Understanding and Achieving the Purpose of Professional Development for Teachers: A Literature Review

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Abstract

A contributing factor to high teacher turnover rates is the contention that teachers are not well-supported in their professional roles. Despite research-based evidence outlining its indispensable benefits, teacher professional development is faced with various challenges. It is crucial, not only for the profession but also for the student learning experience, that these unmet teacher needs are recognized and reversed. The purpose of this literature review was to synthesize knowledge which substantiates the value of professional development in the teaching profession, the approaches toward garnering effective professional development opportunities, and the professional needs of teachers in-practice to best serve their students, and to effect increases job satisfaction and longevity in the profession.

Keywords: professional development, teacher training, job satisfaction

Professional development (PD) and job satisfaction should be a topic of great interest for K-12 educators and administrators, as it is closely related to organizational health and development, both representing a result of continuous changes in education. At a personal level, professional development has an internal purpose, but it is conditioned by the new obligations of teaching and learning activity. An important variable is also the teacher's professional satisfaction. PD differs from pre-service education because it occurs in-practice. Contextually, professional development programs are designed to equip instructors with a toolbox intended to expand their knowledge on the subject matter taught, instructional strategies, and communication skills. It presents opportunities among scholars for consensus building among teachers and other stakeholders to ensure that teachers are continuously trained to improve their instructional strategies and gain the required skills to address classroom challenges (Neto et al., 2017) and may also be used to provide equal opportunities for instructors to collaborate and develop evidence-based strategies that can be used to achieve school missions (Toropova et al., 2021).

Sancho-Gil and Domingo-Coscollola (2020) found that a positive relationship between teachers' satisfaction levels and students' achievement impacted by the extent and quality of professional development opportunities. These opportunities impact teachers' knowledge and instructional skills for evidence-based strategies when addressing classroom problems (Sancho-Gil & Domingo-Coscollola, 2020). In essence, PD that allows teachers to improve their professional knowledge, such as teaching techniques that are important to effect increases in student learning, is regarded as key to improving student academic achievement (Cansoy, 2019; Tack et al., 2018).

Despite research-based evidence outlining its indispensable benefits, teacher professional development is faced with various challenges. Evidence suggests that teachers have difficulties obtaining the professional support required to manage students' academic perceptions effectively. Sancho-Gil and Domingo-Coscollola (2020) found that 28% of teachers from public schools across the United States cited dissatisfaction with professional development, making it difficult for them to effectively respond to challenges in the environment and address students' needs. Limited administrative capacity and poor leadership considerably thwart teachers' efforts to participate in the professional development process (Tack et al., 2018). Collectively, school leaders who do not support teacher professional development pose a significant barrier to teachers' participation in professional development, thus challenging their capacity to enhance lesson delivery and realize better academic performance among students.

Prompted by concerns about the short-comings of professional development opportunities for teachers, the authors conducted a survey of existing literature. The main objectives were to synthesize knowledge which substantiates the value of professional development in the teaching profession, the approaches toward garnering effective professional development opportunities, and the professional needs of teachers in-practice to best serve their students. The references cited in this article are now included in a literature database maintained by the authors.

Methods and Materials

The work concentrated mostly on research studies of original investigation. The conclusions in this article are generalizations based on the authors' interpretation of those original reports. This literature deals primarily with studies published in English but includes international perspectives.

The authors conducted an exhaustive literature search strategy. The purpose was to retrieve peer-reviewed or scholarly articles on the topic. All sources retrieved from different databases were published between 2017 and 2021; with some seminal works included, mainly related to the conceptual framework. The following databases were searched: PubMed Central, Database of Abstracts of Reviews of Effects, PsycINFO, UpToDate, PubMed, Psycharticles, ProQuest, PsychoInfo, Academic Premier, Sage, JSTOR, ResaearchGate, EMBASE, ScienceDirect, Google Scholar, Cochrane Library, Emerald, EBSCO, and Elsevier. The common search terms used to search databases for articles included but may not have been limited to: *professional development*, *kindergarten instructors*, *job satisfaction teacher job satisfaction*, *teacher motivation*, *dissatisfaction among teachers*, *and professional development benefits*.

Challenges of the Teaching Profession: The Case for Professional Development

Existing literature on teaching careers demonstrates an inherent challenge in the teaching profession. According to Ford et al. (2018), the challenge links to the complex profession with different variables and stakeholders' needs that need to be met for employees to be satisfied.

