

Professional Learning Count

Recognizing
Educators' Skills
with Micro-credentials



 \mathbf{G}_{Δ} grunwald associates LLC



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Making Professional Learning Count

Research shows that the teacher is the single most important in-school variable influencing student achievement. This holds true even as our education system is realizing the potential of technology to transform learning.

While teaching can be supported and enhanced by technology and sophisticated algorithms, a high-quality learning environment requires skilled professionals with deep understanding of their individual students and a uniquely human touch. People learn in different ways and at different rates, and numerous social and emotional variables can affect students' progress on any given day.

Skilled teachers carefully plan but also pivot to alternate pathways based on students' interests. They watch for serendipitous moments when students become captivated by a discovery, event or challenge, and engage with an intensity that could not have been foreseen.

And, as technology and the Internet provide opportunities for learning through online courses, communities of practice, videos of expert teaching, teacher resource libraries and more, it is critical that these emerging resources are harnessed as legitimate and beneficial learning opportunities for professional educators as well. To take full advantage of these opportunities, teachers also need new ways to document, share and be recognized for what they learn, including using these new methods.

How can we clearly articulate existing and emerging competencies and support and recognize the accomplishments of educators as they develop throughout their careers?

How can we clearly articulate existing and emerging competencies and support and recognize the accomplishments of educators as they develop throughout their careers? How can we better connect educators with peers so they can share and more quickly adopt best practices? And, what are ways teachers can be supported while driving their own learning? As an emerging professional learning strategy for educators, micro-credentials show great promise.

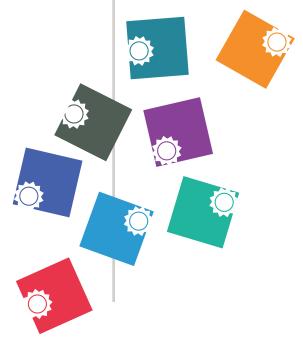
This study provides an in-depth exploration of teachers' attitudes toward professional development and competency-based microcredentials. The results of this study, along with reader feedback, are essential for the design and development of a comprehensive and effective educator micro-credential system that supports the advancement of teachers as well as the teaching profession.

Your comments are welcome. I look forward to hearing from you.

Sincerely,

Karen Cator

President and CEO, Digital Promise



Executive Summary of Key Findings



Teachers are deeply engaged in professional development.

- Ninety-nine percent of teachers participate in formal professional development. More than 80 percent participate in in-service days, and more than half in educator workshops. On average, teachers are required to complete 30 hours of professional development per year.
- Most teachers (72 percent) also participate in informal (non-required) professional development activities. These include traditional approaches, such as educator conferences and mentorships, and a growing range of online resources (including expert practice videos and professional educator networks).
- Satisfaction with professional development is much lower than participation. For example, while 84 percent of teachers report participating in in-service days, only 20 percent are satisfied with them. In general, informal activities generate more satisfaction. Overall, however, teachers feel positively about the practical skills and personal growth they get from professional development activities.

Most teachers
(72 percent)
participate
in informal
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development
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Teachers know very little about micro-credentials.

- Only 15 percent of teachers are even somewhat familiar with the concept of micro-credentials. Micro-credentials address the need for competency-based learning for educators by allowing them to identify specific competencies they wish to develop, submit evidence of their competence and then receive recognition for that learning through digital badges. And only 4 percent of teachers say that they are extremely or very knowledgeable about micro-credentials.
- There are no important differences in knowledge of micro-credentials by teachers' geographic regions, years of experience, grade level or subject taught, or gender. Nor are there any important differences associated with teachers in different types of schools (public or private) or the percentage of students receiving free and reduced-price meals in their schools.

Micro-credentials address the need for competencybased learning for educators by allowing them to identify specific competencies they wish to develop, submit evidence of the competence and then receive recognition for that learning through digital badges.

