

# Chapter 16

## Fostering Teachers' Professional Development Through Collaboration in Professional Learning Communities

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**Abstract** Emerging models for continuing professional development of teachers engage teachers in a collaborative learning through professional learning communities (PLC) as a way to spur their professional development and empowerment, and correspondingly, lead to positive changes in teaching practices and student learning. Learning communities are created in these collaborative models where teachers debate theoretical principles, share insights about their teaching and learning, design new instructional strategies, experiment new ideas in classrooms and reflect on results. Models such as Wenger's "community of practice", Hord's Professional Learning Community, Katz and Earl's collaboration model and Pedder and Opfer's professional learning model will be described. Schools can support teacher learning by promoting collaboration, team learning and collegial dialogue among staff, creating continuous learning opportunities, instituting systems to learn and to share learning. This study explored how a South African primary school succeeded in implementing and developing a PLC culture to empower its teachers to improve their learning and that of their students. Key factors in the success of the school's PLC were the leadership of the principal, who acknowledged the necessity for a collaborative learning culture, and the fact that the school had strong and experienced teaching staff who were committed to quality teaching and learning.

### 16.1 Introduction

Education authorities have recently focused on enhancing and unlocking the professional capacity of teachers by providing high-quality quality continuous professional development (CPD) activities (Brouwer 2011; Godbold 2013; Nehring and Fitzsimons 2011). Studies also confirm that teacher collaboration offers opportunities for empowering teachers and improving teachers' practice and student

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learning (Alrubail 2015; Christiansen and Robey 2015; DuFour 2014; DuFour and Reeves 2015; Forte and Flores 2014; Herbert and Rainford 2014; Poulos et al. 2014; UNESCO report 2014; Watson 2014).

The movement towards professional teacher communities within schools grew from the idea that individual teachers cannot be taken out of their school environment in order to train, empower and change them and then put back into the same school environment and be expected to change that environment. Instead, teachers require teacher communities within the school where they can learn together and apply that learning to their classroom practice. The emphasis in such learning communities should be on empowering teachers and developing their professional knowledge and skills and classroom practices for the sake of quality teaching and learning. It is therefore important that school administrators and teachers recognise and act on the increased significance of collaborative learning in professional learning communities (PLCs) in schools.

Various policy initiatives have attempted to improve the quality of teaching and learning in South Africa (Republic of South Africa 2007, 2011, 2012). The proposed professional learning model in the Integrated Strategic Planning Framework for Teacher Education and Development (2011–2025) that focuses on teacher collaboration in teams (Republic of South Africa 2011) was of particular interest for this study. Considering the numerous challenges South African teachers face, PLCs may empower teachers to improve their teaching methods, to share their beliefs and experiences and ultimately to promote their own learning and that of their students.

Studies show that there has been much development in understanding the phenomenon of a “professional learning community”, but that there is not enough empirical research that can shed light on implementing and sustaining PLCs in schools. This study explored how a South African primary school succeeded in implementing and developing a PLC culture to empower its teachers to improve their learning and that of their students.

## 16.2 Conceptual Framework

The notion “professional learning community” has emerged from organisational theory and human relations and focuses on the (1) continual, intentional and collaborative learning that arises (2) among a cohesive teacher team (3) that emphasises shared knowledge and skills (4) within a caring and affectionate school culture that penetrates the professional lives of school administrators, teachers and their students (5) to eventually promote teacher empowerment as well as teacher and student learning (Huffman and Hipp 2003; Gaspar 2010).

Different lenses were used in the study to shed light on the phenomenon, PLC. Wenger’s social learning theory primarily regards learning as the active, social participation of members within communities of practice (CoPs) and focuses on individuals and also social structures that enable these individuals to learn (Wenger 1999). Team members in CoPs have a shared vision, a clear learning focus and a

shared skill and knowledge base, and they have developed procedures for review and reflection within their particular community. Leadership also plays a key role by providing appropriate infrastructures and the necessary resources for such CoPs to prosper (Wenger 2001) and for teachers to be empowered (Alrubail 2015). Moreover, Godbold (2013) states the teacher empowerment cannot be imposed by school leaders—they need to cultivate it.

