

**UNIVERSITY OF EDUCATION, WINNEBA**

**ANALYSIS OF TEACHER TRAINEES' UNDERSTANDING AND USE  
OF REFLECTIVE PRACTICE IN THE TEACHING OF PHYSICAL  
EDUCATION**



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**MASTER OF PHILOSOPHY**

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**UNIVERSITY OF EDUCATION, WINNEBA**

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EDUCATION**

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**A thesis in the Department of Health Physical Education, Recreation and Sports  
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**JULY, 2021**

## DECLARATION

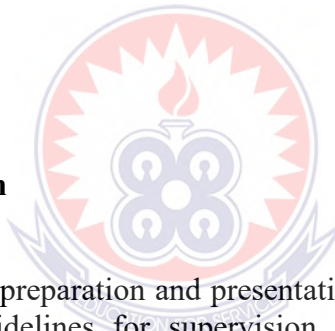
### Student's Declaration

I, **Thomas Okyere**, declare that this Thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

**Signature:** .....

**Date:** .....

### Supervisors' Declaration



I, hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of Thesis as laid down by the University of Education, Winneba.

Dr. Patrick Boafo Akuffo (Principal Supervisor)

**Signature:** .....

**Date:** .....

## **DEDICATION**

To my wife, Mrs. Ernestina Okyere and our lovely children.



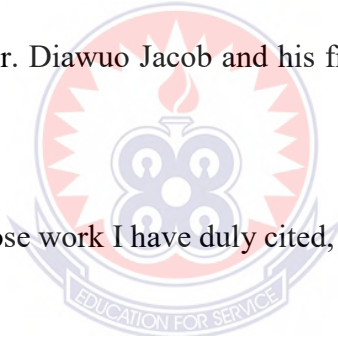
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Finally, to all authors whose work I have duly cited, I am grateful.



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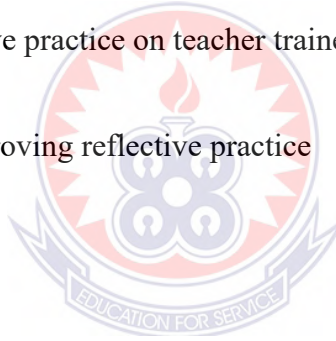
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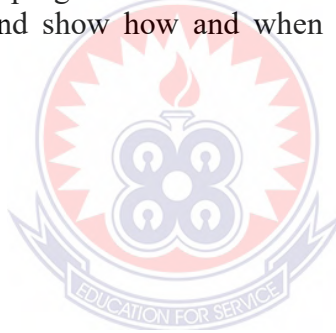
## ABBREVIATIONS

CPD	:	Continuous Professional Development
ITE	:	Initial Teacher Education
NASPE	:	National Association for Sport and Physical Education
NCATE	:	National Council for Accreditation of Teacher Education
PETE	:	Physical Education Teacher Education
QTS	:	Qualified Teacher Status
RFTPE	:	Reflective Framework for Teaching in Physical Education
RPK	:	Relevant Previous Knowledge
TDA	:	Training and Development Agency



## ABSTRACT

The purpose of this study was to analyse the understanding and use of reflective practice among teacher trainees of colleges of education in Bono, Bono East and Ahafo regions of Ghana. The study is a mixed-method research based on a concurrent survey design. The population of the study comprises one thousand four hundred teacher trainees and fifteen tutors (mentors). Purposive and disproportionate stratified sampling techniques were used in selecting five (5) mentors and three hundred and two (302) teacher trainees respectively for data collection. The study used Questionnaire and semi-structured interview guide. Data were thematically analysed in relation to the research questions. The study found out that reflective practice is a common phenomenon in the colleges of education studied and the majority of the teacher trainees know the value and use of reflective practice in the teaching and learning process. Moreover, the study revealed that reflective practice is a tool for successful lesson delivery and its frequent use would yield to a constructive assessment and evaluation. The findings confirmed the *Pre-teaching, In-teaching, Post-teaching* (PIP) model which says that adequate preparation and reflectivity must occur throughout the teaching and learning cycle so as to enhance teacher trainees understanding and use of reflective practice. The study recommends that mentors should intensify their supervision to reinforce reflective practice become part and parcel of teacher trainee's programme of activities for effective teaching as to be able to explain the concept and show how and when they apply it in stages of lesson development.



