

Volume 24, Special Issue 2**Print ISSN: 1098-8394;****Online ISSN: 1528-2651**

THE INFLUENCE OF CONTINUING PROFESSIONAL TEACHER DEVELOPMENT PROGRAMMES IN PROMOTING STUDENT ACHIEVEMENT IN SOUTH AFRICAN SCHOOLS

Hasha R, University of Limpopo, South Africa**Wadesango Newman, University of Limpopo, South Africa**

ABSTRACT

As with any calling or vocation, educators need to develop strong identities as professionals. Often continuous professional development (CPD) comes handy in assisting educators employ high-yield instructional practices. The purpose of the research was to explore the influence of continuous professional development in promoting quality teaching and learning leading to enhanced student achievement in South African schools. The researchers highlighted the importance of CPD in promoting student achievement. The Teacher-Change Theory provided a framework to develop a deeper understanding of educator CPD. The desktop research method was engaged. Basically the desktop research involved collecting data from existing credible published resources. On the basis of the findings of this study, some recommendations were made. The primary recommendation of this study is for educator CPD programmes to create professional development opportunities that promote teacher collaboration by nurturing effective and active teacher learning communities.

Keywords: Continuous Professional Development, Continuing Professional Teacher Development, Teacher-Change Theory, Qualitative Research.

BACKGROUND TO THE STUDY

There is abundant evidence that the success of a school, amongst other factors, is heavily dependent on the quality of the teachers (Cooper, 2016). It is at the classroom level that teaching translates learning into student achievement. It is, therefore, critical to influence those conditions that most affect and influence teachers' skills, motivation and knowledge base.

Whatever system of education in existence, teachers must be given opportunities for refresher courses and advanced learning in the form of continuing professional teacher development (CPTD). The continuous professional development (CPD) of teachers as well as principals as human resources in schools is a critical factor in attaining organisational effectiveness. A single course of teacher training no longer suffices in view of the radical changes which may intervene, such as those pertaining to the introduction of new technology to schools, introductions to new subjects altogether, or simply changes or innovations to existing syllabi. Mizell (2010) asserts that CPD is the only way in which educators can learn so that they are able to better their performance and raise learner achievement.

In a school set up, professional development is concerned with improving upon the knowledge, attitude and skills base of principals and educators. The learner should equally be

a beneficiary of the development efforts by learning at high levels of achievement (Darling-Hammond & Richardson, 2009; Osmundson, 2016; Ruiz, 2017; Caena, 2011). The programmes are planned in pursuit of addressing the needs of the school in particular and the needs of the education system in general. CPD in a broad sense refers to the development of a person in his or her professional role. More specifically, Villegas-Reimers (2003) views educator development as “...*professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically*”. Continuous professional development includes formal experiences such as attending workshops and professional meetings and in mentoring, and informal experiences such as reading professional publications or watching documentaries related to an academic discipline. Continuous professional development can also occur in informal contexts such as discussions among work colleagues, independent reading and research, observations of a colleague’s work, or other form of learning from a peer (Anderson, 2010; Mizell, 2010; Marcelo, 2009; Bautista & Ortega-Ruiz, 2015).

RESEARCH OBJECTIVE

To establish the extent to which continuous professional development influences students’ achievement in schools.

RESEARCH PROBLEM

The Department of Basic Education (DBE) of the Republic of South Africa is on record to challenge schools to accelerate gains in student achievement to meet stakeholder expectations. The DBE (2017) analysis of the 2016 matric results for the Pietersburg Circuit in Polokwane indicates an average circuit pass rate of 78.4%, but further analysis shows a worrisome low pass rate with some schools. For instance, Guava High School had 36%, Apple School 42.9%, Grape Fruit 36.4%, Orange 57.2%, Lemon 59.2% and Mango Secondary School with 39.7%. It is on this background that we were motivated to embark on this study.

