

## **Rejoinder to Response by Melissa Tooley and Joseph Hood to a Review of Harnessing** *Micro-Credentials for Teacher Growth*

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Original Report: https://d1y8sb8igg2f8e.cloudfront.net/documents/Harnessing\_Micro-credentials\_ for\_Teacher\_Growth\_A\_Model\_State\_Policy\_Guide.pdf Original NEPC Review: https://nepc.colorado.edu/thinktank/microcredentials Melissa Tooley & Joseph Hood Response: https://nepc.colorado.edu/thinktank/microcredentials Aydarova Rejoinder: https://nepc.colorado.edu/thinktank/microcredentials

In my NEPC Review<sup>1</sup> of *Harnessing Micro-credentials for Teacher Growth*, published by New America<sup>2</sup>, I raised concerns about the use of evidence because the report makes the claim that its policy proposals are based on research. This claim is problematic for three reasons.

First, a fundamental principle of research is the impartial and disinterested pursuit of truth.<sup>3</sup> In contrast, the report notes that, "New America teamed up with digiLEARN, a North Carolina-based nonprofit organization, as the state considered if and how to incorporate educator MCs into policy."<sup>4</sup> This statement, along with other areas highlighted in my review, suggest that this work was done for the purpose promoting micro-credentials. In their response to my review, the authors note that they "find that the process required to earn a micro-credential could help promote the application of new learning."<sup>5</sup> What is not in the report or in the author's response is how this "finding" emerged. If there are no studies that clearly demonstrate that teachers use what is assessed by the micro-credentials—the observation made in the report<sup>6</sup>—then it cannot be validly claimed that micro-credentials promote the application of new learning by teachers. The report does make this claim. As a result of this sort of leap in reasoning, my review raised the issue of potential confirmation bias: "the mechanism of interpreting information so that it confirms preexisting beliefs."<sup>7</sup>

Second, claiming that a project constitutes research requires a presentation of defensible methodology as well as the provision of "a coherent and explicit chain of reasoning."<sup>8</sup> Researchers in education and the social sciences use the term *methodology* "to describe approaches to paradigms of research ... to help [readers] understand not the products of inquiry but the process itself."<sup>9</sup> In their response to my review the authors note that "the report's

Appendix includes ... methodology."<sup>10</sup> Unfortunately, the Appendix contains no information about any of the following: what study design or research paradigm was followed; how interview questions were designed; how participants were selected; how secondary data were selected and evaluated; how data were processed; what strategies were used to analyze the data; what interpretive techniques were used to develop assertions about the data; what strategies were used to confirm or disconfirm emergent observations and hypotheses; what researchers did to falsify their theories; and how the project's validity, reliability, and generalizability were established.<sup>11</sup>

While the report notes that interviews were conducted and the authors' response adds that "*myriad* secondary research sources"<sup>12</sup> were consulted, these comments are insufficient to demonstrate the quality and trustworthiness of the work. The list of participants provided in the appendix says nothing about how representative the sample is and how data from various participants were treated. The authors spoke to officers from organizations that "represent, support, and/or employ teachers."<sup>13</sup> It is unclear if they interviewed actual teachers.

It is not possible to know from the report if formal methods of analysis were used. If they were not, there is a danger that some perspectives were given preference in the presentation of the findings—a potential confirmation bias again. As I stated in my NEPC review, "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."<sup>14</sup> This observation is based on the actual count of the quotations and references used in the text of the report. This count raises the cautions that including representatives from districts in the participant list does not necessarily mean that their perspectives were adequately taken into account in the analysis or in the presentation of the findings. The report does not provide enough information to demonstrate that strategies of verification and justification to establish the project's validity and reliability were actually used. As a result, the report falls short of the standards of research in education<sup>15</sup> and in the social sciences<sup>16</sup> more broadly.

Third, good research recognizes the cumulative nature of knowledge and engages with existing empirical evidence. The available empirical evidence, for example, shows that districts do not have the capacity necessary to vet professional development options for teachers.<sup>17</sup> Claiming that performance pay does not create competition counters 30 years of empirical research that has found that, in fact, performance pay does create competition that is harmful for school communities.<sup>18</sup>

We may agree that teaching should be a profession that is respected and well-compensated. If there is a potentially good idea for improving teachers' professional learning, then the first step must be to conduct empirical research that uses rigorous methods conducted by disinterested parties who are committed to establishing facts and pursuing the truth. Only after a substantial body of empirical evidence has been accumulated that demonstrates positive impact on teacher and student learning, should we consider policy applications. But since the report states that there is no evidence that unequivocally demonstrates the positive impact of micro-credentials,<sup>19</sup> promoting their use is premature and dangerous.

## **Notes and References**

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