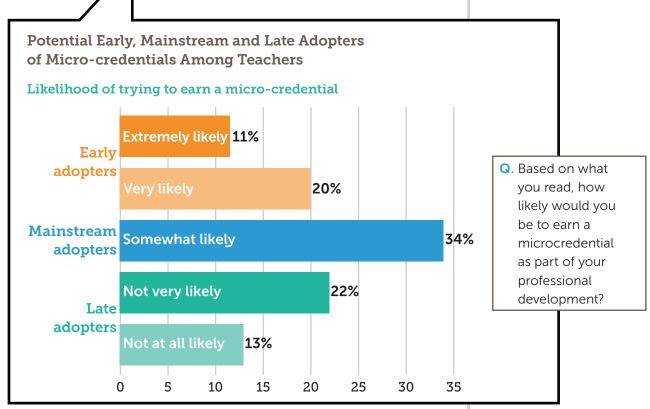


Teachers are interested in micro-credentials and are likely to try them at least once. However, teachers are likely to adopt them at different rates.

- Once teachers see a description of microcredentials, more than 70 percent are at least somewhat interested in them. Sixty-five percent of teachers are at least somewhat likely to try to earn a micro-credential as part of their professional development.
- About 31 percent of teachers are extremely or very likely to try micro-credentials when they become available (potential early adopters), and 34 percent are somewhat interested in trying them (potential mainstream adopters). About 35 percent are not likely to try them (potential late adopters).

70%

of teachers say they are are at least somewhat interested in micro-credentials





There are important differences between potential early and late adopters of micro-credentials.

These distinctions should drive how microcredentials are positioned and messaged to respond to the different needs and motivations of early, mainstream and late adopters.

Potential early adopters are:

- → Motivated by the desire to learn skills and improve capabilities
- Relatively less driven by extrinsic considerations (such as pay)
- Most engaged in professional development activities, especially informal activities
- → More likely to be satisfied by their professional development activities
- → Spread fairly evenly by years of experience
- Somewhat more likely to be female or to be science teachers

Potential late adopters are:

- → Driven primarily by extrinsic motivations, such as whether micro-credentials would satisfy professional development requirements or help them to earn higher pay
- Clustered among the most experienced teachers
- → Less engaged in professional development, especially informal learning, and in particular in new modes of delivery, such as massive open online courses (MOOCs) and video-based tutorials

Early adopters
are most engaged
in professional
development
activities,
especially
informal activities.



Teacher perspectives on micro-credentials reflect their desires to develop professional competencies.

- Teachers want professional development that improves their teaching and their skills. They are closely focused on activities that will improve their capabilities in the classroom. They see micro-credentials as providing:
 - Opportunities to learn new skills and hone existing ones
 - Recognition and sharing of best practices
 - Validation of specific competencies
- Teachers also want professional development that is easy to use and access, and tailored to their specific needs. Micro-credentials can deliver on this, because teachers see them as:
 - Adaptable to individual teacher needs
 - Focused on continuous learning
 - Based on competency, not seat time

"I like both the learning and the acknowledgment."

-Survey respondent

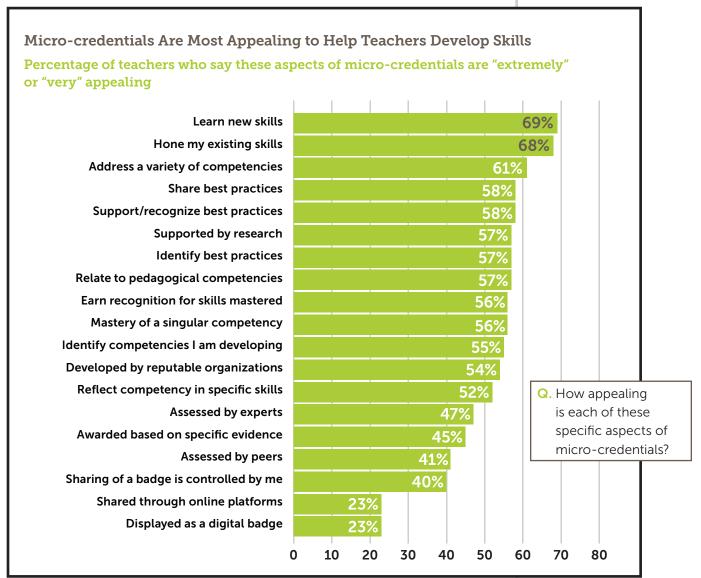


Teachers are not as focused on formal recognition and certification.

