

Enhancing Professional Development by Increasing Agriculture Teacher Margin

Abstract

This philosophical study aims to inform improvements to teacher professional development by introducing and integrating principles from the Theory of Margin. Specifically, a critique of existing professional development norms illuminates traditional offerings increase teacher load without consistent increases in teacher power, leading to the conclusion that traditional professional development offerings do not consistently increase teacher margin and, thus, do not achieve their objective to enhance education through teacher-enacted innovation. To address this limitation, the Model for Margin-Increasing Professional Development is proposed which outlines structures to professional development which increase teacher power and/or decrease teacher load. Adoption of this model is expected to help professional development offerings in agricultural education achieve their aim of positively transforming the discipline via teachers who possess the requisite margin to learn, modify, and enact the innovations introduced during professional development. Recommendations for continued scholarship on teacher margin and professional development are included.

Keywords: load; power; professional development; teacher margin

Introduction

In a comprehensive review of teacher professional development research, Avalos (2011) noted a unifying goal of professional development experiences is to enhance student growth via teacher learning. Therefore, teacher professional development serves as an essential tool for creating positive change within educational systems (Borg, 2018; Denton, 2021). The utility of professional development, however, is dependent on the quality of the experience.

Research on the quality of teacher professional development suggests these opportunities often fail to yield meaningful benefits for teachers and their students (Guskey, 2014; Hill et al., 2013; Kutaka et al., 2017; National Research Council, 2000; Yoon et al., 2007). Reinforcing the shortcomings of professional development, a study conducted by Linn et al. (2010) found teachers neither adopted the interventions shared during professional development nor shared their professional development learning with other educators. Adding to the conversation on the efficacy of professional development, Earley and Porritt (2013) noted reconceptualizing how professional development experiences are evaluated is a necessary next step, suggesting evaluations center more on student learning gains as opposed to teacher knowledge acquisition.

Evidence of ineffective professional development exists in Agriculture, Food, and Natural Resources (AFNR) Education (Torres et al., 2010). In a study by McKendree and McKim (2021), teachers were engaged in an alternative to traditional, transmission-based professional development. Following this new approach, identified as participatory professional development, teachers expressed preference for the alternative, indicating existing professional development within the discipline was typically ineffective and unengaging (McKendree & McKim, 2021). Reinforcing these findings, a study of Louisiana agriculture teachers found teachers sought differentiation in professional development so the content matched the unique needs of their career stage (Roberts et al., 2020).

Existing research suggests professional development is essential to enhancing student learning and teacher effectiveness throughout education; however, more work must be done to enhance the offering and evaluation of professional development experiences (Borg, 2018; Denton, 2021; Desimone, 2009; Linn et al., 2010; McKendree & McKim, 2021). In the current, philosophical study, authors integrate teacher margin into the broader conversation of teacher professional development to inform continued enhancements to teacher professional development design, delivery, and evaluation within AFNR Education.

Purpose

To improve professional development, consistent scholarship around these experiences is recommended to enhance teacher and student learning (Avalos, 2011; Desimone, 2009); therefore, the current study explores literature on teacher margin to uncover (a) potential barriers to higher quality professional development and (b) recommendations for improving teacher professional development. Given the emphasis on teacher professional development, this study responds to the call for scholarship exploring “what methods, models, and practices are effective in recruiting agricultural leadership, education, and communication practitioners (teachers, extension agents, etc.) and supporting their success at all stages of their careers” (Stripling & Ricketts, 2016, p. 31).

Methods

The methods used within this philosophical study included reviews of literature on (a) margin, (b) adult learning, and (c) professional development. Each review of literature was conducted by first reading, reviewing, and discussing literature published since 2010 on these topics. Literature was identified by searching for these concepts within established research databases (i.e., EBSCO, ERIC, and Google Scholar). Our discussion of identified scholarship was organized by two questions, what challenges exist to effective professional development and how can professional development be more effective? Additionally, reviewing recent literature uncovered critical, seminal literature (i.e., identified as commonly referenced scholarship) on these topics. The seminal literature on margin, adult learning, and professional development was reviewed using the same approach operationalized for literature published since 2010.

