

**PROFESSIONAL DEVELOPMENT PROGRAMMES AND LEARNER
CENTRED PEDAGOGY IN THE LEARNING - TEACHING PROCESS IN
SELECTED BRITISH CURRICULUM SECONDARY SCHOOLS IN KENYA
AND TANZANIA**

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ABSTRACT

Education is one of the most important aspects of human resource development. It plays a vital role in the development of human capital and is linked with an individuals' well-being and opportunities for better living. Teachers are central to the capacity of schools to perform and no amount of policy reform will make education more effective unless teachers are part of the change. Recognizing this insufficiency of knowledge of the teachers in both Kenya and Tanzania has led to the need to analyze the effectiveness of professional development programmes in enhancing teacher proficiency in selected British Curriculum Secondary Schools in Kenya and Tanzania. This study was guided by the following research question: To what extent do the professional development programmes enhance learner centred pedagogy in the learning and teaching process? The study was founded on the Human Capital theory (HCT) proposed by Schultz and Becker (1961) who developed it extensively. This study adopted a mixed method design specifically the convergent design. Target population of the study comprised 240 teachers, 40 mentors', 10 deputy head teachers and 10 head teachers of Braeburn Group of International Schools in Kenya and Tanzania. The study findings indicated that the challenges faced by the school managers faced when facilitating the professional development programmes to enhance teacher proficiency were inadequate finances, inadequate time, lack of clear school policy. It is therefore necessary for provision of adequate resources, finances and a detailed school policy to ensure smooth facilitation in order to improve teachers' professional development. The study recommends that teachers should be encouraged to adopt appropriate classroom management techniques to motivate pupils to learn for improved academic achievement. The study also recommends that more opportunities for teachers' professional

interactions and training should be created to ensure that the teachers are better prepared and confident when applying different assessment methods, differentiation and setting assignments.

Keywords: *Professional Development Programmes, Learner Centred Pedagogy, Teachers Proficiency, Schools Policy*

INTRODUCTION

Education is one of the most important aspects of human resource development. It plays a vital role in the development of human capital and is linked with an individuals' well-being and opportunities for better living (Battle & Lewis, 2012). At the same time, development of any nation relies solely on its human resources who are refined to be productive through education (Onyibe, Emmanuel & Uma, 2015). Education is a fundamental tool for national development as it furnishes individuals with appropriate knowledge, skills and attitudes (Nyamwange, Onderi & Ondima, 2013). This means that because of the interaction that exists between the educational systems and the society, educational institutions should produce intelligent, respectful and responsible individuals. Teachers are central to the capacity of schools to perform and no amount of policy reform will make education more effective unless teachers are part of the change.

Effective professional development (PD) is key to teachers learning and refining the pedagogies required to teaching these skills (Learning Policy Institute, 2017). Mkhwanazi (2014) defined teacher professional development as all changes in teaching approaches teachers can acquire towards teaching profession. He asserted that professional development of teachers helps them to acquire relevant and new skills, ideas, knowledge to develop teaching and learning of their subjects. Teachers cannot rely only on the entry knowledge they start the career with; they need to experience professional growth like other professions. Their efficiency is measured or determined with learners' academic performance. Hanushek (2010) believes that improving teacher quality can even have an impact on the national economy. He further observes that if a single highly effective teacher stays in the classroom for 30 years, he or she will contribute nearly \$13 million into the national economy over what a teacher with average effectiveness would.

Globally, studies on teachers and their professional development have shown that so far, continuous professional development is considered as a professional duty in most schools (Marion, 2017). Howey (2018) comparative review on teachers' professional development noted that effective Professional Development is an on-going process and includes training, practice and feedback, and provides adequate time and follow-up support. Successful programmes involve teachers in learning activities that are similar to ones they will use with their students, and encourage the development of teachers' learning communities. This is supportive as the current study focuses on teacher professional development programs in enhancing teaching proficiency in selected British curriculum secondary schools in Kenya and Tanzania.

In Singapore, Bautista, Wong, and Gopinathan (2015) provide a general description of the PD resources available to the teachers who work in the primary and secondary schools run by Singapore's Ministry of Education. There are multiple types of activities in which these teachers can engage during their 100 hours of yearly PD entitlement, ranging from formal/structured courses and programs to more informal/reform-type initiatives (action research, lesson study). Most PD is subject-specific and provides teachers with opportunities for network learning, collegial sharing, and collaboration. The authors argue that Singapore's comprehensive set of PD

resources, considered as a whole, presents the features of high-quality PD described in the literature. However, they suggest that more research is needed to examine the extent to which such ambitious PD model is enhancing teachers' practices and students' learning, something the current study will be able to address.

