



**Great teachers.
Bright futures.**

Competency-Based Micro-Credentials for Educators: Powerful Lessons from Two Years in the Field

As a growing human capital strategy for both public and private sector organizations, micro-credentials assess and reward competency in high value skills. They are also designed to support agency in the learning process, and are increasingly used as a roadmap to articulate the pathways for career advancement.

Investments in professional learning for schools and school systems have been widely criticized for not leading to scalable, substantive changes in teacher practice that improve student learning. Teaching Matters believes that competency-based micro-credentials may offer a valuable tool for priority system-level instructional improvements and transform system-level professional development from a focus on inputs, to the demonstration of professional learning outcomes that matter most.

Recognizing this potential, in 2014 Teaching Matters made an organizational shift to competency-based professional learning to ensure that our system-level partnerships led to clear and evidence-based improvements in high-priority teacher practices. Micro-credentialing became our strategy to focus, incentivize, assess and recognize competency attainment. This structure was paired with in-depth supports that included job-embedded coaching and feedback designed to develop teachers for leadership roles or functions.

Teaching Matters has tested the use of micro-credentials at scale in three different teacher leadership programs during the past 18 months. Since 2015, we have issued 546 rigorous micro-credentials to 154 teachers in one large urban system serving over 1,000,000 children, and a much smaller-sized suburban district of 2,770.

We examined this work by conducting interviews, surveys, observations, and focus groups of coaches, teachers, and administrators, and analyzing evidence of teacher leader competencies. We have learned a great deal about how to begin building a micro-credentialing ecosystem that is starting to create value for both educators and the systems in which they work.

This paper presents our findings and reflections generated by three “use cases.” Each use case sheds light on key successes, challenges and practices that can inform school systems about how to leverage micro-credentials to redesign impactful professional learning systems.

Our key findings include:

- Micro-credentialing is good professional learning
- Currency and incentives for earning micro-credentials matter greatly in adoption
- Coaching, feedback and support are important to demonstrating competency and increasing the likelihood of educators earning micro-credentials



“Micro-credentialing allows you to take a personalized, job embedded approach and apply it at scale. Furthermore, it puts the emphasis on outcomes versus inputs. It puts the onus on the teacher to apply what he or she has learned, and demonstrate impact. This results in deeper, context-based learning and the greater likelihood the practice will stick. Finally, micro-credentialing provides the teacher more agency because it makes the expectations very transparent to the teacher and the coach.”

- Lynette Guastaferrro
Executive Director of Teaching Matters



Three Different Value Propositions for Micro-Credentials

NYC Department of Education (NYC DOE), Assessment Matters: Through a partnership with the NYC DOE, Teaching Matters supported a networked improvement community (NIC) of 14 schools focused on improving formative assessment practices. Micro-credentials were made an optional support to recognize teacher leader competencies.

Case 1: Assessment Matters

Case 2: Mineola Union Free Schools

Mineola Union Free School District in Long Island, NY: Mineola implemented a teacher leadership initiative that used Teaching Matters' support and teacher leader micro-credentials as the pathway to permanent \$500 per year pay increases.

NYC DOE Emerging Teacher Leader Program: Through a partnership with the Office of Teacher Quality and Recruitment, Teaching Matters developed a micro-credentialing model to assess and strengthen the pipeline of teachers able to secure formal teacher leader roles in high-needs schools.

Case 3: Emerging Teacher Leaders

Case 1

Assessment Matters

Assessment Matters was a partnership between Teaching Matters and the NYC DOE designed to strengthen the school-wide formative assessment practices aligned to the Common Core Learning Standards (CCLS) in a cohort of 14 schools. The project targeted 50 teacher leaders to lead inquiry teams and drive improvements in pedagogy and student outcomes through formative assessment.

We introduced micro-credentials to this project to make the learning goals transparent to teachers and leaders, and recognize and reward teachers for key shifts in practice. Teachers attended a three-day induction institute and received bi-weekly onsite coaching from 12 Teaching Matters coaches. Participating teacher leaders were offered the opportunity to submit evidence to qualify for teacher leader micro-credentials. Participation in micro-credentialing was voluntary and there was no formal systemic recognition for earning them. We tested the assumption that teachers would choose to participate in earning the micro-credentials as a way to differentiate themselves and be recognized for demonstrated competency. We learned that this was not generally the case.

Of the 50 teacher leaders participating in Assessment Matters, only two elected to submit evidence and earn micro-credentials. Nevertheless, Teaching Matters coaches



found that large numbers of teacher leaders successfully demonstrated shifts in practice and had produced work product or “evidence” that could have been submitted for micro-credentials had they invested the additional time.