Wenger's social learning theory (1998) identifies three main elements in a community of practice (CoP):

1. Mutual engagement delineates the way in which members in a CoP function (Li et al. 2009). Mutual commitment is deepened when such a community takes responsibility for its own learning and empowerment (Wenger 2000). It implies that team members should know each other well enough to interact productively and to identify the individuals who may be of assistance when required.
2. Shared repertoire is a common set of resources, language and understandings to facilitate and negotiate professional learning among team members (Li et al. 2009; Wenger 1998). Within their CoPs members develop customary ways of cooperating and forming personal relationships (Brouwer et al. 2012).
3. Joint enterprise is the joint processes within which team members work to understand and share goals (Li et al. 2009; Wenger 1998).

A second lens used in the study was that of the professional learning committee (PLC), as outlined in Hord's framework (1997). Hord (1997) defines a PLC as a team of teachers and school administrators who meet regularly and share their learning and then act on what they have learnt. Hord (1997) identifies five critical attributes of a PLC:

1. Supportive and shared leadership: Studies show a strong leadership presence in schools where PLCs function effectively (Christiansen and Robey 2015; Nkengbeza 2014; Outhouse 2012). To transform a school into a PLC therefore requires the endorsement of school leadership to actively initiate and nurture the whole school's professional development, to share leadership and ensure teachers' commitment and to remove obstacles that hinder teacher collaboration (Gaspar 2010; Terry 2013). School administrators need to model a vision of teacher collaboration, communicate confidence in teachers' competence and create time and structures to promote teacher collaboration (Piccardi 2005).
2. Shared values and vision: A shared vision and values guide all decisions and lead to required norms of behaviour for staff members (Nkengbeza 2014; Watson 2014). Collaborative models of professional development encourage pooled intelligence and collegial respect, commitment and trust among teachers that focus on student performance (Williams 2010).
3. Individual and collective learning: Interdependence among team members, where they learn individually and collectively, is considered a requirement for successful teacher communities. It implies that team members engage in a deep professional dialogue about subject knowledge and/or professional skills (Herbert and Rainford 2014; Watson 2014).

4. Shared personal practice: Hord (1997: 6) regards this attribute as a component of the “peers helping peers” process. When teachers share their practices, they address the needs of their students, identify solutions to professional challenges, stimulate professional dialogue and assist in building one another’s expertise (Herbert and Rainford 2014). Moreover, sharing their practice is built on mutual trust and respect (Fulton and Britton 2011).
5. Supportive conditions: Hord (1997) distinguishes between two types of supportive condition: physical and human. The physical conditions comprise school policies and schedules, frequent team meetings and appropriate processes for professional dialogue and communication (Jaquith 2013; Terry 2013). The human conditions encompass the willingness of teachers to work collectively and to accept constructive feedback on their practice (Greer 2012).

When examining the development of PLCs, it is important to look at the stages of such development. DuFour, DuFour and Eaker in Reynolds (2008) identify four stages of PLC development: (1) the pre-initiation stage when teachers have not yet established a shared vision that is linked to student performance; (2) the initiation stage when teams are created and teachers address the idea of a PLC development; (3) the developing stage when most of the teachers accept and take ownership of the idea of a PLC development; and (4) the sustaining phase when teachers become willing and fully committed to use their professional community as a way to promote student performance.

### 16.3 Research Design and School Context

Based on a longitudinal study carried out since 2010 in the school, this school was purposively selected since it revealed promising data on the way in which PLCs developed in the school. The school in the study is a large, urban primary school within a middle-class community in South Africa with approximately 1850 students and 106 teachers at the time of the study. The school received the prestigious “Inviting School” award from the International Alliance of Invitational Education (IE) for manifesting the 5Ps (people, places, policies, programmes and processes) in the school (Purkey and Novak 2008). In essence, employing IE means developing and sustaining a welcoming school environment that is founded on respect, trust, optimism, intentionality and care for the sake of personal growth of all role players and increased learning outcomes (Shaw et al., n.d.).

During the tenure of the previous principal, the school showed among other things the school’s focus on the professional development of individual teachers (Steyn 2009, 2010). However, with his appointment in 2010, the new principal refocused teachers’ professional development on teacher collaboration by initiating a collaborative learning culture in the school (Steyn 2014a, b, c, 2015a, b). The principal started by instituting both vertical and horizontal teacher collaborative

**Table 16.1** Annual national assessment results ANA (2014) for Mathematics in South Africa and the school (in percentages)

	South Africa	Case study school
Grade 4	37	68
Grade 5	37	68
Grade 6	43	80

**Table 16.2** Annual national assessment results (2014) for Literacy (Home language) in South Africa and the school (in percentages)

	South Africa	Case study school
Grade 4	57	68
Grade 5	57	68
Grade 6	63	80

structures that included the whole school team, various departmental teaching teams and teaching teams within the various grades.

