

Micro-Credentialing and the Individualized Professional Development Approach to Learning for Teachers

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Abstract

Traditional delivery of staff development training for teachers is often represented by day-long sessions delivered by an expert from outside the district who utilizes an abundance of PowerPoints via whole group instruction. (These sessions are sometimes viewed by participants as “death by PowerPoint.”) Teachers attending a day-long session are employed at a variety of grade levels and in various subject matter areas, often reducing the relevance and applicability of the content presented. We propose that professional development should be offered to teachers through an Individualized Professional Development approach that tailors content to the specific needs of each teacher. Micro-credentialing, with its built-in accountability through required mastery assessment of content, is a viable way to deliver such training to teachers. Micro-credentialing represents personalized professional learning, self-pacing, and specific application of content to each teacher’s needs and wants. It is more interesting, motivational, and useful to teachers than the traditional day-long approach using whole group instruction. The Individualized Professional Development approach will result in teachers better meeting the needs of their students, thereby enhancing student learning.

Keywords: micro-credentialing, teachers, Individualized Professional Development

Introduction

“We need to know that the purpose of professional learning [professional development] is for educators to develop the knowledge, skills, practice, and disposition they need to help students perform at higher levels” (Glatthorn, Boschee, Whitehead, & Bochee, 2019, p. 244).

All too often professional development is epitomized by the traditional training of teachers via whole group instruction with an outside expert’s delivery system predominately

composed of direct instruction in a day-long format. Reeves (2010) notes that teachers are frequently “required to endure insufferable PowerPoint presentations by well-intentioned leaders” in professional development sessions (p. 2). As Tucker (2019) explains, “The traditional approach to professional development, in which large groups of teachers are mandated to attend a handful of presentations or workshops throughout a school year, isn’t effective in an era of hyper-connectivity and rapid technology change” (p. 57).

While administrators and others—sometimes including teacher leaders—have good intentions, the previously described whole group approach to professional development most often is insufficient in producing truly worthwhile professional development learning for teachers (Reeves, 2010). This whole group top-down approach usually results in minimal ownership by teachers for their professional development and career growth. Further, this whole group approach often does not provide teachers with the knowledge, skills, and abilities to maximize student learning.

We advocate bifurcating professional development into the traditional whole group approach (with improvements) and an *individualized program* for each teacher. The content of this Individualized Professional Development approach is driven by: (1) the needs and goals flowing from a teacher’s formal evaluation, (2) collaboration with the principal, (3) the needs anchored in the building’s school improvement plan, and (4) personal professional learning desires of the teacher congruent with his/her role in the school and career growth. The Individualized Professional Development approach can be thought of as *personalized learning* (Will, 2017). This article only addresses the Individualized Professional Development approach to professional development. The authors will address enhancement for the traditional whole group professional development format in a separate article.

It should be noted that *professional learning* is the term replacing professional development because it is more representative of the desired results (e.g., improved student learning) from training for teachers. In addition to professional development, the term *staff development* is sometimes used to mean the training teachers receive to enhance their knowledge, skills, and competencies to serve students better and to maximize the learning of each student.

Sources for Teachers to Use for an Individualized Professional Development Approach

Micro-credentialing is gaining a stronghold as a vehicle for knowledge and skills development that interfaces well with individualization of professional development for teachers.

Micro-credentialing is a form of professional learning in which teachers work to prove mastery of single competencies. They’re [micro-credentials] designed to be tailored to what a teacher needs or wants to know, from classroom management to analyzing student data. (Will, 2017, p. 1)

Micro-credentialing is sometimes referred to as digital badging (Berry, 2016).

Micro-credentialing is “centered on the idea that teachers need more personalized professional development” (Jones, 2018, p. 2). Micro-credentialing allows for individualization of professional learning for teachers by matching training content with the specific wants and needs of each teacher. It can be broadly content-based, such as addressing assessment

techniques in general, or more specific as in using video to enhance lessons (Utecht, 2018). Micro-credentialing is also competency-based through assessments that *credentials* teachers—often through earning badges—in the content mastery. Vandiver (as cited in Will, 2017) compares experiences in micro-credentialing with the traditional professional development approach in which all participants are presented the content in a large group setting. He states,

It's [micro-credentialing] much better than going and sitting in a big auditorium full of other teachers in all different subject matter areas and grade levels and getting some generic professional development from some speaker who doesn't know us or our schools. (Vandiver as cited in Will, 2017, p. 2)

Summarizing, French and Berry (2017) note that:

Micro-credentials for teachers are competency-based, personalized, small-scale professional development modules that are suited for anytime/anywhere learning and allow teachers to show what they can do, not only what they know. Micro-credentials change the face of teacher professional learning to move away from one-size-fits-all efforts to customized, just-in-time learning that leverages personal desires for professional growth. (p. 38)

BloomBoard, a leading provider of micro-credentialing for teachers, has a platform for delivery featuring: (a) a career pathway map to help teachers and school leaders align advancement opportunities with specific competencies, (b) a discovery experience that helps educators browse and identify credentials that interest them in addressing the skills they need and want to work on, and (c) organizes credentials around instructional standards and specific pedagogical topics (as cited in Schaffhauser, 2018, p. 1). Bloomboard's platform is typical of most providers of micro-credentialing for teachers.

