Dynamics of Reflective Practice for Public Health Teaching and Learning Process, a Theoretical and Empirical Review

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ABSTRACT

This article investigated dynamics of reflective practice for public health teaching and learning process. This empirical and theoretical review specifically focused on unearthing benchmarks of reflective practice and their importance to public health teaching and learning process. Data was generation through a theoretical and empirical review on the existing literature. Delving into literature, findings have shown that reflection in action and reflection on action are the two major benchmarks of reflection that lecturers for public health can utilize to maximize optimum results as they teach students for public health. The inquiry shows that Reflection in action is a self-awareness process in which lecturers pause and think about the progress of their teaching. In the similar context, Reflection on action is a self-awareness process in which lecturers pause and think back after lesson delivery. Through this review, it has been noted that reflecting on their teaching pedagogies, lecturers can identify what works well and what needs improvement in their teaching. This helps them adapt and enhance their teaching strategies to better meet the needs of their students and the community they intend to develop. Through reflection, lecturers can constantly seek ways to refine their practices and stay updated with the latest educational trends and diverse needs of their students. This article concludes that reflection can guide lecturers in establishing teaching techniques toward improvement. Thus, this article recommends that Higher learning institution should come up with proper teaching frameworks as this can help lecturers to check their teaching methods if they are in tandem with the needs of the students and the communities they intend to develop.

Keywords: Dynamics, Reflective Practice, Teaching and learning process, theoretical and empirical review.

INTRODUCTION

Reflective practice is one area that has received special recognition among educationist due to its comparative advantage on how teaching and learning process can be improved. According to Riyanti (2020), the practice of reflective thinking affects the teachers' critical thinking on how to see a problem as the substance of reflection for the future learning. Habib (2017) posits that reflective practice is an ongoing, vibrant process of thinking carefully, honestly, and critically about all aspects of professional practice. These publications argue that reflective practice is an activity of organized awareness to self-assessment and self-analyzation through which teachers develop new teaching strategies and techniques as one way of fostering good performance among students. Thus, schools all over the world are being challenged to implement teaching and learning strategies that will prove effective for both the teachers and students (Harris et al., 2003).

Evidence also shows that one of the factors that can influence the quality of teaching and learning is reflective practice (Hickson, 2011). This is premised on the thinking that learning consists of emotional, social and cognitive dimensions. The cognitive aspects are most easily measured through assessments or performance while the emotional and social aspects may be less easily captured. However, reflective practice frameworks could be used to support the development of both dimensions (Illeris, 2003).

The process of Reflective practice takes place when an individual explores an experience; they have had to identify what happened, and what their role in the experience was, including their thinking and behavior as well as emotions (Fook et al., 2007). This brings about the ability to come up with strategies that respond positively to similar future occurrences. The honesty and comprehensive application of reflective practice has in many times shown an improvement in performance as it allows individual's experiences to make informed decisions on what works best when undertaking a particular activity (Lew et al., 2011). In connection with the foregoing submission, this paper attempts to investigate into dynamics of reflective practice on what works best for public health students.

Theory

This article was guided by Danielson's teaching framework. This framework is a research-based set of components of instruction grounded in a constructivist view of learning". The twenty-two components are clustered into four domains and include descriptors of instructional practices toward effective teaching. The four domains include: planning and preparation, classroom culture and climate, instruction, and professional responsibilities. Danielson (2012) framework emphasized, "teachers' professional learning to include self-assessment, reflection on practice, and professional conversation". The salient features of this framework are that if teachers are to reflect on their teaching, it can enable them to measure their own teaching performance and can facilitate discussion on effective instructional practices. It is also argued that a teaching framework can be used as a guide for teachers' self-reflection as teachers examine components within the instructional framework to improve on their daily teaching practices. This is supported by Marzano et al. (2011) who discussed how an established model for good teaching serves as a way for teachers to use a wide range of approaches to generate and receive feedback about their teaching.

In the context of public health teaching and learning, a teaching framework can foster self-reflection, promote collaborative inquiry, and increase collegial dialogue to support teachers' improvement of their teaching. Therefore, it can be argued that if lecturers from higher learning institutions offering public health courses were to reflect on their teaching, it can be an opportunity of knowing effective pedagogies that can be used during public health teaching and learning process.

LITERATURE REVIEW

According to Hargreaves (2016), reflective practice is central to medical education and a career in medicine (albeit not peculiar to this profession alone). The use of reflection in education and training for professional development has been prominent within the literature for nursing, teacher education and social care, and more recently in the training of doctors in courses related to public health and health promotion (Boud, 2010). In public health, while no formal training or teaching of reflection takes place, it is expected as part of continuous professional development (Jayatilleke & Mackie, 2012). The process of reflection and reflective competency are powerful for maximizing deep and lifelong learning, and for achieving higher levels of responsive professional practice.