In many African countries especially those in Sub-Sahara Africa, professional development programmes for teachers are not fully developed. Saracologlu, (2010) study clearly shows that teacher expertise is the most significant school-based influence on pupil learning. School improvement always calls for enhancing the knowledge, skills, and dispositions of teachers. Whatever course of action a school adopts, success usually hinges on providing support and resources for teachers to strengthen existing expertise or to learn new practices. In Lesotho, Lewin and Stuart (2013) established that following the rise of enrolment and high transition into secondary schools as a result of free primary education, the government developed professional training programme with the main objective of yielding a pool of quality trained teachers. The principal has to play a significant role in motivating his or her teachers in order to facilitate the effective functioning of the school as an organization. Indeed, the key role of the principal is leading the staff and shaping an environment in which teachers can do their work best.

In Kenya, staff development is perceived as a very significant element of personnel management. Quality professional development can lead to important qualitative outcomes such as the creation of a positive school culture, citizenship, improvement in individual teacher skills, and development of opportunities for peer learning (Willemse, Dam, Geijsel, van Wessum, & Volman, 2015). According to Lochner, Conrad, and Graham (2015), teachers are central to whether a curriculum is delivered consistently, effectively, and with efficacy to enable them support of student progress and growth. Forte and Flores (2014) assert that there must be interplay between structure and culture if teachers are to learn together.

The Teachers Service Commission (TSC) was mandated by the Constitution of Kenya (2010), Article 237 to among others to register qualified persons as teachers and to review the standards of education and training of persons entering the teaching service. The TSC Act (2012) Section 23 (2) prohibits any person from engaging in teaching service unless one is registered as a teacher. The TSC Code of Regulations for Teachers (2015) Part III further provided Conditions and Procedure for Registration of Teachers. According to August and Calderon, (2016), Kenya recognized the need to develop a national in-service programme to improve pedagogical practices in the late 1990s. It also recognized that professional development programmes needed to focus on processes in the school and classroom as necessary levels of intervention for improving the quality of teaching and learning therefore improving teacher proficiency (August & Calderon, 2016). The study sought to establish the extent to which professional development programmes influence learner centred pedagogy in the learning and teaching process in selected British Curriculum Secondary Schools.

Statement of the Problem

Learner centered pedagogy is known through research to enhance effective learning. It has varied advantages which include; enabling learners to link new information with the existing knowledge in meaningful ways, enabling learners to create meaningful coherent knowledge and facilitating creative and critical thinking in learners. Learner centered pedagogy has been introduced, in a variety of ways, in most countries worldwide (Schweisfurth, 2013), and has been explicitly promoted by researchers (Tabulawa, 2013; Vavrus and Bartlett, 2013). Despite this, we know

relatively little about its relationship between professional development programmes and learner centred pedagogy in the learning and teaching process in selected British Curriculum Secondary Schools. While most Tanzanian and Kenyan teachers and school leaders have indicated increasing demand for Professional Development (PD), they lack knowledge of what PD for teachers really entails. Teachers do not have a proper understanding regarding the concept, scope, and features of teacher professional development. This study in improving the knowledge, sought to investigate the relationship between teachers professional development programs on learner centred pedagogy in the learning and teaching process in selected British curriculum secondary schools in Kenya and Tanzania.

LITERATURE REVIEW

The traditional approach to professional development models, which take the form of workshops, seminars, conferences or courses, have been criticised by many researchers (Feiman-Nemser, 2001; Fullan & Hargreaves, 2016; Villegas-Reimers, 2013). These models, referred to by Kelleher (2013) as ‘adult pull-outs programs’, are seen to be fragmented, incoherent and decontextualized from the classroom situation. According to Kelleher (2013) successful professional development is continuous, collaborative, coherent, and integrated into school daily life and activities. Teacher professional development is not solely centred on individual teachers acquiring and applying new knowledge and skills; professional development must be continuously rooted within the daily school community life (FeimanNemser, 2011; Rhodes & Houghton-Hill, 2020; Villegas-Reimers, 2013).