Tables 16.1 and 16.2 reveal the Numeracy and Literacy (Home language) results of the school in the study compared to those of South African schools (Republic of South Africa Republic of South Africa 2014), which show that the average performance of students in the school was significantly higher than that of averages in the rest of South Africa, particularly in Mathematics. Grade 3 Mathematics had the highest score in the ANA results in 2014. The high performance in Mathematics can be attributed to, among other things, the fact that the school reduced the number of students in this subject to 15 per class from Grades 4 to 7.

Although this study referred to a previous quantitative study in Steyn (2014a) which focused on the realisation of the five major attributes of a PLC, this study employed a qualitative approach. Qualitative data collection methods during 2015 included a focus group interview with selected teachers and various individual interviews with the principal and staff members. In the analysis of data, the five attributes of Hord's framework (1997) were used to explain the findings. Ethical approval for the study was obtained from the Gauteng Department of Education and the University of South Africa.

## 16.4 Findings

Based on Hord's framework, the findings describe the role of shared and supportive leadership; a common vision and values; collective learning and sharing the responsibility for student learning; shared personal practice; and continuous improvement and supportive conditions.

### ***16.4.1 Shared and Supportive Leadership***

The school principal played a key role when he instituted a PLC in the school. During his first year in office he realised that teachers worked in “very isolated” conditions and that the school had “little islands of excellence” (Steyn 2015a: 166). He had two major concerns: (1) to break the tradition of independence among and also in grades and (2) to improve the academic performance in the school by focusing on the learning of teachers and students (Steyn 2015a). He therefore took the initiative to initiate a PLC culture in the school. Changing the independent culture was a “huge challenge” for the principal and difficult for the teachers, but he considered it to be an “adapt or die” case (Steyn 2015a: 168).

The survey showed that 84.61% of teachers agreed that the principal consistently involved them in decision-making processes and that teachers valued the principal’s shared and supportive leadership approach in creating a PLC (Steyn 2014a). Since 2011 many teachers have bought into the idea and taken “ownership” of collaboration (Steyn 2015c). The principal humbly viewed himself as “the cog in that big machine”, but respected the crucial role of teachers in the successful teacher collaboration (Steyn 2015a: 165).

### ***16.4.2 A Common Vision and Values***

When the principal initially took office he realised that the school’s vision was too elaborate. The school then collectively developed a vision to be “the best school” that revealed the ultimate ideal for the school: “The barefoot, fun, performance school with a Christian character that strives towards excellence and aims to develop each child in totality” (Steyn 2013: 6).

In particular, the principal placed a high premium on improved academic performance in the school (Steyn 2013) which was supported by 84.31% of the teachers (Steyn 2014a). In order to address this shared goal, the principal placed a strong focus on teacher collaboration. He succinctly explained his stance (Steyn 2015a: 168):

Success in the classroom depends 100% on teacher collaboration ... We are driving an idea ... which is so fragile that if there is no continuity and collaboration you will not get to the final destination. ... if we don’t collaborate, we fail them [the students].

Apart from the focus on student learning, the principal made a firm commitment to the shared values of love, excellence, respect, integrity and faith that he had “inherited”, but felt that it was also necessary to deliberately inculcate these values. Appropriate symbols in five pictures were then developed to illustrate these five values, which were displayed throughout the school. Moreover, every teacher in the school had to ensure that each of these values was inculcated for a 2-month period during the year in their classes.

### ***16.4.3 Collective Learning and Sharing the Responsibility for Student Learning***

Teachers' commitment to collective learning removed the isolation between teachers in and among grades which was confirmed by 86.54% of teachers in the survey (Steyn 2014a). The principal succinctly explained:

Without professional collaboration, there can be no growth; no advancement; no development ... The whole is more than the parts, and the system cannot function if all the parts do not work together ... Everything is interconnected, and thrives and succeeds when in collaboration with other systems within the school.