RESEARCH METHODOLOGY

This is a desktop research method that involved collecting and examining information that already exists on the internet, libraries, published journals and periodicals, magazines, published government reports and theses. Desktop research is qualitative and inductive based on secondary research where the researchers reviewed what other researchers had established. The data was found to be necessary in providing baseline information in understanding CPD.

REVIEW AND DISCUSSION OF RELATED LITERATURE

The literature represents reported secondary records and is based on what has been said by other authors about professional development. The purpose of the literature review is to acquire insight into the various literatures based on professional development of the teaching personnel. The assumption being that the body of evidence accumulated over decades would ideally provide research-based conclusions that can guide the development of effective continuous professional development programmes (McDonough et al., 2010; Salo & Ronnerman, 2013; Cooper, 2016).

The Nature and Concept of Continuous Professional Development

In order to avoid possible misconceptions by the readers, the term professional development is contextually defined below so that it is understood as used in this research. Professional development may mean different things to different people. Definitions would ideally add clarity and reduce confusion by establishing shared meanings. Kennedy (2009) defines continuous professional development as:

“... The conscious updating of professional knowledge and the improvement of professional competence throughout a person’s working life. It is a commitment to being professional, keeping up to date and consciously seeking to improve. Continuous professional development is the key to optimising a person’s career opportunities for today and for the future. It focuses on what you learn and how you develop throughout your career”.

Guskey (2000) agrees, adding that professional development is, *“...those processes and activities designed to enhance the professional knowledge, skills and attitudes of educators so that they might, in turn, improve students’ learning”.*

As may be observed, the above definitions interpret professional teaching development as a ‘process,’ meaning to say it is systematic, deliberate as well as organised (Whitehouse, 2010; Collin et al., 2012; Shaha et al., 2015; Sharma, 2010; Shuttleworth, 2008). The common denominator is that the staff skills and competencies are improved upon in order to produce outstanding educational results for students. Additionally, CPD is lifelong in one’s working life. Therefore, professional development of educators is the cornerstone for the provision of quality teaching and learning (Bernadine, 2019). It also implies that educators never cease to learn. CPD therefore, puts emphasis on lifelong learning ‘zeroing-in’ on student achievement. In education, the term professional development may be used in reference to a wide variety of specialised training, formal/informal education or advanced professional learning intended to help educators, principals and other educational personnel improve their professional knowledge, competence, skill and general effectiveness (Evans, 2002; McDonough et al., 2010; Darling-Hammond et al., 2017)).

In a school set up, professional development is concerned about improving upon the knowledge, attitude and skills base of principals and educators. The needs of the personnel, ideally, should be satisfied in the context of the needs of the school. The learner should equally be a beneficiary of the development efforts by learning at high levels of achievement (Darling-Hammond & Richardson, 2009; Caena, 2011; Osmundson, 2016). The programmes are planned in pursuit of addressing the needs of the school in particular and the needs of the education system in general. CPD in a broad sense refers to the development of a person in his or her professional role. More specifically, Villegas-Reimers (2003) views educator development as that,

“...professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically”.

Continuous professional development includes formal experiences such as attending workshops and professional meetings and in mentoring, and informal experiences such as in reading professional publications or watching television documentaries related to an academic discipline. Continuous professional development can also occur in informal contexts such as discussions among work colleagues, independent reading and research, observations of a colleague’s work, or other form of learning from a peer (Guskey, 2002; Guskey, 1994; Marcelo, 2009; Mizell, 2010; Bautista & Ortega-Ruiz, 2015).

Of interest is the view of Clarke & Hollingsworth (2002) on educator professional development as they interpreted what professional development entailed rather than define it. They view educator professional development as educators’ learning, rather than others

getting educators to change or learn. Further, they identified and described three main types of development namely; personal, professional and social. Clarke & Hollingsworth (2002) are convinced that the process of educator development could be seen as one in which personal, professional and social development is occurring, and one in which development in one aspect cannot proceed unless the other aspects develop also.

