# AN EXPLORATION OF TEACHER COMPETENCE IN BOTSWANA AND BEYOND: A PRELIMINARY ASSESSMENT OF EXTANT LITERATURE

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### Abstract

This article explores literature on competence-based education (CBE) internationally, regionally and locally as it attempts to agitate for a comprehensive study and implementation of CBE in the Botswana education system. It underscores the necessity of equipping teachers with essential competencies required for effective teaching and learning in schools. The article delves into the concept of 'competence' in relation to educators, highlighting their pivotal role in fostering a workforce proficient in 21st-century skills and competencies. Such preparation is vital for addressing emerging challenges that may impede the successful adoption of CBE systems. Additionally, the article is an in-depth examination of the literature on perceived proficiency of teacher competencies among graduates. In the Botswana context, the study examines graduates holding a Diploma in Primary Education (DPE) from two teacher education institutions in Botswana, covering the period from 1995 to 2019 to assess the level of perceived mastery of teacher competencies as prerequisites for competent teachers.

**Keywords:** competence-based education, continuous professional development, competencybased curriculum, teacher training, Botswana

## **1.0 Introduction**

This article explores competence-based education internationally, in regional countries and in Botswana. It seeks to outline effective training and capacitation of teachers with competencies required for teaching and learning in schools. The article defines and discusses the term 'competence' in relation to teachers as they play a major role in developing a workforce based on 21<sup>st</sup> century skills and competencies to enable them to meet emerging challenges that could impede the implementation of competency-based education systems. This article further explores the level of perceived mastery of teacher competencies as prerequisites for competent teachers from the perspectives of teachers who graduated with Diploma in Primary Education (DPE) qualification from 1995 to 2019 from two teacher education.

Studies have shown that a major factor which influences the quality of learning and achievement of students is the standard of teaching in classrooms (Yang & Tan, 2022). This standard of teaching depends on the quality of teacher education. The attainment of teacher competencies required for effective teaching in primary schools depends upon a teacher education programme which integrates them into teaching and learning, and which should produce quality teachers capable of changing teaching approaches towards the 21<sup>st</sup> century learners (Kasule et al., 2019). Teacher competencies are an interrelated combination of attitudes, skills, knowledge, as well as awareness (Fantini et al., 2001). These competencies amalgamate into a group of behaviours which facilitate planning, organization, and

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© Daniel Raseboa Rantabe Journal Vol. 28(1): 62-76 implementation of effective instructional practices during teaching and learning (Mutende et al., 2021). The emphasis on competency-based training of teachers is critical in capacitating them in the proficiency of competencies geared towards quality classroom instruction, as well as inspiring, guiding, and impacting on learners' achievement (Mardapi et al., 2018). An awareness of the teachers' role in human development through education internationally has increased the demand for quality/competent teachers. Teachers' continuous participation in competency-based training activities enhances their professional development and equips them with up-to-date knowledge, skills, and disposition to address emerging challenges faced by the society (Mardapi et al., 2018).

Ngao and Xiaohong (2020) aver that pre-service and in-service teacher preparation is one of the critical aspects of teacher education curriculum since it capacitates the teachers to become multitalented, critical thinkers. The following sections explore competency-based education and teacher competencies from an international, the regional, and the Botswana context.

#### 2.0 Teacher-competency: International context

Studies conducted in developed nations such as the European Union, the United States of America, Australia, Singapore, Malaysian, and the United Arab Emirates (UAE) (Aras, 2018; Caena & Redecker, 2019; Kesici & Cavus, 2019; Mohamed et al., 2017; Potolea & Toma, 2019; Sulaiman & Ismail, 2020) have shown that competency-based education systems and teacher competences have been topical across the world (Kellogg, 2018). The abovementioned countries have already implemented competency-based education in their teacher education systems. Education policies in these nations show collaborative efforts, potential innovations, and have generated a wealth of comparable international data (Caena & Redecker, 2019) upon which this research is anchored.