The quality of education in Zambia and its relevance to industry remains elusive and a number of objectives relating to quality in the Educating Our Future Policy of 1996 remained unachieved in certain instances, going by the performance reports of 2013-2014. In Zambia, there has been a concern in the way teaching and learning is handled at different levels of education including higher learning institution. This has compelled the Government of the republic of Zambia through the relevant Ministry to make significant strides in upgrading lecturers' skills, curriculum review and development as interventions for improving quality education. In addition, regulatory bodies such as the Higher Education Authority (HEA) have been established to ensure adherence to standards. Despite these strides, quality and relevance has remained a challenge due to a number of factors. These include inappropriate curriculum, inadequate qualifications of academic staff; insufficient training materials and equipment; and poor teaching and learning facilities. This is especially prominent in the areas of Science, Technology, Engineering and Mathematics (STEM) and innovation (National Higher Education Policy of 2019).

Disu (2017) explains that when lecturers are embedded in reflective practice, they will be able to examine their practices, implement alternative methods and share the best practices with colleagues. However, when public health lecturers do not engage in the process of reflective practice, teaching becomes haphazardly, accidental and superficial (Stanton, 1990). Additionally, Braun & Crumpler (2004) note that when lecturers do not reflect on their practice, they would be more likely to teach in the same way they were taught and this would result in the repetition of the same ineffective strategies.

Pedagogical approaches to Reflective Practice

Reflective approaches have been increasingly adopted in health and social care education. However, how reflective practice is taught in and between professional courses differs extensively. This review of literature identified and categorized literature available on teaching reflective practice in health and social care and compared this with what was available interprofessionally and multiprofessionally. Limited examples comparing how reflective practice is taught such as professional development, refresher courses in different professions were found. The lack of empirical data has implications on teaching and learning process (Norrie et al., 2012).

Growing body of evidence advocates for the use of teaching frameworks that promote self-assessment and collaborative inquiry and foster a common language concerning what constitutes good teaching practice (Marzano, 2007 & Danielson, 2008). The aforementioned contestation is premised on their research-based teaching frameworks that provide attributes for good teaching and a structure for analyzing teachers' demonstration of knowledge of content and skills, engagement of students in learning, establishment of classroom routines and procedures, and willingness to take part in continuous professional learning. Both Marzano (2007) & Danielson (2008) argues that teachers must examine their teaching practices, set growth goals, and use focused feedback to achieve those goals. For this reason, teaching frameworks that serve as tools for reflection can guide teachers in establishing teaching techniques toward improvement. Marzano (2012) argues that all experts have complex models that delineate what to do in specific situations. In other words, they have models of effective performance".

In reference to the above argument, a report by Wiener (2013) shows how the framework for teaching, developed by Danielson (2012), was adapted to reflect Common Core State Standards' (CCSS) expectations and used to observe teachers in Hillsborough County Public School in Tampa, Florida. The observation report revealed that most teachers struggled with using questioning and instruction techniques in Danielson's (2012) framework for teaching. As a result, Hillsborough County Public School decided to integrate teaching techniques from the teaching framework with Common Core content. This situation revealed that teaching frameworks can provide a process for reflection and can promote school-wide inquiry focused on a common language and teaching expectations. Thus, this article argues that lecturers have a duty to check their mode of lecturing as this can lead to the development of teachers' expertise needed to foster student learning.

Empirical evidence by Hargreaves (2016) on reflective practice in medical education at Leeds University had shown that structured support and learning opportunities built into the spiral curriculum proved to be an effective way of facilitating deeper and meaningful reflective practice over time. Scaffolding opportunities to develop reflective competence through facilitation for learning, using a wide range of related topics delivered during the undergraduate course, is seamlessly promoting reflectivity. The supported (scaffolded) learning is facilitated by means of small-group discussions and questioning by the tutor or coach to prompt continual reflection, central to most models of a reflective process. This competence moves to self-questioning by the individual, demonstrated in conversations and formative assessments, and becomes part of the repertoire of learning (Hargreaves, 2016).

Forms of reflections and their relevance

It is important to unearth some benchmarks of reflective practice that may be cardinal to public health teaching and learning process. According to Dewey (1993), reflection in action and reflection on action are the two major forms of reflection that can be employed by lecturers. In the context of Reflection in action, this denotes self-awareness process in which we pause and think about the progress of an activity. In the context of Reflection on action, this is a self-awareness process in which we pause and think back after something has

happened. Therefore, this article argues that refection in action may require lecturers for public health to pause as they deliver their lessons to their students and assess if students are able to follow what is being taught. In the light of reflection on action, this may require lecturers to think back and be able to reflect of their action after teaching if the objectives of the lessons have been achieved.