Salo & Ronnerman (2013) also describe what they consider key features of the educator development process. Educator professional development could be seen as having two aspects. One is the input of new theoretical ideas and new teaching suggestions. The second is trying out, evaluation and practice of those new theoretical and teaching ideas over an extended period in a collaborative situation where the educators are able to receive support and feedback, and are able to reflect critically. They conclude that both aspects were important if personal, professional and social development of educators is to occur.

Evans (2002) picked up that, implicit in the description of educator professional development appeared to be an interpretation of educator development as, “... *a comparatively longitudinal process of teachers’ behavioural change that is guided by and focused upon practical application of suggested innovations*”. It appears to be a process involving sequentially; the generation of ideas, that may be applicable to teaching; then trying out these ideas. That is followed by discussing in collegial contexts the viability and implications of the ideas as they emerge as potential practice; and finally adopting new practices that emanate from the ideas (Evans, 2002). There is no evident consideration of the possibility that, continuous professional development may also occur in less systematic and unplanned ways incidentally or accidentally.

Evans (2002) hereby puts an interpretation of continuous professional development forward. She interprets educator professional development as a process which may be on-going or which may have occurred and is complete. She is however, cautious not to imply that educator professional development in its entirety may ever be considered to have been completed in a finite way, but rather that educators may be considered to have developed in some way. Her reference to professional development being completed incorporated recognition that the completion may often be “*transient*” or lasting only for a short time. Furthermore, Evans (2002) also interprets continuous professional development as a process rather than a product, but would categorise unsuccessful or partially successful efforts as professional development; rather those professional development processes that failed or partially failed to be completed.

Furthermore, Evans (2002) sums up her concept of professional development as some form of change that would generally be categorised as learning. She refers to continuous professional development as “...*functional development*...” that may include learning new ways of teaching, learning how to apply new methods or processes in teaching, for example, on how to be more productive. In this context, the intellectual change focus within attitudinal development may incorporate the enhancement of understanding or the increase of knowledge, which are generally accepted as products of learning. A further point is that, in the context of professional development, an educator who becomes more reflective or analytical would be manifesting intellectual development and one who becomes more highly motivated in general or in relation to specific aspects of his or her work would be manifesting motivational development (Lessing & de Witt, 2007; Malik, 2016; Whitehouse, 2011; Darling-Hammond et al., 2017).

From the above contributions, continuous professional development may be used in reference to a wide variety of specialised training, formal or informal education, or advanced professional learning intended to help educators and other school personnel improve their professional knowledge, skill or competence and effectiveness. Continuous professional development of educators is educators’ on-going learning to improve the way they teach,

deliberately directed towards students learning at high levels of achievement (Kosgei, 2010; Vracar, 2014; Huish, 2014; Joyce & Showers, 2003). In other words, lifelong learning is the means by which educators attempt to maintain and keep abreast of the knowledge and skills related to their job considering that initial teacher training would not suffice in this fast technology-changing world.

Importance of CPD

The role of the educator in the success of every student is of paramount importance in all educational situations. A part of the success of every educator is highly dependent upon his or her knowledge and skill (Collin et al., 2012). Furthermore, a part of every educator's knowledge and skill is dependent upon his or her training. However, schools can no longer solely rely on educators having undergone some teacher education training; educators need to continually update their knowledge and skills throughout their careers (Haslam, 2010; Steyn, 2010; Cooper, 2016; Trotter, 2006).

Educational technology and curricula, for instance, are constantly changing, making it challenging, for educators to keep with trends and practices in the field (Mizell, 2010). Continuous professional development comes handy in transforming educators into better and more apt educators by enabling them to create relevant and tailored course instructions for today's students (Tsoetsi & Mahlomaholo, 2013; Huish, 2014). The assumption with professional development is that when educators discover new teaching strategies, they are able to go back to the classroom and make changes to suit the needs of their learners. In fact, research shows that an inspiring and informed educator is the most important school-related factor influencing student achievement, so it is critical to pay close attention to how both new and experienced educators are supported (Edutopia, 2008; Mestry et al., 2009).