The teachers who earned badges saw strong potential for micro-credentials as a vehicle for professional development. Bronx middle school teacher Victoria Dedaj explained:

“This was really different and unlike other PD. I always felt like I was in the lead. I was able to use the process to set goals for myself. It really empowers the teacher to drive the learning.”

Another benefit for micro-credential

Competency-Based Micro-Credentials for Educators: Powerful Lessons from Two Years in the Field

earners working in Assessment Matters was easy access to formative assessment data to measure impact from their work in Professional Learning Communities (PLC's). Dedaj's team demonstrated significant student learning effects from the shifts she and her team made to meet student learning gaps. Collecting this level of evidence can change how systems measure the impact of professional development.

The teachers who chose to earn micro-credentials cited "being recognized for my unique skills" as the prime reason they went forward. Both felt strongly that micro-credentials have great potential to replace more traditional professional development and certifications. Neither indicated additional pay as an incentive. This is consistent with what has been reported by Digital Promise about "early adopters" of micro-credentials who are more intrinsically than extrinsically motivated.

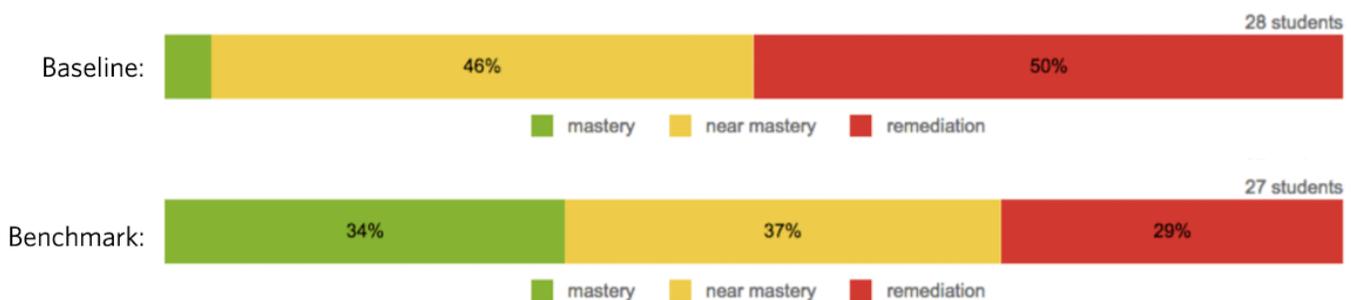
Teachers who did not earn micro-credentials as part of this program reported the top two reasons for not earning micro-credentials were that they were not required as part

of participation in the program (56%) and there was no incentive to earn them (38%).

Despite limited participation in micro-credentialing, Teaching Matters saw the potential of micro-credentials to better focus professional development on specific and measurable outcomes and learner engagement. Jelbin Delacruz, a coach with Teaching Matters, said "The micro-credentialing process has added another dimension to my coaching of teacher leaders. The tools and resources provided structure for my work and enabled me, as well as the teacher leaders with whom I worked, to 'speak the same language,' while teachers appreciated the greater agency in their own learning."

But we learned too that without systemic incentives aligned to the attainment of micro-credentials, teachers' voluntary participation was negligible. We also learned that our coaches needed more training and understanding of competency-based coaching, norming and assessing to better engage teachers in the process and improve participation.

Pelham Academy ELA Team: RL6.1 Baseline to Mid-Year Benchmark Comparison:



Evidence submitted by Victoria Dedaj for the "Data Analyst" credential

Case 2

Mineola Union Free School District, Teacher Leadership Program

Mineola Union Free School District is a suburban district in Long Island, NY and a member district in the League of Innovative Schools. Superintendent Michael Nagler was very familiar with micro-credentialing as an emerging practice. Dr. Nagler and Assistant Superintendent Patricia Burns were interested in leveraging teacher leadership as a way to empower teachers to examine their own practice, build school-wide decision making, engage deeply in the use of data, and collaboratively work to meet the instructional needs of their students. They knew these roles would be challenging and sought to incentivize teacher leaders to move into them and earn the micro-credentials that would provide the foundational skills needed to lead effective teams. To this end, they negotiated with the teachers' union and arranged a \$500 permanent salary increase and a new teacher leader role upon earning Teaching Matters' teacher leadership micro-credentials in three critical areas.

Ten teacher leaders participated in the program in three elementary schools. All ten teachers received induction training as well as intensive on-site coaching and support, including monthly in-person

coaching, workshops and cohort meetings. The initial goal was for all ten teachers to lead professional learning teams and demonstrate skills associated with earning 18 micro-credentials in one year - a goal which proved challenging. While all ten earned many micro-credentials, only two completed the full set in one year.