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

Physical Education is an integral part of the list of subjects that are taught in basic schools in Ghana. The teaching of the subject has become increasingly important due to the growing levels of obesity and inactivity among youth of school-going age (Bernard, Lavallee, Gray-Donald & Delisle, 1995). The task lies in the hands of teachers at this level to ensure that these children are put through meaningful Physical Education experiences in order to develop physical activity habits and to accumulate desirable amounts of physical activity. This will enhance their health and help them develop healthful habits. These can, however, be achieved through quality teaching. According to Siedentop, (2009), quality teaching and effective school programmes have always been of great interest in the educational community.

Literature has it that teaching has become a more complex and demanding task than ever before and requires much preparation and organization from the teacher (Gore, 2001). It has also been revealed in research that teacher education programmes have been criticized for not preparing teachers sufficiently to educate future generations of students (Darling-Hammond, 2000).

Reflective practice in physical education and physical education teacher education (PETE) revolves around notions like reflection, reflective practice, reflective teaching, and the reflective practitioner. These have been part of the educational discourse for quite some time. Indeed, reflection has been described as the ‘grand idea in teacher education’ (Jay & Johnson, 2002).

While Dewey (1933) modeled reflection on scientific thinking, i.e. as a systematic and detached experimentation with hypotheses, Schön's (1991) notion of reflection-in-action is connected to a form of immediate insight (Molander, 2008). Thus, the concept does not have an unequivocal definition or common understanding. As Fendler (2003) points out:

“Today's discourse of reflection incorporates an array of meanings... Reflective teaching has become a catchall term for competing programs of teacher education reform”.

The absence of reflections on lessons taught by some teachers has been taken as evidence of lack of informed actions in teaching. This is mainly because; teachers who take actions in teaching without reflections may not be aware of problems that need to be attended to in teaching. It is through informed decision that teachers' actions have a chance of achieving the desired results (Brookfield, 1995).

One well-known way of framing reflective practice was presented by van Manen (1977), who suggested three levels of reflectivity. The first level, technical reflection, is concerned with reflecting on the *means* rather than the *ends* of teaching. That is, reflections attend to the efficiency and effectiveness of the means a practitioner decides to use and how the delivery of these means can be improved. The next level, practical reflection, is concerned with understanding the assumptions underpinning practical actions. As opposed to technical reflection, the practitioner tries to clarify the norms and values of the means, rather than how the means are used. The third level, politico-ethical reflection, sometimes referred to as critical reflection, is concerned with reflecting over the ends in light of wider social, political and ethical contexts.

Critical reflection “involves a constant critique of domination, of institutions, and of repressive forms of authority” (van Manen, 1977).

In the context of Physical Education (PE), Tsangaridou and O’Sullivan (1994) developed a framework called reflective framework for teaching in physical education (RFTPE). The RFTPE is primarily developed from a synthesis of literature on reflective practice. In addition, data from a study of pre-service teachers’ reflective practice was used in the final conceptualization of the framework. The RFTPE consists of two major categories; the *focus* of reflection and the *level* of reflection, which is divided into technical, situational or sensitizing, mirroring van Manen’s (1977) model. The second category in RFTPE is represented by the levels description, justification and critique. These levels can be combined in different ways (e.g. description and justification, description and critique, or description, justification, and critique). As an example, a technical-descriptive reflection involves giving descriptive information about instructional or managerial aspects of teaching. A sensitizing-descriptive, justificatory and critical reflection involves providing descriptive information combined with logical explanations and evaluations of an action from a critical, socio-political perspective.

In a review of the literature on reflective teaching, Tsangaridou and Siedentop (1995) found little empirical research on the topic in the PE and PETE literature. The work they reviewed tended to be prescriptive rather than descriptive. That is, the studies focused on strategies for improving reflection among pre-service teachers rather than describing what reflection is and how it actually takes place in PETE or in the professional work of PE teachers.

Ballard and McBride (2010) indicate that in the context of PETE, most studies investigate the pre-service teachers' progression in reflective practice as a result of enrolment in teaching method courses in combination with practicum experiences. The content and implementation of these courses vary greatly as they take place in different countries (e.g USA, Canada, Cyprus or Finland) and thus influenced by different contexts for PETE. Several studies reported that pre-service teachers develop their reflective capabilities only to a limited degree (Placek & Smith, 1995). As cited or recorded in Cobbold (2011), teaching practicum, variously called teaching practice, professional practice, professional experience, practical experience, school experience, has always been part of teacher education regardless of the approach taken.