Through our collaborative discussions, challenges and affordances associated with effective professional development were uncovered. Challenges were concatenated into themes and compared to themes of affordances (i.e., strategies to increase the effectiveness of professional development), primarily found through literature relating to adult learning and margin. The resultant discussion includes a summary of findings which illuminate the affordances of adult learning and teacher margin to address identified limitations to existing forms of professional development.

Theoretical Framework

The current, philosophical study is framed using the Theory of Margin (McClusky, 1963). The Theory of Margin is comprised of three interrelated concepts. First, *load* is conceptualized as the accumulation of personal and social demands an individual shoulders. Second, *power* is the accumulation of personal and social resources to accomplish their load. Finally, *margin* is the difference between load and power (Main, 1979; McClusky, 1963). An individual in which load is equal to, or exceeds, their power will lack margin. Importantly, an individual operating without margin for extended periods of time will be “highly vulnerable and susceptible to breakdown” (Main, 1979, p. 23). An individual in which power exceeds their load possesses margin. The theory posits margin is required for an individual to successfully embrace new loads in the form of

additional tasks, emergent responsibilities, and/or innovations (Denton, 2021; Main, 1979; McClusky, 1963).

In this article, the notion of margin is extended to educators by introducing the term “teacher margin.” The proposed definition of teacher margin is “when a teacher has available power, due to reduced professional load, which allows them to achieve new personal and professional ambitions.” Connecting to professional development, a teacher with margin will be positioned to meaningfully engage in professional development to enhance their practice because they possess the margin needed to learn and implement new knowledge and practices (Main, 1979; Merriam & Baumgartner, 2020). As Main stated, “margin allows a person to invest in life expansion projects and experiences, including learning experiences” (1979, p. 23). Alternatively, a teacher who lacks margin will likely not benefit from professional development due to an inability to engage and/or an inability to adopt new knowledge or practices from the professional development experience (Denton, 2021). The relationship between margin and professional development is made more salient in AFNR Education by continued research documenting the extensive load of agriculture teachers (McKim & Sorensen, 2020; Sorensen & McKim, 2014; Sorensen et al., 2017; Traini et al., 2020).

The posited relationship between margin and innovation (Denton, 2021; Main, 1979; McClusky, 1963) compels considering margin as an integral component to the broader conversation on the efficacy of professional development. Therefore, the current study includes an investigation into the literature on teacher margin to identify opportunities to inform advancements to professional development. In this pursuit, the necessity to view margin as a precursor to successful professional development was extended to also consider professional development as a mechanism to increase teacher margin by increasing teacher power and/or decreasing teacher load.

Findings

The Challenge: Three Barriers to Effective Professional Development

In an effort to inform enhanced professional development, adult learning literature was explored to uncover potential elements of teacher professional development which may decrease the effectiveness of the experience. Three items are illuminated, including (a) increased load through forced learning, (b) facilitation methods not increasing power, and (c) situational barriers reducing margin, each contextualized within the load-power-margin framework (Main, 1979; McClusky, 1963).

Increasing Load through Forced Learning

The ideal context for adult learning includes intrinsic motivation in the pursuit of competence and autonomy (Merriam & Baumgartner, 2020; Wilson, 1999). In fact, scholars suggest adults cannot learn through coercion, they must voluntarily engage in an experience for it to yield meaningful learning (MacKeracher, 2004; Thomas, 1991). Therefore, professional development opportunities which are forced are not likely to result in impactful gains among teachers. Viewing this reality from the lens of the Theory of Margin, compulsory professional development adds to the load (i.e., accumulation of personal and social demands) shouldered by teachers; thus, reducing margin (McClusky, 1963). Being an AFNR teacher entails shouldering a tremendous load (McKim & Sorensen, 2020; Sorensen & McKim, 2014; Sorensen et al., 2017; Traini et al., 2020); therefore, AFNR teachers are likely to have limited margin. Individuals without margin will not benefit from a required experience as it exacerbates their lack of margin by increasing their load.