- Fewer teachers cite opportunities for recognition and certification of existing skills as motivators for using micro-credentials, although a majority of them (56 percent) see value in earning recognition for skills they have mastered.
- In parallel, teachers are not very interested in displaying digital badges for microcredentials earned or sharing them through social media platforms. These were the two least appealing features of micro-credentials out of 19 features tested in the survey.

"I don't need to show off badges on Facebook, I need to improve next week's lessons."

-Survey respondent



Introduction

Teachers earn credentials at the beginning of their careers, but they learn new skills every day. In their interactions with students and with one another, in professional development activities, and in the innumerable informal experiences within and beyond their school walls, teachers learn and improve their craft.

Yet this lifelong learning is rarely formally recognized. It does not appear on teachers' resumes or in their employment records. Once they complete their standard undergraduate and, perhaps, graduate educations or National Board certifications, there are limited pathways for educators to receive recognition for their professional learning and growth. Further, while districts and schools may track teachers' participation in professional development based on hours logged, they rarely focus on the skills teachers learn, use and hone in their daily practice.

Digital Promise is working with partners to develop a micro-credential ecosystem— a new way to satisfy teachers' love of learning, recognize their accomplishments and empower them to drive their own development. Teachers can earn micro-credentials—formal, competency-based recognition for specific skills that teachers use in the classroom—through an efficient online system.

Micro-credentials are designed to enable our public education system to continuously identify, articulate, capture, recognize and share the best practices of America's educators. Over time, a system of micro-credentials has the potential to transform professional learning and strengthen professional practice.

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This report is an effort to connect this initiative to teachers in a systematic way. Our study surveyed a nationally representative sample of more than 800 teachers in public and private schools, across the country and across the K–12 grade levels, to find out what they know and think about micro-credentials, to discover under what circumstances and for what purposes they might earn them, and to identify key barriers as well as incentives that might make micro-credentials attractive.

The core findings about professional development are encouraging: teachers are heavily engaged in professional learning in general and, in particular, they use and find value in a number of informal tools for expanding their knowledge and skills. And because currently recognized professional development options do not fully satisfy teachers' needs, there is significant opportunity to provide alternatives, such as micro-credentials.

"I like that
you are able to
continue [your]
education and
be valued for
what you may
have honed for
many years."

-Survey respondent

The Concept of Micro-credentials

In this study, teachers were first asked if they were aware of micro-credentials. Then, to gauge their interest in and attitudes about the concept, they were presented with this explanation:

Teachers earn credentials at the beginning of their careers, but they learn new skills every day. While teachers are recognized for the time they spend in traditional professional development, they often don't have the opportunity to demonstrate the full breadth of what they have learned. To address this, Digital Promise is building a system of micro-credentials to provide professional educators with a new way to identify the competencies they are developing and gain recognition for the skills they master throughout their careers.

Micro-credentials could relate to traditional skills such as mastery of physics content, or to competencies such as strategies to support learning differences, engage students with design thinking or use data to make decisions. To earn a micro-credential, educators compile or produce evidence demonstrating their competence in a specific skill. This evidence is submitted through an online system and evaluated by a qualified assessor. Each micro-credential an educator earns can be displayed

as a digital "badge" and shared through online platforms such as blogs, LinkedIn and Facebook, as desired and controlled by the educator.

Educator micro-credentials can enable our public education system to continuously identify, support, recognize and share the best practices of America's educators so all teachers can hone their existing skills and learn new ones.

Features include:

A system of micro-credentials that addresses a variety of competency areas across the teaching profession. These micro-credentials are designed and developed by reputable organizations and partners. Each micro-credential:

- → focuses on a singular competency.
- → is supported by research.
- → is assessed based on artifacts, such as classroom videos, student work or project plans, that demonstrate an educator's competence with a particular skill.
- is assessed by experts or peers who have already earned that micro-credential.
- → is displayed through a portable and shareable digital "badge."