The notion of interdependence in their PLC was echoed by many teachers during interviews. For them, collaboration was necessary to measure their own professionalism and also to ensure their own professional empowerment and development. Moreover, teachers stated that being part of a learning community meant that they had opportunities to collectively generate creative ways to solve problems and to share certain subject-related responsibilities, which was seen as a welcome relief for teachers, considering their challenging workload.

### ***16.4.4 Shared Personal Practice and Continuous Improvement***

The principal believed that it was human nature for people not to share their "intellectual property" and also wanted them to stop their "ridiculous" competitiveness (Steyn 2015a: 168). His strategy paid off when he instituted PLCs, where a lot of sharing, discussion and reflection took place. Sharing practices in the school occurred when teachers used the Integrated Quality Management System in classroom observations; 86.54% of teachers valued the feedback they received from peers after such observations (Steyn 2014a). With the introduction of the Curriculum and Assessment Policy Statement (Republic of South Africa 2011), teachers engaged in professional dialogue when they had to design new lesson plans and worksheets. The spirit among team members was usually of such a nature that teachers felt comfortable making contributions. Their often diverse perspectives were respected and these insights contributed to a more holistic view of any given issue under discussion.

### ***16.4.5 Supportive Conditions***

Structural conditions and conditions that fostered human relationships in the school created conducive conditions for individual and collective learning to occur.

Regarding the structural conditions in the school, well-structured avenues in the form of formal horizontal and vertical teams were arranged in the school's timetable. Team meetings occurred during assembly and test periods for the different grades and quarterly among the grades in the different departments. This arrangement not only allowed for continuity between different grades but also consistency within classes in particular grades. The school also provided the necessary teaching equipment such as computers, interactive whiteboards and data projectors to support teachers. Various training opportunities, depending on the needs of teachers, were constantly offered to empower teachers. A teacher commented that she could not think of "any other school that provided such support" in the form of collaborative learning and that she was "grateful" to belong to this school.

Although a high level of collaboration occurred in the school, both the principal and teachers expressed the need to have more frequent formal structured meetings. Although the school had been creative in scheduling team meetings, it remained a huge challenge to find ample time in the existing tight school programme for teacher collaboration.

Supportive conditions for PLCs also include the development of positive, caring and productive relationships in the school, which 92.16% of teachers confirmed in the survey (Steyn 2014a). Teachers valued a feeling of "togetherness" among colleagues that they regarded as of "inestimable" value. For the principal, the school had developed into a "brotherhood ... where teachers cry together when it is difficult" since the introduction of PLCs (Steyn 2015a: 170).

As can be expected of individuals, differences sometimes occurred in the teams. In such cases, teachers preferred to address these problems as soon as possible and, if possible, in person. Nevertheless, the principal and teachers valued differences of opinion, but believed that they had to be properly managed so that set goals can be attained.

## 16.5 Discussion of Findings

In line with the study by Wells (2014), this study showed that by positioning teachers as professionals within PLCs, the school was able to empower teachers by improving their learning and that of their students. The transformation into a PLC required the principal's leadership to actively cultivate the whole staff's professional development (Evans 2014; Fulton and Britton 2011; Terry 2013). In essence, it was the principal's innovative and ongoing leadership that seemed to have had the most significant effect on changing the school culture (Evans 2014; Jaquith 2013; Outhouse 2012; Nkengbeza 2014; Terry 2013). Furthermore, it was important for the principal to capitalise on the expertise of teachers and build teacher leaderships to create and sustain effective PLCs in the school. By doing this, the principal showed that he adhered to the IE assumptions of respect and optimism (Purkey and Siegel 2003).



Teachers at the school bought into the idea of teacher collaboration. Teachers' collaborative activities in the school corresponded to the work of Pedder and Opfer (2011), where teachers regularly engaged in professional dialogue, observed each other and obtained valuable feedback on their teaching practice. The findings also support Wenger's joint enterprise, where team members worked in understanding and sharing goals (Wenger 1998). Teachers' commitment to a shared goal is regarded as a key characteristic of effective professional learning teams (Hord 1997; Nkengbeza 2014). Other studies also confirm the necessity of a shared goal, and that teachers should be inspired to attain this shared goal (Fulton and Britton 2011; Greer 2012; Jaquith 2013).