Mary LoCascio, one of the Mineola teachers who earned all 18 micro-credentials, said: "It was a lot of work. But my team and I saw big benefits...we focused on writing and we saw tremendous growth for all students. This process helped us formulate a plan - there was a motivation to follow through as we saw student growth." District administrators and teachers also said there was significant improvement in the culture of collaborative inquiry focused on student achievement.

We saw again the importance of coaching and feedback in moving teachers toward earning micro-credentials. All survey respondents named encouragement and support by their Teaching Matters coach as the primary reason for having earned micro-credentials. Teaching Matters coach Jennifer Ostrow said, "I worked closely with the teachers to make sure to review the 'look

fors' for each micro-credential. This helped teachers understand what good practice looked like and to assist them as they refined those practices. It also helped me to focus my feedback to be specific about how to improve."

Incentives for micro-credentials matter, but it was not necessarily the \$500 monetary incentives that drove participation in this case. Teachers cited the ability to serve in a new role and continuing education credits as the top reasons they would want to earn micro-credentials in the future.

One other important revelation from the Mineola case was about volume, both in terms of the depth and number of competencies teachers were expected to complete in one school year. Earning 18 rigorous micro-credentials in one school year proved daunting. We are working with Mineola this year to continue to support these teacher leaders toward the most appropriate level of micro-credentialing and have expanded the project to the district's middle and high school.



"Once the teachers earned the micro-credentials then you really saw the shifts. The teacher leaders felt they had earned the right to lead PLC's, and lead in ways that moved whole teams toward improved student outcomes. That confidence was evident in their practice and the micro-credentials helped to distinguish them."

- Pat Burns
Assistant Superintendent,
Mineola Union Free School District



Case 3

NYC DOE Emerging Teacher Leader Program

Teaching Matters formally partnered with the NYC DOE's Office of Teacher Recruitment and Quality (TRQ) to develop a program for emerging teacher leaders - those who aspire to formal teacher leader roles within the NYC DOE and benefited from the additional professional learning and support to prepare them for the role. Teaching Matters collaborated with TRQ, as well as with input from the United Federation of Teachers, to craft a rigorous competency-based professional learning program that would prepare applicants and result in more teacher leaders serving New York City's most struggling schools. Together with a team of experienced teacher leadership coaches at TRQ, we developed a new set of four high-leverage competencies that represent critical gateway skills for teachers moving into teacher leader roles.

Given the scale of this partnership - serving more than 190 teachers across the system - Teaching Matters offered a hybrid array of supports and convened a series of in-person and online coaching and feedback opportunities aligned to the four micro-credentials. Once teachers successfully demonstrated proficiency in the four competencies and earned all four micro-credentials, they were able to interview for formal teacher leader roles that come

Strategizing
for
Assessment



Analyzing
Student
Work



Planning
Professional
Learning



Stepping into
a Formal
Teacher
Leader
Role



with the opportunity to earn up to \$12,500 in additional compensation. The micro-credentials became part of a developmental and highly selective screening process for these important and well-compensated new positions. The support of the United Federation of Teachers in this endeavor was critical, and demonstrates a first-of-its-kind recognition of an alternative pathway to teacher leader roles. There were 191 teachers who participated in this program citywide. Teaching Matters issued 414 micro-credentials to 123 teachers.

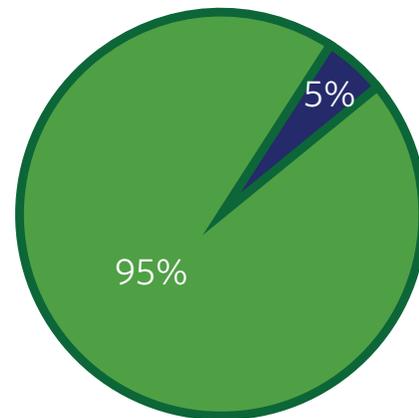
Within the program, teachers received

coaching and supports, ranging from competency-based in-person workshops, to competency assessment, online coaching and feedback. Teachers submitted evidence of successful application of the practices and received feedback against micro-credential criteria from an online coach.

Having an online coach offering targeted coaching along the way improved participation and completion rates. Emerging teacher leaders typically submitted evidence 2-3 times, getting feedback each time, before meeting the competency criteria. Evidence included analysis of changes to student achievement based on assessment data and documentation of shifts in practice based on professional learning the emerging teacher leaders led in their schools.