Further, John Dewey (1993) posit that an individual can reflect on things, particularly when there is a real problem or a sense of difficulty by merely 'thinking' about them. Thus, this could be the reason among others why Dewey suggested three steps of reflection: (1) problem definition, (2) analysis, and (3) generalization. He emphasized the distinction between taking action based on reflection, as opposed to impulsive thinking. It can be substantiated that Deweys' ideas on reflective practice in teaching demonstrates several purposes for reflection ranging from Teacher's self-reflection as a tool for self-knowledge, Reflection for professional development, Reflection to aid research on teaching, Reflection to enhance student learning experience and Reflection as a teaching and assessment tool. In relations to benchmarks of reflective practice and their importance, Donald (1987) observed that reflection is an important tool for beginning teachers as it improves their practice. Equally, Thuynsma (2001) discussed reflection in teaching as when teachers encounter uncertain conditions or critical incidents. In the context of this article, ideas by Thuynsma demonstrates that idea that teaching and learning process is associated with challenges. Hence, lecturers should reflect on their teaching and device mechanisms on how they can overcome such challenges to achieve the agenda of quality education that responds to societal needs.

Effectiveness of Reflective Practice

Reflection has been reckoned to promote optimum effectiveness and efficiency in an ever evolving and complex health-care system through practitioners auditing their own Reflection reminds qualified practitioners that there is no end point to learning about their everyday practice (Driscoll, 2001). Where it exists, the practice of reflection has tended to focus on individual professionals at specific points in time and/or on specific elements of practice. This, however, can form only a part of the experience as many public health actions involve many disciplines. Often action takes place across multi-sectoral teams and involves multi-phased interventions. Programme delivery is often longer term, should be population focused and policy led (Fleming, 2007).

In view of reflective practice, Tsingos et al., (2015) conducted a study to determine the effectiveness of integrating reflective practice activities into a second-year undergraduate pharmacy curriculum and their impact on reflective thinking ability. The research focused on the impact of a new learning and teaching module and assessment task integrated into an undergraduate pharmacy curriculum. These resources were designed to enhance pharmacy student understanding of reflective practice and improve reflective thinking skills. Student responses to the Reflective Thinking Questionnaire (RTQ) pretest and posttest showed an improvement in their reflective thinking ability. Thus, integrating reflective activities into curriculum enhanced reflective capacity (Tsingos et al., 2015).

Empirical evidence on first year medical students has highlighted that 'Net Generation' learners have a preference for group based and creative activities rather than using written text-based approaches (Sandars & Homer, 2008). Experience with the use of multimedia (audio, photographs and video) and its creative use for reflection, such as in digital storytelling, appears to not only increase student engagement but also increases the depth of reflection (Sandars et al., 2008). Storytelling has been used to effectively engage students and healthcare professionals in reflection and reflective practice (McDrury &Alterio, 2003). Individuals often require initial training to develop their storytelling skills and a structured approach is useful. A typical sequence for a story is a beginning, middle and an end. The use of reflective writing for reflection in undergraduate medical students has been described (DasGupta &Charon, 2004).

A study conducted by Fiona and colleagues used a coding scheme to determine the level of reflection of student journals, as well as a qualitative approach of thematic analysis to investigate themes within the student's reflective journals. Findings of this study suggest a low level of student reflection; this evidence suggested that writing reflections can demonstrate the presence or absence of reflective thinking. In addition to reflecting on what they had learnt, students in this unit reflected on their career aspirations and their own

strengths and weaknesses when working with peers. This is particularly important for a first year, first trimester unit, where the students have no or a limited social group at university and are still transitioning from high school. This result of students not engaging in reflection at the deepest level may be a reflection of either their position in their degree or the teaching that they received around reflective practice. Either way, the positive outcomes from this study suggest that this task is useful in assisting students to think about their course, careers and the way that they work with their peers (Fiona et al., 2015).