Digital Promise is another source that teachers can access regarding micro-credentialing for their Individualized Professional Development approach. Digital Promise's framework ensures that each micro-credential: (a) focuses on a single competency, (b) has a key method backed by research, (c) requires submission of evidence, and (d) includes a rubric or scoring guide. To be awarded a credential or badge, a teacher is required to submit evidence such as: (a) a project or lesson plan, including evaluation guides or scoring rubrics; (b) student work samples; and (c) text, audio, or video of a classroom interaction (Digital Promise, 2019, p. 1). Attributes of micro-credentialing regarding teachers' professional learning are:

- Creates a sense of ownership.
- Emphasizes continuous learning.
- Provides *deep learning* on a focused topic.
- Usually focuses on a single competency.
- Personalizes the design of content delivered through a self-pacing approach.
- Is based on knowledge and skills acquired; not hours of "seat time."
- Requires implementation of what teachers learn with their students.
- Usually requires teachers to furnish examples of students' work and videos of implementation to demonstrate effective application.

- Focuses on the application of content in the context of the teacher’s job (referred to as job embedding).
- Is competency and performance-based because teachers must pass mastery assessments to be credentialed and earn a badge.
- Emphasizes teachers effectively understanding the process needed to implement the competency being learned.

In addition to the micro-credentialing approach, an abundance of E-learning resources are available from professional associations and organizations that are high quality and allow for the individualization of professional learning for teachers. State departments of education and other regional education organizations and consortia are useful sources for the content needed for the Individualized Professional Development learning approach for teachers. There is a wealth of relevant content available on the internet via digital platforms. Face-to-face seminars and workshops can be excellent sources for content. Networks, blogs, and other digitally-based resources also provide useful information for the individualized professional learning of teachers.

Hopefully, a teacher’s school and the district will provide the leadership, encouragement, and resources needed to aid her/him in securing the necessary training to make the Individualized Professional Development approach work. As Tucker (2019) notes: “Leaders who want to create change in their districts and encourage innovation [in teachers] must invest time, energy, and resources into building a *sustainable* professional learning infrastructure to support that change” (p. 57).

Darling-Hammond, Hylar, and Gardner (2017) advocate that effective professional learning, through a method such as the Individualized Professional Development approach, must have “Sustained duration: Effective professional development provides teachers with adequate time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice” (p. 3). Yoon, Duncan, Lee, Scarloss, and Shapley (2007) reviewed “1,300 studies identified as potentially addressing the effect of teacher professional development on student achievement” (p. iii). Only nine of the 1,300 utilized a scientifically-based research design. These nine studies revealed that teachers who averaged 49 hours of high-quality professional learning “can boost their students’ achievement by about 21 percentile points” (Yoon et al., 2007, p. iii). The message is clear that when school administrators are willing to invest significant resources in high-quality targeted professional learning for teachers, the payout to students can be immense. The Individualized Professional Development approach is what school leaders need to invest in to significantly improve student learning.

Factors to Enhance Learning Through the Individualized Professional Development Approach

Regardless of the source for securing content (e.g., micro-credentialing, other E-learning, or interactive face-to-face small group seminars) for professional development, teachers will profit from utilizing basic principles of learning such as the desire to learn, learnability, learning agility, and transfer of learning. Elastic thinking and micro-learning, along with Dweck’s (2016) growth mindset, will aid teachers in maximizing their professional learning through the Individualized Professional Development approach.

Basic Principles of Learning¹

Four aspects for successful professional development by teachers through the Individualized Professional Development approach regarding learning are: (1) desire to learn, (2) learnability, (3) learning agility, and (4) transfer of learning. *Desire to learn* is representative of teachers who have an open mind and a curiosity about the world around them (Henriksen as cited in L. A. Berger & Berger, 2018, pp. 138-146). Desire to learn means a teacher having an open mind that is inquisitive to finding cause-effect connections to solve problems. Interestingly, teachers indicative of a desire to learn understand the importance of the *ability to unlearn* (Caplan, 2013). This means *letting go* of what traditionally has been done, and how to do it, in favor of identifying new methods and approaches that improve teaching performance and student learning.