Facilitation Methods not Increasing Power

Limited margin reducing teacher learning is not solely attributed to the additional load of professional development, the other half of the margin equation (i.e., power) must also be considered. Research suggests power is obtained when adults develop applicable knowledge and skills through an experience which is either (a) self-directed or (b) facilitated using best practices (Kutaka et al., 2017; Merriam & Baumgartner, 2020). In adult learning, best practices include hands-on, collaborative, tailored to participant backgrounds, and accommodating of all types (e.g., learning preferences; visual and audial abilities) of learners (Bond & Blevins, 2020; Chval et al., 2008; Easterly & Myers, 2017; Kutaka et al., 2017; MacKeracher, 2004). Unfortunately, teacher professional development experiences often fail to adhere to these best practices due to an overuse of facilitator-centered, lecture-based methods (Chval et al., 2008; Denton, 2021; National Research Council, 2002), resulting in teachers feeling disengaged and devalued during traditional teacher professional development (Denton, 2021; McKendree & McKim, 2021). Ineffective professional development experiences yield an expectation amongst teachers that future experiences will not result in applicable knowledge and skills (Chval et al., 2008; McKendree & McKim, 2021). Thus, teachers are likely to view professional development as an increase in load without an expectation of increased power.

Situational Barriers Reducing Margin

Factors external to the professional development also impact teacher learning (Cross, 1981; Merriam & Baumgartner, 2020). Research done by Sorensen et al. (2016) highlights AFNR teachers occupy numerous life roles beyond teacher, including spouse, parent, church member, and community leader. Time, energy, and emotional loads emerging from these life roles reduce the margin necessary for teachers to meaningfully engage in, and implement knowledge and strategies learned during, professional development experiences. One prominent example of a situational barrier reducing margin is the COVID-19 pandemic which added to the loads of AFNR teachers via new expectations and unforeseen sources of stress (McKim & Sorensen, 2020). Emerging from the pandemic, it is clear the emotional toll of COVID-19 alongside redefined job expectations has reduced teacher margins and, potentially, teacher capacity for professional development.

Possible Solutions: Recommendations to Enhance Professional Development

Using the Theory of Margin, we identified elements of professional development which result in ineffective experiences via increased load, decreased power, and decreased margin. As we shift to an exploration of possible solutions, we seek potential changes to professional development which will decrease load, increase power, and increase margin for AFNR teachers.

Strategies to Decrease AFNR Teacher Load

The first strategy for decreasing teacher load associated with a professional development experience is to reduce the demands associated with the experience. The first strategy to accomplish this goal is making professional development experiences optional so they are not viewed as obligatory tasks. The second strategy is to provide flexibility for how teachers engage in the professional development; for example, offering in-person, online, and hybrid options; providing multiple offerings at different times for teachers to select; and providing the professional development at multiple locations for teachers to select. The third strategy is to create family-friendly professional development options in which partners and/or children can be present; thus, reducing the loads of teachers by, as an example, reducing the need to coordinate childcare at home

when engaged in professional development (i.e., especially relevant for single parents or parents with a spouse who works full time). As Worsely et al. noted, “a professional development program that invites and honors the multiple roles of teachers can expand existing best practices” (2021, p. 1113).

In addition to addressing the logistical elements, the outcomes of the professional development should be structured to decrease the load AFNR teachers experience in their jobs. One method for accomplishing this is to facilitate participatory professional development (McKendree & McKim, 2021). In participatory professional development, teachers work together to solve tangible challenges within their jobs. For example, teachers may work to create a curriculum resource to address a need; develop a self-directed resource for students in an FFA contest; or restructure required paperwork to be more efficient. Leveraging professional development as an opportunity to learn via collaboration while creating resources that reduce teacher load is critical to increasing teacher margin.

