaching as well as peer collaboration structures, such as professional learning communities, to ensure that MC potential is realized. Importantly, the success of MC implementation depends on a cultural shift in which teachers pursue growth rather than participate in PD simply for compliance.

Developing and Implementing State and Local Policies

Early adopters of MCs sought to introduce competency-based approaches and individualize professional learning. With 26 states that have MC policies in place, five are using MCs for career advancement, three use them for license renewal, 15 use MCs for professional development, and eight use MCs for specific licensure endorsements. States have adopted a range of approaches for selecting and prescribing which MCs teachers should take, and for incentivizing teacher participation through stipends or salary increases. The report recommends that states create clear frameworks that MCs can fulfill, include theories of action for their implementation, and identify road maps for aligning MCs with existing human resources systems. Local Education Agencies (LEAs), districts, and school leaders have to play a major role in selecting MCs, ensuring their quality, and covering expenses for MC fees. It also calls on states to provide incentives, so that teachers would not game the system by pursuing MCs for the skills they have already acquired or by choosing traditional PD because it requires less effort. States have to ensure the portability of MCs and an equitable distribution of resources across different districts, so that struggling schools are not left behind.

MC Impact on Teacher Practice and Student Outcomes

The report concludes that research on the effectiveness of MCs is limited and there is no available evidence demonstrating unequivocally that teachers implement in the classroom the skills covered by MCs or that MCs improve student learning. Nevertheless, it provides recommendations for using MCs to determine which teachers can receive bonus pay, renew their licenses, assume new roles, or move up career ladders with higher compensation.

Model State Policy Guide

The policy guide that accompanies the report starts with the assumption that states have vetted and selected high-quality MCs. It then lists steps states can take to integrate MCs into professional development systems, state policies, and school practices for teacher advancement, license renewal, and ongoing professional learning.

III. The Report's Rationale for Its Findings and Conclusions

The report argues that individualization of professional development that MCs offer can improve teaching practices and student learning. This will allegedly address current problems with the ineffectiveness of traditional PD. The rationale for promoting the use of MCs for licensure renewal, career advancement, or higher pay assumes that rewarding teachers for earning MCs would improve teacher retention and job satisfaction.

IV. The Report's Use of Research Literature

While research on the use of MCs among teachers may indeed be limited, the report fails to consider extensive research on teaching, effective professional development, and teacher effectiveness policies. If the report incorporated that knowledge base, it would become apparent that MC use can create problems rather than provide solutions.

The report fails to consider what teaching entails. Teaching is a complex professional practice that requires strong content knowledge,[9] knowledge of how the content can be taught effectively,[10] understanding of contexts in which learning occurs,[11] and ability to build relational connections with students[12] and communities.[13] Approaching teaching as a set of "skills" erases this complexity[14] and represents an outdated perspective of "behavioral depictions of teaching practice."[15]

This misrepresentation also leads to a misunderstanding of teacher learning. As a development of adaptive expertise,[16] teacher learning does not happen in a vacuum of preparing evidence to demonstrate mastery of a skill. Instead, it requires "sustained and substantive"[17] opportunities to learn teaching practice[18] as a member of a professional community[19] through dialogues,[20] collaborations,[21] discussions of new research,[22] and professional inquiry.[23]

Research on professional development differentiates between traditional "one-stop" PD, such as half-day workshops, and innovative approaches that focus on teachers' "ongoing engagement in learning."[24] Over the last decade, consensus has emerged that effective professional development incorporates content focus, active learning strategies, coherence between what teachers are learning and the curriculum they are using, opportunities for collaboration, collective participation, availability of modeling of new practices, coaching and expert support, feedback and reflection, and sustained duration.[25] By design, MCs do not meet the criteria for effective PD because they focus on assessing teachers instead of pro-

viding opportunities for growth. Rare studies on individualized professional development support this observation: most teachers choose to learn new content rather than create evidence to earn an MC.[26]

Furthermore, research has shown that PD has impact on teacher practices and student learning when it is connected to teachers' own classrooms.[27] Studies have demonstrated that packaging PD and offering it through various platforms decreases its effects to zero.[28] This means that standardized MCs—far-removed from teachers' classroom realities—are unlikely to improve teachers' practices.[29] In addition, PD offered by multiple providers lacks coherence, which makes cumulative learning impossible to achieve.[30] On the other hand, new studies have shown that simply pairing more effective teachers with less effective teachers and giving them time to discuss specific strategies improves teaching and increases student achievement.[31] This raises an important question of whether MCs are worth the effort if other more cost-effective and context-sensitive practices have demonstrated positive effects.