The Standard Council of the Teaching Profession (1998) defines teaching practicum as a period of time spent in schools where the prime focus for the trainee teacher is to practice teaching under the supervision of a mentor who should be trained for this job, to spend time with teachers and classes, observing, teaching small groups and whole classes, and undertaking the range of tasks that make up the teacher's role including planning, assessing and reporting. Some research documents criticize the way teacher education institutions prepare pre-service teachers for teaching (Korthagen, 2001; Stuart & Thurlow, 2000). But other research reports the positive effect of the practical experience in teacher education.

This research indicates that during teaching practicum, pre-service teachers learn to teach by means of the personal experience they get in the field (Britzman, 2003). They fully appreciate the craft, professional demands and dimensions of teaching, learn the realities of day-to-day teaching and simultaneously learn to put pedagogical



theory into practice. Considering the bridge between theory and practice, the practicum also provides the context in which pre-service teachers develop a personal teaching competence (Smith & Lev-Ari, 2005).

In other words, during the practicum, pre-service teachers learn the lessons of experience, which prepare them for the full scope of teachers' role, for accomplishing the central purposes of schooling with all students, and for developing the ability and disposition to keep on growing (Zeichner, 1996). Pre-service teachers' experiences in the schools also shape their conception about teaching, learning and school contexts, and their attitude to their work and to the children they teach (Hodge, Davis, Woodward & Sherrill, 2002).

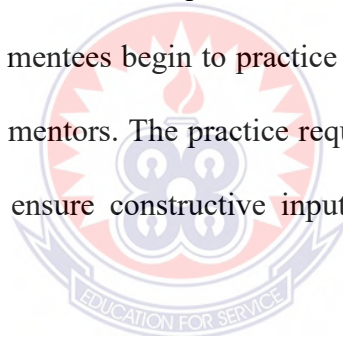
Falender et al. (2004) also postulate that practicum is a form of experiential learning that could be described as field-based learning, work-based learning, learning by doing or learning from action. Teaching practicum is an opportunity to observe and work with real students, teachers, and curriculum settings. Practicum does not only bridge the gap between theory and practice in learning to teach but it provides the opportunity for pre-service teachers to develop their personal teaching competence (Brouwer & Korthagen, 2005). Akyeampong and Lewin (2002) recognize practicum as an essential component of Initial Teacher Education (ITE) programmes in that it provides opportunity for pre-service teachers to apply the knowledge and theories learned to classroom situations.

During practicum among the colleges of education, teacher trainees are generally supposed to do a year-long teaching practice at their respective places of posting. Prior to the final phase of the "in-in-out" teaching professional development programme, learners stay on campus and go through the rudiments of the teaching

profession for two-years. Workshops are organised preceding the one-year programme ushering them into the final phase of the programme. During the period, they are taken through all the activities in the programme as well as the expectations.

The internship activities begin as the teacher trainees report to their various schools of practice and are introduced to their lead mentors and mentors of the programme. Due to the collaborative nature of the school and the community hosting the trainees, the lead mentors further introduce the learners to the chiefs and other opinion leaders to be welcomed and integrated into the community.

Classroom activities start as the mentees are made to observe the practices of their mentors for two weeks or more to acquaint themselves with the standards and the environment, after which mentees begin to practice their teaching under the guidance of their mentors and lead mentors. The practice requires that pre-conference and post conferences are done to ensure constructive input and effective evaluation of the lessons.



Scheduled dates are set for the supervisors from the colleges to go to the field to supervise the teaching practice activities in order to keep track of the standards set for the teaching profession. Each teacher trainee should at least be supervised from three different supervisors and average mark is calculated out of the accumulated marks obtained to grade them at the end of the programme. In sum, teacher trainees are assigned to return to campus for two or few weeks to write two final papers to end the semester.

From the above discussions, practicum is a medium through which teacher trainees are given the opportunity to experience reflective practice in order to equip

themselves with the needed skills to meet the demands of the profession. The experiences gathered through the process aid the teacher trainees to translate pedagogical theory into practice.