Henriksen (as cited in L. A. Berger & Berger, 2018, pp. 138-146) describes *learnability* as “the desire and ability to quickly grow and adapt skill sets to remain relevant for the long term” (p. 139). He also explains learnability by referencing the Learnability Quotient™ that assesses the following about each teacher:

- *Intellectual*: How motivated or willing is the teacher to learn or understand things better?
- *Adventurous*: Does the teacher have an intrinsic desire to explore and try new ways of doing things?
- *Unconventional*: Is the teacher willing to question the status quo?

Learning agility is defined by Gay and Sims (2006) as:

Encompassing the ability to learn very quickly and think creatively. Individuals [teachers] with high learning agility also seek out the ideas and feedback of others, and work towards continuous improvement both for personal effectiveness and team effectiveness. Demonstrating high learning agility includes the ability to be flexible, handle stress well, and adapt to change. Individuals with high agility perform effectively in ambiguous situations. (pp. xvi-xvii)

Dalziel (2018) adds innovation and self-reflection to the learning agility concept applied to teachers in an Individualized Professional Development approach (p. 132).

Dalziel (2018) notes that the inability of teachers to effectively apply learning agility can result in *derailment*. Derailment is indicative of the “know-it-all” teacher who is extremely inflexible and ineffective in reacting to change or causing change. Teachers in pursuit of developing new knowledge, skills, and abilities must embrace learning agility and counteract derailment.

Transfer of learning refers to a teacher’s ability to take knowledge and skills acquired in one context (e.g., E-learning) and effectively transfer and apply the learning in the classroom to improve education for children. New learning is of minimal utility in the context of professional development for teachers if it cannot be put to proper use that results in enhanced student learning.

Elastic Thinking²

Thinking the same way with the same assumptions and reference points does not provide the innovative thinking needed to address the fast pace of the changing environments experienced by teachers. Teachers who use *elastic thinking* have a changed mindset and consider divergent views and ideas regarding how to solve difficult educational problems. They identify creative and innovative ways of self-development to enhance their knowledge, skills, and competencies to serve students better. Attributes of elastic thinking that aid teachers' acquisition of new knowledge and skills through an Individualized Professional Development approach are:

1. Letting go of *comfortable ideas* and becoming accustomed to ambiguity and contradictions in the learning process.
2. Rising above conventional mindsets and reframing questions.
3. Willing to abandon ingrained assumptions and opening up new paradigms.
4. Utilizing imagination to generate and integrate a wide variety of ideas.
5. Willing to experiment. (Mlodinow, 2018, p. 6)

Technology-based Micro-learning³

The Internet of things, the global proliferation of mobile devices, and the rapid decrease in the cost of these devices and related services are taking us to a place where everyone across the globe will have just-in-time access to information and learning platforms, right when they're needed. (Neal & Sonsinoas as cited in Bickham, 2016, p. 292)

Micro-learning, in increments as minimal as five minutes, meshes well with some aspects of technology-driven professional development for teachers who utilize the Individualized Professional Development approach. A premise of micro-learning is that a teacher's professional learning can happen at any time or any place. Micro-learning means "making learning [only] as long as necessary. Cut out extraneous details and only focus on the most relevant and pertinent information" (Cole, 2017, p. 9). The heart of micro-learning is a teacher understanding how long it takes to learn the most essential parts of a concept (Cole, 2017).

Micro-learning is facilitated through the quick "accessibility across devices, particularly mobile devices. Integrating the use of these instruments with micro-learning paves the way for a more enjoyable learning" for teachers and productive use of their time (Otmanboluk, 2017, p. 8). Micro-learning is often useful as a supplemental learning tool when paired with an E-learning micro-credentialing module. Micro-learning represents an informal approach to professional learning because its structure and application are based on the judgment and discretion of the teacher (Glatthorn, Boschee, Whitehead, & Boschee, 2019).

Growth Mindset⁴

Teachers can believe that factors such as intelligence and personality are unchangeable (fixed mindset) or believe that these factors can be nurtured and developed (growth mindset) for enhancing their professional development (Dweck, 2016). Both the fixed and growth mindsets impact teachers, but the growth mindset will enhance their expertise in professional development endeavors (Bartz, 2016b).