As far as Hord's (1997) third attribute—individual and collective learning—is concerned, the school succeeded in building a PLC. In their professional engagement, teachers enhanced both their individual and collective practices and ultimately the performance of students (DuFour 2014; Poulos et al. 2014; Forte and Flores 2014; Watson 2014). A recognised advantage of teacher collaboration in PLCs lies in the notion of “pooled intelligence” (Williams 2010: 4. Moreover, the findings reveal the presence of the mutual engagement and shared repertoire of Wenger's social learning theory, since team members employed various methods to actively interact and engage in their teams (Wenger 1998). In sharing their professional experiences, teachers extend their interpretations of classroom practices beyond those that were individually established. The focus on continuity and communication in this school also changed the previously isolated structures in the school. This study therefore supports Wenger's (2007: 1, 2) community of practice model, which emphasises the importance of teachers' joint enterprise.

The findings reveal the existence of supportive conditions and therefore confirm the existence of the two sets of factors of Hord's model (1997)—namely supportive structures and relationships in the school (Huffman and Hipp 2003: 12). The school structured various formal PLCs and the principal played a key role in creating the supportive structures for teacher collaboration. However, finding appropriate time for staff to collaborate in PLCs within a school's time-table, as shown in this study, is often cited as a barrier to an effective PLC (Terry 2013). Evans (2014) therefore states that principals need to understand the interventions required to ensure the most suitable strategies for professional development of staff.

The intentionally structured teams brought teachers together and assisted them to form close personal and professional relationships (Forte and Flores 2014). Their mutual engagement also connected them in ways that were deeper than mere “superficial similarities” (Brouwer 2011) and also broke down their previous isolation (Pedder and Opfer 2011). Furthermore, teachers' mutual engagement revealed a feeling of belongingness, cohesiveness and interdependence that was based on the presence of trust in and respect for each other (Fulton and Britton 2011). In the presence of trust and respect, teachers felt free to participate and share experiences (Katz and Earl 2010; Purkey and Novak 2008). The findings, however,

showed that teachers sometimes experienced disagreements, which Wenger (1998) also acknowledges in communities of practice. The teachers nevertheless solved their differences in an amicable way for the sake of their shared goal (Greer 2012). Moreover, Brouwer (2011) believes that the joint enterprise in communities of practice may be more productive when diversity exists among team members.

When the developmental levels of a PLC in this school were considered, the findings showed that the school to a large extent operated on the developing stage of DuFour et al. (as cited in Reynolds 2008; Steyn 2015b). It had progressed from the pre-initiation and initiation stage in 2010 when the PLC was established to the developing stage, and when teachers bought into the idea of a PLC and collectively attempted to attain the shared vision of improved teaching and learning. Key factors in the success of the PLC in the school were the principal, who saw the necessity for introducing a collaborative learning culture in the school, and the fact that the school had strong and experienced teaching staff who were committed to quality teaching and learning. Being an Inviting School that continued to adhere to the assumptions of the IE approach was another promising factor in introducing a teacher learning community in the school.

## 16.6 Conclusion

The findings from this case study reveal how the school succeeded in introducing and developing a PLC to the level of the developmental stage of a PLC. The establishment of a collaborative school culture in the study manifested in a number of ways:

1. The school principal played a key role in initiating and developing a culture of teacher collaboration.
2. Formal collaborative structures in the form of PLCs and appropriate scheduled meetings were instituted in the school programme.
3. Instituting PLCs required teachers to take ownership of the idea, which also involved shared goals, trust, respect and continuous professional dialogue.
4. The development of the collaborative school culture required a willingness and commitment among teachers to sustain the PLCs.

Although this case study reveals the manifestation of PLCs within a particular school context, it is important to understand that schools that consider moving towards a more collaborative structure need to customise the implementation of a PLC to suit their particular needs and circumstances. The only requirement in making professional learning a reality is that the principal and teachers acknowledge that it is in their power to make a difference in the quality of their own professional learning and that of their students.