As a result of this, physical education teacher education programmes (PETE) have emphasized both the subject matter and pedagogical preparation that teachers receive and have created alternative pedagogies for teacher education that link theory and practice (Lampert, 2010).

Linking theory and practice in general inclusive teaching, future physical educators' competencies for teaching students with disabilities depend on how well Physical Education Teacher Education (PETE) programmes provide disability related knowledge and experiences (Hodge et al., 2002). PETE programmes are designed to develop cognitive and behavioural teaching competencies of pre-service teachers, and this training process significantly affects the root of their teaching behaviour in the future. Each PETE programme should have a particular teacher education curriculum based on national- and state-level teacher education standards and benchmarks, such as Professional Standards for the Accreditation of Teacher Preparation Institutions (National Council for Accreditation of Teacher Education [NCATE], 2008) and Advanced Standards for Physical Education (National Association for Sport and Physical Education [NASPE], 2008). Particularly, NCATE and NASPE standards currently require that PETE programmes provide diversity-based courses and experiences that facilitate pre-service teachers' ability to work with diverse students (e.g., students with disabilities) in K–12 schools (Ayers & Housner, 2008). In addition, beliefs and attitudes of faculty in each PETE programme may substantially influence how to train the pre-service physical education teachers. In sum, the PETE

programmes should play a pivotal role in enhancing and changing pre-service teachers' teaching behaviours to promote inclusion.

In addition, reflective teacher education has been introduced as a suitable approach for use in teacher education programmes (Ottesen, 2007). Because of how complex the nature of teaching and learning is, teachers are required to be reflective and be able to adjust to the diverse classroom situations (Procee, 2006). It is very important to note that teachers who have their jobs at heart reflect on whatever transpires in their classrooms. They do this before, during and after their lessons. This gives them an idea about the effectiveness of their teaching.

## **1.2 Statement of the Problem**

According to Jasper (2006), reflective practice is purposeful and thoughtful activity that enhances professional understanding and help to gain new ideas and insight. Also, Eyler and Giles (1999) discovered that the more rigorous the reflection in course, the better the learning, including academic outcomes such as deeper understanding and better application of subject matter, increased complexity of problem solving, openness to new ideas and critical thinking skills.

Despite these assertions, reflection is critiqued and interrogated throughout the teaching and learning process and often described as, “a higher level meta-cognitive skill” (Clegg & Bradley, 2006). This indicates that the shift from ‘content reflection’ to the more advanced skill of ‘premise reflection’. This suggests that ‘real reflection’ is achieved as an ongoing and complex process rather than a singular task. Due to its complexity in nature, it confirms with Putman (2012) who establishes that the more years of teaching experience the teacher has, the higher level of self-efficacies to engage students and manage the classrooms.

In the Colleges of Education, series of workshops are organized yearly for preparing teacher trainees toward their teaching practice. The essence of organizing these workshops is to share ideas about emerging methods, procedures, and processes with the view of improving their teaching skills at their field of practice. Yet, teacher education programmes have been heavily criticized for not preparing teachers sufficiently to educate future generations of students (Darling-Hammond, 2000). Due to the complexities inherent in reflective practice, most novice teachers exhibit poor preparation and organization of lessons and lesson notes, inconsistencies in lesson delivery, and have discouraging feedbacks from their learners during their micro-teaching sessions (on-campus teaching practice). If these challenges are not properly addressed, they may affect their professional training.

### **1.3 Purpose of the Study**

The study therefore sought to analyse teacher trainees' understanding and use of reflective practice in the teaching of Physical Education.

### **1.4 Objectives of the Study**

The objectives of the study were to:

1. Analyse teacher trainees' demonstration of understanding of reflective practice.
2. Evaluate teacher trainees' use of reflective practice in the teaching of physical education.
3. Identify the effects of reflective practice on teacher trainee's performance.
4. Identify measures for improving reflective practice.

### **1.5 Research Questions**

1. How do teacher trainees' demonstrate understanding of reflective practice?
2. How do teacher trainees' use reflective practice in their teaching?
3. What are the effects of reflective practice on teacher trainee's performance?
4. What measures can be used to improve reflective practice?

### **1.6 Significance of the Study**

The study will enhance teacher trainees' understanding of reflective practice in the teaching of Physical Education. In addition, Physical Educators and scholars may use the outcome of the study as a teaching and learning resource. Thus, the study will serve as a source of reference for both academic and non-academic purposes.