Spillane (2022) notes that if the knowledge and skills, acquired through teacher professional development, are not connected to broad school directions with the opportunity for support and follow-up at school level, those knowledge and skills would be of little benefit for the teachers to improve their classroom practices.

Fullan (2021, p.315) concludes: “Nothing has promised so much and has been so frustratingly wasteful as the thousands of workshops and conferences that led to no significant change in practice when the teachers returned to their classrooms”. Many scholars argue that integrating professional development programmes into school life and context is important for professional development implementation success, others agree with this belief, but they also claim that the delivery mode of professional development programmes should also offer a range of practices which respect adult learning theories.

Globally, Nijia, (2017) study on Technology-Based Professional Development for Teaching and Learning in K-12 Classrooms in Georgia. In an urban Georgia school district, teacher satisfaction surveys revealed that technology based professional development was not equipping teachers with the skills or support needed to implement technology into their teaching practices. The purpose of this mixed methods case study was to explore teachers’ experiences and perceptions of technology based professional development and its effect on self-efficacy. Guided by Piaget’s constructivist theory, this study was based on the perspective that teachers often construct knowledge rather than gain it. Guiding questions explore the experiences teachers have had with technology integration in daily teaching practices, their self-perceived competency level and self-efficacy regarding technology, their attitudes about provided professional development and time and resources provided for their collaborative professional work, and perceptions about their technology related professional development needs. A purposeful sample of 35 teachers was used to collect quantitative data through a survey and 8 of these teachers were interviewed.

Interview data were transcribed, coded, and member checked. Three themes emerged: teacher-centered versus student-centered use; necessity of differentiated professional development; and lack of support, resources, and time. Descriptive analysis revealed that most teachers were using technology daily. Factors contributing to the frequency and quality of technology use included resources, support, and self-efficacy.

As a model intervention, the final outcome is a comprehensive professional development plan to provide teachers with a platform to share and improve their teaching practices, which when implemented will offer positive social change, in the form of support for these and other teachers, which will lead to improvements in teaching and learning and achievement of educational outcomes. Despite the two studies dealing with the same topic they differ in context and their key constructs. The previous study was on Technology-Based Professional Development for Teaching and Learning in K-12 Classrooms in Georgia while the current study will look at on teacher professional development programmes in enhancing teaching proficiency in selected British Curriculum Secondary Schools. Also, the two studies geographical orientation varies as the latter is in developed world as the current study is in a developing world. The findings of the constructs of the previous study may not adequately give same answers to the constructs in the current study, a gap to be filled by the current study.

In Africa, Wolfa, Aberb, Behrmanc and Tsinigod,(2019) study on Experimental Impacts of the “Quality Preschool for Ghana” Interventions on Teacher Professional Well-being, Classroom Quality, and Children’s School Readiness. We assessed the impacts of a teacher professional development program for public and private kindergartens in the Greater Accra Region of Ghana. We examined impacts on teacher professional well-being, classroom quality, and children’s readiness during one school year. This cluster-randomized trial included 240 schools (teachers N¼444; childrenN¼3, 345, Mage¼5.2) randomly assigned to one of three conditions: teacher training (TT), teacher training plus parental-awareness meetings (TTPA), and controls. The programs incorporated workshops and in-classroom coaching for teachers and video-based discussion groups for parents. Moderate impacts were found on some dimensions of professional well-being (reduced burnout in the TT and TTPA conditions, reduced turnover in the TT condition), classroom quality (increased emotional support/behaviour management in the TT and TTPA conditions, support for student expression in the TT condition), and small impacts on multiple domains of children’s school readiness (in the TT condition).

The parental-awareness meetings had counteracting effects on child school readiness outcomes. Implications for policy and practice are discussed for Ghana and for early childhood education in low- and middle-income countries. The context and key constructs of the two studies differ. The previous study was on Experimental Impacts of the “Quality Preschool for Ghana” Interventions on Teacher Professional Well-being, Classroom Quality, and Children’s School Readiness while the current study was on teacher professional development programmes in enhancing teaching proficiency in selected British Curriculum Secondary Schools. The key constructs of the previous study may not be able to provide similar responses on the constructs of the current study, a gap to be filled by the current study.

