



PROFESSIONAL DEVELOPMENT: PROMOTING QUALITY EDUCATION IN LEARNING INSTITUTIONS IN KENYA THROUGH ENHANCED TEACHER CAPACITY

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Abstract:

Lifelong professional development is critical nowadays because the world is undergoing major changes in socio-economic, political, climate, technology and shift in global markets that demand relearning in order to acquire relevant skills to cope with the changes. This entails that employees are facilitated with opportunities for continuous professional development in order to unlearn obsolete skills and learn new skills to help them adapt to the dynamic changes that are ever emerging and significantly affecting societies across the world. Building teacher capacity continually through lifelong learning is critical if they are to offer education that is relevant to the needs of today's complex society. To achieve this purpose, it is imperative that learning institutions embrace best practices in professional development such as systematically structured staff development programmes, in order to transform teachers' teaching practices by enhancing their professional skills to help them improve students' learning. This paper reviews literature on teacher professional development with a view to making recommendations on how learning institutions in Kenya could establish adequate structures to facilitate teachers with effective professional development with a view to empowering them to deliver holistic quality education that that is in tandem with the 21st century standards based education. Quality education is crucial in achieving sustainable development because of its significant impact on the economic development of the society.

Keywords: quality education, professional development, enhanced teacher capacity

1. Introduction

The need for effective teacher professional development has continued to attract the attention of educators. Research reports show a positive link between teacher

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professional development, teaching practices, and student outcomes (Zarrow, 2018). Hammond, Hyler, & Gardner (2017) for example established that providing professional development to teachers has a moderate effect on student achievement and also note that teachers who receive substantial professional development boost their students' achievement significantly. The researchers further describe effective professional development as structured professional learning that results in changes in teacher practices and improvements in student learning outcomes. These advantages should be exploited to enhance the quality of education offered in learning institutions across the globe.

In addition, reforms in education including integrating technology in learning and teaching, a shift of pedagogical approaches from instructivism to constructivism and emphasis on standards driven education and systems thinking are driving a renewed interest in professional development (Maclyntire & Byrd, 1998; Means, 1994; Sparks & Hirsh, 1997 in *Teacher Professional Development, Issues and Trends*, 2004). Further, the 21st century dynamic technology has influenced acceptance that teacher professional development is a lifelong process which spans an entire career. This in effect implies that building teachers' capacity should be an ongoing endeavor that is systematically structured in order to enable them to offer education that is relevant to the needs of the society. In line with the discussion, Zarrow (2018) maintains that teacher professional development is a critical way to help teachers learn and refine instructional strategies to help students learn the 21st century skills such as critical thinking, problem solving, effective communication and collaboration, and self-direction. However, Darling-Hammod, Hyler and Gardner (2017) lament that many teacher professional development initiatives appear ineffective in supporting changes in teacher practices and student learning.

For instance, most professional development programmes do not change teaching practices, nor improve student learning due to shortcomings including: too many and sometimes conflicting goals and priorities competing for teachers' time, energy and attention; unrealistic expectations of how much time it will take schools and teachers to adopt and implement goals; professional development training events that are inappropriate in size, scope or structure to support learning new ideas or skills; lack of support for teachers' implementation of new instructional practice and failure to provide teachers with feedback about how implementing new skills impacts student learning (The National School Boards Association's Center for Public Education report- *Teaching the Teachers*). This situation could be improved by structuring intensive and comprehensive professional development programmes that are focused on curriculum goals and student learning.

Further, the researchers point out six barriers to professional development namely inadequate resources, including necessary curriculum materials; lack of a shared vision about what high-quality instruction entails; lack of time for implementing new instructional approaches during the school day or year; failure to align state and local policies toward a coherent set of instructional practices; dysfunctional school cultures; and inability to track and assess the quality of professional development. Each

of these barriers should be addressed in the context of the learning institution to enhance effective professional development. For instance, relevant learning resources should be facilitated to promote quality education. Further, policies on professional development should be based on instructional practices and the goals of the curriculum. The leadership should also enhance a shared vision of quality education with faculty and staff.

These challenges, notwithstanding, professional development resources are available in two forms namely traditional professional development and new professional development (Professional Development: 3 Components of Growth-Teach-TeachHUB). Traditional professional development is accessible to teachers through various methods including attending conferences and seminars, subscribing to journals, joining professional organizations, reading education books, connecting with mentors and colleagues, hearing guest speakers and taking courses. However, these methods have shortcomings such as cost and limitation to certain times and places. They also deal with content that may or may not pertain to instruction, and also connect teachers to a restricted number of resources.

On the other hand, new professional development offers teachers technology-based opportunities for their professional development such as Web 2.0 communication tools; Social media including Twitter, Pinterest, Instagram, Facebook, Google; Podcasts, Video conferencing, Photo sharing, Blogs and articles. This enables teachers who are keen to grow professionally to customize their self-education with both digital and traditional resources. The two options give teachers an opportunity to connect themselves to the resources that fit their needs and their schedule rather than sit back to wait to be told what to learn (Professional Development: 3 Components of Growth-Teach-TeachHUB).