### **1.7 Delimitations**

The study was delimited to only Colleges of Education in the Bono East, Bono and Ahafo regions of Ghana. It also focused on the Physical Education tutors (mentors) and teacher trainees in colleges of education of the above-mentioned regions. The study analysed the reflective behaviour of teacher trainees on internship with regards to effective lesson delivery.

### **1.8 Limitations**

Some respondents were reluctant to answer the questionnaires due to their busy schedules. Although some questionnaires were retrieved late, it did not have any negative bearing on the study. Also, some relevant and related materials to support the study at the colleges' libraries were rare yet, the researcher resulted to electronic source of data in the process as an alternative.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

The following areas shall be reviewed in relation to the topic under study: teacher trainees understanding of reflective practice, teacher trainee's use of reflective practice in the teaching of physical education, the effects of reflective practice on teacher trainee's performance and the measures to improve reflective practice.

#### 2.1 Teacher Trainees 'Understanding of Reflective Practice

Reflection, in the words of a layman, "... simply means thinking about something," but for some, "it is a well-defined and crafted practice that carries very specific meaning and associated action" (Loughran, 2002). Reflective teaching, at a very general level involves 'thinking about one's teaching'. Reflective teaching is a process where teachers think over their teaching practices, analyse how something was taught and how the practice might be improved or changed for better learning outcome (Schon, 1993). Yang (2009) indicates that critical reflection does not come naturally to most teachers, therefore appropriate opportunities for reflection should be provided to teacher trainees. This suggests that reflectivity is a skill that needs to be acquired by learning and not by automatic occurrence (Priya, Prasanth & Peechattu, 2017). Teacher educators should apply this theory in classroom practice; in order to assess their own teaching performance so that the classroom becomes a kind of laboratory where the teacher can relate theory to practice.

Regarding teacher preparation, reflection is commonly reported as a process of self-examination and self-evaluation that teachers should engage in regularly in order to interpret and improve their professional practices (Husu, Toom & Patrickainen, 2008). According to Shoffner (2008) reflection is worthwhile because it enables

classroom practitioners to identify, analyse and manage complex classroom issues. Furthermore, practitioners are forced to question their practice and consequently gain a better understanding of their own beliefs. As a result, those same practitioners will begin to contemplate more fully the relationship between theory and practice and to question those things normally understood to be accepted knowledge.

Evans and Policella (2000) write, “Reflection requires teachers to be introspective, open-minded, and willing to be responsible for decisions and actions”. In each of these examples, the notion of reflective self-awareness has been extended to mean that reflection can provide the basis for rational responsible choices.

Eryama (2007) explained the concept of ‘reflection’ as a special connotation which should not be taken as a typical dictionary word which means simple thinking or deliberation. Richards (1990) states reflection as a process or an activity in which an event is recalled, considered, and assessed, generally for a larger purpose. Reflective practice is a latest and advanced method for teacher’s training where all teachers can assess themselves before class using their intuitions and reflective skills. They also criticize on their teaching during and after class with the help of their colleagues and students and then accept criticism as a positive feedback. It helps teachers to enhance their teaching performance effectively.

According to Rodgers (2002), reflection is a systematic and disciplined way of thinking that comprises the following phases: spontaneous interpretation of an experience, naming the problems and questions that arise out of the experience, generating possible explanations for the problems posed, developing and testing the explanations, and efforts to sort out, or live with, the problems posed.



Marzano (2007) defined the reflective process as a set of interacting instructional strategies used to help students actively process content during critical learning experiences. In this manner, reflection is an intentional act, engaging students in questioning their own thinking to construct an understanding of it. He suggested that students use reflection as a means to identify points of uncertainty, levels of understanding regarding content and preconceived ideas that were accurate, as well as ones that were inaccurate.

Critically, reflective teaching occurs when teachers “identify and scrutinize the assumptions that undergird their teaching” and the way they work as teachers (Brookfield, 1999). Atherson (2005) argues that reflective practitioner invigorates the classroom by making it interesting, challenging and motivating for pupils. Reflective teaching practice is a valuable approach in advanced teaching where teachers use their perceptions and experience to evaluate their teaching progress. They observe themselves, criticize their teaching practices and admit other’s criticism with open-heart. It makes teachers self-evaluators for their own teaching practices.

