Microcredentials: A Promising Professional Development Model for Teacher Leaders

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Abstract – **With the ongoing demands on principals, many are looking toward instituting a shared leadership model distributing leadership responsibilities to teacher leaders. Unfortunately, there is limited training or professional development available for preparing teacher leaders. One promising solution is the use of incorporating microcredentials. In our article, we will share how administrators can integrate microcredentials to help prepare teacher leaders.**

Keywords – **Professional Development, Teacher Leaders, Online.**

I. INTRODUCTION

Teacher shortages, budget cuts, and state mandates are among the top stressors affecting principals. According to a national survey, 75% of principals think their jobs are "too complex" (Met Life, 2013). There is also much pressure on principals to be successful. According to Branch, Hanushek, and Rivkin (2013), highly effective principals increase achievement of a student by between two to seven months in a single school year whereas ineffective principals lower achievement at the same amount. In order for principals to effectively lead schools successfully, shared leadership is essential (Wilhelm, 2013; Printy & Marks, 2006). According to Wilhelm (2013), shared leadership is powerful because it generates ownership of schoolwide student outcomes because teacher leaders take ownership of students beyond their classroom. Many state agencies and researchers have stressed the importance of using teacher leaders (Ishimari, 2013; Wilhelm, 2013; Printy & Marks, 2006). In fact, 17 states have adopted teacher leaders standards and 22 states now offer endorsements or certifications (Diffey & Aragon, 2018).

Unfortunately, there is ambiguity on how to best prepare teacher leaders especially for administrators. In the related research, we discuss that definition of a teacher leader, professional development and microcredentials in regards to teacher leader preparation.

II. RELATED LITERATURE

A. *What is a Teacher Leader?*

Researchers agree that there is not a single definition of a "teacher leader". In fact, there are as many definitions as the many hats they wear on school campuses across the nation. Katzenmeyer & Moller (2009) share "teacher leaders lead within and beyond the classroom; identify with and contribute to a community of learners and leaders; influence others toward improved educational practice" (p.6). York-Barr and Duke's (2004) definition is "Teacher leadership is the process by which teachers, individually or collectively influence their colleagues, principals, and other members of school communities to improve teaching and learning practices with the aim of increased student learning and achievement" (p. 287-288).

In fact, the term of "teacher leader" is somewhat ambiguous and not clearly defined (Abramovich & Miedjen-

-sky, 2019; Hunzicker, 2017; York-Barr & Duke, 2004). It all varies from one school campus to another. York-Barr and Duke (2004) share "The hope for teacher leadership is continuous improvement of teaching and learning in our nation's schools, with the result being increased achievement for every student" (p. 255). Teacher leaderships take on a variety of both formal and informal roles such instructional coaches, curriculum specialists, team leaders, mentoring, leading small group discussions and teaching modeling (Hunzicker, 2017; York-Barr & Duke, 2004). There are very little professional development opportunities and/or resources for principals to help prepare their teacher to take on such a role as a teacher leader.

Because of the lack of clarity for the role for teacher leaders, the Teacher Leadership Exploratory Consortium (2011), which represents a variety of educational organizations, state education agencies, teacher leaders, administrators and higher education institutions created model standards that are "designed to encourage professional discussion about what constitutes the full range of competencies that teacher leaders possess and how the leadership can be distinguished from, but work in tandem with, formal administrative leadership roles to support good teaching and promote student learning" (p. 4). The standards are listed below.

Table 1. The Teacher Leader Model Standards.

Domain I: Fostering a Collaborative Culture to Support Educator Development and Student Learning.
Domain II: Accessing and Using Research to Improve Practice and Student Learning.
Domain III: Promoting Professional Learning for Continuous Improvement.
Domain IV: Facilitating Improvements in Instruction and Student Learning.
Domain V: Promoting the use of Assessments and Data for School and District Improvement.
Domain VI: Improving Outreach and Collaboration with Families and Community.
Domain VII: Advocating for Student Learning and the Profession.

Again, in order for the transformation of shared leadership to be successful, principals must invest in resources and provide instructional support (Printy & Marks, 2006).