To nurture the growth mindset, teachers need to focus on: (a) having *purpose* drive their professional development; (b) dealing head-on with deficiencies instead of hiding from them when pursuing new knowledge and skills; (c) seeing setbacks as learning opportunities for future successes; (d) viewing other teachers as collaborators to learn from; (e) nurturing a burning desire to keep learning new knowledge and skills; (f) finding inspiration from successes of others (including students) and learning from them; (g) understanding that they can change and grow through passion, effort, application, and experience; and (h) being ready to take risks, confront challenges, and keep working to get better through professional development—even when feeling distressed (Bartz, 2018b). Teachers challenging themselves to develop new skills and competencies, and being willing to put forth the needed effort to do so, is key to maximizing the growth mindset through an Individualized Professional Development approach (see Table 1).

Table 1

Examples of Dweck’s Mindset: Fixed vs. Growth

Fixed	Growth
abilities/skills are static	abilities/skills can be developed
<ul style="list-style-type: none"> ● avoids challenges ● gives up easily ● sees effort as fruitless ● ignores useful criticism ● is threatened by others 	<ul style="list-style-type: none"> ● embraces challenges ● persists against obstacles ● sees effort as necessary ● learns from criticism ● is inspired by others’ successes (Dweck, 2016)

Mentors, Performance Career Coaches, and Networking⁵

Mentors

“Mentoring aims include: building confidence through support, feedback and advise how to develop; serving as role models; helping the mentee [teacher] to learn to navigate organizational politics” (Caplan, 2013, p. 117).

Teachers utilizing the Individualized Professional Development approach can profit immensely from a mentor within the district because such an individual has a holistic, contextual understanding of education and knows how to enhance student learning. As a learning process, mentoring has the huge advantage of being one-to-one (Caplan, 2013, p. 103). The mentor has expertise and knowledge specifically relevant to effectively educating children to share with the mentee [teacher], especially in the realm of how the school district operates regarding factors that are likely unknown to the teacher. The teacher also has the potential for the mentor to *sponsor* him/her for career advancement. Requisites of an effective mentor-mentee arrangement are trust, positive relationship, accessibility, confidentiality, and a bonded interest in the pursuit of effective professional development and career guidance for the mentee.

Performance Career Coaches

A performance career coach (individual usually external to the school district) is another avenue of insights for teachers regarding their professional development, especially for career advancement. A performance career coach can make the following contributions to teachers: (1) explore their career aspirations, (2) provide growth-oriented perspective and identify new opportunities for such, (3) help them to focus on developing and releasing all of their potentials, (4) identify more challenging experiences in present job situations, (5) help them to develop *emotional and social maturity*, (6) aid them in the use of networking to assist in problem solving, (7) help them to become solution-oriented and to establish authentic commitment for future actions, (8) ask probing questions while being a *careful listener*, and (9) help them to minimize their complaining and focus on what they can control in making positive change (Caplan, 2013; Bartz, 2016a).

Trust, a positive relationship, and accessibility are keys to effective results for the teacher working with a performance career coach. Cost is the downside to utilizing a performance career coach and, thus, may prohibit a teacher from using this source. Providing performance career coaches may be more cost-effective when used on a limited basis such as bi-annually or for a more intense short time (e.g., several months). Caplan (2013) refers to this intense short-term experience as “just-in-time coaching” (p. 105). It may be feasible for a teacher to utilize a retired educator as a performance career coach at little or no cost.

Networking

Teachers need to forge strong and productive connections with other teachers and educator groups to supplement their professional learning and gain multiple perspectives on issues relevant to them (Wills, 2019). These connections are not about socializing online, but gaining new and broad-based perspectives, creating access to knowledge, and taking one’s expertise to a higher level (Hagerman, Christiansen, & Stein as cited in Bickham, 2016, pp. 49-67). Professional associations are excellent sources for networking, both in person and online. Formal and informal digitally-based platforms can also be beneficial for gaining professional development, knowledge, and skills, as well as providing career advancement insights. Regarding social networking tools, Caplan (2013) advises teachers using the Individualized Professional Development approach to “take advantage of these new technologies” to advance their knowledge and skills. He goes on to state, “The possibilities are endless and will change the nature of learning, as well as career development” (p. 116).

Summary

The Individualized Professional Development approach to professional learning is necessary for teachers to develop their full potential. Most importantly, the Individualized Professional Development approach will enhance teachers’ skills that lead to improved student learning. Micro-credentialing is an excellent vehicle for delivering focused learning based on the needs of individual teachers utilizing the Individualized Professional Development approach.

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Footnotes

¹Based in part on:

Bartz, D. E. (2018b, November). Staff members self-managing their talent development. *American International Journal of Humanities and Social Science*, 4(5), 1-12.

²Based in part on:

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³Based in part on:

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⁴Based in part on:

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