Strategies to Increase AFNR Teacher Power

In addition to decreasing teacher load through professional development, facilitators should leverage opportunities to increase teacher power. Power is represented as internal (e.g., skills, knowledge) and external (e.g., relationships, money) factors which increase an individual’s ability to manage loads (McClusky, 1963). Therefore, professional development should seek to empower teachers with applicable knowledge and skills that can be directly applied to better meet the needs of their students (Desimone, 2009). Further, professional development experiences should be facilitated using learner-centered approaches (Easterly & Myers, 2017; Desimone, 2009; MacKeracher, 2004). Learner-centered professional development actively engages teachers in tailored experiences, facilitated using diverse strategies, which begin at the knowledge and ability levels of participants and build to a level where teachers are empowered to implement new, proven strategies within their classrooms. As a template, facilitators are encouraged to explore the cognitive apprenticeship model, which includes (a) modeling, (b) coaching or scaffolding, (c) fading, (d) solo performance, and (e) reflection and discussion (Brandt et al., 1993).

Building teacher power from external resources should also be considered when designing professional development experiences. One simple method is to, when feasible, provide monetary incentives to teachers for engaging in professional development, increasing their power through financial means. Additional sources of power from external resources include building relationships which can be leveraged for tangible resources and emotional support (Jordan, 2008; Moser & McKim, 2020). Being intentional about offering teachers opportunities to experience the utility of collaborative partnerships with peer teachers during professional development may catalyze future relationships, increasing teacher power via, as examples, shared curricular resources and social support (Bond & Blevins, 2020; Desimone, 2009).

Discussion

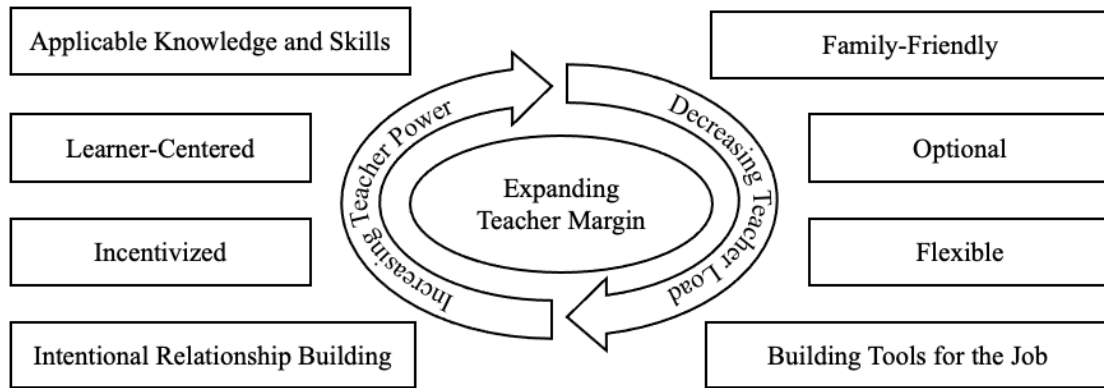
A New Model: Affordances and Potential Critiques

As a mechanism for increasing student success, teacher professional development is an essential element of educational systems which must be continually evaluated (Avalos, 2011; Desimone, 2009). In the current study, barriers to effective teacher professional development within AFNR Education were explored alongside recommendations for enhancing professional development based on literature in adult learning and the Theory of Margin. To summarize the

recommendations, a model for margin-increasing professional development is proposed (see Figure 1).

Figure 1

Model for Margin-Increasing Professional Development



Within the model, the central objective of professional development is to increase teacher margin. Margin is required for teachers to manage loads associated with their jobs in addition to the loads associated with other life roles (Main, 1979; McClusky, 1963). Furthermore, margin is required for teachers to accept the load associated with new growth opportunities for themselves and their students (Denton, 2021; Main, 1979). In totality, the load of enacting positive change in educational systems relies on teachers having margin (Denton, 2021); therefore, expanding teacher margin is at the crux of the model. Immediately surrounding teacher margin are the two mechanisms by which margin is expanded - increasing teacher power (i.e., building internal and external resources) and decreasing teacher load (i.e., reducing personal and social responsibilities). On the periphery of the model are the mechanisms for increasing teacher power and decreasing teacher load explored within this study.