Researchers such as Klaeijsen et al. (2018) have identified increased workloads, unrealistic expectations from students and parents, limited resources, lack of support, and role -conflict as some of the challenges attributed to teaching practice. Other researchers such as Sancho-Gil and Domingo-Coscollola (2020) have identified a lack of administrative support as the key factor contributing to difficulties in teaching practice whereby instructors fail to achieve the relevant support required to execute certain practices or duties. In a different study, Renbarger and Davis (2019) established that employee compensation is another important aspect influencing teachers' satisfaction in the teaching practice.

Additional research has established a relationship between teachers' satisfaction and working conditions in the school environment and determined that a conducive work environment influences teacher motivation. Conversely, a work environment that does not support employee development through a mentorship program results in high dissatisfaction levels among teachers because they find it increasingly difficult to adjust to the work environment's challenges (Baluyos et al., 2019). Student discipline also influences the perception of the teaching profession. According to Klaeijsen et al. (2018), students' discipline has far-reaching implications on the teaching profession. Reports suggest that teachers who perceive students to be hostile may find their work to be less satisfactory (Baluyos et al., 2019).

A study conducted by Melnyk et al. (2019) in the UK established that school discipline, particularly among students, influences how teachers would consider their environment as satisfying. Comparable thoughts were presented by Neto et al. (2017) who found that hostile students would threaten teachers' safety in the classroom, including being bullied, which reduced their motivation to teach. Comparable findings were reported by Ford et al. (2018) who argued that student indiscipline was linked to 10% of teacher attrition among middle school institutions in the US. In a different study investigating the relationship between student discipline and teachers' willingness to quit their profession, Troesch and Bauer (2017) conducted a study on 215 mid-school teachers in the US. The study findings suggested that 80% of the teachers identified school indiscipline as the main factor contributing to attrition rate among teachers.

School discipline, especially among teachers and students, also influences the psychological well-being of instructors and their intention to quit or remain within the teaching practice. According to Ford et al. (2018), an environment that includes indiscipline students and a lack administrative support negatively affects teachers' mental well-being. In view of Toropova et al. (2021), a mentally disturbed teacher will find it increasingly probable to quit the profession in preference for other careers.

Similar results were reported by Renbarger and Davis (2019) who used a qualitative study to investigate the impact of student indiscipline on teacher attrition rate. The researchers investigated 315 teachers and established that experiences resulting from students' indiscipline, such as teachers' bullying, created anxiety, depression, and post-traumatic disorders that negatively affect job satisfaction among teachers leading to a high attrition rate. In view of the evidence reviewed, it can be concluded that the challenges in the learning environment calls for the need for professional development programs that are designed to support the competencies of teachers in handling or responding to different challenges within the learning environment.

Changes in the learning environment, including stakeholders' expectations, technological changes, and the need to adapt to teacher career needs, require teachers to acquire new techniques and understand the area in which they teach. One of the strategies that has been used to support the acquisition of knowledge among learners through a continuous learning process is professional development. As described by Sancho-Gil and Domingo-Coscollola (2020), professional development avails the opportunity for teachers to improve their teaching strategies through evidence-based knowledge that is compatible with the changing needs in the

environment. To achieve the expected expectations from stakeholders and the individuals' desires, teachers are required to have a profound understanding of the subject they teach, be able to communicate specific information to learners effectively, and encourage critical thinking in the classroom (Baluyos et al., 2019).

To achieve these objectives, teachers need to be professionally developed continuously on communication skills, teaching strategies, and current trends in the teaching profession, such as the use of information technology in teaching to support timely communication with students and instructional support (Neto et al., 2017). Comparable findings were reported by Troesch and Bauer (2017) who argued that teachers require professional development in information technology to effectively respond to changing student needs, such as the need to integrate technology in designing instructional materials or communicating with learners. In particular, teachers who are not professionally developed may find it challenging to communicate with students or initiate a high level of thinking among learners to improve their creativity levels (Baluyos et al., 2019).

Teachers are supportive of establishing greater expectations regarding learning or teaching. Nevertheless, there is a probability that the strategy used to teach learners do not involve students or help teachers to adapt to emerging needs in the environment. Therefore, educators may be unprepared to implement teaching practices needed to meet stakeholders' expectations. To address such needs, there is a need for professional development to continuously allow teachers to acquire new skills and competencies needed to adjust to challenges in the environment. To achieve positive educational reforms, there is a need to shift and focus on developing kindergarten teachers professionally to empower them and provide them with the required competencies to meet their goals. As explained by Klaeijsen et al. (2018), professional development provides opportunities for instructors to gain broader skill sets in different areas of their competency for better performance.