In Kenya, Mwangi and Khatete (2017) study on teacher professional development needs for pedagogical ICT integration in Kenya: lessons for transformation. The research examines teachers’ professional development needs in Kenya with a specific focus on the teachers’ needs towards professional development in pedagogical ICT integration. Teachers’ professional

development is often regarded as a key element to successful education reforms. Hence, teachers are expected to undergo continuous professional development to keep abreast with the various changes that occur in the education systems including the modes of teaching and instructional resources. In this study, a cross-sectional and descriptive survey design was used where research data were collected through triangulation. Three key instruments namely; questionnaires, interview guides and checklists were used to collect data. The study sample for the institutions was 30 secondary schools from Nairobi and Kiambu Counties. The sample comprised 278 teachers, 375 secondary school students, 30 schools and Computer for Schools Kenya (CFSK) trainers. The study revealed a variance in the use of ICTs by teachers especially between personal use and pedagogical use. The highest teacher professional development need cited by teachers for effective ICT integration was an intensive approach to ICT integration. Most teachers felt that the approaches used in professional development did not equip them adequately for independent ICT usage in schools.

The study proposes a convergent approach to teacher professional development which supports constructivist learning among teacher trainers and subsequently among learners in schools to enhance ICT integration in teaching and learning. Despite the studies looking similar, they differ in context and methodology. The previous study was on teacher professional development needs for pedagogical ICT integration in Kenya: lessons for transformation whereas the current study will look at on teacher professional development programmes in enhancing teaching proficiency in selected British Curriculum Secondary Schools. On methodology the previous study combined use of a cross-sectional and descriptive survey design while the current study used a mixed methods design to collect in-depth data.

METHODOLOGY

This research study was conducted in Kenya and Tanzania and focused on secondary schools that teach the British curriculum within the two countries. The two countries are located in the Eastern part of Africa and covered in their southern part by Indian Ocean and share the waters of Lake Victoria. The study adopted the convergent design, an approach to inquiry that combines both quantitative and qualitative designs as proposed by Creswell and Clark (2018). The current study combined survey and phenomenology designs. This model is based on the concurrent approach to mixed methods research designs as advanced by Creswell and Clark (2018); Leech and Onwuegbuzie, (2009). The target population for the study was 10 Head teachers, 10 Deputy Head teachers, 40 School Mentors and the 240 Teachers in the 10 selected British Curriculum Secondary Schools in Kenya (8 schools) and Tanzania (2 schools). In this study, different types of data collection instruments were used. These included two sets of questionnaires, for the purpose of primary quantitative data and two sets of interview guides for qualitative data. In this research the raw data collected was systematically organized so as to carry out the data analysis. Both sets of data collected were inspected in order to identify, spelling mistakes and wrongly responded to items. The data was cross-examined to ascertain accuracy, completeness and uniformity. The data was analyzed descriptively (frequency distribution to show percentages, means and standard deviations) and by Inferential data analysis (Pearson correlation coefficient).

FINDINGS AND DISCUSSION

The study sought to find out to what extent the professional development programmes enhances learner centred pedagogy in the learning and teaching process. The respondents were asked to rate to what extent they agreed with the following statements on their approach to Teacher

Professional Development Programmes in enhancing Learner Centred Pedagogy using this key SD= Strongly Disagree, D= Disagree, MA= Moderately Agree, A=Agree and SA=Strongly Agree. The findings are presented herein in Table 1 for teachers and Table 2 for mentors.

Table 1

Responses on Professional development programmes on Learner Centred Pedagogy- Teachers (n=90)

	L	SD	D	MA	A	SA
The professional development programmes have aided my use of a variety of instructional strategies that are appropriate for students' skill levels (e.g. interactive, experiential, direct)	K	2(2.7)	-	4(5.3)	27(36)	42(56)
	T	-	-	-	-	15(100)
The professional development programmes have enabled me to engage students in active learning (e.g, role play, group work, presentations)	K	1(1.3)	-	6(8)	19(25.3)	49(65.3)
	T	-	-	-	2(13.3)	13(86.7)
The professional development programmes have enabled me to use a range of learning skills (e.g Kinaesthetic, Visual, Audio)	K	.-	1(1.3)	4(5.3)	22(29.3)	48(44)
	T	-	-	1(6.70)	3(20)	11(73.3)
The professional development programs have enhanced my use of a variety of teaching resources (ICT, Science ,Sports)	K	-	2(20)	10(13.3)	24(32)	39(52)
	T	-	-	2(13.3)	5(33.3)	8(53,3)
The professional development programmes assist me in developing an understanding of differentiation when teaching.	K	1(1.3)	4(5.3)	7(9.3)	21(28)	42(56)
	T	-	-	1(6.7)	3(20)	11(73.3)
The professional development programmes assist me to understand the cultural diversity of learners	K	1(1.3)	1(1.3)	10(13.3)	25(33.3)	38(50.7)
	T	-	-	1(6.7)	4(26.7)	10(66.7)
The professional development programmes have assisted me to be a facilitator in the learning process.	K	1(1.3)	3(4)	5(6.7)	20(26.7)	46(61.3)
	T	-	-	-	1(6.7)	14(93.3)