Teacher initiative in professional in professional development is particularly critical in developing countries like Kenya where schools operate on a meagre budget that may not accommodate incurring expenditure in professional development. It is the view of the author that whatever challenges teachers face that may impede their professional growth; they should make a personal commitment to continually develop themselves by customizing their professional development with what is available. This notwithstanding, teacher professional development should be emphasized because research indicates that students who receive enhanced instructional activities and whose teachers receive professional development achieve more learning than students who are engaged in traditional teaching approaches (Darling-Hammod, Hyler and Gardner, 2017).

Professional Development-The Glossary of Education (2013) outlines areas of professional development which includes further education and knowledge in a teacher's subject area; mentoring teachers in specialized teaching techniques applicable across subject areas, such as differentiated learning; learning technology skills including how to use interactive whiteboards or course-management systems to improve teaching effectiveness and student performance; improving fundamental teaching techniques such as effective classroom management, formulating questions in ways that elicit

deeper thinking and more substantive answers from students; working with colleagues to develop teaching skills collaboratively or create new interdisciplinary courses that are taught by teams of two or more teachers; developing specialized skills to teach and support students with learning disabilities; acquiring leadership skills for developing and coordinating a school; pairing new and beginning teachers with more experienced mentor teachers or instructional coaches who model effective teaching strategies, exposing less-experienced teachers to new ideas and skills, and providing constructive feedback and professional guidance; conducting action research to determine what is working or not working in a school's academic programme, and use the findings to improve educational quality and results; earning additional formal certificates and attending graduate school to earn an advanced degree (masters or doctorate) in education, educational leadership, or a specialized field of education such as literacy or technology.

This list provides a comprehensive view of professional development which reflects areas of development that relate to 21st century skills such as formulating questions in ways that elicit deeper thinking and more substantive answers from students; working with colleagues to develop teaching skills collaboratively or create new interdisciplinary courses that are taught by teams of two or more teachers. It also provides opportunities for individual learning institutions to customize their professional development according to their specific context and needs.

The following section explores the concept 'Professional Development'.

2. Professional Development Concept

Professional or staff development is the process of improving and increasing capabilities of staff through access to education and training opportunities in the workplace, through outside organization, or through watching others perform the job (Mathur, 2015 & Business Dictionary). Professional development helps to build and maintain morale of staff members and to attract and retain higher quality staff to an organization (What is Professional Development? Definition and Meaning; Mathur, 2015). Professional development is crucial because businesses cannot achieve desired goals without experienced and qualified staff. Organizations should motivate their employees in order to obtain the best possible results and also foster their growth using varied motivation techniques such as monetary compensation; organizational culture; constant feedback; clear communication; ownership of organization by employee; employee involvement; learning & development opportunities; getting rid of bad employees; starting conveying organizational values, expectations and goals early; putting proper team in place; spelling out objectives employees are expected to achieve; personal engagement of employees in informal activities such as lunch and dinner; team building; support by managers; promotion from within the organization; and engaging employees with social networks (What is professional Development? Definition and Meaning). The various forms of motivation are integral to professional development.

Teacher professional development is one specific aspect of professional development of employees in an organization which provides opportunities for a teacher's growth after acquiring a training certificate and securing a job. It is imperative that teachers continually hone their teaching skills through formal, informal, ongoing, and job-embedded professional-development programmes if they are to keep themselves at the cutting edge. Teacher professional development is considered to be the primary mechanism that schools can use to help teachers continuously learn and improve their skills (Professional Development/Edutopia).

Notably, professional development has been extensively researched in recent decades and many strategies and initiatives have been developed to improve its quality and effectiveness. This is however not the case in developing countries like Kenya where professional development is not offered to teachers (Njui, 2010, Kafu, 2011). In addition, while research reveals there are many theories about professional development, there is a consensus on some features of effective professional development. One-day workshops or conferences that are not directly connected to a school's academic program, or to what teachers are teaching, are considered to be less effective than training and learning opportunities that are sustained over longer periods of time and directly connected to what schools and teachers are actually doing on a daily basis (Professional Development-The Glossary of Education, 2013). This is interestingly the form of professional development used in Kenya to train teachers on how to implement a new curriculum. For instance, teachers teaching lower primary are currently being trained on how to implement the Basic Education Reforms Curriculum Framework (2017) on the job. A discussion of the features of effective professional development is presented ahead.

UNESCO and UNICEF (2013a) maintain that offering ample professional development opportunities and developing teacher capacity are among key factors of achieving sustainable development and also helpful in preparing students for life and work in the context of a global world with numerous emerging challenges. They further note that building teacher capacity is the chief means for improving classroom instruction and, in turn, student achievement as well as helping to build and maintain the morale of the teacher. Further, lifelong teacher empowerment is viewed critical in enhancing development of new skills that enable teachers to cope with the rapid technological changes which dictate new ways and approaches of teaching. This enables them to offer holistic, quality and relevant education with capacity to promote the development of the society.

UNESCO-IBE (2013) maintains that achieving holistic quality education requires highly competent and committed teachers who employ interactive and engaging teaching methods with technology support. In line with this view, Laxmi & Gure (2016) argue that teacher education should develop skills and appropriate knowledge among teacher trainees for using and integrating the correct technology in an appropriate manner. The researchers maintain that every teacher should know how to use technology. This is a tall order in developing countries like Kenya where teachers are

not trained in technology skills not to mention that most schools have not installed technology.