Villegas-Reimers (2003) established that the process of continuous professional development has a significant positive impact on three aspects that he identifies as; educators' beliefs and practices, students' learning and the implementation of educational reforms. Successful continuous professional development experiences have a noticeable impact on educators' work or beliefs and practices both in and out of the classroom, especially considering that a significant number of educators tend to be under-prepared for their profession at the initial assumption of duty (Villegas-Reimers, 2003). The claim, according to Villegas-Reimers's research evidence, is that professional development strengthened educators' knowledge, skills and dispositions. Kettle and Sellars (1996), Kallestad and Olweus (1998) and Youngs (2001), all, report similar results cited by Villegas-Reimers (2003).

On the second aspect, with regard to the effect of educators' professional development on students' learning, a number of studies report that the more professional knowledge educators have, the higher the levels of student achievement (Falk, 2001; Educational Testing Service, 1998; Grosso de Leon, 2001; Guzman, 1995 & Tatto, 1999) all cited in Villegas-Reimers (2003:21). Darling-Hammond et al., (2017) agrees, adding that,

"...investments in teachers' knowledge and skills net greater increases in students' achievement than other uses of an education dollar".

Villegas-Reimers (2003) offers evidence to support the fact that continuous professional development plays an important role in changing educators' teaching methods, and that these changes have a positive impact on students' learning. Data collected during the "*Cognitively Guided Instruction Project*" (a multi-year and multi-phase programme of curriculum development, professional development and research) showed powerful evidence, which supported the strong relationship that links the improvement of educators' practices

and the increasing levels of students' achievement. Darling-Hammond et al., (2017) also concluded that,

"Teachers who participated in sustained curriculum-based professional development reported changes in practice that, in turn, were associated with significantly higher student achievement scores on state assessment".

The third aspect brings us to the issue of continuous professional development having a positive impact on the success of educational reform. Educational societies tend to be engaged at some point in some form of educational reform at national, district, provincial, state or school level. Villegas-Reimers (2003) puts forward the assertion that educational reforms that do not include educators and their professional development have not been successful. That puts the relationship between educational reform and educators' professional development in a state of positive co-relationship, making the relationship reciprocal.

As mentioned previously, reforms that have centred on educators' professional development have been extremely successful in transforming even national education systems. Villegas-Reimers (2003) cites Namibia as the case where the education system was transformed into a more democratic system after the country gained independence.

As has already been alluded to, professional development may happen in a variety of ways. Formally, it can take place at a workshop, seminar, meeting or conference. Informally, it can occur through conversations, readings, observations or even feedback. The importance of continuous professional development is to become more educated in one's desired profession. Huish (2014) proposed that it is important for educators to engage in some form of professional development for the gain of being educated, as opposed to dragging oneself to attend because it is either mandatory or for the benefit of earning some reward for attendance. With the internet and increased technology in the classroom, for instance, new ideas and tools are being explored and implemented on a daily basis, rendering it crucial to stay up to date. Ideally, professional development programmes should energise and excite educators about what it is that they are teaching (Mestry et al., 2009; Tsotetsi & Mahlomaholo, 2013).

Huish (2014) further highlights the importance of professional development for educators by putting forward claims that continuous professional development should introduce new ideas, teaching methods, structures, tools and technology that would benefit in the daily classroom activities. When educators return to their classes after attending a professional development programme of some sort, the most important part of the professional development programme would be to apply those new ideas or teaching methods to benefit the learner. As a way of encouragement, Huish (2014) is very clear and bold on advising fellow educators to always look to educating themselves. By so doing, educators are in a better position to set an example to their students by continuing to learn and expand one's knowledge and skills base.

The importance of professional development is viewed in the context of the importance of educator's knowledge, skills and positive attitude in executing their duties. Professional development is the strategy schools employ to ensure that educators continue to strengthen their practice throughout their careers (Borko, 2004, Dinham & Scott, 2003; Caena, 2011). Mizell (2010) agrees by adding that, *"In education, research has shown that teaching quality and school leadership are the most important factors in raising student achievement"*.