For over two decades the concept 'competence' has become the reference point of debate worldwide in relation to teacher education professional standards, training programmes, and career development (Potolea & Toma, 2019). Goodwin and Low (2021, p. 367) opine that "teacher quality is evaluated on the competencies of teachers to prepare students both cognitively and affectionately for the future." Thus, competence has become one of the dominant paradigms in enhancing the quality of teaching and is also one of the key factors in the implementation of the curriculum. As defined by the European Parliament and the Council of European Union (2006), 'competence' is "a combination of knowledge, skills, and attitudes appropriate to a particular situation" (Potolea & Toma, 2019, p. 4). A combination of knowledge, skills, and attitudes is critical in the process of executing a task, because competence integrates learning domains to accomplish the desired outcomes. The desired outcome is realized through the synergetic effect the intended behaviour (Mandal, 2018). Competency is an educational delivery model that organizes content according to what a student knows and can do. It focuses on whether students have mastered competencies and outcomes. However, there is limited information regarding implementation strategies and best practices of designing CBE models (Kellogg, 2018). Kesici and Cavus (2019) contend that a successful education system needs qualified teachers who are experts in their subject

area and are also equipped in terms of "general knowledge and general ability, and [have] sufficient knowledge and skills regarding the knowledge for teaching profession" (p. 78). Similarly, the content and pedagogy of teacher education programmes are considered as important components in successful teaching (Kellogg, 2018).

The concept of competence as a paradigm is not only confined to the acquisition of knowledge, skills, and attitudes appropriate to a particular situation but also includes utilization of the three competencies to successfully complete a complex learning task under given set criteria (Potolea & Toma, 2019). The nature of knowledge, that is, subject matter and content for teaching staff are normally defined in each teacher education programme, whereas the skills show how subject matter and content are utilized within a particular context. In the case of attitudes, the term 'disposition' was adopted to denote an individual's mind-set to act in a particular direction and manner (Potolea & Toma, 2019).

Australia and Singapore have been identified amongst the top ten countries that have the best education systems and top performing education systems in the world as reflected in the students' achievement in the program for international student assessment (PISA) examinations for mathematics, science and reading literacies; and the teachers are accorded a respectable status (Rajandiran, 2021). The education systems of these countries offer various degree programmes for elementary and secondary teachers. In Australia, all teachers are expected to have a bachelor's degree; and in addition, teacher candidates for basic education should have undergone teaching practice experience. Newly appointed teachers after graduation in Singapore undergo a yearlong formal teacher induction programme (TIP), which is another process of teacher professional development programme to gain professional expertise (Latchanna et al., 2019).

In Singapore, primary and secondary teachers undergo a four-year undergraduate teacher education degree, a four-year double degree program, and a four-year academic degree. These programmes are followed by a postgraduate teacher training course. Similarly, the National Institute of Education (NIE) in Singapore provides rigorous university education for bachelor's and college degrees in teaching subjects for teachers (Aras, 2018). With regard to competency-based education system NIE in Singapore provides rigorous university education for bachelor's and college degrees in teaching subjects for teachers (Aras, 2018).

According to Rajandiran (2021), in 2011, Singapore education system marked a shift to a value-driven and student-centric phase with a deliberate introduction of 21<sup>st</sup> century competencies into initial teacher preparation programmes. During this phase teachers were charged with the responsibility to instil values in learners and to reach out to the community to produce a holistic economy in learning. Teachers were a driving force behind learners' outcomes.

The competence-based education (CBE) is not a new phenomenon. In the USA it has become a topic of interest in recent years, with an increasing number of higher education institutions incorporating it into their programmes. In the USA a successful and proclaimed student-centred practice should be a place with a strong relationship amongst students and in which students' emotional and social being are supported. There should be timely technological support adapted to teaching and learning, thus "lifelong learning and independent learning are promoted" (Kesici & Cavus, 2019, p. 79).

Sturgis and Casey (2018) noted that one of the major features of the CBE, also known as mastery-based, proficiency-based or performance-based, should be fully student-centred. Its structures emphasize upon "academic knowledge, the skills to transfer and apply knowledge, and a set of lifelong learning skills that enable students to be independent learners". In a study conducted by Kesici and Cavus, (2019) in the United Kingdom, student-centred practices were found to enable students to understand research processes and to form research identities. They can also be appreciated for their supremacy in involving students in active learning and as individuals who can search, interpret, think, and question the learned information.

The competence-based practices are therefore desired for enhancing effectiveness of learning process whereby students achieve their goals, teachers become successful, and ultimately the success of the program and that of the education system (Kesici & Cavus, 2019). These practices are opposed to the traditional education system which is characterized by a "narrow set of academic outcomes, memorization, and comprehension of content; build on a fixed mindset-the notion that people's abilities are carved in stone" instead of a growing mindset" (Sturgis & Casey, 2018, p. 7).