In line with the foregoing discussion, Scott (2015) argues that providing teachers with opportunities for professional development can help them seize opportunities for integrating 21st century skills, tools and modern pedagogies into classroom practice to help them identify what activities they can replace from the formal education model and how to balance direct instruction with project-oriented teaching methods. She argues that this enhances continuous improvement in curriculum delivery as teachers have an opportunity to reflect on their teaching practice. It also ensures that education is relevant to the needs of the society. Further, Scott (2015) observes that professional development can help teachers to understand how inter-disciplinary education enhances a deeper understanding of subject matter and how it enhances development of 21st century skills. This, she says cultivates teachers' ability to identify students' particular learning styles, intelligences, strengths and weaknesses and helps them to develop their abilities to use various strategies to reach diverse students and create environments that support differentiated teaching and learning as well as assessment. It further helps teachers to support formative evaluation of students' 21st century skills development. These benefits of professional development should be exploited because access to quality education is a right that should be accorded to individuals without discrimination to enable them unleash their potential in education so that they are empowered to contribute to economic development of the society and thereby accelerate sustainable development

However, despite its significance, professional developments have many setbacks. School managers for instance may encounter challenges when selecting and providing professional development opportunities such as finding adequate time during the school day for teachers to participate; securing sufficient funding particularly when school budgets are tight or being cut; lack of sufficient funding by the government; insufficient support for professional development from the administrative leadership; and lack of faculty interest or motivation due to heavy teacher workloads (Professional Development-The Glossary of Education, 2013. Such challenges should be adequately addressed in order to provide teachers with opportunities to build their capacity with the knowledge and skills needed to drive 21st century education. In particular, governments should be prepared to invest in professional development by installing technology in schools, training teachers in technology skills to enable them to effectively integrate technology in instruction, facilitating students with mobile technologies and embracing curricula reforms at all levels of learning.

Lack of teacher professional development in Kenya has forced teachers to engage in flexible study learning modes including distance learning, e-learning and blended learning in an effort to upgrade their job status. The modes have given teachers (particularly in primary schools) a window of opportunity to pursue further education at Diploma, degree and graduate levels during school holidays, despite the sharp criticisms by education stakeholders, levelled against the quality of education offered through these modes. For instance, the Teachers' Service Commission (TSC) continues

to raise concerns that the diplomas and degrees acquired by primary school teachers through the blended mode (popularly known as School Based) have no impact on the teacher's teaching practice. The major concern on the criticism is lack of coverage of required contact hours which translates into lack of content coverage as the school holidays are fairly short. This has impacted negatively on the quality of education offered through the school-based programme.

In response to the criticisms and concerns by key stakeholders, the Commission for University Education carried out an audit of the School Based programme in all universities in 2016. The audit confirmed that the programme was too limited in terms of contact hour coverage to provide quality higher education and the intellectual rigor that defines quality university programmes. To this end, the Education cabinet secretary (2017) recommended that universities offering the programme either close it or convert it into a part-time programme to ensure that the students secure the knowledge and competencies that define quality higher education that is useful to the students and the society at large (Kenya Cracks Down in Sweeping Review of Higher Education Quality, 2017).

The following section briefly explores effective teaching in relation to quality education. The section is deemed relevant to this paper because professional development is aimed at promoting effective teaching and learning which in turn impacts the quality of education.

2.1 Effective Teaching

In their evidence-based studies of teacher professional development, Walter & Briggs (2012) established that effective teaching makes a positive impact on learning. This finding is supported by Sammons et al. (2008) whose study of children aged 3 -11 found that teachers' classroom practice make a significant difference to children's academic and social/behavioural progress after other factors such as family, home and prior attainment were controlled for. Also, van de Grift (2007), found that quality maths teaching was significantly related to pupil attainment, involvement, attitude and behaviour. Similarly, Barber and Mourshed (2007) investigated what makes for effectiveness in a school system and concluded that three variables made the most difference to improved student outcomes namely: getting the right people to become teachers, developing those people's ability to teach well; and ensuring that the system is able to deliver the best possible instruction for every child (Barber & Mourshed, 2007:2). This confirms UNESCO's (2005) view that offering quality education is a concerted effort which demands all stakeholders including teachers, parents, learners and curriculum developers to play their roles effectively in order to achieve the intended purpose-quality education.

UNICEF (2000) identified five dimensions of quality namely learners, environments, content, processes and outcomes. However, while these factors are critical in the realization of quality education, teachers are the single most important factor to improving education (Teachers, the Single Most Important Factor to Improving Education, 2015). This notwithstanding, teachers cannot improve education

in a vacuum. Building their capacity on a continuous basis is not an option if they are to deliver quality education that resonates with the needs of the 21st century society.

Interestingly, Barber & Mourshed's variables above (getting the right people, developing their ability and ensuring that the system delivers the best possible instruction for every child) have not been given due consideration in Kenya. Kibera & Kimokoti (2007) observe that most students enrolled to do the Bachelor of Education (B.Ed) degree in Public Universities are simply thrown there because they do not qualify for admission to their degree of choice. This means pursuing a degree in education is not their choice. Thus, they are not committed to the teaching profession. To this end, majority branch into other professions they deem prestigious after acquiring their B.Ed. Those who remain in teaching due to lack of an alternative profession are too frustrated to do justice to the demands of the noble profession.