To further clarify and emphasise on the importance of professional development for educators, Mizell (2010) posed eight questions that he immediately responded to, as illustrated below;

"Why do educators need professional development? Didn't they learn what they need to know in college?"

College and university programmes cannot provide the extensive range of learning experiences necessary for graduates to become effective school educators. Once students graduate and are employed, they then continue to learn through experience. New educators take years to gain the skills they need to be effective in their roles. Even experienced educators confront great challenges each year, including changes in subject content, new instructional methods, advances in technology, changed laws and procedures, and student learning needs. Educators who do not experience effective professional development do not improve their skills, and student learning suffers.

“Why do new educators need extra support?” Mizell (2010).

New educators juggle an overwhelming number of unfamiliar issues, such as classroom management, instruction, curriculum, school culture and operations, test preparation and administration, parent relationships and interactions with other educators as colleagues. When left to themselves, they may develop counter-productive behaviours (ibid). Nevertheless, with some extra support, the new educators learn effective practices to mitigate daily challenges. Many school systems provide mentors and familiarisation or induction programmes for novice educators. More importantly, research shows that new educators who received intensive mentoring had a significant effect on learner achievement after as little as two years (Strong et al., 2004, cited in Mizell, 2010).

“Do new principals need the same kind of extra support as new educators?” (ibid).

Yes, indeed, new principals and assistant principals, just like new educators, benefit from on-going learning when they assume their new roles (Mizell, 2010).

“Do principals have separate professional development from educators?” (ibid, p. 7).

Principals who are instructional leaders often choose to participate in professional development designed primarily for educators so that they can support its outcomes. In addition, principals need professional development to address their specific roles and responsibilities. This professional development usually occurs in separate venues, often at different times. Many experts, however, believe that principals do not have adequate access to professional development related to their roles as school leaders (Mizell, 2010).

“When do educators typically engage in professional development?” (ibid).

CPD is most effective when it occurs in the context of educators' daily work. When learning is part of the school day, all educators are engaged in growth rather than learning being limited to those who volunteer to participate. School-based professional development helps educators analyse student achievement data during the school year to immediately identify learning problems, develop solutions and promptly apply those solutions to address students' needs.

“Where does professional development typically occur for educators?” Mizell (2010).

Educators benefit most by learning in the setting where they can immediately apply what they learn; that is, in the school where they work. However, other professional development may occur at:

- An educator's school district complex, or some professional development resource centre.
- A third-party site such as an educator service centre.
- Another school, school system, state or foreign country.
- A college or university.
- Local, provincial or national conferences, seminars or workshops.
- Online.

“Why can’t educators just use online professional development?” (ibid).

Online professional development can be useful for learning content and even observing video demonstrations of effective teaching or leadership. Some online professional development also provides interactive, real-time discussion among participants and an expert. However, there are limitations to online professional development which include:

- Professional development may not relate to the specific learning challenges of an educator’s students.
- An educator learns in isolation rather than as a member of a team where participants learn from colleagues’ expertise, experience and insights.
- Educators’ collective growth has a greater impact on student learning across the school than individual learning does.
- No one will know whether or how well an educator applies his or her learning to benefit learners.

Mizell (2010) underscores the above claims by asserting that, all schools should be places where both adults and children learn. In addition, educators who routinely develop their own knowledge and skills, model for students that learning is important and useful (Burns, 2014; Cooper, 2016). Their on-going development creates a culture of learning throughout the school and supports educators’ efforts to engage students in learning. Furthermore, a school that organises team-based professional development and expects all educators and administrators to participate; though for different purposes, at different times, in different ways, demonstrates that it is serious about all educators performing at higher levels. As a result, the entire school is likely to be more focussed, effective and efficient (Osmundson, 2016).

Vraca (2014) identified three reasons why continuous professional development matters. *“A teacher’s professional learning journey is an on-going process throughout their career”* was the first reason.