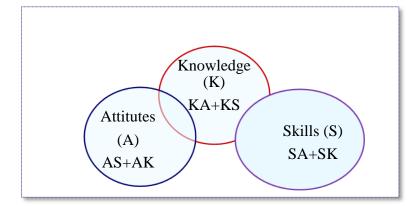
Keller-Schneider et al. (2020) describe competency from the Swiss perspective as a self-image of the individual's potential to deal with requirements by means of possessed competencies of "knowledge, beliefs, values, motives, goals, self-regulation and emotions" (p. 38). According to Keller-Schneider et al. (2020) a sense of competence enables an individual to form a self-image of having the potential to deal with what is required. A requirement which is demanding and significant for a solution is regarded as a challenge. Thus, the process of being a professional teacher involves self-image formulation, maintenance of resources such as possessed competencies, coping with stress, etc., throughout the career path of a novice to becoming an expert teacher (Keller-Schneider et al., 2020).

In a study to investigate perceived challenges and competence in all stages of teachers' career development in Switzerland, Keller-Schneider et al. (2020) found that teachers perceived themselves to having a high level of competence to achieve the goals of teaching and learning as well as to satisfy learners' individual needs. Keller-Schneider et al. (2020) indicate that the most crucial sense of competence is that it should be career specific, and the level of competence possessed by an individual should serve as a drive to accomplish desirable and significant requirements. It could be concluded that the positive sense of competence held by teachers assumes the expected high performance, commitment to the

career, and capability to deal with the day-to-day teaching and learning challenges (Keller-Schneider et al., 2020).

According to Domininguez-Loria et al. (2020), teacher training institutions in Switzerland facilitates the implementation of projects which enable the mastery of competences needed to create innovative environments that are in favour of employability of graduates and the socioeconomic development of the country. Fantini et al. (2001) conceptualised (A+ASK paradigm), that is awareness plus attitudes, skills, and knowledge paradigm, explains cultural competence as the interrelationship between the domains of attitudes, skills, knowledge as well as awareness. According to Fantini et al. (2001) cultural competence is characterised by four dimensions of awareness, attitudes, skills, and knowledge, and refers to an individual's ability to interact effectively and appropriately across cultures. The A+ASK paradigm suggests that the interrelationship between the competency domains of attitudes, skills, knowledge, as well as awareness amalgamate into a group of behaviours used to accomplish a task as illustrated in Figure 1.

Figure 1: Interrelationship between Awareness + Attitudes, Skills, Knowledge



Source: Fantini et al. (2001)

In Figure 1, K represents knowledge which is acknowledged widely, whereas the three domains A (a\*s\*k) represent the self-awareness of the teacher in relation to the surrounding environment. As Fantini et al. (2001, p. 9) argue "know-thyself" relates to one's awareness, and self-efficacy. The intersections of AS/SK/KA together form the intermediate points of any two combinations of the dimensions, therefore assuming that in any context of teaching and learning each of them could be observed and measured.

Mandal (2018, p. 352) described competence as a "combination of knowledge, skills and behaviours used to improve performance, or quality of being adequately qualified and capable of performing a given role." Some of the characteristics of the concept competency suggest that it is linked to all three domains of knowledge, skills, and attitudes, under which performance can be measured, demonstrated, observed, and measured on a constructed dimensional dichotomy scale (Mandal, 2018). There is a growing recognition of the that teacher education programs focusing solely on content knowledge and pedagogical competencies but divorced from disposition competencies are insufficient to support and develop effective future teachers (West et al., 2018). In Australia West et al. (2018) indicate that teacher education programs which foster and "support the development of positive and professionally conducive disposition" (p. 3) have the potential to impact on pre-service teachers' self-awareness and shape their perceptions towards teaching and learning.

Literature also reveals that teacher education programs that are inclined on content knowledge, skills, and pedagogy, but which are divorced from teacher disposition are found to be inadequate to maximally capacitate future teachers (West et al., 2018). Studies from UK, USA, Canada, and Australia suggest that graduating teachers would leave the "profession within three to five years" (West et al., 2018, p.1), a situation which is attributable to the negative impact a teacher experience within early years of the teaching career.

From the Malaysian perspective competence refers to a group of behaviours an individual uses to achieve a desired outcome which include knowledge, skills, and personal characteristics to perform a difficult task in a particular role and positions (Sulaiman & Ismail, 2020). These researchers opine that competences comprise five main components of "knowledge (one's information and knowledge), skills (one's ability to perform a particular task), self-concept (person's attitude, values and image), values, character and motives (one's emotions, desire, psychological needs or impulse to action" (p. 3537). A further analysis of competencies relating to self-concept, values, character, motives, attitudes, and behaviour (Sulaiman & Ismail, 2020) could also be encapsulated under disposition competencies (West et al., 2018).

According to the Indonesian perspective, teacher competence is a multi-dimensional construct comprising pedagogical, professional, and personal competences derived from an "accumulation of capabilities to facilitate learning" (Mardapi et al., 2018, p. 108). According to Mardapi et al. (2018) personal competencies refer to the cognitive, metacognitive, motivational and emotional or social competencies.