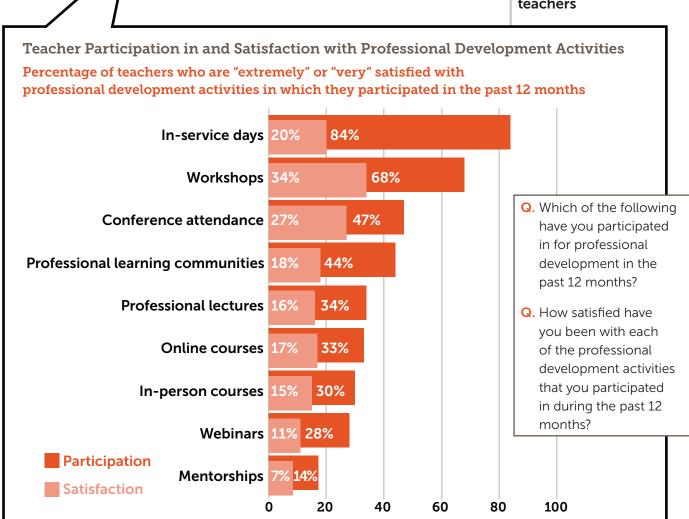
Key Findings

Participation, Satisfaction and Motivation in Professional Development

Teachers are required by schools and school districts to participate in professional development throughout their careers. On average, teachers report that they are required to complete 30 hours of professional development per year, and almost all teachers say they participate.

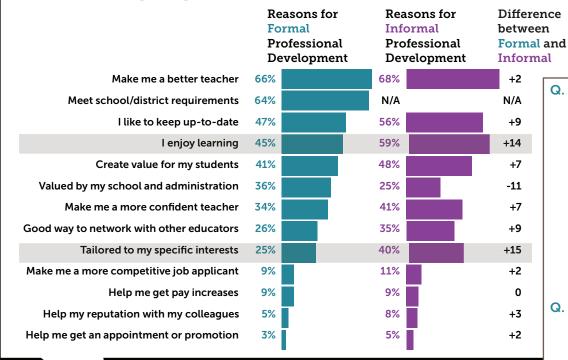


The average amount of required professional development for teachers



Driving Factors for Teacher Participation in Professional Development

Reasons teachers participate in formal and informal activities



a professional development activity in the past 12 months. Which of the following reasons strongly encouraged you to participate?

Q. You mentioned

that you have

participated in

Q. You mentioned that you have participated in an informal professional development activity not required in the past 12 months.

Which of the following reasons strongly encouraged you to participate?

Source: Grunwald Associates LLC

Teachers also participate widely in informal professional development; 72 percent of teachers say they do so at least once a year. Teachers also are highly aware of new informal modalities, such as learning through expert practice videos, professional learning communities, online educator networks and Twitter. More than half of teachers who are aware of the more common approaches say they have participated in them. Overall, participants are more satisfied with informal activities.

Teachers tend to give different reasons for participating in formal and informal professional development. Teachers say they are "strongly encouraged" to participate in informal activities because they enjoy learning, like to keep up to date and network with other educators, and because informal activities are tailored to their specific interests, among other factors. Teachers believe their their schools and administrators place more value on formal than informal training.

Knowledge of and Interest in Micro-credentials

Few teachers have any knowledge of micro-credentials. Only 15 percent are even "somewhat" aware of micro-credentials, and most of those with some knowledge have learned about them from other teachers.

However, once teachers are presented with an explanation of micro-credentials, they express substantial interest in this new way to recognize professional learning. Thirty-one percent of teachers say they are "extremely" or "very" interested, and a further 43 percent say they are "somewhat" interested.

These numbers translate directly into interest in actually earning a micro-credential. About 31 percent of teachers say they are "extremely" or "very" likely to earn a micro-credential as part of their professional development and 34 percent say they are "somewhat" likely. The remaining 35 percent say they are not likely to try this.

These groupings correspond well to the standard path for technology adoption by early, main-stream and late adopters.