Professional development allows teachers to develop effective strategies required to implement creative strategies in classrooms to support learning among teachers. Traditional professional development programs have dominated the 20th century. According to Klaeijsen et al. (2018) traditional development for teachers included the use of the listening and absorbing approach. Within the sessions, instructors are advised, counselled, trained, and mentored by an expert on a specific area that requires adjustment for a successful teaching career (Sprott, 2019). Over the years, professional development practices have shifted, and modern techniques have been employed, such as technology to promote in-person training support services to teachers (Toropova et al., 2021).

Teacher Morale and Professional Development

Research has established a link between teacher morale and professional development. Cansoy (2019) found a positive relationship between teacher morale and students' academic attainment. According to the study findings, teachers identified low morale as one factor that resulted in poor academic outcomes among learners. Teachers are not committed to their work when they feel incapable of offering guidance to learners or feel professionally undeveloped for specific tasks. Comparable findings were reported by Renbarger and Davis (2019) who established that new educators are more vulnerable to low morale when they face challenges in the learning environment that they feel less competent to tackle. Comparable thoughts were reported by Troesch and Bauer (2017) who, on the other hand, found that teachers with high morale positively influenced academic performance in learners because they were committed and had the required skills to support learners.

In summary, it can be deduced that different factors influence teacher motivation and professional development. However, the most important aspect to conceptualize is that professional development directly affects teacher motivation and its impact on students' outcomes. Factors such as administrative support within the school environment increase teacher morale and quality of teaching directly linked to improved performance among students.

Teachers working in a highly supportive environment have high morale compared to those working in settings that lack administrative support. For instance, Renbarger and Davis (2019) found that poor working conditions characterized by a lack of administrative support lowered morale among teachers. Low morale among teachers negatively impacts students' outcomes because teachers are less motivated to offer quality teaching. As explained by Neto et al. (2017) quality teaching among teachers, which directly impacts students' outcomes, is influenced by the extent to which teachers are motivated and feel satisfied to offer personalized support to students. Comparable findings were reported by Reeves et al. (2017) who established that the quality of teaching among teachers and its impact on students' outcomes was influenced by the level of satisfaction teachers derive from professional development programs. In this regard, it can be concluded that professional development practices such as training, mentorship, and counseling equip teachers with valuable skills required to support learning. These findings imply that failure to achieve teacher morale through professional development programs could lead to low academic outcomes. Teachers will be less motivated to offer quality instructions and support to learners.

The following implications can be derived from the analysis conducted above. First, the analysis conducted suggested that professional development programs equipped teachers with new skills and competencies to improve their instructional practice (Makovec, 2018). In particular, through professional development programs, teachers can acquire important technological skills in 21st-century classrooms. The modern classroom is characterized by using technology-based instructional strategies that are important in supporting the instructional practice (Reeves et al., 2017). By empowering teachers through professional development to gain new skills, research suggested that there is a possibility that teachers will find their work highly satisfying and less dissatisfying for quality instructions. Professional development, characterized by career growth opportunities through frequent training, mentorship, and guidance, increases teachers' satisfaction (Merchie et al., 2018). Creating an enjoyable environment by equipping teachers with an enhanced knowledge base to allow them to respond to challenges in the work environment provides a platform for improved job satisfaction and commitment to teaching practice (Sprott, 2019).

Improved job satisfaction among teachers based on continuous professional career development creates avenues for teachers to expand their teaching practice and empowers them to improve their academic outcomes (Torres, 2019). Therefore, professional development programs create a satisfying environment for teachers to acquire required skills and resources to address challenges within their work environment that would otherwise contribute to job dissatisfaction (Sprott, 2019). The findings also suggest that the professional development programs that focus on providing administrative support, collegial support, and availing the required resources to teachers increase their level of job satisfaction, thereby reducing the intentions to quit their teaching profession.