A study conducted in the United Arab Emirates (UAE) defined teacher competency as "an integrated set of personal characteristics, knowledge, skills, attitudes, that are needed for effective performance in various teaching contexts" (Mohamed et al., 2017, p. 154). This definition was based on a study in UAE to determine pre-service teacher readiness-for-the-job; based on the internationally established eleven (11) core teacher competences (ITCs). The same study revealed in part that mastery of competences by pre-service teachers occurs during the initial training, while the actual mastery of competences is achieved later in professional teaching (Mohamed, et al., 2017). The UAE perspective further states that teacher competences are uniformly clustered into three main domains namely, "knowledge: what teachers need to know; skills: what teachers are able to do; and attitudes or behaviour:

how teachers would put their knowledge and skills in practice" (Mohamed et al., 2017, p. 155).

#### 3.0 Teacher competency: The African perspective

Teacher competency has also been studied across different African countries including Ghana, Nigeria, and Ethiopia in the Northern Africa region; Rwanda, Kenya, Tanzania in the Central Africa region; and in the South African Development Community (SADC) region. Research focused on the implementation of policies, initiatives, approaches, and strategies aimed at enhancing teacher competency and improving the quality of teacher education (Ruth & Ramadas, 2019; Akinrinola & Ogegbo, 2020; Mwila et al., 2022).

According to Mwila et al. (2022) countries within the South African Development Community (SADC) regions implemented the continuous professional development (CPD) approach to address competency needs of both pre-service and in-service teachers. This was intended to enable them to share effective classroom practices that impacted on learners' achievement. The continuous professional development (CPD) approach could be applied during teacher preparation and extended to in-service teachers on ground.

The implementation of competency-based curriculum (CBC) also gained popularity across different African countries such as Kenya, Rwanda, Ghana, Tanzania, and Ethiopia during the twentieth century where there was pedagogical shift from teacher-centred to learner-centred approaches (Ruth & Ramadas, 2019). The competency-based curriculum (CBC) was adopted in these countries with the view that it will yield competent graduates with specific skills and knowledge required to effectively perform real life tasks.

The competency-based education (CBE) strategies were adopted in Zambia, Rwanda, Kenya, Tanzania, Nigeria, and South Africa because of their innovative approaches which focuses on the learner's mastery of knowledge, skills, and values needed for the fourth industrial revolution era (Akinrinola & Ogegbo, 2020). Whereas competency-based education (CBE) strategies were adoption in Rwanda, Nigeria, and South Africa were necessitated by pressure from industry since most graduates of the so-called content-based learning lacked the skills and competencies needed in the world of work. Akinrinola and Ogegbo (2020) described competence on the bases of learner outcome as embedded on a task by "showing the ability to know, learn, and learn how to learn, doing things individually and functioning well in teamwork" (p. 3). The two key areas for teacher development as encapsulated within the CPD initiatives are the cognitive and affective domains because they determine teacher efficacy. The cognitive aspect relates to pedagogical and instructional skills whilst the teacher's dedication and commitment are essential to the affective component (Mwila et al., 2022).

As already mentioned, the implementation of the competency-based education (CBE) or competency-based curriculum (CBC) and continuous professional development (CPD) were intended to enhance teacher competency and meet challenges associated with the 21<sup>st</sup> century learner (Kasule et al., 2019). Ruth and Ramadas (2019) aver that CBE requires high

level of thinking and reflection as it focuses on the improvement of content knowledge, skills, attitudes competencies required for performance in the labour market. In this article, the term competence is described in relate to teachers because of their preoccupation with teaching and learning which is characterised by teachers' classroom practices that allow learners' active participation in the learning process (Mwila et al., 2022). It is expected that during teaching and learning, the teachers' competencies such as creating "inclusive child-friendly environment", skills such as "communicate to enable learning," etc., should be exhibited to positively impact on students' learning achievement (Mwila et al., 2022, p. 108).

The continuous professional development (CPD) approach was implemented within the South African Development Community (SADC) member states for the competency needs of both pre-service and in-service teachers. There was need for teachers to effectively carryout classroom practices that maximizes learners' achievement (Mwila et al., 2022). In Eswatini, the delivery of teachers' continuous professional development (CPD) and the inservice education and training (INSET) activities were based at education centres, zones, and schools to provide the on-going technical and professional support to teaching and learning. In Zambia there is an established structure for the provision of School Based Continuous Professional Development (SBCPD) to teachers. There are also long term and short term INSET teacher training leading to diploma or degree offered in both teacher training colleges and universities (Mwila et al., 2022).