B. *Professional Development*

States and districts in the United States will spend more than $18 billion annually on professional development (Boston Consulting Group, 2014). The overall purpose of professional development is to improve teacher practices that positively affect student learning (Darling-Hammond, Hyler & Gardner, 2017). Fewer teachers are satisfied with their professional development (Berry, 2015). According to a study by the Bill and Melinda Gates Foundation (2014), school district leaders want to spend more time on "personalized" learning but teachers are dissatisfied with how it is implemented (Berry, 2015). Teachers also want professional development that is continuous (DeMonte, 2017) and meets their individualized learning needs. One promising possible solution is the use of microcredentials that are personalized, continuous, targeted and researched-based.

C. *Microcredentials*

Microcredentials are digital badges representing a competency or skill that a learner has mastered. Microcredentials can be offered at all levels and disciplines (Rimland & Raish, 2019). Rooted in "gamification", learners have the ability to compete for badge which increases engagement, motivation and learning (Rimland & Raish, 2019). With the emergence of this new technology, microcredentials are gaining traction in the educational community because of their accessibility and targeted competencies.

According to DeMonte (2017), microcredentials for teachers are defined as "an approach to professional learning that provides teachers with the opportunity to learn and demonstrate competency in new skills, while also getting feedback from an outside evaluator and earning recognition for mastery by earning the microcredential" (p. 4). Microcredentials offer personalized learning providing opportunities for teachers to document their formal and informal learning (Berry, Airhart & Byrd, 2016).

According to Berry et al., (2016), four characteristics distinguish the microcredential approach from traditional teacher professional development models.

Microcredentials are:

- Competency-based-Focuses on teachers' skills and abilities.

- Personalized-Based on teachers' needs and strengths

- On demand-Works around teachers' schedules.

- Shareable-Teachers can share their microcredentials across many platforms including social media, blogs and their resumes.

More importantly, many microcredentials are aligned with teacher standards such as InTASC standards.

Our program currently uses BloomBoard microcredentials. We are grant funded, and one of the components of the grant is to prepare teacher leaders. BloomBoard, like similar microcredentials are based on four foundational research areas: cycles of inquiry, portfolio-based (evidence-based) learning, job-embedded supports and rigorous evaluation and assessment (BloomBoard, 2019).

According to the theory posed by Cushman (1999), the cycles of inquiry is a multifaceted process in which a teacher: a) poses a question in relation with improvement; b) identifies resources that might help improve practice; c) gathers information and breaks into parts for comparison, reflections and analysis; d) The analysis leads to new action which suggests new inquiry which starts the cycle again. With cycles of inquiry, the key purpose is to improve practice in the classroom setting (Cushman, 1999; BloomBoard, 2019). Next, teachers understand through job-embedded supports in which teachers develop expertise as a collaborative group with common goals for student learning (BloomBoard, 2019). Job-embedded learning refers to teaching learning that is grounded in daily teaching practice to improve teaching practices to increase student learning (Darling-Hammond &McLaughlin, 1995; Croft, Coggshall, Dolan, Powers, & Killion, 2010). Microcredentials are a form of portfolio-based learning. With the popularity of digital learning, using electronic portfolios is a natural fit for teachers. Not only is it easily accessible, it opens itself to collaboration, feedback and assessment. In fact, many teacher credential agencies are moving toward portfolios for licensure such as EdTPA. Portfolios have also been used for National Board Certifications and have proven to have a positive impact on student learning (Darling-Hammond, Newton & Wei, 2013). Teachers are provided feedback on their classroom practice by experts in the field that may result in improved teacher performance and higher student achievement. Rigorous evaluation and assessment coupled together can be powerful tools toward improvement in teacher practice. Rarely are teachers provided detailed feedback to improve their practice that is beyond the walls of their school.

At least nine states have adopted microcredentials for continuing education unit (CEU) credits with Texas being one. In addition, several states including Arkansas, North Carolina, Rhode Island, Delaware South Carolina and

Tennessee have incorporated microcredentials in their professional development plans in mentoring, leadership, teacher leadership, school improvement, teacher recruitment and teaching evaluation (DeMonte, 2017l Croft, Coggshall, Dolan, Powers, & Killion, 2010).