Professional development opportunities are essential in every occupation to increase efficiency and compete in a global economy (Kelcey et al., 2017). The teaching profession is not beyond the need for upgrading. Legislation has laid the groundwork for development by requiring teachers to receive professional development as student-teachers and in-service educators (Dos Santos, 2019). According to Kelcey et al. (2017), professional development

activity addresses the teachers' and students' needs by expanding content knowledge, meeting legal requirements, encouraging best practices for managerial and instructional strategies within the classroom, and developing curriculum. High-quality teachers offer excellent educational opportunities that produce successful learners (Dos Santos, 2019).

In view of Bond and Blevins (2020), quality professional development for teachers has a more significant effect on student performance than higher educator salaries and smaller teacher-to-student ratios. The drive behind effective professional development is to influence teachers' behaviors positively and, in turn, have a significant impact on learning and student performance (Drewes et al., 2018). A school administrator will prudently invest in developing teachers to instigate change and enhance learning and education quality. A rigorous teacher appraisal system that provides feedback promotes teacher professional development to increase effective educational practices (Vansteelandt et al., 2020). Learning Forward recommends school districts spend approximately 10% of their yearly budget on professional development (Koukis & Jimoyiannis, 2019). Increasing financial support for professional development and employing quality activities and programs will strengthen reform efforts (Merchie et al., 2018; Dos Santos, 2019).

Bond and Blevins (2020) documented how student achievement improved after policies, curriculum, instruction, and procedures were shifted to support all students. The notable challenge for educator professional development is to allow teachers to improve their understanding of the learning process and continuously develop instructional strategies that support learning (Drewes et al., 2018). Student success is primarily attributed to an educator's ability to instruct all learners, collaborate with colleague teachers, and continuously develop and build their knowledge, abilities, and skills (Pollock, 2018, Chapter 4). Continuous professional development that supports both special and general classroom teachers is needed, particularly relating to effective instruction and inclusive practices that will positively influence teachers' self-efficacies for inclusion (Koukis & Jimoyiannis, 2019; Dos Santos, 2019).

In their study, Drewes et al. (2018) reported a direct correlation between teaching practices and professional development activities by describing learning institutions' activities reaching distinguished status. The distinguished schools held professional development activities that comprised an analysis of instructional practices, emphasized collaboration, used data, used similar instructional strategies, and allowed for evaluations of participants' activities (Dos Santos, 2019). According to Drewes et al. (2018), self-efficacy can be enhanced through vicarious experiences and mastery. Preparing educators for every circumstance that may occur during their tenure is impossible for educator training programs. Professional development is vital for educators to continue improving their instructional skills and knowledge based on their students' needs, their current needs, and best-practice research. The practice of instructing all students through inclusion has gradually taken place through the reformation of procedures, policies, curriculum, and instruction in the general learning classroom. Teacher support and guidance to reach this restructuring are necessary by implementing operative professional development plans and programs.

Characteristics of Successful Professional Development

Professional development is at the center of educational reforms. Therefore, a proper understanding of the characteristics that constitute a successful professional development program becomes an essential issue to stakeholders. Researchers have identified different factors that constitute successful professional development programs among teachers. For instance, Renbarger and Davis (2019) found that teachers are the most influential factors impacting

students' performance. Based on this understanding, it is therefore important to develop teachers professionally to realize academic expectations. Researchers such as Sancho-Gil and Domingo-Coscollola (2020) have reported that an effective professional development program is likely to increase the teacher knowledge base and positive academic outcomes.

A lack of evidence exists in the current literature relating to how personal characteristics related to professional development influence students' performance or teacher effectiveness (Toropova et al., 2021). Nevertheless, past research has offered insights into particular aspects of professional development that have been linked to successful outcomes both in teachers and students (Klaeijsen et al., 2018). As an illustration, Renbarger and Davis (2019) established that the percentage of instructors without professional development reduced from 56% in 2015 to 2.6% in 2019. The study findings suggest that there have been renewed policies to support teacher development as the main key component of professional development programs.

Another aspect of a professional program is the content focus. A professional program's focus is to increase students' outcomes by empowering learners to achieve specific goals. Therefore, to achieve content focus, teachers must be developed professionally to increase their professional knowledge of their subjects and a better understanding of instructional strategies to support academic attainment among learners. Troesch and Bauer (2017) identified 30 characteristics linked to effective development programs. Specifically, it highlighted an increase in teacher content knowledge base and pedagogical skills as the most identified components of teachers' successful development programs. The scope to which professional development emphasizes improving content knowledge among teachers has directly been linked to increased teacher knowledge and competencies in addressing classroom issues through evidence-based practices. Comparable findings were reported by Neto et al. (2017) who also argued that teachers' knowledge directly impacts learners' academic outcomes and, hence, the need for stakeholders to develop teachers in different areas for better achievement continuously.