Imel (1992) defined reflective practice as “a mode that integrates or links thought and action with reflection” and one that “involves thinking about and critically analyzing one’s actions with the goal of improving one’s professional practice.” She further described reflective practice as a process where the learner takes on the perspective of an objective observer in order to identify and challenge assumptions and feelings that underlie their learning and then to consider how these assumptions and feelings influence their approach.

Reflective practice assists teachers to confront inconsistencies between their thinking and their practice, and promote a conceptual change in teachers’ views about

teaching. Teachers' pedagogical thinking informs their decision-making and behaviours in teaching situations. In learning environments and teaching contexts, teachers may encounter situations or episodes where they need to pause, think and make intelligent decisions. In Pakistan to produce professionally competent teachers who have excellent pedagogical skills and insight to reflect on their practices. During 2006, The Higher Education Commission (HEC) revised B.Ed. curriculum and included four units on critical thinking and reflective practices. Researcher developed interest in the connotation of reflection-in-action and intended to question the reflective practices of Student Teachers during practicum course. Brookfield (1999) introduces four lenses through which teachers can view these teaching and learning episodes and reflect on their implications. These lenses are: (1) autobiographies as teachers and learners, (2) students' eyes, (3) colleagues' experiences, and (4) the literature on teaching and learning.

The first lens involves putting our autobiographical self in the mirror to understand students' experiences through self-reflection. This can be done by drawing on our own experiences and understanding. This process can also alert us of the assumptions we may have made along the way. The second lens is to see ourselves as students see us, and draw on students' feedback to inform our reflections. This reflective process makes us aware of the invisible power relationships within learning environments that may affect students' learning experiences. The third lens enables us to observe our practice critically from a colleague's perspective. Finally, the fourth lens is research on teaching. It can provide us with insights into other people's practices, through reading literature, for instance. We find various related aspects of the things we have been doing in our own teaching in other people's situations. In other words, they may

be named “in different ways [but they are] generic aspects of what we thought were idiosyncratic events and processes” (Brookfield, 1999).

Reflective practice for teaching is for those teachers who are disposed to think about their teaching practices, and are willing to put reflective practice into action. Reflective practice challenges teachers who have unquestioned assumptions about good teaching, and encourages them to examine themselves and their practices in the interest of continuous improvement (Ghaye, 2010).

Teacher reflection means that individuals will view their own work through the critical lens of another with the anticipated aim of developing their own personal and professional skills (Husu, 2009). According to Moon (2005) reflective practice can be described as phenomenological, in that a given phenomenon is studied through direct experience, interpreted and the insights gained used, to further understanding and modify actions. Reflective practice is widely acknowledged as an essential component in the professional development of teacher trainees.

Ovens (2002) see reflective practice as a discourse in his study. The term discourse is used in his study in a broad sense to denote ways of talking and thinking about teaching as well as practicing teaching; activities which can be viewed as key drivers within the context of practitioner-based research. He also suggests that the concept of *discourse communities* might be useful to highlight the discursive nature of reflective practices and the way these are connected to the underlying beliefs and values of its members. He identifies three discourse communities: the phenomenological, critical and situated learning communities, which become the context where individuals are both situated within and situate themselves and is the generative location of the discursive practices which students experience in their teacher education.

Boud and Miller (1996) opine those reflective conversations do not happen in a personal and social vacuum as teaching experience is situational and context specific. The context that shapes the experience also shapes the kind of learning from experience. Thus, learning occurs within a framework of taken-for-granted assumptions about what is legitimate to do, to say and even think. It is influenced directly and indirectly by the power of others as well as by forces, which constrain participants' views of what is possible.

When reflective practice is characterised as a discourse, it becomes evident through the way teacher trainees use language and frame questions about aspects of their teaching and experience, that different kinds of reflection on practice can be identified. The typology devised by Ghaye and Ghaye (1998) recognises useful qualitative distinctions, which can be drawn between reflective conversations:

- *Descriptive* reflection on practice - is personal and retrospective.
- *Perceptive* reflection on practice - links teaching to feelings.
- *Receptive* reflection on practice - relates personal views to others' views.
- *Interactive* reflection on practice - links learning with future action.
- *Critical* reflection on practice - places individual teaching within a broader system.