Early Adopters

Teachers who say they are "extremely" or "very" interested in micro-credentials could become early adopters for this new credentialing system. Identifying and understanding this group is a central strategic task for those deploying and recognizing micro-credentials.

This group is very enthusiastic about the opportunities they see in micro-credentials. Almost 80 percent believe that micro-credentials can help them become better teachers, and this is one of their top motivators for seeking professional development. They see micro-credentials as providing value for their students and meeting their own needs for learning.

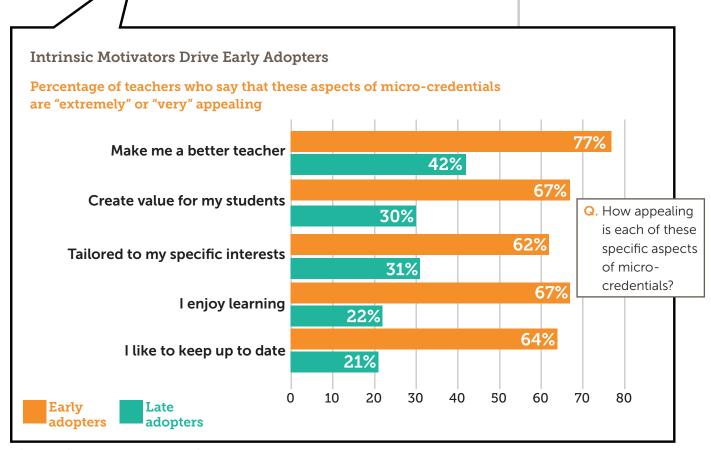


of teachers are
"extremely" or "very"
interested in trying
to earn a microcredential

Potential early adopters are more engaged in professional development generally, especially with informal activities, and are more likely to express satisfaction with their professional development. They are twice as likely as late adopters to use expert practice videos, more than three times as likely to read professional learning blogs, and four times as likely to try a MOOC or follow professional learning resources on Twitter.

While all teachers use professional development in part to meet school district requirements, participation in professional development by early adopters is more strongly driven by intrinsic motivations. At least 50 percent of early adopters say that their motivations include:

- Making me a better teacher (70 percent)
- > Keeping up to date (59 percent)
- I enjoy learning (56 percent)
- Adding value for students (50 percent)



These broad motivators for professional development among early adopters match up well with the specific drivers for using micro-credentials. Early adopters are excited by specific ways they see micro-credentials helping them become better teachers, creating value for students and keeping them up to date. Late adopters have much less interest in these features of micro-credentials.

Demographically, teachers with 10 years of experience or less are more likely to be early adopters, but there is interest in micro-credentials across the entire spectrum of experience. A quarter of the most experienced teachers (those with 16 or more years of experience) are potential early adopters, as are 30 percent of teachers with 11 to 15 years of experience.

Early adopters assign lower priority to extrinsic motivators for earning micro-credentials. They are far less likely than late adopters to identify more pay as an important motivator.

Early adopters say that the absence of sufficient information about micro-credentials is a barrier to trying them. They are also concerned about cost and worry that their administrators don't know about micro-credentials.

Mainstream Adopters

About one-third of teachers can be tentatively categorized as potential mainstream adopters. They are somewhat interested in microcredentials and somewhat likely to try to earn at least one.

Mainstream adopters share some characteristics with both early and late adopter groups. Like potential early adopters, they:

- → Are very focused on learning new skills
- Believe that micro-credentials can help them identify and share best practices
- Are interested in mastering a singular competency

Early adopters
assign lower
priority to
extrinsic
motivators for
earning microcredentials.

→ Are somewhat more likely to have fewer years of experience

Like late adopters, mainstream adopters are:

- Not interested in sharing badges through online platforms or in displaying digital badges
- Less likely than early adopters to participate in most kinds of informal education
- Less satisfied with their professional development activities

Like late adopters, some mainstream adopters see no direct need for a digital badge, see no impact on pay and are concerned that it sounds like a lot of work.

Late Adopters

Just over one-third of teachers say that they have little or no interest in micro-credentials. Yet in the end, if micro-credentials become ubiquitous, this group too will eventually adopt them to at least some degree.