Another component of a successful professional development program for teachers is active learning. Active learning capitalizes on the assumption that involving teachers directly in designing and implementing professional programs is the best way to increase their skills and competencies. Sancho-Gil and Domingo-Coscollola (2020) reported that active learning focuses on specific needs that teachers have regarding technology and teaching practices. By focusing on their need, teachers can actively identify areas needed for development and direct the mentors' attention to such areas for a positive outcome. Furthermore, Klaeijsen et al. (2018) reported that active learning provides teachers with hands-on practice to experiment with different areas being taught to them before applying them to classrooms. Real-life applications of different teaching strategies learned from mentors provide teachers with the confidence to support learners in realizing their academic goals (Neto et al., 2017).

Approaches to Professional Development

There are varied delivery methods of professional development from which districts can choose. However, some of them do not meet the criteria for effective teacher development. Explained below are some of the methods that are frequently cited in current research and literature. Additional studies need to be conducted on the relationship between each professional development method and student academic achievement.

In-Service Training

In-service training methods may be done variedly across districts. The purpose of the

in-service is to coach educators who are currently employed by the district. As expressed by Bond and Blevins (2020), training sessions are most often developed by the district and may not be appropriate to teachers' current needs. Like other professional development strategies, in-service training is only effective when it is part of a long-term plan, and follow-up sessions are provided (Olofson & Garnett, 2018). Nevertheless, there is usually minimal or no follow-up to in-service professional development.

Districts often hire experts and consultants to lead the in-service training. According to Manduca (2017), schools that use experts as presenters witnessed more student achievement improvements because of their creditability and platform for reaching teachers. In-service training is frequently viewed as ineffective (Gunter & Revees, 2017). Chai (2019) offered contrasting findings by reporting that this approach is one of the successful collaborative problem-solving efforts, training teachers, peer coaching, or other school-oriented professional learning methods.

Out-of-District Workshops

Sustainable learning with a follow-up aspect is vital to the learning process when implementing efficient, professional development. According to a study conducted by Semon et al. (2020), most teachers attend single-shot district workshops with no follow-up or feedback. This study further reported that this professional development method does not necessarily correspond with state and federal expectations and mandates that call for goal-centered professional learning follow-up.

Gunter and Revees (2017) conducted a meta-analysis analyzing the relationship between professional development and student performance improvement. According to their findings, the workshop professional development method established a positive correlation between professional development and student's academic achievement. The analysis further confirmed that workshops which utilized research-oriented instructional practices provided teachers with opportunities to adapt the practices and integrated active learning experience for participants. The researchers concluded that content is an essential part of the planning process.

Online Learning

Online learning is becoming more common in the 21st-century school system. As explained by Stepanchenko and Briskin (2019), professional development can be achieved anytime and anywhere through emerging technologies when online learning is integrated into the school system. The ever-evolving technology allows teachers to create personalized learning plans and goals, connect with and learn from teachers worldwide, conduct their research, and take online courses. Online learning allows teachers to access content and classes at their convenient time and place (Bond & Blevins, 2020).

Researchers have identified some negative components of online learning resulting from technological advancement. For instance, Semon et al. (2020) argued that there is the possibility that content is not correlated to a teacher's students or learning environment. These researchers established that online learning is a more isolated experience that lacks collaborative opportunities. Moreover, it is important to underscore that effective professional development is planned with the school's learning objectives and goals in mind. Because online learning is immeasurably personalized, it helps in the individual learning goals alignment.

Job-Embedded Professional Development

In regard to the previously explained literature and government mandate, job-embedded professional development meets the criteria for an effective professional development method. This method offers teachers formal and informal cooperative opportunities with colleagues without the need to leave their houses (Cavazos et al., 2018; Semon et al., 2020). Different from other strategies, teachers can receive immediate feedback and training and engage in self-driven learning, which is critical as they implement new practices (Semon et al., 2020).

This professional development strategy has presented positive effects for enhancing classroom teaching and student achievement. However, studies such as Cavazos et al. (2018) have suggested that this technique is not common in current school practices. Researchers of such past studies have argued that job-embedded professional development requires a robust system and professional development and student performance structure to achieve the necessary time and space for such collaborative learning. Chai (2019) sees this method is commonly used in elementary school settings since the teachers work across subject areas.