Note: P=Participants, L= Location, K= Kenya, T= Tanzania; Teachers n=90, K=75, T=15;

Source: Field Data, 2023

The respondents were asked to indicate the extent to which they agreed professional development programmes have aided their use of a variety of instructional strategies that are appropriate for students' skill levels (e.g. interactive, experiential, direct). For teachers in Kenya, 56% of the teachers strongly agreed 36% agreed while all the teachers in Tanzania strongly agreed that professional development programmes had aided their use of a variety of instructional strategies that were appropriate for students' skill levels (e.g. interactive, experiential, direct). The study findings are in agreement with those of Wilson and Rock (2015) found out that teachers increased their professional understandings, competencies and also increased their professional confidence. Additionally, information from

professional literature and education experts was instrumental in increasing their knowledge of instruction techniques and strategies.

On whether the professional development programmes have enabled them to engage students in active learning (e.g., role play, group work, presentations), 65.3% and 86.7% of the teachers strongly agreed both in Kenya and Tanzania respectively. Results further showed that in Kenya, 64% and 29.3% strongly agreed and agreed while 73.3% of the teachers in Tanzania strongly agreed that the professional development programmes had enabled them to use a range of learning skills (e.g. Kinesthetic, Visual, Audio). The findings are in collaborations with those of Teygong (2018) whose study revealed that on instructional media and print media, textbooks and references books were frequently utilized when compared with audio and video media in classrooms. On evaluation, teachers used questions and answer method to assess learners' acquisition of curriculum knowledge, skills and attitudes as opposed to continuous assessment tests and regular examinations that featured during end of term period. The study concluded that frequent and variation in pedagogical competencies improved learning in schools that is evidenced through improved academic performance by pupils.

The respondents were asked to indicate whether professional development programs had enhanced their use of a variety of teaching resources (ICT, Science, Sports). For the teachers in Kenya, 52% strongly agreed, 32% agreed while 20% disagreed as for the teachers from Tanzania, 53.3% strongly agreed, 33.3% agreed and 13.3% moderately agreed that professional development programs had enhanced their use of a variety of teaching resources (ICT, Science, Sports). Results concur with those of Mwangi and Khatete (2017) who revealed a variance in the use of ICTs by teachers especially between personal use and pedagogical use. The highest teacher professional development need cited by teachers for effective ICT integration was an intensive approach to ICT integration. The findings thus imply that teachers need to undergo continuous professional development to keep abreast with the various changes that occur in the education systems including the modes of teaching and instructional resources

On the statement whether the professional development programmes assist me in developing an understanding of differentiation when teaching; 56% and 73.3% of the teachers from Kenya and Tanzania strongly agreed respectively that professional development programmes assisted them in developing an understanding of differentiation when teaching. Results are in support of Lewis and Tsuchida (2018) who found out that professional development program is important in connecting classroom practice to broader school and community goals, shaping national policy and creating demand for improvement of practice through viewing best practice and comparing it with their own. Similarly, Meichen, Prashant, Yaojiang, Fang, Chengfang and Rozelle (2017) on the impact of teacher professional development Program-National Teacher Training Program on student achievement, revealed that, although the program had positive effect on mathematics teaching knowledge of teachers, it had no significant effect on teaching practices in the classroom. The findings imply that the teacher should know different strategies that he/she can apply during teaching and when to use them.

The study further sought to find out whether the professional development programmes assisted the teachers to understand the cultural diversity of learners. Majority (50.7%) of the Kenyan teachers strongly agreed, 33.3% agreed and 13.3% moderately agreed while 66.7% of the Tanzanian teachers strongly agreed that the professional development programmes assisted the teachers to understand the cultural diversity of learners. Finally, majority (61.3%) of the teachers

in Kenya strongly agreed, and 26.7% agreed while 93.3% of the teachers from Tanzania strongly agreed that the professional development programmes had assisted them to be facilitators in the learning process. The findings are in support of Bamberger and Tal (2022) who showed that learners after a visit at the Science Centre in Israel were able to remember details of the experience including the guides' explanations up to six months after the visit. Similarly, human capitalists asserted that investment in staff training increases an individual's skills and abilities that can potentially increase productivity and performance of individuals' work.