In addition, research shows that teachers are not facilitated with professional development. Njui (2010) for instance established that the Ministry of Education had not established a structure or kitty for facilitating in-service teachers with professional development. Kafu (2011) supports this noting that even in situations when curriculum has undergone revision, teachers are not facilitated with in-service training. Also, learning institutions are not able to deliver the best possible instruction for every child due to numerous challenges. For instance, Ochangi, Ayot, Kamina, Ondigi & Kimemia (2015) established gaps in teacher trainee preparation in Information Communication Technology (ICT) noting they were unable to integrate it with teaching during Teaching Practice. This confirms the need to develop teachers' ability to teach well through professional development.

Other issues include political decisions about teacher education programme which lack professional in-put, increased enrolment without reciprocal increase in the development and supply of relevant facilities and resources; engagement of untrained teacher trainers in teaching; inadequate funding for education; overloaded curriculum and co-curriculum activities; lack of teacher specialization for teaching in specific levels of engagement; inadequate practical teaching experiences for teacher trainees; and lack of employment opportunities for graduates (Bunyi). These are systemic issues that are indicative of the fact that the system is not able to deliver quality education to individual learners. For instance, the high student-teacher ratios in public learning institutions do not allow for individualized learning. This has resulted in excluding slow learners from learning as they cannot easily grasp concepts at the same pace with average and above average learners. It has also overstretched human and material resources in public schools making it impossible to develop students with the skills they need to cope with the demands of the vast society (Bunyi). Reforms in education are crucial if the system of education is to recruit the right people in education programmes, effectively develop their ability and ensure that teachers have facilities and resources needed to deliver the best possible instruction for every student.

The following section discusses selected key qualities/elements of teacher professional development adopted from research findings that have informed this paper.

2.2 Qualities of Effective Professional Development

There is a wide variety of theories and divergent research findings about what kinds of professional development are most effective. However, there is a general convergence of thought and focus on the qualities of effective professional development despite the differences in terminology. Professional Development-The Glossary of Education (2013) for instance observes that high quality professional development is sustained, intensive, ongoing, comprehensive, aligned, collaborative, continuous, systemic and relevant to teachers' work and connected to student learning.

On the other hand, Darling-Hammod, Hyler & Gardner (2017) identify seven elements of effective professional development namely content focus, incorporation of active learning, collaboration, job-embedded, use of models and modeling of effective practice, provision of coaching and expert support, opportunities for feedback and reflection, and sustained duration. Similarly, Walter & Briggs (2012) identified seven elements namely concrete and classroom-based, bringing in expertise from outside the school, involving teachers in the choice of areas to develop and activities to undertake, enabling teachers to work collaboratively with peers, providing opportunities for mentoring and coaching, sustained over time and supported by effective school leadership. A scrutiny of the above elements depicts similarities despite some differences in wording. This study compresses the elements into subheadings and discusses each in the following section.

2.3 Content

Professional development should focus on teaching strategies associated with specific curriculum content and also support teachers learning within their classroom contexts. It should further be connected to student learning and also strengthen teachers' understanding of how to teach their specific subjects effectively (Professional Development-The Glossary of Education, 2013; Darling-Hammod, Hyler & Gardner, 2017). Focusing on content at each level of learning is crucial in ensuring that students cover the scope designed for each level in order to enhance mastery of knowledge and skills at each subsequent level, and also enhance curriculum continuity. This is critical in ensuring that students are adequately prepared for the next level of learning. Developing countries should embrace this focus in order to alleviate the gaps in knowledge witnessed at various levels of education. Research by Uwezo (2013) reports gaps in literacy and numeracy at various stages of education in Kenya, Tanzania and Uganda. However, reforms in assessment tools should be needed to ensure that assessment is competence based in order to align it with global standards.

2.4 Active Learning

This entails that professional development takes place in the classroom at both pre-service and in-service training where teachers build practical skills through active learning (Fleer & Robbins, 2003; White, Lim & Chiew, 2006; Meeus, Van Petegem & Meijer, 2008; Andrews, 2006; Bryant et al., 2001). Active learning embraces classroom

practices that engage students in collaborative activities such as reading, role-play, open-ended discussions, live modeling, and classroom visits.

While many forms of active learning help teachers decipher concepts, theories, and research-based practices in teaching, modeling the new practice helps teachers to understand and apply a concept and remain open to adopting it. Such practices are crucial in developing students with 21st century skills such as problem solving, communication, critical thinking, innovation and citizenship. They also help to develop reflection and other metacognition. In addition, active learning provides teachers with opportunities to get hands-on/concrete and classroom-based experience designing and practicing new teaching strategies (Darling-Hammod, Hyler & Gardner, 2017; Walter & Briggs, 2012).

Professional development programmes that incorporate this learner centered element are in tandem with today's dynamic society. Brandes and Ginnis (1994, p.ix) support the approach noting that it is development which is at the cutting edge of change in education in the society which is becoming more questioning, more challenging, making participation become the norm of our culture. Further, the authors observe that schools will have to reflect these moves, and this will manifest itself through the ways in which learners and teachers learn together. Thus, involving teachers actively in practical experiences on activities related to teaching is imperative if they are to master the skills of effective teaching and learning needed to improve their teaching practice.