To substantiate the above claim, Vraca (2014) had this to say:

“To promote and nurture effective teaching, the profession should offer quality training, well designed career paths, time to work together on the best ways to help students, quality evaluations that help teachers in their development, professional development based on identified needs, and fair accountability process”.

Professional learning as is in professional development is an on-going process. Continuous professional development becomes the link between educators’ individual skills and knowledge and the contribution they make to a school and learners (Borko, 2004; Mizell, 2010). According to Vraca (2014), the process of professional learning should provide educators the opportunity to expand their skills, develop new teaching strategies and deepen their understanding of subject content. For instance, for experienced educators, it is vital to find time to participate in some continuous professional development of some sort because technology is continually changing as much as subject knowledge is updated. More specifically, when subject knowledge is updated, experienced educators need access to professional learning opportunities to be refreshed on those subject areas and keep abreast of educational trends to promote student learning effectiveness. What teachers know has a bearing and major influence on how students learn (Mizell, 2010; Steyn, 2010; Vraca, 2014).

Vraca (2014) second reason was based on the claim that, *“The classroom is continuously changing, and educators must be prepared to meet needs of their students”.*

The emphasis is on educators being given professional learning opportunities to be ready and equipped for any changes in classroom practices. The introduction of eBooks, tablets as learning devices, and electronic notebooks and boards into some schools is testimony to the above claim.

Finally, Vraca (2014) third reason asserted that, *“It is important for schools to adopt rich professional learning opportunities for its educators”.*

Principals of schools should identify professional development training needs and prepare educators for the changing classroom by providing opportunities for educators to continue to develop their teaching skills and subject matter knowledge. To sum up, Vraca (2014) posits that professional development ultimately matters because it is an on-going process throughout an educator's career as it prepares educators for the changing classroom. In addition, professional development provides rich opportunities for educators to continue to develop their teaching skills and subject matter, ensuring effective, high quality teachers, optimistically are placed in all classrooms.

Moeini (2008) views teacher professional development as, "...the tool by which policy makers convey broad visions, disseminate critical information, and provide guidance to teachers". The instruction provided to educators is perceived to be instrumental in promoting educator development in areas such as reading instruction, technology and general subject mastery. Moeini (2008) takes notice that the majority of novice educators began their career in a teaching environment that had little or no professional assistance while expected to carry a full educational load immediately. It is not unusual for some new educators to teach in disciplines that may differ from their area of specialisation. Worse still, they may be asked to teach in some fields for which they are less prepared and receive little support, and may further not be evaluated based upon proper criteria to improve their teaching. In such a scenario, continuous professional development comes in handy to ensure that individual educators enhance their skills and abilities once they have formally qualified (Dinham & Scott, 2003; Osmundson, 2016; Cooper, 2016.)

CPD is important as it helps to ensure that further learning is progressed in a structured, practical and relevant way to guarantee that there are applied efficiencies in learning (Desimone et al., 2006; Vracar, 2014; Moonasar & Underwood, 2018). Professional development allows individual educators to focus on specific skills and knowledge they require. In fact, not only novice educators require guidance, but also some veteran educators whose knowledge of teaching methods needs updating. A major study carried out by the National Foundation for Improvement of Education of the US National Education Association concluded after interviewing 1,000 educators that professional development was no longer viewed as separate from the teaching job, but must be built into the daily, weekly and yearlong job of teaching (Khan, 2010). This renders continuous professional development essential for educators to develop the content knowledge and skills they need to succeed in their classroom.

Osmundson (2016) agrees that the goal of CPD is to learn and become a better employee, but contends that other advantages are possible through participation in development opportunities. The underlying benefit gained beyond building knowledge includes the aspect of gaining confidence and credibility (Osmundson, 2016). The phrase, "*knowledge is power*" rings true. The act of learning provides new perspective and increased expertise in one's field. Secondly, the goal of most continuous professional development activities, if not all, is to teach how to do something better. By mastering new skills, efficiencies are recognised. Osmundson (2016) further claims that CPD empowers the programme participant with the ability to influence and lead. By using the knowledge learned with the confidence, credibility gained, the ability to influence, and lead becomes less subjective, and focuses more on the facts/figures brought to the table. These opportunities provide a tool for more meaningful contributions to the team.