Table 2

Responses on Professional development programmes on Learner Centred Pedagogy- Mentors (n=15)

	L	SD	D	MA	A	SA
The professional development programmes have aided teachers use of a variety of instructional strategies that are appropriate for students' skill levels (e.g. interactive, experiential, direct)	K T	- -	- -	1(8.3) -	4(33.3) 1(33.3)	7(58.3) 2(66.7)
The professional development programmes have enabled teachers to engage students in active learning (e.g, role play, group work, presentations)	K T	- -	- -	1(8.3) -	3(25) 1(33.3)	8(66.7) 2(66.7)
The professional development programmes have enabled teachers to use a range of learning skills (e.g Kinaesthetic, Visual, Audio)	K T	- -	- -	1(8.3) -	5(41.7) 1(33.3)	6(50) 2(66.7)
The professional development programs have enhanced teachers use of a variety of teaching resources (ICT, Science ,Sports)	K T	- -	- -	2(16.7) 1(33.3)	5(41.7) -	5(41.7) 2(66.7)
The professional development programmes assist teachers in developing an understanding of differentiation when teaching	K T	- -	- -	4(33.3) 1(33.3)	5(41.7) -	3(25) 2(66.7)
The professional development programmes assist teachers to understand the cultural diversity of learners	K T	- -	- -	4(33.3) 1(33.3)	6(50) -	2(16.7) 2(66.7)
The professional development programmes have assisted teachers to be facilitators in the learning process.	K T	1(8.3) -	- -	1(8.3) 1(33.3)	4(33.3) 1(33.3)	6(50) 1(33.3)

Note: P=Participants, L= Location, K= Kenya, T= Tanzania; Mentors n=15, K=12, T=3

Source: Field Data, 2023

The study sought to find out whether the professional development programmes have aided teachers use of a variety of instructional strategies that are appropriate for students' skill levels (e.g. interactive, experiential, direct); 58.3% of the mentors from Kenya strongly agreed and 33.3% agreed while 66.7% from Tanzania strongly agreed and 33.3% agreed that the

professional development programmes had aided teachers use of a variety of instructional strategies that were appropriate for students' skill levels (e.g. interactive, experiential, direct). The study findings concur with Kelleher (2013) who opined that successful professional development is continuous, collaborative, coherent, and integrated into school daily life and activities. Additionally, teacher professional development is not solely centred on individual teachers acquiring and applying new knowledge and skills; professional development must be continuously rooted within the daily school community life (FeimanNemser, 2011; Rhodes & Houghton-Hill, 2020; Villegas-Reimers, 2013).

In regards to the statement "The professional development programmes have enabled teachers to engage students in active learning (e.g, role play, group work, presentations)" majority of the mentors (66.7%) strongly agreed with the statement in Kenya and Tanzania. In addition, 50% and 66.7% of mentors in Kenya and Tanzania strongly agreed respectively that professional development programmes had enabled teachers to use a range of learning skills such as Kinesthetic, Visual, Audio. The findings are in collaborations with those of Teygong (2018) whose study revealed that on instructional media and print media, textbooks and references books were frequently utilized when compared with audio and video media in classrooms.

The study further sought to establish if the professional development programs had enhanced teachers use of a variety of teaching resources (ICT, Science, Sports). In Kenya, 41.7% strongly agreed, another 41.7% agreed while 16.7% moderately agreed that professional development programmes had enhanced teachers use of a variety of teaching resources. Similarly, 66.7% of the mentors in Tanzania strongly agreed while 33.3% moderately agreed with the statement. Results concur with those of Mwangi and Khatete (2017) who revealed a variance in the use of ICTs by teachers especially between personal use and pedagogical use. The highest teacher professional development need cited by teachers for effective ICT integration was an intensive approach to ICT integration.