The analysis of studies cited here did not delve into competencies pre-service teachers mastered during teacher preparation, but rather on the implementation of policies and approaches to enhance teacher competency during teaching and learning. The cited studies discussed teacher competencies as perceived by scholars from different countries and focused on continuous professional development (CPD), in-service education and training (INSET), competency-based education (CBE), competency-based curriculum (CBC) (Mwila et al., 2022; Ruth & Ramadas, 2019; Akinrinola & Ogegbo, 2020).

## 4.0 Teacher competency: Botswana perspective

In respect of Botswana, the education system experienced reforms in the 1990s (Kuyini et al., 2020) when the Government of Botswana made a commitment to improve the quality of teachers in view of the significant role, they play in curriculum implementation (Republic of Botswana, 1994). Furthermore, the education system experienced major reforms with the advent of the National Curriculum and Assessment Framework (NCAF) (2015) and the Education and Training Sector Strategic Plan-(2015-2020) (ETSSP 2015-2020) (Republic of Botswana, 2015; Kasule et al., 2019). According to Kasule et al. (2019), the ETSSP 2015-2020 is a transformation strategic upon which the Ministry of Education and Skills Development (MoESD) committed itself to producing high quality teachers and to developing teacher professional standards in an attempt direct teaching approaches towards 21<sup>st</sup> century learners. The NCAF (2015) on the other hand advocates for learners' acquisition of knowledge, skills, and attitudes that would address the challenges and demands of the 21<sup>st</sup> century.

According to Kasule et al. (2019) the Botswana education system experienced some major reforms with the advent of the National Curriculum and Assessment Framework (NCAF) (2015) and the Education and Training Sector Strategic Plan-(2015-2020) (ETSSP-2015-2020) (Republic of Botswana, 2015). The NCAF (2015) reforms advocate for learners' acquisition of knowledge, skills, and attitudes contributed meaningfully to sustainable economic development; and meet challenges of demands associated with 21<sup>st</sup> century skills. The ETSSP-2015-2020 (Republic of Botswana, 2015) is a five-year transformation strategic tool with which the Ministry of Education and Skills Development (MoESD) was mapping its vision of being a provider of an educated and globally competitive workforce by producing up-to-date quality teachers and teacher trainers equipped with new concepts and methodologies. The ETSSP advanced the outcomes-based education (OBE), multiplepathways, development of teacher professional standards and set out teacher competencies aligned with the 21<sup>st</sup> century learner needs (Kasule et al., 2019). The development of teacher professional standards should be appropriately designated for annexation by the Botswana Teaching Professionals Council Board (BOTECO), formally established under the 2019 Botswana Teaching Professionals Council Act, to regulate the teaching profession, maintenance of teachers' ethical standards, as well as licensing of teachers (Kabir, 2024).

The most appropriate teacher education programme for the 21<sup>st</sup> century should facilitate student teachers' acquisition of key competencies encapsulated in National Curriculum and Assessment Framework (NCAF) (2015). Major (2018) contends that the preparation of leaners with skills necessary for sustainable development of a society should "take place in a peaceful, friendly learning environment and where all stakeholders are valued and respected" (p. 156). Therefore, it is necessary for colleges of education in Botswana to provide a peaceful and friendly environment enabling learners to be critical thinkers.

The proposed Botswana Framework for Teacher Education and Professional Development System (TEPDS) (Minister of Education and Skills Development (MoESD) (2016, p. 1), described competency as "the individual's capability to choose and apply an integrated combination of knowledge, skills, and attitudes to perform a task under specified conditions." The Botswana Qualification Authority (BQA, 2015) says that competency refers to the possession of the content knowledge, skills, and attitudes competencies that enables an individual to perform the duties of a trainer in a specified a career. It could be deduced that 'competent' does not only relate to the possession of integrated combination of knowledge, skills and attitudes, but also the capability to select and apply the appropriate competencies in order to perform a specific task successfully, e.g. a vocation or career (BQA, 2015). Regrettably, the framework did not categorically specify any desired set of competencies to be mastered by the pre-service teachers.