Earning micro-credentials in this program was highly incentivized, but was also extremely rigorous given the challenging role teachers were expected to move into. Completion rates were high, at about 60%, for participants who received coaching. Survey respondents who earned micro-credentials cited the ability to move into a new role (88%) as the number one reason for completing the additional work required. Participants said the chance to get good feedback on skills was a major reason they would earn micro-credentials in the future (84%), followed by the ability to earn continuing education credits and to be recognized for new skills.

Percent of Teachers Approved for Alternative Pathway to Teacher Leader Role



95% of all teachers who completed all four micro-credentials were accepted into teacher leader roles.

Of the participants who did not earn micro-credentials, 70% said they were too much work; 56% indicated they would likely earn micro-credentials in the future if they satisfied continuing education credit requirements. Challenges for general understanding about micro-credentials and their use beyond this program remain. Yelena Pinkhasova, a high school teacher from Queens, said: "I don't think most people know what they are right now. I can see how they may become important. It is a great way to think about portfolios - everything will just be digital - transferable. It would be good to [demonstrate my skills] on LinkedIn."

The DOE concluded that this process provided a reliable alternative pathway for teachers seeking teacher leader roles into some of the system's most struggling

schools. Anne Williams, Director of TRQ, said: "This type of professional development is powerful in that it isn't just about going to a session, listening and going home. It is fundamentally built on a process that requires learners to implement practices, reflect on the work and demonstrate mastery."

She also spoke about future opportunities for micro-credentialing to support needs in the system. "Micro-credentialing is not a term that is used in the DOE. We did see strong potential for this as an alternative process - one that requires evidence that educators have demonstrated competencies in critical skills as an important strategy for supporting qualified candidates into new roles and re-qualification for existing roles."

The competency-based micro-credentialing approach for this project successfully met NYC DOE goals. It proved a reliable and efficient component of a larger human capital strategy and allowed the nation's largest school system to give more equitable access to teachers interested in moving into new roles. It worked to support career pathways for teacher leaders, and was recognized as a valuable innovation.

The NYC DOE, in partnership with Teaching Matters, is building on this initiative in SY 16-17. They will be offering micro-credentials as part of the pathway to teacher leader roles for an additional 300 emerging teacher leaders across eight districts this coming

year. Teaching Matters will work with the DOE to develop their own internal capacity to provide competency-based coaching and issue micro-credentials. Teaching Matters will support the team in norming and scoring the micro-credentials, and provide on-going technical assistance to ensure rigor associated with the micro-credential.

Key take-aways from the Emerging Teacher Leaders program were its capacity to be operated at scale, its demonstrated professional learning and competency-building, the importance of meaningful incentives to spur participation, and the program's utility for the targeted aim of creating a well-qualified pipeline of prospective teacher leaders.

Conclusions

Competency-based micro-credentialing drives good professional learning

The process of micro-credentialing has proven to engage learners as agents in their own professional development. It is an asset-based approach that supports demonstration of competency at one's own pace, and it has the kind of flexibility that allows learners to assemble evidence that is not only rigorous, but also of relevance to their own teaching. The cycle of inquiry that undergirds the micro-credentialing process is one of teacher practice, coach and team feedback, submission of evidence, expert assessment, necessary adjustment, and ultimately demonstration of impact in the classroom for milestone badges.



“Teachers need to be constantly updating their pedagogical practices and skills. Often this is smaller snippets of learning - not a whole course. Micro-credentials really focus on the right “bite size” of skills that people need. They are very efficient.”

- Dr. Michael Nagler
Superintendent, Mineola Schools



Micro-credentials need system-level champions to establish meaningful currency

Our experience suggests that system-level value is a key motivator for teachers to earn micro-credentials, and helps drive the overall success of a competency-based micro-credentialing initiative. The most powerful forms of currency include pathways into new career roles, and financial incentives. Teachers say recognition from the system not only bolstered their own interest in micro-credentialing, but served to validate their accomplishments and credentials for their colleagues and administrators.

District leaders working with teachers and their unions can inform micro-credentialing initiatives to ensure that they align to critical system level goals and are appropriately incentivized. In two of our three implementations we had system level champions. It is no coincidence that these were the most effective at engaging teachers successfully.



“I am a younger teacher and new to the school. It was hard to come in as a teacher leader leading other teachers who have been here longer and have taught longer. The micro-credentials were a way to document the work, and make it clear to other teachers and to administrators and coaches in the school what I was doing. They helped improve the culture at the school and helped others to accept the role of teacher leader.”