## References

- Alrubail, R. (2015). Administrators, empower your teachers. *Edutopiq*. Retrieved from <http://www.edutopia.org/discussion/administrators-empower-your-teachers>. Accessed August 23, 2016.
- Brouwer, P. (2011). *Collaboration in teams*. Ph.D. thesis. The Netherlands: University of Utrecht.
- Brouwer, P., Brekelmans, M., Nieuwenhuis, L., & Simons, R.-J. (2012). Community development in the school workplace. *International Journal of Educational Management*, 26(4), 403–418.
- Christiansen, T., & Robey, P. A. (2015, Fall). Promoting systemic change through the integration of professional learning community practices with Glasser quality schools. *International Journal of Choice Theory and Reality Therapy*, XXXV(1), 7–13.
- DuFour, R. (2014, May). Harnessing the power of PLCS. *Educational Leadership*, 30–35. Retrieved from <http://www.educationalleadership-digital.com/educationalleadership/201405?folio=30#pg33>. Accessed May 20, 2015.
- DuFour, R., & Reeves, D. (2015, October 2). Professional learning communities still work (if done right). *Education Week Teacher*. Retrieved from <http://www.edweek.org/tm/articles/2015/10/02/professional-learning-communities-still-work-if-done.html>. Accessed July 19, 2016.
- Evans, L. (2014). Leadership for professional development and learning. *Cambridge Journal of Education*, 44(2), 178–198.
- Forte, A. M., & Flores, M. A. (2014). Teacher collaboration and professional development in the workplace: A study of Portuguese teachers. *European Journal of Teacher Education*, 37(1), 91–105.
- Fulton, K., & Britton, T. (2011). *STEM teachers in professional learning communities: From good teachers to great teaching*. Retrieved from <http://nctaf.org/wp-content/uploads/2012/01/1098-executive-summary.pdf>. Accessed December 4, 2015.
- Gaspar, S. (2010). *Leadership and the professional learning community*. Ph.D. thesis. Lincoln, NE: University of Nebraska.
- Godbold, W. (2013). Empowered teachers will change the world. *SEEN SouthEast Education Network*. Retrieved from <http://www.seenmagazine.us/Articles/Article-Detail/ArticleId/2899/Empowered-teachers-will-change-the-worldaccessed>. August 23, 2016.
- Greer, J. A. (2012). *Professional learning and collaboration* (Unpublished Ph.D. thesis). Blacksburg, VA: Virginia Polytechnic Institute and State University.
- Herbert, S., & Rainford, M. (2014). Developing a model for continuous professional development by action research. *Professional Development in Education*, 40(2), 243–264.
- Hord, S. M. (1997). Professional learning communities: What are they and why are they important? *Issues... About Change*, 6(1), 1–8.
- Huffman, J. B., & Hipp, K. K. (2003). *Reculturing schools as professional learning communities*. Oxford: Scarecrow Education.
- Jaquith, A. (2013). Instructional capacity: How to build it right. *Educational Leadership*, 71(2), 56–61.
- Katz, S., & Earl, L. (2010). Learning about networked learning communities. *School Effectiveness and School Improvement*, 21(1), 27–51.
- Li, L. C., Grimshaw, J. M., Nielsen, C., Judd, M., Coyte, P. C. & Graham, I. D. (2009). Evolution of Wenger's concept of community of practice. *Implementation Science*, 4(11), 1–8. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2654669/pdf/1748-5908-4-11.pdf>. Accessed January 8, 2015.
- Nehring, J., & Fitzsimons, G. (2011, September). The professional learning community as subversive activity: Countering the culture of conventional schooling. *Professional Development in Education*, 37(4), 513–535.
- Nkengbeza, D. (2014). *Building a professional learning community in a conflict and post-conflict environment* (Academic dissertation). Jyväskylä, Finland: University of Jyväskylä.