Kuyini et al. (2021, p. 4), defined competency as "the knowledge, skills and attitudes, and most importantly "the ability to apply these competencies in different context, and this manifests in students' learning outcome" in accordance with the social cognitive theory by Bandura (1997). Teacher competencies are thus defined as the expertise and knowledge that one requires to be effective in teaching (Kuyini et al., 2021). The Urch (1995) consultancy,

which was a formative evaluation of the DPE pilot project, proposed attributes distinguishing a competent DPE graduate as:

Ability to retrieve and organise new knowledge, through self-initiated study and independent research project, graduates who must know how to pursue subject matter independently, resource teachers and agents of innovative curriculum implementation in primary schools, demonstrate interactive teaching-learning methods, and provide demonstrations and advice to their primary school colleagues, community development leaders, a link that sparks parents and community leaders interest and helps to develop the concept of community oriented school (p. 10).

The conceptual framework of competent teachers for primary schools in Botswana emphasis the individuals' ability to retrieve, organise and pursue subject matter knowledge through research as a self-initiated and independent learner. DPE graduates are expected to resource teachers and agents of innovative curriculum implementation in primary schools by demonstrating interactive teaching-learning methods and providing advice to their primary school colleagues. Another key aspect of competent DPE graduates is a service to the community development by linking parents and community leaders to develop the concept of community-oriented school (Urch, 1995).

The Management Manual for Colleges of Education (2000) presents the colleges' curriculum framework as comprising the academic and professional studies as well as the teaching practice component (Ministry of Education, 2000). Teaching practice is an essential component of teacher education programme in Botswana which aims to "expose student teachers to the practical elements of teaching and social skills; observing and analysing children's behaviour, practicing how to prepare and present information to children using relevant pedagogies" (Ministry of Education, 2000, p. 38).

In 2008 the Government of Botswana collaborated with Commonwealth of Learning (COL) and United Nations International Children's Emergency Fund (UNICEF) to support the pre-service teachers' enhancement of learner-centred approach by incorporating the Child Friendly School (CFS) innovations in colleges' curriculum. The innovation was aimed at improving the quality of education in schools by incorporating child-centred learning and teaching methodologies that emphasises learner participation and inclusion (Junaid, 2011). It was therefore anticipated that this development would improve the quality of education in schools "through promotion of qualitative learning environment (safety and security, sanitation, care and inclusiveness) and child-centred learning and teaching methodologies that emphasise learner participation and inclusion" (p. 8).

On the bases of Botswana perspective, Major (2018) advocates for critical pedagogy; a theory suggesting that learners should be provided with critical thinking tools in order to be involved in the learning process as critical thinkers. The education system should therefore transform learners into citizens with the ability to challenges the situation at hand, such as classroom teaching and discover the knowledge and its meanings to their real lives by

"learning from the questions we can generate" (Major, 2018, p. 163). The graduates of Botswana education system lack critical thinking skills because of their failure to create self-employment and are hence depended on government for employment (Major, 2018).

This article takes cognizance of the internationally recognised teacher competences (ITCs) and in concomitant with the adopted three competency domains (Mohamed, et al., 2017), all teacher competencies substantiated in this study are clustered into three competencies of knowledge, skills, and disposition (Kasule et al., 2019; Kuyini et al., 2021; Mohamed et al., 2017; Republic of Botswana, 2015; Urch, 1995), as the focal set of explicit, measurable, essential, up-to-date and coherent teacher competences that should be mastered and acquired for lifelong learning (Kesici & Cavus, 2019) and recommended for competent DPE graduates of colleges of education in Botswana. This study, therefore, problematises the issue of teacher competence in Botswana and argues that there is need to explore competencies acquired by teachers, their relevance, and the extent to which they effectively use them for teaching and learning as they prepare and produce tomorrow's workforce. There is need to determine and describe the level of perceived mastery of competencies possessed by teachers in primary schools in Botswana. There is need to find out if teachers in the primary schools reflected the competencies of a quality teacher during their teaching. There is need to determine what support systems are there to help the primary school teachers to own and implement the desired competencies, and there is need to find out what challenges teachers in primary schools are facing in their attempt to reflect these competencies during teaching and learning, among other things.

## **5.0** Conclusion

The article had argued that as in other countries, in Botswana majority of teachers who teach in primary schools graduated with a Diploma in Primary Education (DPE) qualification from Colleges of Education. These Colleges of Education uphold the mandate of the Department of Teacher Training and Technical Education (TT&TE) which is basically to equip graduates with requisite skills and competencies for a knowledge-based economy through innovative delivery and programmes that inspires entrepreneurship, ICT application and lifelong learning for a local and global market (TT&TE-Strategic Plan, 2019). On completion of the DPE programme, graduates are expected to have mastered a range of competencies generated by the Ministries of Basic Education policies and Tertiary Education policies, and in line with the Botswana Qualification Authority set standards. It was assumed that these graduate teachers would have mastered a range of competencies, the assumption being that they would effectively carryout instruction at classroom level. This article problematises the level of perceived mastery of teacher competency domains of content knowledge, skills, and disposition as prerequisites for competent teachers from the perspectives of DPE graduates. It has argued that there is need to explore the views of the graduates of the Diploma in Primary Education (DPE) programme about their mastery of the desired teacher competencies during training to be able to apply them to improve pupils' performance in primary schools in Botswana.