Additionally, professional development opportunities conducted in group settings provide an added benefit of building one's network. They also provide an outlet for individuals to brainstorm and seek feedback (Osmundson, 2016). CPD also keeps one abreast of changes in the education system. It is easy to become complacent and simply maintain the status quo. Employee development opportunities can shed light on new approaches and direct

on how to navigate through (Dinham & Scott, 2003). For many individuals, professional development is just a part of moving up the career ladder. Whether necessary for advancement or not, professional development must be encouraged as a motivator for one to become a better employee. Professional development opportunities are about getting more out of the work experience. Being the best one can be, hopefully is reciprocated in things like better compensation, flexibility, perks and advancement, and more (Moeni, 2008; Sparks, 2002).

CONCLUSIONS

Researchers are very clear that educators need CPD to improve teaching and influence student achievement. Largely, educators view CPD in the context of professional activities that would develop educators' knowledge, skills, attitudes and other related characteristics. Educators conceive CPD as necessary for the maintenance of life-long professional competencies. The research findings suggest positive benefits to participation in CPD for the school, the individual educator as well as the student. All reviewed research literature agreed that the main purpose of CPD is to promote effective educator performance in schools, and thereby enhancing student achievement. Research views CPD as critical in encouraging educators to be life-long continual learners to enhance student achievement.

REFERENCES

- Anderson, C. (2010). Presenting and Evaluating Qualitative Research. *American Journal of Pharmaceutical Education*, 74(8), 1–7.
- Bautista, A., & Ortega-Ruiz, R. (2015). Teacher professional development: International perspectives and approaches. *Psychology, Society and Education*, 7(3), 240-251.
- Bernadine, G.G.K. (2019). Challenges faced by educators in the implementation of Continuing Professional Teacher Development (CPTD). *Gauteng Province: Teacher Education in the 21st Century*, 1-7.
- Borko, H. (2004). Professional development and teacher learning mapping the terrain. *Educational Researcher*, 33(80), 3-15.
- Burns, M. (2014). Five models of staff development. *Global Partnership for Education*, 1-4.
- Caena, F. (2011). *Literature Review Quality in Teachers' Continuing Professional Development*. London: European Commission.
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education* 18, 947–967.
- Collin, K., Van der Heijen, B., & Lewis, P. (2012). Continuing professional development.” *International Journal of Training and Development*, 1-6.
- Cooper, D. (2016). *Professional Development: An Effective Research-based Model*. Mifflin Harcourt, Houghton.
- Darling-Hammond, L., Hyler, M.E., & Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, Learning Policy Institute, CA.
- Darling-Hammond, L., & Richardson, N. (2009). Teacher Learning: What Matters? *Research Review: Feb 2009*, 65(5), 46-53.
- Department of Basic Education (DBE). (2017). Analysis of Results-Pietersburg Circuit Polokwane: Government Publications.
- Desimone, L.M., Smith, T.M., & Ueno, K. (2006). Are teachers who sustained content-focused professional development getting it? An administrator's dilemma. *Educational Quarterly*, 42(2), 179-215.
- Dinham, S., & Scott, C. (2003). Benefits to Teachers of the Professional Learning Portfolio: A case study. *Teacher Development*, 7(2).
- Edutopia. (2008). *Why is Teacher Development Important? Because students deserve the best*. George Lucas Educational Foundation, New York.
- Evans, L. (2002). What is Teacher Development? *Oxford Review of Education*, 28(1).
- Guskey, T.R. (2002). Professional Development and Teacher Change. *Teachers and Teaching: Theory and Practice*, 8, 381-391.
- Guskey, T.R. (2000). *Evaluating professional development*. Thousand Oaks, Corwin Press, CA.