Potential late adopters have some specific demographic and motivational characteristics:

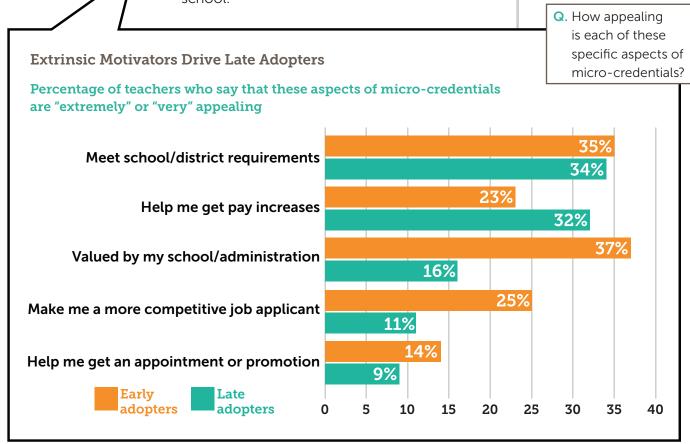
They are more likely to be more experienced teachers. Forty-nine percent of late adopters report 16 or more years of experience, a significantly higher percentage than early adopters. Late adopters make up a larger percentage of highly experienced teachers than of other groups of teachers with less experience.

However, a quarter of these highly experienced teachers are potential early adopters. This is a lower proportion than for less experienced teachers, but it still represents an important and, perhaps, influential subset of potential early adopters.

Late adopters
are more likely
to be more
experienced
teachers.

- → Late adopters participate somewhat less in formal professional development activities, and considerably less in informal activities.
- They are also less satisfied with both informal and formal types of professional development than early and mainstream adopters.
- → Late adopters are more driven by some extrinsic motivations, such as pay increases or meeting district or school requirements, than by other extrinsic motivations.

Early, mainstream and late adopters identify some similar barriers to using micro-credentials. Specifically, they need more information, are concerned about cost and worry that their administrators don't know about micro-credentials. There are no significant differences between early, mainstream and late adopters on other characteristics and demographics, including subject or grade taught, or teaching in a public or private school, or in an urban, rural or suburban school.



Attitudes about Micro-credential Features

One of the more important findings from this study is that teachers are strongly motivated by their own drive to improve—to learn, acquire new skills, adopt best practices and provide more value for kids.

That sentiment is reflected in the appeal of micro-credentials to potential early and mainstream adopters, who show a strong preference for the potential learning benefits.

Appeal of Micro-credentials for Teachers	All teachers	Early adopters	Mainstream adopters	Late adopte	rs	
	Percentage of teachers who say these are "extremely" or "very" appealing					
Learn new skills	69%	89%	81%	40%		
Support/recognize best practices	58%	86%	64%	28%	Q. How appealing is each of these specifical aspects of microcredentials?	
Mastery of a singular competency	56%	88%	61%	24%		
Developed by reputable organizations	54%	81%	61%	24%		
Assessed by peers	41%	64%	44%	20%		
Shared through online platforms	23%	49%	18%	7%		
Displayed as a digital badge	23%	52%	17%	5%		

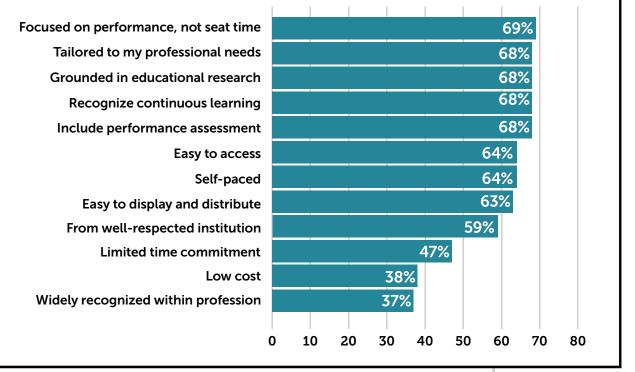
All three groups say that sharing and displaying digital badges for earned micro-credentials is less appealing than other features. Early adopters are positive about digital badges, but mainstream and late adopters find digital badges significantly less appealing.