How microcredentials work:

- Teacher selects microcredential in an area or competency they would like to improve;

- Teacher uploads evidence of their mastery of the microcredential competency. (video, reflection, project) using a rubric provided;

- The evidence is assessed by a trained assessor using the rubric; and

- The teacher is provided a digital badge if he/she performed at the mastery level.

One key advantage is that microcredentials are online professional development which is personalized, convenient and targeted. In their review of literature Darling-Hammond, Hyler and Gardner (2017) identified elements of effective professional development models including:

- Content Focused.

- Incorporates active learning.

- Supports collaboration.

- Uses models of effective practice.

- Provides coaching and expert support.

- Offers feedback and reflection.

- Is of sustained duration.

Microcredentials for teachers are created based on effective components of professional development as shown below.

Table 2. Elements of Effective Professional Development and Components of Microcredentials.

Elements of Effective Professional Development	Components of Microcredentials
Content Focused	Microcredentials focus on key competencies that are aligned with standards.
Incorporates active learning	Teachers are active learners in setting goals for microcredentials.
Supports collaboration	Can enhance professional learning communities.
Uses models of effective practice	Microcredentials uses researched based practices to improve student learning.
Provides coaching and expert support	Teachers receive support that is personalized and target to meet his/her learning goals.
Offers feedback and reflection	Provides specific feedback aligned with a rubric.
Is of sustained duration	Microcredentials are "stackable" and teachers use their actual teaching practices to implement changes

Microcredential companies like BloomBoard actually have teacher leader microcredentials that are aligned with the Professional Standards for Educational Leaders (PSEL) (National Policy Board for Educational Administration, 2015) developed by the Council of Chief State School Officers and the National Policy Board for Educational Administration (NPBEA) focusing on the following domains:

- Equity and Cultural Responsiveness;

- Human Capital Management;

- Engaging Families and Communities;

- Leading for Student Learning;

- Operations and Management;

- Caring, Supportive Community; and

- School Improvement

In the box below, we included the *Professional Standards for Educational Leaders Standards* and the *Teacher Leader Model Standards* and microcredentials (BloomBoard) that meet the domain. Below are the microcredentials used by Bloomboard that meet these domains. We used BloomBoard because we are more familiar with their company, but we know that other microcredential companies offer similar microcredentials.

Table 3. Teacher Leader Standards and Microcredentials.

Professional Standards for Educational Leaders	Teacher Leader Model Standards	Microcredential https://bloomboard.com
Equity and Cultural Responsiveness	Fostering a Collaborative Culture to Support Educator Development and Student Learning	• Implementing Culturally Responsive Curriculum Using a Culturally Responsive Data Cycle
Human Capital Management	Promoting Professional Learning for Continuous Improvement	• Setting and Achieving Growth Goals • Coaching Using the Cycle of Instructional Improvement • Developing Leadership in Support of Student Academic Success • Providing Evidence Driven Feedback
Engaging Families and Communities	Improving Outreach and Collaboration with Families and Community	• Developing the School as a Resource for Families • Accessing Community Resources in Support of Student Learning • Engaging Families in Support of Student Learning
Leading for Student Learning	Facilitating Improvements in Instruction and Student Learning	• Selecting and Facilitating Use of Common Instructional Strategies • Selecting Appropriate Curriculum and Instructional Materials • Integrating Technology in Support of Learning
Operations and Management		• Ensuring Alignment with Local, State, and Federal Policies and Regulations • Guiding Effective Conflict Resolution

Professional Standards for Educational Leaders	Teacher Leader Model Standards	Microcredential https://bloomboard.com
		• Validating Resource Quality
Caring, Supportive Community	Advocating for Student Learning and the Profession	• Developing a System of Academic and Social Supports • Building a School Culture where Teachers Succeed • Modeling Effective Communication • Building a School Culture Every Student Needs
School Improvement	Promoting the Use of Assessments and Data for School and District Improvement	• Using Data and Research to Assess New Initiatives and Approaches • Managing a Continuous Cycle for School Improvement

Microcredentials could be a possible solution to helping prepare teacher leaders but implementing a new type of professional development can be daunting and challenging. Below we have shared some helpful tips in implementing microcredentials that we hope that administrators will find useful. We have also included a table with links that provide resources for those interested in learning more about microcredentials.