Each kind of reflection on practice serves a particular purpose and can be used to shape the way teacher trainees express and make sense of their own practice. Underpinning the direction of reflective conversations, they can engage in with self, others and theoretical literature are situated the different types of question, identified earlier, they might ask.

Carr and Kemmis (1986) expressed succinctly, teacher trainees come to realize that reflection has two distinctive roles within action research.

First, to form the basis for the planned action; reflection focuses on the meaning of observing an event or situation in order to plan the action.

Second, to evaluate the effect of the action; reflection focuses on the meaning of observing the effects of the action. In both phases of the cycle, reflection is retrospective and provides a link between the considered events of the past with future planning and development.

During seminar sessions, the role of reflection within action research is modelled through a range of simulated tasks. For example, teacher trainees“ identify a particular teaching strategy they want to further develop, such as „questioning“, and consider:

Why they have selected this focus; why effective questioning techniques might be important both within the physical education and wider school contexts?

How questioning has been defined, conceptualized and can be broken down into constituent elements - specific, non-specific, general, focused; types of questions – open and closed; wording and language used; when to use questions; and who they should ask – individual, small groups, whole class; why are they asking the question?

How effective questioning techniques might benefit pupil learning - does it foster independent learning, develop higher order thinking skills, increase participation and motivation?

Such questions engage teacher trainees in reflective discourse as they unpack the constituent components and examine the complexity inherent in that particular aspect

of teaching. An understanding of how subtle changes in their own teaching behaviour can influence pupils learning enables teacher trainees to realize the importance of taking note of the minutiae in teaching and come to recognize that even little things which happen in the learning environment really can matter. Finding solutions to these preliminary questions not only encourages teacher trainees to reflect on their own experiences, it encourages them to question personal attitudes, assumptions, beliefs, theories and values as they undertake an extensive search of literature and review the findings of research studies undertaken by others. From a more informed platform, they can devise a plan of action which identifies how they plan to develop the use of questioning in a particular context, such as a year 7 gymnastics unit of work. Importance is placed on the notion that within action research the plan of action must be provisional, as results gathered from data collected to monitor the effectiveness of a particular strategy should be evaluated to further inform future planning.

The essential learning required to prepare a productive and responsible adult for the 21st century must empower the individual to think as an autonomous agent rather than to act uncritically on the received ideas and judgments of others. By having students engage in reflective activities they are provided with opportunities to consider their actions and evaluate them in the context of various learning activities (Mezirow, 1997).

Schon (1987) thinks that when students take the time to reflect, they develop the Meta cognitive elements necessary to think and plan how they may do things differently in the future based on either their success or failures at an activity.

Robins et al. (2003) describe reflective practice as a tool that allows teachers, student teachers and teaching assistants to understand themselves, their personal philosophies and the dynamics of their classroom more deeply. While acknowledging the critics who argue that there is little evidence that reflection actually changes behaviour, they propose that the process of engaging in reflection not only provides a personal resource that can be accessed in other similar contexts, but is also a tool that empowers individuals who use it. This is because engagement with the process of focused thinking supports self-knowledge and understanding (White, 2004; Wieringa, 2011). The capacity to engage with your professional work in this manner is not always easy. One reason is that classrooms are busy, fast-moving work environments within which pupils of diverse characteristics are engaging in an extremely important undertaking: that of learning new knowledge, skills and strategies. Another is that any framework or other tool to support your professional development is only as beneficial as the user is proficient. In order to develop the skills and competencies of an expert teacher, you need to engage in reflection. Reflective practice, over time, allows you to become skilful in making informed judgements and professional decisions, and is empowering (Robins et al., 2003).

Leigh (2012) also has it that if educators can develop an instructional method that puts reflection into content area learning activities, they will then have an educational basis that encourages students to become autonomous, reflective, and socially responsible thinkers. Reflective practice activities, such as journals and class summary activities commonly called exit slips can provide educators with a form of assessment that monitors individual development and progress and can be readily used to inform future instruction.

The word reflection is suggestive of a number of mirror images of our actions, peaceful pondering about our experiences and making our past an asset for our future, thinking meaningfully about past periods, and the memories that come in our mind and become a learning experience. In education and training, the term is often used specifically to indicate an essential stage in the learning process where a difficult and deliberate process of thinking and inferring a situation is undertaken in order to arrive at a deeper understanding of event and our position there (Khanam, 2015).