## References

- Akinrinola, F. Y. & Ogegbo, A. A., (2020). Competency-based education in Africa: Exploring teachers' perceptions, understanding and practice. *Journal of Teacher Education through Flexible Learning in Africa*, 2, 1-24. https://doi.org/10.35293/tetfle.v2i1.86
- Aras, S. (2018). Teacher education systems of Australia, Singapore and South Korea: A caseoriented comparative study. *Baskent University Journal of Education*, 5(2) 233-242. http://buje.buskent.edu.tr/index.php/buje/artical/view/118

Botswana Qualification Authority. (BQA) (2015). Gaborone: Government Printer.

- Caena, F., & Redecker, C., (2019). Aligning teacher competence frameworks to 21<sup>st</sup> century challenges: The case for the European digital competence framework for educators (DIGCOMPEDU). *European Journal of Education*, 54, 356-369. https://doi.org/10.1111/ejed.12345
- Department of Teacher Training and Technical Education. (2019). *TT&TE-strategic plan-*2019. Teacher Training and Technical Education. Government Printer.
- Dominguez-Lloria, S., Fernandez-Aguayo, S., Marin-Marin, J. A. & Alvarinas-Villaverde, M. (2021). Effectiveness of collaborative platform for the mastery of competencies in the distance learning modality during COVID-19. Sustainability 2021, 13, 1-14. https://doi.org/10.3390/su13115854
- Fantini, A. E.; Arias-Galicia, F. & Guay, D. (2001). Globalisation and 21 century competencies: Challenges for North American higher education. Consortium for North American Higher Education Collaboration (CONAHEC): Understanding the difference. Publication number 2A343, (pp. 1-33). Colorado: Western Institute Commission for Higher Education. https://conahec.org
- Goodwin, A. L., & Low, E. L. (2021). Rethinking conceptualisations of teacher quality in Singapore and Hong Kong: A comparative analysis. *European Journal of Teacher Education*, 44(3), 365-382. <u>https://doi.org/10/1080/02619768.2021.1014117</u>
- Junaid, M. I. (2011). An evaluation of the commonwealth of learning-UNICEF child friendly school project in Swaziland, Lesotho, Botswana and South Africa. Vancouver: COL.
- Kabir, M. (2024). Teachers for all: Investigating in Botswana's teacher workforce. UNICEF Innocenti-Global Office of Research and Foresight. Florence: Italy.
- Kasule, D., Mapolelo, D., & Kasozi, J. A. (2019). A model for continuing professional development of serving primary school teachers in Botswana. *MOSENODI: Journal* of the Botswana Educational Research Association 22(1), 57-67. https://journals.ub .bw//index.php/mosenodi/article/view/1597.

- Keller-Schneider, M., Zhong, H. F., & Yeung, A. S., (2020). Competence and professional development: Teachers' perceptions at different stages of career. *Journal of Education* for *Training*, 46(1), 36-54. https://doi.org/10.1080/02607476.2019.1708626.
- Kellogg, S. E. (2018). Competency based education: Best practices and implementation strategies for institutions of higher learning. (Doctorate Dissertation). Concordia University St. Paul, College of Education, (pp. i-109). https://digitalcommons.csp. ed/edd/3.
- Kesici, A. E. & Cavus, B. (2019). The evaluation of teacher training programs in the United States of America in terms of student-centered practices used in class. *Journal of Education and Training Studies*, 7(10), 78-89. https://doi.org/10.11114/jets.v7i10. 4462/
- Kuyini, A. B., Major, T. E., Mangope, B. & Alhassan, M. (2020). Botswana teachers' competencies perceived as important for inclusive education. *International Journal* of *Inclusive Education*, 28(7), 1-17. https://doi.org/10.1080/13603116. 2021.1988156
- Latchanna, G., Vankataramana, M., & Garedew, A. (2019). Exploring professional development of teachers: A case of Ethiopia, Finland, India and Singapore. *MIER Journal of Studies, Trends and Practice, 9*(2), 121-133. https://doi.org/10.52634/mier/2019/v9i2/1386
- Major, T. & Mulvihill, T. M. (2018). Problem-based learning pedagogies in teacher education: The case of Botswana. *Interdisciplinary Journal of Problem-Based Learning*, 12(1), 1-11. https://doi.org/10.7771/1541-5015.1543
- Mandel, S. (2018). The competencies of a modern teacher. *International Journal of Research in Engineering, Science and Management, 1*(10), 351-360. www.ijresm.com
- Mardapi, S. D., Sugiman & Herawan, T. (2018). Assessing teacher competence and its follow-up to support professional development sustainability. *Journal of Teacher Education and Sustainability*, 20(1), 106-123. DOI: 10.2478/jtes-2018-0007
- Ministry of Education and Skills Development. (2016). *The national curriculum and assessment framework (NCAF)* (Unpublished). Gaborone: Ministry of Education and Skills Development. Ms.
- Ministry of Education and Skills Development (2010). *Draft Colleges of Education Diploma in Primary Education curriculum* (Unpublished). Gaborone: Department of Teacher Training and Development.