Darling-Hammod, Hyler & Gardner (2017) maintain that professional development models that feature on active learning help teachers to participate in the same style of learning they are designing for their students, using real examples of curriculum, student work, and instruction. The models also immerse them in the types of learning activities and environments they will be creating for their students and provide opportunities for them to work together to study student work, videotape classroom lessons for analysis, and scrutinize texts to identify potential literacy challenges to students. The researchers established that active learning professional development model resulted in student reading achievement gains equivalent to a year's additional growth and significantly higher achievement on assessments. They thus recommend active learning opportunities for teachers such as reading, role-play, open-ended discussions, live modelling and classroom visits, and also note that this practice helps teachers to understand and apply a concept and remain open to adopting it. Professional development programmes should exploit the benefits of this practice to empower teachers to improve student learning.

2.5 Collaboration

The element entails creating opportunities for teachers to share ideas on both professional and pedagogical issues in teaching with fellow teachers or with other professionals beyond the school (Darling-Hammod, Hyler & Gardner, 2017; Walter & Briggs, 2012; Professional Development-The Glossary of Education, 2013). Darling-Hammod, Hyler & Gardner (2017) note that working collaboratively could help

teachers create professional learning communities that model classroom learning that promotes 21st century skills. In addition, it could also encourage knowledge sharing among communities of practitioners using face-to-face, virtual and blended communications. This is a great synergy that can help teachers and stakeholders to offer relevant education that is responsive to the needs of the society.

Further, research indicates that collaborative professional development has the potential to improve the delivery of education. Cordingley et al. (2005) for instance established that when teachers engage in collaborative professional development on a sustained basis, there was improvement in students' learning and behaviour, and in teacher's practices, attitudes and beliefs. The researchers further found that collaborative continuing professional development worked best when outside expertise was brought into the teaching context, and when outside providers developed fruitful and respectful partnerships with teachers. The findings are supported by Kirkwood (2001), Harwell et al. (2001), Bryant et al. (2001) and Evans et al. (2006). Interestingly, however, collaboration between teachers does not necessarily happen. Fuys, Van Keer and Aelterman (2010) found that Belgian primary student teachers did not spontaneously engage in collaborative activities, even though they put a high value on collaborative learning for their students. Learning institutions across the countries of the world should network with other similar institutions locally and internationally with a view to enabling all learning institutions across the globe to align with the 21st century standards-based education. However, as learning institutions work towards preparing students for the global market, they should be careful to deliver education within the context of their immediate society.

2.6 Use of Models and Modelling of effective practices in Teaching

Curricular models and modelling of instruction provide teachers with a clear vision of best practices in teaching and learning. The models include lesson plans, unit plans, sample student work, observations of peer teachers and video or written cases of accomplished teaching. Research shows that students of teachers who participate in professional development opportunities have more gains in learning than students whose teachers do not (Darling-Hammod, Hyler & Gardner, 2017). For instance, in a professional development model focused on the types of pedagogical content knowledge teachers need to effectively teach elementary science in United States, curricular and instructional models were used in multiple ways to support teacher learning. One group of teachers analyzed teaching cases drawn from actual classrooms and written by teachers while another group worked in carefully structured, collaborative groups to analyze examples of student work from a shared unit taught in their own classrooms. A third group used metacognitive strategies to reflect on their instruction and its outcomes. Results showed that students of teachers who participated in any of the above professional development opportunities performed better than those whose teachers did not participate, and these effects were maintained a year later (Darling-Hammod, Hyler and Gardner, 2017). However, to effectively employ the models to deliver relevant quality education in the context of the learning institution,

teachers should regularly reflect on the contents of the models with reference to the changes of the society. They should also use the models in the context of the learning institution.

2.7 Coaching and Expert Support

This entails bringing in expertise from outside the school to share specialized knowledge and practice focused directly on teachers' individual needs on one-on-one coaches in the classroom as facilitators of group workshops, or as remote mentors using technology to communicate with teachers (Walter & Briggs, 2012; Effective Teacher Professional Development-Learning Policy). The experts may include master teachers or coaches based in universities or professional development organizations. Research shows that teachers who participate in coaching and expert support have larger gains and higher performance than those who do not. In line with the discussion, Darling-Hammod, Hyler and Gardner (2017) emphasize the need to support teachers during the implementation stage, noting that teachers take an average of 20 separate instances of practice to master a new skill, and this number may increase if the skill is exceptionally complex.

Further, studies indicate that when teachers engage in mentoring and coaching, they become more focused in their aims and versatile in their approaches (Harvey, 1999; Kohler, Ezell & Paluselli, 1999; Andrews, 2006); they benefit from modelling (Kimmel et al., 1999) and become more confident and enthusiastic (Wilkins, 1997, Hobson et al., 2006, 2007) and also benefit the student (Ganser, 1996; Furlong & Maynard, 1995). In addition, mentorship programmes help to facilitate development activities through allowing newer employees to shadow more tenured staff. They also help an employee to feel that there is a long-term plan for them within the organization that will afford them opportunities that align with their professional goals and this motivates them to stay long in the organization (What is professional Development? Definition and Meaning). Learning institutions in Kenya should network with similar institutions with structured comprehensive professional development programmes to borrow best practices for the purpose of improving the quality of teaching and learning.

2.8 Feedback and Reflection

Positive feedback by the organization to praise the employee promptly about accomplishment acts as a positive and motivating gesture (What is professional Development? Definition and Meaning). Feedback and reflection should be emphasized in professional development because research has established that students of teachers who received expert mentoring and feedback experience the greatest gains in learning outcomes. In addition, high-quality professional learning provides built-in time for teachers to think about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback which is offered through analyzing lesson plans, demonstrating lessons, or videos of teacher instruction, which also provide opportunities for reflection about what might be refined or retained and reinforced. The activities may be undertaken in the context of coaching or workshop or among peers.