As to whether the professional development programmes assist teachers in developing an understanding of differentiation when teaching, for the mentors in Kenya, 41.7% agreed, 25% strongly agreed and 33.3% moderately agreed while in Tanzania 66.7% strongly agreed and 33.3% moderately agreed that professional development programmes assisted teachers in developing an understanding of differentiation when teaching. Results are in support of Lewis and Tsuchida (2018) who found out that professional development program is important in connecting classroom practice to broader school and community goals, shaping national policy and creating demand for improvement of practice through viewing best practice and comparing it with their own.

The respondents were asked to indicate whether the professional development programmes assisted teachers to understand the cultural diversity of learners, half of the mentors from Kenya agreed while 66.7% from Tanzania strongly agreed that the professional development programmes assisted them to understand the cultural diversity of learners. Similarly, 50% and 33.3% of the mentors both in Kenya and Tanzania strongly agreed that professional development programmes had assisted teachers to be facilitators in the learning process. The findings are in support of Bamberger and Tal (2022) who showed that learners after a visit at the Science Centre in Israel were able to remember details of the experience including the guides' explanations up to six months after the visit.

From qualitative data, the head teachers and deputy head teachers indicated that professional development programmes enhanced learner centred pedagogy in the learning and teaching process since the teachers acquired the necessary knowledge, skills and experiences to place learners at the heart of learning whereas the learners also get to enjoy the learning process as they are fully involved. Additionally, most of the respondents indicated that programme development programmes aid teachers in attainment of new and relevant skills, improve the teaching methods, enhance teachers' proficiency and promote teachers and students' involvement in learning which makes the learners to enjoy the teaching process thus improving the learner outcomes. The findings are in support of human capital theory as opined by Babalola, (2003) who argued that the most critical indicator of the value of human capital is the level of expertise possessed by an organization which can be done through identifying and analysing organisational core competencies.

One of the Head teachers, respondent HT1 stated that;

Professional development programs enhance teachers' proficiency in pedagogy by introducing them to new pedagogical approaches, such as differentiated instruction, project-based learning, and inquiry-based learning. These approaches allow teachers to deliver content in a more engaging and effective way, catering to the diverse learning needs of their students. Moreover, professional development programs provide teachers with the opportunity to practice and apply new pedagogical approaches in their classrooms, receiving feedback and support to improve their teaching practices. Collaborative learning is another essential component of professional development programs, allowing teachers to work together, share experiences, and learn from each other. Additionally, professional development programs teach teachers how to integrate technology into their teaching practices, enabling them to use educational technology to enhance learning outcomes. Finally, professional development programs provide teachers with the opportunity to continue their education and stay up-to-date with new research and developments in pedagogy, adapting their teaching practices to meet the evolving needs of their students (HT 1, June 6, 2023).

Another respondent DHT 3 had this to say. "There is direct linkage between PD and learning programmes- training on baseline assessments and use of assessment to test progress in learning for each student. As well as helping teachers to focus on progression in each lesson, and term" (DHT 3, May 27, 2023). Majority of the respondents further asserted that professional development programmes had enabled teachers sharpen their skills in classroom management, differentiation and also get ideas of how to ensure all children access their learning. Further, the respondents opined that it improved teaching methodology and learner outcomes and provide additional skills and tools for 21st century learner.

The study findings were seen to be in line with Tindowen, (2019) who did a study on the Influence of Empowerment on Teachers' Organizational Behaviours. The results revealed that Catholic teachers have high levels of teacher empowerment. Specifically, they have very high level of status, professional growth, self-efficacy, and impact and high level of decision-making and autonomy in scheduling. Meanwhile, they also high level of organizational behaviours. To support Gizen (2013) observed that most teachers complained of subject group meetings having not enough periodic schedule.

Relationship between Professional Development Programmes and Learner Centred Pedagogy in the Learning and Teaching Process

The study also sought to assess to what extent the professional development programmes enhanced learner centred pedagogy in the learning and teaching process. To achieve this, the first hypothesis was tested. The findings are presented in Table 3.

Table 3

Linear Model Summary for Professional development and Learner centred pedagogy

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.576a	0.332	0.325	0.498

Note. a Predictors: (Constant), Professional development

Source: Field Data, 2023.

The coefficient of determination (R^2) and correlation coefficient (R) shows the degree of association between professional development programmes and learner centred pedagogy in the learning and teaching process. The results indicate that $R^2 = 0.332$ and $R = 0.576$. R value gives an indication that there is a strong and positive relationship between professional development programmes and learner centred pedagogy in the learning and teaching process. The R^2 value of 0.332 indicates that professional development programmes explain 33.2% of variations in learner centred pedagogy in the learning and teaching process.