- Ministry of Education (2000). *Management manual for colleges of education*. Gaborone: Government Printer.
- Mohamed, Z., Valcke, M. & De Wever, B. (2017). Are they ready to teach? Student teachers' competence framework. *Journal of Education for Teaching*, *43*(2), 151-170. Retrieved from https://doi.org/10.1080/02607476.2016.12577509
- Mutende, R. A., Imonje, R. K., Akala, W. (2021). Pre-service teacher integration of constructivist ideas in the lecture method. *International Journal of Learning, Teaching and Educational Research, 20*(6), 277-298. https://doi.org/10.26803/ijlter.20.6.15 293/
- Mwila, K. Namuchana, M Lufungulo, E. S. Chinemerem, O. G. Mundenda, S. Mungwatu, D. Nang'andu, C. & Hikaambo (2022). Teachers' continuous professional development (CPD) in South African Development Community (SADC): A review of policies, approaches and implementation strategies in enhancing teacher competency. *International Journal of Humanities and Social Sciences*, 5, 104-124. https://doi.org/10.1007/978-3-030-12708-4
- Ngao, A. I. & Xiaohong, T. (2020). Teacher education in Tanzania: Pre-service teacher preparation for the 21<sup>st</sup> century. *Journal of Education and Practice, 11*(11), 61-69. https://doi.org/10.7176/JEP/11-11-09
- Potolea, D., & Toma, S. (2019). "Competence" concept and its implications on teacher education. *Journal of Educational Sciences and Psychology, IX (LXXI)* (2), 01-09. https://www.researchgate.net/publication/357657841
- Rajandiran, D. (2021). Singapore's teacher education model for the 21<sup>st</sup> century (TE21). (pp. 59-77). In F. M. Reimers (Ed.). *Implementing Deeper Learning and 21<sup>st</sup> Education Reforms*, (eBook). https://doi.org/10.1007/978-3-030-57039-2
- Republic of Botswana (2015). *Education and training sector strategic plan* (ETSSP-2015-2020). Gaborone: Government Printer.
- Republic of Botswana (1994). *The revised national policy on education* (RNPE). Gaborone: Government Printer.
- Ruth, C. & Ramadas, V. (2019). The Africanised competency-based curriculum: The twentyfirst century strides. *Shanlax International Journal of Education*, 7(4), 45-51. https://doi.org/10.34293/education.v7i4.640
- Sturgis, C & Casey, K. (2018). Designing for equity: Leveraging competency-based education to ensure all students succeed. Competency Works, iNACOL https://files.eric.ed.gov/filltext/ED589907.pdf

- Sulaiman, J. & Ismail, S. N., (2020). Teacher competence and 21<sup>st</sup> century skills in transformation schools. *Universal Journal of Educational Research*, 8(8) 3536-3544. Retrieved from http://www.hrpub.org. DOI:10.13189/ujer.2020.080829.
- Urch, G. E. (1995). Formative evaluation of the pilot diploma programme in primary education: Tlokweng College of Education (Unpublished). Gaborone: Department of Teacher Training and Development.
- West, C., Baker, A.A., Ehrich, J. F., Woodcock, S., Bokosmaty, S., Howard, S. J., Eady, M.J. (2018). Teacher disposition scale (TDS): Construction and psychometric validation. University of Wollongong: Faculty of Arts, Social Sciences and Humanities, (pp. 1-16). https://ro.uow.ed.au/sspapers
- Yang, J. A. & Tan C. (2022). Initial teacher education in Singapore and South Korea. In M. S. Khine & Y. Lui (2022). (Eds.). Handbook of Research on Teacher Education: Innovations and Practice in Asia, 141-157. https://doi.org/10.1007/978-981-16-9785-2\_8