Darling-Hammod, Hyler & Gardner (2017) emphasizes the significance of feedback noting that in an organization, employees want to receive constant, specific, and clearly defined feedback from their supervisors.

2.9 Sustained Duration

This entails that professional development is sustained over time to provide teachers with adequate time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice. Strong professional development initiatives engage teachers in learning over weeks, months, or even academic years, rather than in short, one-off workshops (Darling-Hammod, Hyler & Gardner, 2017; Walter & Briggs, 2012; Professional Development-The Glossary of Education, 2013). Further, Darling-Hammod, Hyler & Gardner (2017) note that continual professional development gives teachers time to learn and implement new strategies and this enhances effective implementation of a new teaching strategy in class and also allows teachers to embed effective practices into their classrooms (Cordingley et al., 2005 & Bryant et al., 2001). These advantages should be exploited to help learners offer quality education to their students.

2.10 Support by School Leadership

This element assumes that managers have a responsibility to influence teacher professional growth in their learning institutions. Barber & Mourshed (2007), Chiew, (2006) Hustler et al. (2003), Hobson et al. (2007) & Bryant et al. (2001) confirmed this noting that principals provide pedagogical leadership to teachers in schools through exercising significant influence on teacher professional development in instructional leadership and learning; creating and maintaining positive and healthy teaching and learning environments for everyone in the school; designing and delivering the content of professional development; and assessing professional development outcomes. In line with the discussion, Bredeson (2000) observes that there are mutually beneficial connections between principals' leadership, teacher growth and development, and the creation of authentic, professional learning cultures in schools that impact professional development. However, the researcher recommends that as instructional leaders and learners, principals should play the role of models, coaches, facilitators and guides, not guardians and governors of learning, to avoid the danger of them making themselves indispensable agents of teacher professional development. Thus, principals should work in collaboration with teachers to examine closely the design, delivery, content and outcomes of professional development and communicate its connection to student learning and organizational success. While this ideal situation is most desirable for learning institutions if quality education is to be achieved, developing countries have a long way to go for teachers and principals to be entrusted with designing and delivering professional development. A lot of coaching and mentoring is needed to empower them before they can be entrusted the responsibility to design and deliver professional development.

Bredeson (2000) maintains that professional development is not an event, nor is it a set of activities in schools. It is rather a professional responsibility and an integral part of teachers' and principals' professional work. The researcher further notes that although principals play a significant role in teacher professional development, teachers themselves are responsible for their own professional growth. He however acknowledges that the traditional hierarchical governance processes around staff development have generally silenced teachers' voices in decisions about the design, delivery, and content of their own learning and professional improvement. This silencing has resulted in teacher' dependency on leaders because many have no idea what it entails to be responsible for planning, implementing, and evaluating their own professional development. Further, the researcher observes that principals have a responsibility to build leadership capacity among staff in their schools to create, nurture, and maintain over time self-renewing and authentic learning community (Bredeson, 2000). This empowerment is crucial because principals may not necessarily be effective leaders in pedagogy, particularly if they are not adequately trained in the area and if they are also not regularly empowered through structured and systematic lifelong professional development.

3. Conclusion

Investing in teacher professional development is crucial today because technological advancement has brought about numerous changes and ever emerging issues that require teachers to learn new skills in order to deliver quality and relevant education that meets the needs of the society. This is crucial because teachers are the most important factor in improving education and influencing equity, access and quality in education. The resultant effect of the influence is economic growth of the society which in turn could accelerate sustainable global development. To this end, learning institutions should provide teachers with systematic intensive and comprehensive professional development programmes to positively impact their effectiveness, resourcefulness and enthusiasm. Professional development programme should also accord teachers job motivation through adequate remuneration and housing, decent accommodation and attractive scheme and conditions of service among other things. In addition, the programmes should incorporate teacher development of 21st century skills to help them deliver education relevantly. This could further help them to keep abreast with the current development and research in education.

3.1 Recommendations

The study makes the following recommendations:

A. Link Professional Development to School Goals, Student learning and Teaching Practice

Professional development should support teachers across the entire professional continuum starting from pre-service to in-service training. All elements of professional

development including training, teacher networks and collaborative inquiry should be linked to and aligned with school goals and student learning.

B. Align Professional Development with Education Reforms

Professional development should be systematically structured and aligned with 21st century reforms in education. This entails embracing reforms such as technology integration in learning and teaching; use of constructivist pedagogy, differentiated teaching and assessment; emphasis of formative assessment, standards driven education, interdisciplinary education and systems thinking in order to empower teachers with 21st century skills.

C. Invest in Technology for Effective Professional Development

The government should prioritize technology installation in learning institutions to acknowledge it as the key driver of 21st century education. It should further emphasize the need to train teachers in technology skills to enable them to effectively integrate technology in instruction.

D. Embrace Lifelong Professional Development

Education planners should put in place systematic structures for lifelong professional development to continually empower teachers with skills that enable them offer relevant quality education that is responsive to the needs of the changing society.

E. Network with Institutions offering Professional Development

Learning institutions should network with local and international institutions offering structured and systematic professional development to borrow best practices in order to improve the quality of teaching and learning. This could enable learning institutions across the globe to align with the 21st century standards-based education.