According to teachers, micro-credentials deliver on a number of factors that all teachers consider important when they decide on the professional development activities in which to participate. They say that micro-credentials are tailored to their professional needs, grounded in educational research, and focused on performance, not seat time.

Micro-credentials Deliver on the Attributes of Professional Development That Teachers Want

Percentage of teachers who say these characteristics describe micro-credentials "extremely" or "very" well

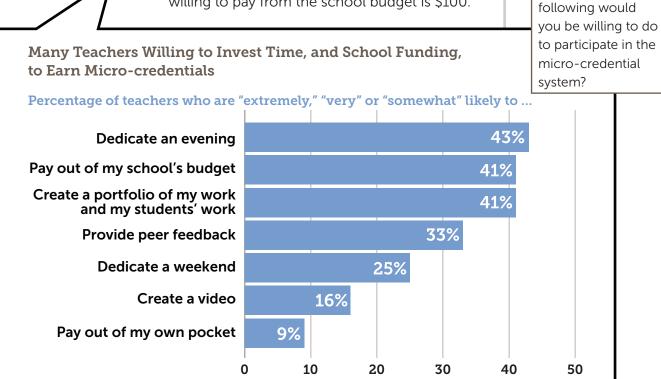
Q. How well does each of the following characteristics describe micro-credentials based on your current understanding?



Potential Teacher Investment in Micro-credentials

Teachers are prepared to spend time earning micro-credentials—over and above the time it takes to acquire new knowledge or skills during their careers. On average, teachers say they would be willing to spend 4.2 hours to collect and submit evidence required to earn a micro-credential. Twenty-eight percent of teachers say they'd be willing to spend six hours or more collecting and submitting evidence, such as videos, student work, written reflections, or lesson or unit plans, to demonstrate that they have learned or mastered a specific competency. Overall, 43 percent of teachers say they would dedicate an evening to this process.

Teachers also recognize that assessment of micro-credential competencies requires funding, and that two potential sources of that funding are school budgets and their own personal funds. Nine percent of teachers say they would be willing to pay out of their own pockets. Forty-one percent say they would pay from their school budgets. The median amount they'd be willing to pay from the school budget is \$100.



Source: Grunwald Associates LLC

Q. Which of the

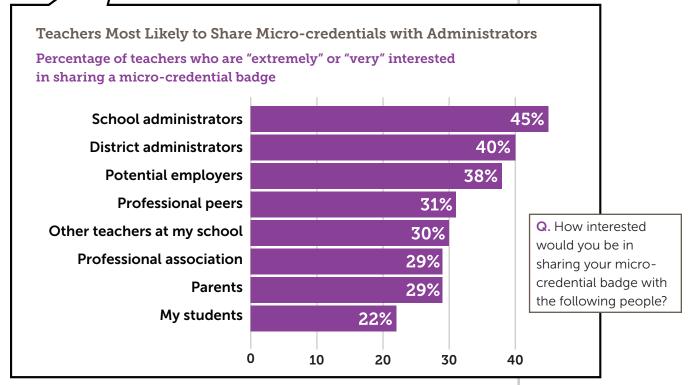
Sharing and Using Micro-credentials

One potentially attractive feature of microcredentials is that they can be posted and shared digitally, particularly as a means of enhancing recognition. Some teachers really like this idea, but most are less interested.

In open-ended comments, some teachers indicate that they are somewhat wary that administrators could use micro-credentials as a new assessment tool, or even make them mandatory. Despite this concern, teachers overall are more interested in sharing digital badges with school and district administrators than they are in displaying them on social media.

"We learn and use skills that are not always measured in a classroom observation.
Using microcredentials would allow us recognition in those areas."

-Survey respondent



Conclusion

Overall, about 30 percent of teachers are interested in trying micro-credentials. They will be the first to adopt, and their views will largely shape adoption thereafter, particularly in a world where sharing opinions through social media and ratings sites has become a key gateway for emerging technologies.