In the process of reflection, one publication point out that an additional possibility to provide the learner with manageable goals to develop their emotional intelligence is to use the model suggested by McShane et al,. (2013). This indicates that the learner begins at the lower level of competence before it is possible to move up. It would, however, be helpful to indicate to students that these levels are likely to overlap; for example, managing one's own emotions in response to a growing awareness of others' emotions. Findings from another research by Heydari & Beigzadeh (2024) on Medical students' perspectives of reflection for their professional development revealed that reflection encompassed self-awareness (self-acceptance, metacognitive self-exploration, semantic perception); professional competence (self-directed learning, professional commitment); and reflection culture (organizational climate, educational structure). The Students explained the undeniable impact of reflection on individual and self-directed learning and the development of professional commitment during their studies. The findings of this study, provide better understanding of the lack of a positive organizational atmosphere, inappropriate educational structure and intensive clinical rotations, as well as lack of trust between students and medical teachers, which negatively impact on or hinder professional development. In the context of this article, it is vital that lecturers of public health to reflect on their teaching so as to avoid miss match during teaching and learning process as observed by (Heydari & Beigzadeh,2024).

Reflective Practice in relation to professional development

Reflection enhances personal development by leading to self-awareness and if the focus of reflection is improvement in patient care, it helps to expand and develop clinical knowledge and skills (Cotton, 2001). The process of reflection slows down activity providing time to process material of learning and linking to previous ideas (Moon, 2002).

Public Health Continuous Professional Development and the reflection that forms part of it can be viewed in light of adult learning as individuals need to take ownership and engage in setting their learning agenda (Bennetts et al., 2012). Therefore, the mere act of reflecting supports the andragogical model as adults need to be able to establish the purpose of the activity undertaken and identify how to cope effectively with real-life situations. There needs to be opportunity to reflect as individuals as well as in teams in an acute manner while carrying out the longer-term projects.

The practitioner could then experience surprise, puzzlement or confusion associated with the situation. Reflecting on the phenomena that is being experienced and prior understanding which have implicated, the resulting behavior will lead the learner to new understanding (Dugdill, 2009).

The practice of self-reflection in academic achievement has been captured in disciplines that contribute to Public Health. A positive impact was noted through reflective journal writing over only scientific report writing for those studying biology. This was evidenced through greater awareness of cognitive strategies and conceptions of learning when learners constructed more complex and related knowledge when learning from text (Schmidt, 2011). In studies of mathematics students, while reflection was not necessary for high grades of achievements, it supported better conceptualization of meanings of the technical definitions. Practice, shaped through reflection can develop professionals, organizations and society. This is already considered important within health promotion (Schmidt, 2011). Therefore, its merits may be overlooked. One can argue that this approach of reflecting on an issue is too straight forward and, in practice, difficult issues may take months to reflect on. However, a structure to guide the process of reflection on the content and the process of learning would be deemed useful (Fleming, 2007).

Boud (2010; p.36) considers that reflection within professional practice "is a way of thinking about productive work, not strategy or technique", and further suggests that "we do need to move beyond older conceptions of reflective practice that are insufficiently rich to generate further work". We ought to be open-minded enough to

consider other paradigms of reflection, experimenting with parameters such as the number of individuals involved and the form that the reflection takes.

The Capacity building for deep learning and reflective practice in medicine is imperative to ensure recognition of the complex elements of patient safety and safe practice. "Deep learning can be integrated with current experience and knowledge, resulting in rich cognitive networks that the individual can draw on in practice" (Kaufman & Mann, 2010). This suggest that Successful reflection requires the individual to recognize the importance of reflection for both personal growth and professional development.

CONCLUSION

This theoretical and empirical review has shown that the benchmarks of reflection such as reflection on action and in action are important strategy that lecturers can use to promote quality teaching and learning process in higher learning institutions especially in institutions offering public health programmes. It has been argued that reflection is essential in the teaching and learning process for improved Teaching Practices. Reflecting on their teaching pedagogies, lecturers can identify what works well and what needs improvement in their teaching. This helps them adapt and enhance their teaching strategies to better meet the needs of their students and the community. This article has also shown that reflection offers an opportunity for continuous improvement where lecturers can constantly seek ways to refine their practices and stay updated with the latest educational trends and diverse needs of their students. More important, it has been indicated that flection is vital tool lecturers as this encourages them to participate in professional development opportunities, collaborate with colleagues, and share best practices, contributing to a supportive and collaborative teaching relevant to solving society problems.

RECOMMENDATIONS

Based on this theoretical and empirical review, the following are the recommendations;

i. There is need for lecturers to seek ways or mechanisms on how to constantly refine their pedagogical principles as this can help to improve their teaching
ii. Higher learning institution should come up with proper teaching frameworks as this can help lecturers to check their teaching methods if they are in tandem with the needs of the students.
iii. The Ministry of Education should consider creating a platform for sensitizing lecturers on reflective teaching where all lecturers can hold conferences. This may allow lecturers to identify their colleagues teaching similar courses and may begin to share experiences, challenges, exchange notes and best practices for teaching and learning.

Competing interest

The authors have no competing interest.

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