F. Prioritize areas of Professional Development

Learning institution should identify and focus on one or two instructional priority areas at a time with input from the teachers/faculty to make professional development simple and effective. They should also communicate these priorities and expectations to all staff before implementation for ownership purpose.

G. Provide Feedback

Professional development should make provision for constant feedback to help teachers monitor implementation of instructional skills. Feedback is significant in enhancing mastery of skills.

H. Formulate and Enforce Policy on Professional Development

Policymakers should adopt standards for professional development to guide its design, evaluation and funding. They should also work with school administrators to evaluate and re-design the use of time and school schedules to increase opportunities for professional learning and collaboration such as participation in professional learning communities, peer coaching and observations across classrooms, and collaborative planning.

I. Conduct Needs Assessment Regularly

This should be done using data from staff surveys to identify areas of professional learning most needed and desired by teachers to ensure that professional development

is connected to practice and also supports the areas of knowledge and skills teachers want to develop.

J. Create Learning Communities

Learning Institutions should create communities of learners locally and internationally with similar reputable institutions or organizations offering professional development programmes. This would empower teachers to deliver education that enhances development of 21st century skills to students.

K. Create Database for Teacher Mentors and Coaches

School administrators should collaborate with County and National Governments to identify and develop expert teachers as mentors and coaches to support learning in their particular area(s) of expertise.

L. Invest in Professional Development

The government should have a kitty on professional development that can provide flexible funding and continuing education units for learning opportunities (including sustained engagement in collaboration, mentoring and coaching, workshops and seminars) to empower teachers with skills for effective teaching and learning. The kitty should also provide teachers with opportunities for professional learning and coaching in technology skills.

References

1. Andrews, B. W. (2006). Re-play: re-assessing the effectiveness of an arts partnership in teacher education. *International Review of Education* 52/5:443-459.
2. Annual Learning Assessment Report- Uwezo (2013). Retrieved from. www.uwezo.net/wp-content/.../08/2013-Uwezo-East-Africa-Report-Summary.pdf.
3. Barber, M. & Mourshed, M. (2007). *How the World's Best-Performing School Systems Come Out on Top*. London: McKinsey & Company. Available at http://www.mckinsey.com/locations/UK_Ireland/~media/Reports/UKI/Education_report.ashx.
4. Berkowitz, M. W. *Character and Citizenship*. <https://characterandcitizenship.org/about-us/key-players?id=8>
5. Brandes, D. & Ginnis, P. (1994). *A Guide to Student-Centered Learning*, Cheltenham: Nelson Thornes Ltd.
6. Bryant, D. P., Linan-Thompson, S., Ugel, N., Hamff, A. & Hougen, M. (2001). The effects of professional development for middle schools general and special education teachers on implementation of reading strategies in inclusive content area classes. *Learning Disability Quarterly* 24/4:251-264.
7. Bredeson, P.V. (2000). The school principal's role in teacher professional development, *Journal of In-Service Education*, 26:2, 385-401, DOI: 10.1080/1367458000200114. <https://doi.org/10.1080/1367458000200114>.

8. Bunyi, G.W.(2011) *Teacher Preparation and Continuing Professional Development*. <https://www.sussex.ac.uk/webteam/gateway/file.php?name=report-kenya...pdf>.
9. Cordingley, P. Bell, M., Thomason, S., & Firth, A. (2005). The impact of collaborative continuing professional development (CPD) on classroom teaching and learning. Review: How do collaborative and sustained CPD and sustained but not collaborative CPD affect teaching and learning? In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. Available at www.eppi.ioe.ac.uk.
10. Darling-Hammond, L., Hyler, M.E. and Gardner, M. (2017).Effective Teacher Professional Development-Learning Policy Institute. <https://learningpolicyinstitute.org/.../effective-teacher-professional-development-brief>.
11. Education- CS Matiang'i Defends Halt of School-Based B.Ed Programme (2017). Public lecture during the 15th Universities Education Exhibition and Discourse, at The Catholic University of Eastern Africa.
12. Evans, T., Guy, R., Honan, E., Kippel, L. M., Muspratt, S., Paraide, P., Reta, M. & Tawaiyole, P. (2006). *PNG Curriculum Reform Implementation Project: Impact Study 6: Final Report*. Melbourne: Australian Government.
13. Fleer, M. & Robbins, J. (2003). 'That's stupid!' and rolls her eyes': the risks and dilemmas of student teachers working in two communities of practice. *Refereed paper presented at the 2003 International Education Research Conference of the Combined Australian Association for Research in Education/New Zealand Association for Research in Education Conference*.
14. Furlong, J. & Maynard, T. (1995). *Mentoring Student Teachers: The Growth of Professional Knowledge*. London: Routledge.
15. Ganser, T. (1996). What do mentors say about mentoring? *Journal of Staff Development* 17/3
16. Hammond, L. D., Maria E. Hyler, M.E, & Gardner, M. (2017) Effective Teacher Professional Development-Learning Policy Institute. <https://learningpolicyinstitute.org/.../effective-teacher-professional-development-report>.
17. Harvey, S. (1999). The impact of coaching in South African primary science INSET. *International Journal of Educational Development* 19: 191-205.
18. Harwell, S. H., Gunter, S., Montgomery, S., Shelton, C. & West, D. (2001). Technology integration and the classroom learning environment: research for action. *Learning Environments Research* 4/3: 259-286.
19. Hustler, D., McNamara, O., Jarvis, J., Londra, M., Campbell, A. & Howson, J. (2003). *Teachers' Perspectives of Continuing Professional Development: DfES Research Report No. 429*, London: DfES.
20. Effective Teacher Professional Development-Learning Policy Institute. <https://learningpolicyinstitute.org/.../effective-teacher-professional-development-brief>.