Many teachers—and most potential early adopters—engage in informal professional development and are more satisfied with informal activities than they are with formal professional development. Micro-credentials fit well with existing professional development opportunities for teachers, and in particular with the rise of informal learning.

All teachers, and especially early adopters, are driven by intrinsic motivations. Above all, they want to learn to be better teachers, and they believe that to some degree micro-credentials can help them achieve this goal. These intrinsic motivations open the door for broader adoption because micro-credentials can offer opportunities to build new skills. At the same time, micro-credentials must address a variety of intrinsic motivations to be successful.

Key point: To succeed with early adopters, micro-credentials should deliver more than certification and validation. Micro-credentials also need to reflect the attributes of professional development that teachers most value, such as being competency-based and personalized.

"Administrators
or policymakers
could misconstrue
[micro-credentials]
to use them as an
evaluation device,
while educators
will see them as a
new hoop to jump
through."

-Survey respondent

Teachers who are not potential early adopters have different needs and wants. To appeal to mainstream adopters, micro-credentials will have to address the extrinsic motivations of these educators. This may require new strategic initiatives and different messaging.

Already, and with limited exposure to the concept of micro-credentials, teachers express willingness to dedicate some time to earning one. As a result of these survey findings, we now have more information to guide the design of this micro-credential system to ensure it meets their needs and the needs of the profession.

"Micro-credentials take a larger concept and break it into smaller parts.
... It allows the teacher to slowly layer in these new teaching concepts."

-Survey respondent

About This Study

This study is based on teacher responses to a 20-minute survey conducted online. The survey used a nationally representative U.S. sample of 856 teachers in grades K–12. Respondents from both public and private schools were included.

Teacher Sample Composition

Grade		District Size	
Elementary	47%	Less than 1,000 students	149
Middle	24%	1,000 to 4,999 students	289
High	29%	5,000 to 24,999 students	389
Gender		25,000+ students	209
Female	78%	Region	
Male	22%	South	329
Teaching Experience		Midwest	259
Less than five years	11%	Northeast	239
Five to 10 years	28%	West	209
11 to 15 years	20%	Metro Status	
16+ years	40%	Suburban	509
School Type		Urban	279
Public	87%	Rural	239
Private	8%	School Demographics	
Parochial	5%	(Average)	
School Size		White (non-Hispanic)	549
Less than 500 students	36%	Black/African American	199
500 to 999 students	38%	Hispanic/Latino	199
1,000+ students	26%	Asian/Pacific Islander	69
		Other	29

Methodology and Analysis

All respondents were recruited and completed their surveys online, and were incentivized for their participation.

All differences reported between subgroups of teachers are statistically significant at the 95 percent level of confidence (p < 0.05), unless otherwise indicated. Additional directional data are reported to indicate noteworthy trends.

About Digital Promise

Digital Promise is a nonprofit organization authorized by Congress to spur innovation in education in order to improve the opportunity to learn for all Americans. Through its work with educators, entrepreneurs, researchers and leading thinkers, Digital Promise supports a comprehensive agenda to benefit lifelong learning and provide Americans with the knowledge and skills needed to compete in the global economy.

Most important, all learners must have access to learning technology—because when everyone participates, everyone learns.

www.digitalpromise.org

About Grunwald Associates LLC

Grunwald Associates is a full-service research and consulting firm whose work has informed the debate on a range of national policy issues. Grunwald offers an in-depth understanding of education and innovation, combined with mastery of state-of-the-art research methodologies.

The firm specializes in challenging public and proprietary assignments for nonprofit, corporate and government clients. Services include sophisticated quantitative and qualitative research, including pricing simulation and product configuration, social media and community development, and messaging and strategic counsel. www.grunwald.com

Making Professional Learning Count: Recognizing Educators' Skills with Micro-credentials is available to download at www.grunwald.com/reports and at www.digitalpromise.org/page/-/dpdocuments/microcredentials/making_professional_learning_count.pdf?nocdn=1.

A more detailed market research report based on this survey, including findings of interest to industry, is available commercially from Grunwald Associates. See www.grunwald.com/reports/microcredentials-market-research-study/