The study findings were in line with Wolfa, Aberb, Behrmanc and Tsinigod, (2019) who found an association between some dimensions of professional well-being (reduced burnout in the TT and TTPA conditions, reduced turnover in the TT condition), classroom quality (increased emotional support/behaviour management in the TT and TTPA conditions, support for student expression in the TT condition), and small impacts on multiple domains of children's school readiness (in the TT condition). Teygong (2018) in support found that teachers' pedagogical competencies had significant effect on academic performance in primary schools in Chepkorio Ward. Findings revealed that the extensive adoption of learner-centred approaches as compared to teacher-centred ones. The study findings support the human capital theory which emphasizes how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability which is a product of innate abilities and investment in human beings.

Table 4

ANOVA for Professional development and Learner centred pedagogy

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.669	1	12.669	51.084	.000b
	Residual	25.544	103	0.248		
	Total	38.213	104			

Note. a Dependent Variable: Learner centred pedagogy

b Predictors: (Constant), Professional development

Source: Field Data, 2023.

From ANOVA the stepwise linear regression analysis in Table 4, it is clear that the model is significant in predicting how professional development programmes enhance learner centred pedagogy in the learning and teaching process. The regression model achieved a high degree of fit as reflected by an R^2 of 0.332 ($F = 51.084$; $P = 0.000 < 0.05$). The relationship was significant at critical value (0.05) since the reported p-value (0.000) was less than the critical value. This means that the measures of professional development programmes were significant at 95% confidence level which support previous findings from correlation analysis, which reported that there was a significant correlation among the variables ($r = 0.576$). This implies that the null hypothesis $\beta_1=0$ is rejected and the alternative hypothesis $\beta_1\neq 0$ is taken to hold implying that the model $Y = \beta_0 + \beta_1X_1 + e$, is significantly fit. Thus, it was important to test the significance of the predictor to determine its effect on learner centred pedagogy in the learning and teaching process.

Table 5

Regression Coefficients for Professional development and Learner centred pedagogy

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	3.073	0.197		15.566	0.000
Professional development	0.339	0.047	0.576	7.147	0.000

Note. a Dependent Variable: Learner centred pedagogy

Source: Field Data, 2023.

In addition, results shown in Table 5 indicate that the coefficient of determination was significant with a value of 0.339 and $p = 0.000$. This indicates that a unit increase in professional development programmes would result in 33.9% increase in enhancing learner centred pedagogy value in a direct relationship between professional development programmes and learner centred pedagogy in the learning and teaching process. Therefore, at $p < 0.05$ level of significance the null hypothesis (H_0) is rejected and accepts the alternate hypotheses (H_A) implying that professional development programmes have a statistically significant influence on learner centred pedagogy in the learning and teaching process.

Summary

The research question was to find out to what extent the professional development programmes enhanced learner centred pedagogy in the learning and teaching process. The findings indicated that professional development programmes enhanced learner centred pedagogy in the learning and teaching process greatly. This was supported by the correlation and regression analysis which revealed a positive significant ($\beta = 0.339$, $p = 0.000$) relationship between professional development programmes and learner centred pedagogy in the learning and teaching process. Descriptive statistics indicated on average that the professional development programmes had aided the use of a variety of instructional strategies that were appropriate for students' skill levels (e.g. interactive, experiential, direct), use a range of learning skills (e.g. Kinesthetic, Visual, Audio) and use of a variety of teaching resources (ICT, Science, Sports). Results further showed that professional development programmes assisted the teachers to understand the cultural diversity of learners. The findings thus imply that teachers need to undergo continuous professional

development to keep abreast with the various changes that occur in the education systems including the modes of teaching and instructional resources.

CONCLUSIONS

The study concludes that the selected British curriculum secondary schools have embraced professional development programmes for teachers which is especially meant for newly recruited teachers and practicing teachers so as to ensure that they align with the International education requirements. This implies that professional development programmes had enhanced teachers' proficiency in the learning process which was measured through learner centred pedagogy, content delivery, behaviour management, assessment for learning and self-efficacy. It is therefore crucial for the school heads to ensure that such courses are continued and every teacher being engaged in the said schools are subjected to the courses for effective learning and teaching.

Declaration of Conflict of Interest

The authors indicated no Conflict of Interest.

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