- Guskey, T.R. (1994). Results-oriented professional development: In search of an optimal mix of effective practices. *Journal of Staff Development*, 15(4), 42-50.
- Haslam, M.B. (2010). *Teacher Professional Development Evaluation Guide*. Washington D.C. Maryland State Department of Education.
- Huish, J. (2014). Importance of Staff Development. NYU Steinhardt newsletter: School of Culture, Education and Human Development, 1-2.
- Joyce, B., & Showers, B. (2003). *Student Achievement through Staff Development*. National College for School Leadership, New York.
- Kennedy, A. (2009). Models of Continuing Professional Development: a framework for analysis. *Journal of In-service Education*, 31(2).
- Khan, W.A. (2010). Continuing professional Development (CPD) what should we do? *Bangladesh Journal of Medical Education*, 1(1), 37-44.
- Kosgei, K.K. (2010). Challenges facing staff development and training: A survey of secondary schools in Kericho County. *International Journal of Humanities and Social Science Intervention*, 4(2), 34-47.
- Lessing, A., & de Witt, M. (2007). The value of continuous professional development: Teachers' perceptions. *South African Journal of Education*, 27(1), 53-67.
- Malik, M. (2016). Assessment of a professional development program on adult learning theory. *Portal: Libraries and the Academy*, 16(1), 47-70.
- Marcelo, C. (2009). Professional Development of Teachers: Past and future. *Educational Sciences Journal*, 8, 5-20.
- McDonough, A., Clarkson, P., & Scott, P. (2010). Shaping the future of mathematics education: *Proceedings of the 33rd Annual conference of the Mathematics Education Research Group of Australia*, MERGA, Fremantle.
- Mestry, R., Hendricks, I., & Bisschoff, T. (2009). Perceptions of teachers on the benefits of teacher development programmes in one province of South Africa. *South African Journal of Education*, 29, 475-490.
- Mizell, H. (2010). *Why Professional Development Matters*. Learning Forward. 504 South Locust Street, Oxford, OH 45056.
- Moeini, H. (2008). Identifying Needs: A Missing Part in Teacher Training Programs. *International Journal of Media Technology and Lifelong Learning*, 4(1), 1-12.
- Moonasar, A., & Underwood, P.G. (2018). Continuing Professional Development opportunities in Information and Communication Technology for academic librarians at the Durban University of Technology. *Journal of Education for Library and Information Science*, 84(1), 47-55.
- Osmundson, E. (2016). 7 Reasons why professional development is important. *Farm Journal's Pork*, 15.
- Ruiz, J.R. (2017). Collective Production of Discourse: an approach based on the Qualitative School of Madrid. In *A New Era in Focus Group Research*, Palgrave Macmillan, London, 277-300.
- Salo, J.P., & Ronnerman, K. (2013). Teachers' professional development as enabling and constraining dialogue and meaning-making in Education for All. *Professional Development in Education*, 39(4), 596-605.
- Shaha, S.H., Glasset, K.F., & Ellsworth, H. (2015). Long-term impact of on-demand professional development on student performance: A longitudinal multi-state study. *Journal of International Education Research*, 11(1), 29-34.
- Sharma, S. (2010). Qualitative methods in statistics education research: Methodological problems and possible solutions. In *Proceedings of the Eighth International Conference on Teaching Statistics*.
- Shuttleworth, M. (2008). *Case Study Research Design*. Explorable, London.
- Sparks, D. (2002). *Designing powerful professional development for teachers and principals*.
- Steyn, G.M. (2010). Educators' perceptions of continuing professional development for teachers in South Africa: A qualitative study. *Africa Education Review*, 7(1), 156-179.
- Trotter, Y.D. (2006). Adult learning theories: Impacting professional development programs. *Delta Kappa Gamma Bulletin*, 72(2).
- Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature*. International Institute for Educational Planning, Paris.
- Vracar, A. (2014). Three reasons why staff development matters. *Nashville Annual Conference: Learning Forward*.