The opportunity to transform professional development within AFNR Education using the Margin-Increasing Professional Development model is not without potential roadblocks. In the following discussion, we explore three potential barriers to implementing the model. The first potential roadblock is the need for facilitator training to offer margin-increasing professional development. In order to offer this approach to professional development, facilitators must be, among other things, skilled at learner-centered instruction, able to integrate applicable knowledge and skills for AFNR teachers, and possess the capacity to organize relationship-building experiences inclusive of all participants. Furthermore, the professional development facilitators must, themselves, have adequate margin to facilitate this innovative approach to professional development. This potential roadblock highlights an opportunity to establish a train-the-trainer program for professional development facilitators in AFNR Education focused on facilitating professional development that intentionally builds AFNR teacher margin.

The second potential roadblock to implementing the Margin-Increasing Professional Development model is a lack of financial resources to implement the model. Additional resources are required to incentivize professional development for participants, create family-friendly professional development experiences, and offer professional development experiences which are flexible (e.g., costs associated with offering professional development at multiple times and using

varied delivery methods). To address this potential roadblock, facilitators are encouraged to consistently pursue funding to support professional development efforts. Potential sources of funding for AFNR teacher professional development include corporate sponsors; private and public grants; and expanded budgets for professional development associated with local, state, and national legislation.

The third potential roadblock is the systematic in-affordance of margin within AFNR Education. Scholarship within the discipline presents an evolving argument that AFNR teachers work excessive hours (McKim & Sorensen, 2020; Sorensen & McKim, 2014; Sorensen et al., 2017) due, in part, to a discipline which precludes them from establishing boundaries (Haddad et al., 2023; Traini et al., 2020). Thus, we must question if Margin-Increasing Professional Development is just a band-aid to a broader, systems-based issue in which AFNR Education disallows margin and boundaries. Importantly, traditional professional development approaches which fail to intentionally address teacher margin contribute to a system precluding boundaries (Haddad et al., 2023). Thus, while the model for Margin-Increasing Professional Development should certainly not be seen as the only solution to these systematic issues, it could be viewed as a necessary evolution contributing to systems-level change. Therefore, we anticipate Margin-Increasing Professional Development contributing to the evolving boundary and work-life balance research and practice within the AFNR Education discipline.

Limitations

There are two primary limitations to the current philosophical study on teacher margin and professional development. First, the authors acknowledge the literature reviewed was not exhaustive of all scholarship on margin, professional development, and adult learning. Reviewing additional literature on these topics has the potential to uncover additional challenges and affordances associated with professional development that can inform a continually expanding model for Margin-Increasing Professional Development. Second, the authors acknowledge the philosophical nature of this study and lack of empirical evidence associated with the efficacy of the proposed model. This study, however, is designed to inform new practice within professional development with the hope those interventions are evaluated for their impact on teachers and results are disseminated via scholarship.

Conclusions and Recommendations

The intent of this study was to enhance professional development via an exploration of teacher margin and literature in adult education; the resultant model provides a mechanism by which to achieve this intent. Therefore, facilitators of professional development experiences in AFNR Education should consult the model to identify opportunities to enhance their offerings by expanding teacher margin using the mechanisms identified in the model. Furthermore, it is recommended scholars in AFNR Education evaluate dimensions of teacher power and teacher load within the context of professional development; specifically, conducting research to identify additional features of professional development which increase power or decrease load. In these studies, differences among teachers should be explored to see how power and load differ by, as examples, gender identity and expression, teacher certification route, teaching experience, and race/culture.

Increasing teacher margin via professional development yields an opportunity to expand teacher capacity to catalyze positive change within their classroom and community. The proposed model for margin-increasing professional development is, therefore, an orientation to more effective and impactful professional development in AFNR Education. Continued efforts, each

compelled by a desire to enhance student learning, to increase the efficacy of teacher professional development are warranted.

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