- Victoria Dedaj
Teacher, X468



Coaching, feedback and support are still required

Coaching, feedback and support are also critical factors to supporting educators in understanding, practicing and demonstrating competencies. This is particularly true for micro-credentials that require new competencies and rigorous levels of evidence. These are also precisely the kinds of competencies systems are willing to invest in and recognize with new roles, career ladders and financial incentives.

The clear articulation of the competency, exemplars of best practices and well defined criteria for evidence create the conditions for more scalable, personalized and efficient coaching and support. Teaching coaches to norm on and score micro-credentials was important and necessary for capacity building.

For most teachers to engage in new learning, application, and practice, they both needed and valued feedback throughout the process from those with expertise in the competency. If systems are to undertake competency-based micro-credentialing they should be prepared to offer or realign existing professional development support and provide feedback for people seeking to demonstrate competencies and earn micro-credentials.

Systems can use micro-credentials to efficiently assess learning and effectively deploy teachers

Because micro-credentials have the potential to identify the particular skills teachers have, they can make more efficient and accurate the process of assigning teachers to various tasks or roles, and recognizing them for promotions. They may be useful as well in very targeted new knowledge acquisition, certification, and recertification for both novice and established teachers. Finally, they can, perhaps in a way more palatable than previously to teachers' unions, make multiple measures available to assess teachers' readiness for particular career pathways.



"This is not passive PD. Teachers engage in all types of activities to learn and improve their practice but there is little incentive to spend time collecting and demonstrating that learning with evidence unless they see an external support, recognition or benefit. The value to the system is to have evidence of who can lead on what. School systems often do not know systematically where their expertise really lies at a competency-based level - micro-credentials change that."

- Lynette Guastaferrro
Executive Director, Teaching Matters



The Way Forward

Competency-based micro-credentialing holds promise to revitalize professional development for educators and help achieve system goals. We heard from teachers, administrators and coaches alike that competency-based micro-credentialing shifts the professional learning paradigm, and they appreciated that micro-credentials are transparent, personalized, evidence-based, accountable and designed to be rooted in the relevant context of real classrooms.

However, micro-credentialing is still nascent, and much remains to be learned and done. As Teaching Matters expands our partnerships with school systems this year, we will be zeroing in on questions of assessment, system-level ownership of the micro-credentialing processes, and how micro-credentialing may link to improvement science. We look forward to continuing to share what we learn with the wider community.

Bibliography

Reports

Grunwald Associates LLC and Digital Promise. (2015). [Making Professional Learning Count: Recognizing Educators' Skills with Micro-credentials.](#)

TNTP. (2015). [The Mirage: Confronting the Hard Truth about Our Quest for Teacher Development.](#)

CTQ and Digital Promise. (2016). [Micro-Credentials: Driving Teacher Learning and Leadership.](#)

Getting Smart and Bloomboard. (2016). [Moving PD from Seat Time to Demonstrated Competency Using Micro-Credentials.](#)

Articles

Doran, Leo. October 2015, "[Once Digital Badges are Explained, Teachers are Willing to Pursue Them, Survey Finds,](#)" in Education Week.

Taylor Kerchner, Charles. April 23, 2014, "[Digital Badges Have Revolutionary Potential,](#)" in On California, Education Week blog.

Layton, Lyndsey. the Washington Post, August 4, 2015, "[Study: Billions of Dollars in Annual Teacher Training is Largely a Waste.](#)"

Sawchuk, Stephen. "[Can 'Micro-Credentialing' Salvage Teacher PD?](#)" March 30, 2016, in Education Week.

Schrage, Michael. [Four Innovative Trends to Watch in 2013,](#) in Harvard Business Review December 28, 2012.

*Competency-Based Micro-Credentials for Educators:
Powerful Lessons from Two Years in the Field*

Thank you to all our school and district partners who have participated in this launch of competency-based education and micro-credentialing. We particularly want to thank all of those who shared their insights and are quoted in this report. We also want to thank our board for their support of this work.

This report has had many contributors at Teaching Matters. Mary Strain was the principal author. Contributing writers included Sharon Rubinstein, Lynette Guastaferro, Jennie Brotman and Evan O'Donnell. Jen Murtha and Jane Condliffe provided critical review.

Teaching Matters is an organization dedicated to increasing teacher effectiveness, one of the most critical factors in student success. Our services transform how educators work together at urban public schools, helping the most effective teachers develop the skills they need to lead their peers and drive school-wide improvement. We also partner with school leadership to create a work environment that equips teachers to succeed in the classroom.

Great teachers. Bright futures.



**475 Riverside Drive Suite 1270
New York, NY 10115**

212 870-3505
inquiry@teachingmatters.org
www.teachingmatters.org