Professional Learning Communities

Similar to the job-embedded method, professional learning community development strategies are used to form collaborative learning opportunities for teachers (Semon et al., 2020). Specifically, they address teacher isolation, create common teacher responsibility for all learners, and expose teachers to knowledge or instructional strategies they did not have access to formerly (Admiraal et al., 2019). These professional communities provide teachers the autonomy to facilitate their learning while enhancing teamwork. PLCs need to be part of public schools' professional learning process to promote collaborative learning settings across the state (Hunuk et al., 2019). This site-centered approach is entirely collaborative and team-oriented. However, research has established limited evidence to promote reflection on personal experiences and practices.

Site-Based Coaching

The site-based coaching professional development approach significantly improves teacher performance. Coaching offers a unique opportunity for staff developers to design professional learning to meet teachers' abilities and needs (Stepanchenko & Briskin, 2019). This method enhances extensive trust and collaboration while allowing educators to voice their learning needs (Drewes et al., 2018). Most schools prefer professional development with coaches because it provides a stronger focus on their individual needs, making them more likely to implement new teaching techniques than traditional professional development participants (Gunter & Revees, 2017; Hunuk et al., 2019). Nevertheless, a conducted survey has established that most educators preferred content experts in coaching roles (Gunter & Reeves, 2017). The authors' argument contradicts those of district personnel who call for expected constructive feedback throughout.

The most significant instructional practices adoption occurred with educators who requested and received extensive classroom-oriented support (Stepanchenko & Briskin, 2019). However, teachers who are resistant to change are often lost or forgotten in coaching programs. Study findings of comparable research elaborated that such teachers seemed to avoid the instructional coach and restricted their work together to avoid the challenges and pressures of implementing new practices, which influenced the school's long-term objectives for increasing

student achievement (Drewes et al., 2018). In a different study by Bond and Blevins (2020), teachers who had undergone coaching felt more confident in their teaching. However, they were not rated as more effective than teachers who were yet to undergo coaching. While instructional coaches meet the criteria for effective professional development, there is limited evidence to conclude which coaching method is the best (Hunuk et al., 2019).

Conclusions

To effectively design an effective professional development program, the designer must integrate teacher experience. Melnyk et al. (2019) identified professional experience as a key issue that affects career development programs among teachers. Teachers must be professionally developed based on their experience in teaching. Novice teachers must be provided with a variety of professional development programs based on the fact that they are on the entry-level, and the focus must be on factors that are likely to influence their development (Neto et al., 2017). Veteran teachers who have experience in teaching and maintaining students must be allowed to learn new strategies designed to support growth in instructional practices (Mukan et al., 2019). Overall, the research suggests professional development programs must be focused on teachers' experiences and their unique needs based on the challenges presented by their unique environments (Merchie et al., 2018).

Bond and Blevins (2020) established that effective teaching is the most influential predictor of student performance. The more students engage with effective teachers, the higher their measured academic performance. Professional development and teachers' practical training are significant to strengthening the public education system (Drewes et al., 2018). Traditional methods of teacher development have proven unsuccessful, and educator training cannot prepare educators for every challenge they may face during their careers (Call, 2018). Drewes et al. (2018) credited the inefficiency of commonly practiced teacher professional development to the substantial information disseminated with little time for actual classroom application. Apathetic attitudes toward what should otherwise be prime opportunities for growth and learning are attributed to the lack of relevance, intensity, progression, and unfocused content transferability (Kuhn & Stevens, 2017).

Teachers' needs have not been met by the history and deliverance of professional development (Call, 2018). It is crucial, not only for the profession but also for the student learning experience, that these unmet teacher needs are recognized and reversed. Finding new tools in teacher training is essential for the improvement and effectiveness of the educational experience. Professional development guided by research that are collaborative, actively center participation around instruction within the context of the learning, and occur throughout the calendar year have found to have the most profound and direct impact on teaching and learning (Call, 2018). Effective professional development happens when there is mutual participation, content is centered on curriculum needs and research-based practices, extended over a period of time to allow for active learning and practice, connected to the system and school-wide goals, follow- up activities including coaching with feedback opportunities, and additional development activities (Lander et al., 2020; Manduca, 2017).

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