Finally, the report states that MC implementation requires selection and vetting of MCs prior to making those choices available to teachers. A recent analysis of teacher effectiveness policy interventions, however, has revealed that principals and district leaders are not prepared for effective instructional leadership.[32] These findings cast doubt on LEAs' capacity to ensure that scarce resources are not wasted on products of minimal value.

V. Review of the Report's Methods

The report uses interviews and third-party data but does not explain how the data were collected or analyzed. While some quotes and observations come from state agency representatives or district officials, approximately 70% of the report's claims about the benefits and advantages of MCs are based on interviews with MC providers. This raises concerns about the report's validity and reliability, since providers have a vested interest in sharing positive stories to sell their products. The report would be more credible if its claims stemmed from the analysis of data based on independent evaluations. In addition, teachers' perspectives are largely absent from the report, even though their voices should be central in assessing the benefits and challenges of MC use.

The report claims that it addresses the research gap on MCs by "measuring impact on teacher practice and learning."[33] This claim, however, is not borne out by evidence. The discussion of MC impact involved one experiment where teachers used massive open online courses (MOOCs) to learn new skills and MCs to demonstrate what they have learned. This experiment, however, is unable to show the impact of MCs alone.

The bottom line is that as the report offers suggestions for how MCs can be implemented, it fails to provide conclusive evidence that MCs are effective in improving teaching practices, students' learning experiences, teachers' job satisfaction, or teacher retention—the very problems that the report claims MCs could address.

VI. Review of the Validity of the Findings and Conclusions

Four problems undermine the validity of the report's findings and conclusions.

First, the state policy guide[34] for MC implementation starts with the assumption that the quality and rigor of MCs have been established, but the report's advice for assessing MC quality is insufficient for this task. Research on effective PD programs has established that program design matters: Programs have more chances of effecting change if they are developed by people who are intimately familiar with complexities of classroom realities, the challenges of teachers' professional decision-making, and the specific contexts of teachers' work.[35] In most cases, the information about the qualifications of MC developers and the research that informs MC design is not readily available, making it challenging for states to adequately vet MCs.

Second, the report promotes the use of MCs for professional growth even after stating that they "are typically not a good mechanism for training on a topic."[36] As evaluation tools, MCs are unlikely to improve teachers' practices unless states can guarantee their "integration into an effective professional learning and integration system."[37] Here lies the paradox of the proposal: MCs on their own cannot create effective PD systems but effective PD systems do not need MCs to produce positive results. This raises questions about their merit for teacher growth.

Third, effective professional development requires significant investments of time and resources.[38] Whether districts already have effective systems in place or have yet to develop them, incorporating MCs into existing structures would create additional expenses. MC fees (which can be substantial), stipends for teachers to participate, and allocations to hire additional staff to create schedules with sufficient time set aside for PD could dramatically increase PD expenses. With no evidence to show that MCs improve teaching practices or student achievement, it is not clear that they are worth the investment they require.

*The problem of teacher retention cannot be addessed without improving teachers' working conditions and making salaries of **all** teachers comparable to those of other college-educated professionals.*

Finally, the report advances the vision of individualization, career ladders, and, in essence, merit-based pay to improve teacher retention. These ideas have a long history in education reform.[39] Past efforts to implement these ideas failed to increase student achievement or improve teacher retention.[40] Schools function as communities where a pursuit of shared vision and commitment to common good are crucial for their success.[41] Competition promoted by individualization and bonus pay undermines teachers' willingness to share successful practices and support each other in their professional growth.[42] This means that the introduction of MCs tied to individual advancement is likely to erode rather than foster the collective culture of growth, effectiveness, and success. More importantly, the problem of teacher retention cannot be addressed without improving teachers' working conditions and making salaries of *all* teachers comparable to those of other college-educated professionals.[43]

VII. Usefulness of the Report for Guidance of Policy and Practice

Overall, this report does not offer a convincing case in favor of adopting MCs for teacher growth. Utilizing MCs has not been proven to be an effective tool for improving teaching, something the report's implementation guidelines ignore. This proposal could have the unintended consequence of increasing LEA expenses on professional development without guaranteeing returns on investment. Other more cost-effective alternatives exist that have been proven to improve teachers' practices and students' learning gains.[44] Investing in empirically tested approaches would offer greater gains to state and local education agencies in the long run.

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