21. Johansson, O. & Bredeson, P. (1999) *Value Orchestration by the Policy Community – reality and myth*, in P. Begley (Ed.) *Values and Educational Leadership*. New York: SUNY Press.
22. Kafu, P. A. (2011). *Teacher Education in Kenya. Emerging Issues-Europa EU*. <https://europa.eu/capacity4dev/file/15908/download?token=wVi2rChq>.
23. *Kenya Cracks Down in Sweeping Review of Higher Education Quality (2017)*. www.monitor.icef.com/.../kenya-cracks-down-in-sweeping-review-of-higher-education-qua...
24. Kibera, L. W. and Kimokoti, A. (2007). *Fundamentals of Sociology of Education. With Reference to Africa*. Nairobi: University of Nairobi Press.
25. Kirkwood, M. (2001). The contribution of curriculum development to teachers' professional development: a Scottish case study. *Journal of Curriculum and Supervision* 17, pp. 5-28.
26. Kohler F. W., Ezell H. K. & Paluselli M. (1999). Promoting changes in teachers' conduct of student pair activities: an examination of reciprocal peer coaching. *Journal of Special Needs* 33: 154-165
27. Laxim, V. & Gure, G.S. (2016). *Techno-Pedagogy, Practices in Teacher Education*. ER Publications. *International Journal of Enhanced Research in Educational Development (IJERED)* ISSN: 2320-8708, Vol. 4 Issue 6.
28. Mathur, A. (2015). What do you understand by the term professional Development. <https://prezi.com/.../what-do-you-understand-by-the-term-professional-development/>
29. Meeus, W., van Petegem, P. & Meijer, J. (2008). Portfolio as a means of promoting autonomous learning in teacher education: a quasi-experimental study. *Educational Research* 50/4:361-386.
30. Ochangi, Ayot, Kamina, Ondigi & Kimemia (2015). Improving Student Teaching for Quality Teacher Preparation: A Kenyan University Case. *African Journal of Teacher Education*.
31. Professional Development: 3 Components of Growth-Teach-TeachHUB. www.teachhub.com/professional-development-3-components-growth.
32. Professional Development Definition. The Glossary of Education (2013). www.edglossary.org/professional-development.
33. Professional Development/Edutopia. <https://www.edutopia.org/blogs/tag/professional-development>.
34. Sammons, P and Ko, J. (2008). *Effective Classroom Practice Project*. Nottingham, Nottingham School of Education.
35. School Culture Definition-The Glossary of Education Reforms (2013). www.edglossary.org/school-culture.
36. Scott, C. L. (2015). *The Future of Learning 1. Why must learning content and methods change in the 21st century?* www.unesdoc.unesco.org/images/0023/002348/234807e.

37. Teachers, the Single Most Important Factor to Improving Education (2015). www.africateengeeks.co.za/.../teachers-single-most-important-factor-improving-educa.
38. Teacher Professional Development. Issues and Trends (2004). Arizona State University: Gene V Glass. C Vrasidas, GV Glass - Online professional development for ..., books.google.com.
39. UNESCO. Teachers, <https://en.unesco.org/themes/teachers>.
40. The National School Boards Association's Research-Center for Public Education report Teaching the Teachers.
41. UNICEF (2000). *Defining Quality in Education*. A Paper Presented by UNICEF at the International Working Group on Education, Italy. New York: UNICEF.
42. UNESCO (2005). *EFA, Global Monitoring Report 2006: Literacy for Life*. Paris: UNESCO.
43. UNESCO and UNICEF. (2013a). *Envisioning Education in the Post-2015 Development Agenda: Executive Summary*. Paris
44. UNESCO-IBE (2013). *Statement on Learning in the post-2015 Education and Development Agenda*. Geneva, UNESCO International Bureau of Education. www.unesco.org/newfileadmin/MULTIMEDIA/HQ/ED/pdf/UNESCOIBESstatement.pdf.
45. van de Grift, (2007). Quality of teaching in four European countries: a review of the literature and application of an assessment instrument. *Education Research* 49/2:127-152.
46. Walter, C. & Briggs, J. (2012). *What Professional Development makes the Most Difference to Teachers*. University of Oxford, Department of Education. 15 Norham Gardens: Oxford, OX2 6PY. Available in www.education.ox.ac.uk/.../WalterBriggs_2012_TeacherDevelopment_public_v2.
47. What is Professional Development? Definition and Meaning. www.businessdictionary.com/definition/professional-development.html.
48. White, A. L., Lim, C. S. & Chiew, C. M. (2006). An examination of a Japanese model of teacher professional learning through Australian and Malaysian lenses. *Paper presented to the Conference of AARE, The Association for Active Educational Researchers*.
49. Wilkins, C. W. (1997) *Effects of a resident mentor teacher on student achievement in mathematics*. Unpublished report. Mississippi, USA.
50. Zarrow, J. (2018). 5 Strategies for Better Teacher Professional Development. <https://www.teachthought.com/Teaching>

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