III. TIPS FOR ADMINISTRATORS IMPLEMENTING MICROCREDENTIALS

We have listed below five tips for administrators to help them implement microcredentials in order to help prepare teacher leaders.

1. *Give a Survey to Your Teachers*

In order for teachers to identify their strengths and areas for improvement, a survey can be an excellent assessment. An advantage of microcredentials it that they are personalized to the learner. It is not a one-size-fits all model (Acree, 2016).

2. *Be an Educational Leader. Model Lifelong Learning*

There are many microcredentials available for administrators that can help in providing professional development in a variety of competencies for principals including engaging families in student learning, modeling effective communication, school culture, and technology among many other topics.

3. *Provide Training and Support*

In implementing microcredentials, provide adequate training and ongoing support your teachers. Many of the microcredential companies like BloomBoard will provide instructors who will provide training specialized for your audience. Also, some schools have included specially trained teachers on campus who help provide guidance to first time users of microcredentials.

4. *Professional Learning Communities*

Virtual communities centering around specific microcredentials can enhance professional learning communities building collaboration among teachers.

5. *Smart Small*

Have the teachers identify two to three areas that they can improve and have them make attainable goals with the microcredentials. Acknowledge completion of microcredentials. In one school in Tennessee, teachers hang their certificates of completion on the wall.

6. *Provide Ample Mobile Devices*

This suggestion is not mandatory in order to implement microcredentials, but it does encourage teacher leaders to complete microcredentials.

Table 3. Additional Resources for Administrators.

Resource	Website	Description
EdSurge Research Guide	https://d3e7x39d4i7wbe.cloudfront.net/uploads/pdf/file/3/PD-Remix-EdSurge-Report-2014.pdf	Highlights PD tools that can enhance learning
NEA Microcredentials	https://nea.certificationbank.com/	Free microcredential library for NEA members
BloomBoard	https://bloomboard.com/	Microcredentials
Digital Promise	https://digitalpromise.org/initiative/educator-micro-credentials/	Microcredentials
American Institutes of Research	https://www.air.org/sites/default/files/downloads/report/Micro-Creditials-for-Teachers-September-2017.pdf	Informational article sharing information regarding microcredentials
Center for Teaching Quality	https://www.teachingquality.org/wp-content/uploads/2018/04/Microcredentials_and_the_transformation_of_CA_schools.pdf	Informational article sharing information regarding microcredentials

In our own grant, we have learned quite a few lessons ourselves in preparing teacher leaders.

1. *Take Small Steps. Be realistic*

Start with 1-2 microcredentials per semester or 3-4 per calendar year. When we implemented more during one semester, the teachers became overwhelmed. When we narrowed it down to 1-2 per semester, their motivation to complete the microcredentials skyrocketed.

2. *Provide Opportunities for Discussion*

We learned that our participants benefited with from collaboration on their specific microcredentials. This is one reason why professional learning communities can be a beneficial tool to enhance teachers' knowledge and skills.

3. *Communicate with the Microcredential Company*

We were fortunate to have partnered with BloomBoard, and they have been very receptive to our needs. They provided intense training for our teachers with guided practice. There are a few emerging microcredential companies and can only imagine there will be more in the future. Make sure you have a clear plan in mind in preparing teacher leaders. Companies will work with you to tailor the microcredentials to your needs.

4. *Provide a Survey*

In retrospect, we think a survey would have been helpful in planning for microcredentials for our teacher leaders. They each have different experiences and backgrounds along with strengths and areas of improvement. A survey would have better helped in developing individualized learning goals.

IV. CONCLUDING THOUGHTS

With the demands on principals, shared leadership is critical for leading a successful school campus. Unfortunately, there is very little professional development options in preparing teacher leaders. As shared, microcredentials could be a promising solution that has many advantages including professional development that is personalized learning, research-based, and targeted.

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