- Outhouse, C. M. (2012). *Evaluating the role of principals in teacher teams: A longitudinal analysis of principal involvement and impact in a district-wide initiative to increase teacher collaboration* (Unpublished Ph.D. thesis). Amherst, MA: University of Massachusetts.
- Pedder, D., & Opfer, D. V. (2011). Are we realising the full potential of teachers' professional learning in schools in England? Policy issues and recommendations from a national study. *Professional Development in Education*, 37(5), 741–758.
- Piccardi, J. M. (2005). *Principals' perceptions of factors affecting teacher collaboration in elementary schools* (Unpublished Ph.D. dissertation). Providence, RI: Johnson & Wales University.
- Poulos, J., Culberston, N., Piazza, P., & D'entremont, C. (2014). Making space: The value of teacher collaboration. *Education Digest*, 80(2), 28–31.
- Purkey, W. W., & Novak, J. M. (2008). *Fundamentals of invitational education*. Kennesaw, GA: The International Alliance for Invitational Education.
- Purkey, W. W., & Siegel, B. (2003). *Becoming an invitational leader: A new approach to professional and personal success*. Atlanta, GA: Humanics Trade Group.
- Republic of South Africa. (2007). *National Education Policy Act (27/1996): National policy framework for teacher education in South Africa*. Department of Education, Government Printer: Pretoria.
- Republic of South Africa. (2011). *Integrated strategic planning framework for teacher education and development in South Africa (2011–2025)*. Pretoria: Department of Basic Education and Department of Higher Education and Training, Government Printer.
- Republic of South Africa. (2012). *Action plan to 2014: Towards the realisation of schooling 2025*. <http://www.education.gov.za/LinkClick.aspx?fileticket=XZGwprV9gek%3D&tabid=418&mid=1211>. Accessed May 4, 2014.
- Republic of South Africa. (2014). *Report on the annual national assessment of 2014. Grades 1–6 and 9*. Pretoria: Department of Basic Education.
- Reynolds, D. (2008). *How professional learning communities use student data for improving achievement* (Unpublished Ph.D. thesis). Los Angeles, CA: University of Southern California.
- Shaw, D., Siegel, B., & Schoenline, A. (n.d.). Basic tenets of invitational theory and practice (ITP): An invitational glossary manuscript (Unpublished manuscript).
- Steyn, G. M. (2009). Using reflexive photography to study a principal's perceptions of the impact of professional development on a school: A case study. *Koers: Bulletin for Christian Scholarship*, 74(3), 1–29.
- Steyn, G. M. (2010, June). 'n Skoolhoof se perspektief op professionele ontwikkeling: 'n Enkele gevallestudie (A principal's perspective on professional development: A single case study). *Tydskrif vir Geesteswetenskappe*, 50(2), 244–261.
- Steyn, T. (2013). Professional and organisational socialisation during leadership succession of a school principal: A narrative inquiry using visual ethnography. *South African Journal of Education*, 33(2), 1–17.
- Steyn, G. M. (2014a). Exploring the status of a professional learning community in a South African primary school. *La Pensée Multidisciplinaire Journal*, 76(5), 256–269.
- Steyn, G. M. (2014b). Exploring successful principalship in South Africa: A case study. *Journal of Asian and African Studies*, 49(3), 347–361.
- Steyn, G. M. (2014c). Teacher collaboration and invitational leadership in a South African primary school. *Education and Urban Society*. Available from <http://eus.sagepub.com/cgi/reprint/0013124514536441v1.pdf?ikey=EDDKppL1KsZpizJ&keytype=ref>. Accessed December 9, 2015.
- Steyn, G. M. (2015a). Creating a teacher collaborative practice in a South African primary school: The role of the principal. *The Journal of Asian and African Studies*, 50(2), 160–175.
- Steyn, G. M. (2015b). The developmental level of a school-based professional learning community in a South African school. *Journal of New Generation Sciences*, 13(3), 197–213.
- Steyn, G. M. (2015c). Creating a teacher collaborative practice in a South African primary school: The role of the principal. *The Journal of Asian and African Studies*, 50(2), 160–175.
- Terry, W. (2013). Shared leadership. *Educational Leadership*, 71(2), 62–67.

- UNESCO. (2014). *Teaching and learning: Achieving quality for all*. Paris: UNESCO. Retrieved from <http://www.uis.unesco.org/Library/Documents/gmr-2013-14-teaching-and-learning-education-for-all-2014-en.pdf>. Accessed December 5, 2015.
- Watson, C. (2014, February). Effective professional learning communities? The possibilities for teachers as agents of change in schools. *British Educational Research Journal*, 40(1), 18–29.
- Wells, M. (2014). Elements of effective and sustainable professional learning. *Professional Development in Education*, 40(3), 488–504.
- Wenger, E. (1998). *Communities of practice. Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wenger, E. (1999, January to February). Learning as social participation. *Knowledge Management Review*, 6, 30–33.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization, SAGE Social Science Collection*, 7(2), 225–246.
- Wenger, E. (2001). Organically grown. *T+D (Training and Development)*, 55(6), 40–41.
- Wenger, E. (2007). Communities of practice. Third annual National Qualifications Framework Colloquium. June 5, 2007. Velmore Conference Estate.
- Williams, M. L. (2010). *Teacher collaboration as professional development in a large, suburban high school* (Unpublished Ph.D. thesis). Lincoln, NE: University of Nebraska.