Sellars (2012) studied “Teachers and Change: The role of reflective practice”. He found that quality of the educational changes that teachers have the skills and opportunities to effect will only be as reliable and proficient as the teachers’ individual capacities for reflective practice and development of self-knowledge. Priya, et al. (2017) studied “Reflective practices: A means to teacher development”. They concluded that by developing knowledge and understanding the setting practice and the ability to identify and react to the problems, the teacher trainees can become effective teachers.

The habit of reflective practices is the panacea for effective teaching. Reflective teachers always imagine what they are doing and how it might be made even better (Eisner, 2002). Reflective teachers found the rationale of their teaching practices by developing a deeper understanding about their teaching style. Habit of reflection enhanced their ability to question and understands the results of their own actions (Ferraro, 2000).

Erginel (2006) puts it that the practicum course offers opportunities to teacher trainees to reflect upon their professional actions through videotaping, micro-teaching assignments, reflective learning journals, peer’s feedback and student’s feedback.



According to Jasper (2006), reflective practice is purposeful and thoughtful activity to enhance professional understanding and to gain new ideas and insights.

Spiller (2011) explains that involvement in reflection-in-action leads teacher trainees to identify and rectify their own professional mistakes during teaching. Reflective teachers continuously examined their professional beliefs. The process of self-evaluation facilitates teachers to understand their motives behind classroom policies. Self-reflection is particularly valuable for teachers to defuse disruptive situations.

Schon claims that professionals reflect over their practices to reshape their professional actions and to search out feasible solutions or professional problems (Finger & Asun, 2000).

Reflective teachers seek to discover the source of an issue or problem rather than simply be satisfied with a temporary solution. Reflective thinkers seek to learn and develop the necessary skills that assist them in analyzing an academic or social situation and arrive at a conclusion that best fits that particular situation, as well as benefits those involved (Thorsen & DeVore, 2013).

Wackerhausen (2008) points out that across the various definitions of reflection there is a common configuration, which he calls an anatomical structure. More specifically, Wackerhausen proposes that when we reflect, we always reflect on something. There is always an object of reflection. Next, when we reflect on this object, we always reflect with certain concepts, assumptions and knowledge. Importantly, what we reflect with operates on two levels: The foregrounded concepts are those that we actively employ and that are explicitly present in our reflections. These foreground concepts operate on a tacit background of taken for granted assumptions and

knowledge, but the background assumptions implicitly delimit the conceptual boundaries within which the foreground concepts can be unfolded in our reflections. For instance, theoretical concepts that are explicitly used for reflection are always conditioned on some taken for granted assumptions, such as ontological and epistemological ones.

Furthermore, Wackerhausen suggests that when we reflect, we always do so *from* certain interests, motivations, and value orientations. Both the object and concepts of reflections are guided from specific motivations, such as improving one's practice as a PE teacher. Finally, Wackerhausen points out that reflection always takes place *within* a given context. That is, the reflection we make about our practice as researchers will be different if we perform the reflection in the context of an official meeting as compared to a late-night evening in the pub with our colleagues.

In sum then, this framework for reflection highlights that when we reflect *on* something, we always do so with certain concepts, assumptions and knowledge, from given interests and within a specific context. The merit of bringing in this theory of reflection is that it provides a very useful approach in order to analyse the content of reflection.

Karen and Kottkamp (1993) postulate that reflective practice, while often confused with reflection, is neither a solitary nor a relaxed meditative process. To the contrary, reflective practice is a challenging, demanding, and often trying process that is most successful as a collaborative effort. Although the term reflective practice is interpreted and understood in different ways, within our discussion, reflective practice is viewed as a means by which practitioners can develop a greater level of self-awareness about the nature and impact of their performance, an awareness that creates opportunities

for professional growth and development. As explained, awareness is essential for behavioral change. To gain a new level of insight into personal behavior, the reflective practitioner assumes a dual stance, being, on one hand, the actor in a drama and, on the other hand, the critic who sits in the audience watching and analysing the entire performance. To achieve this perspective, individuals must come to an understanding of their own behavior; they must develop a conscious awareness of their own actions and effects and the ideas or theories-in-use that shape their action strategies.

Achieving this level of conscious awareness, however, is not an easy task. Theories-in-use, as we have seen, are not easily articulated. Schon (1983) has described this process in the context of professional practice. As he explained, professional knowledge is grounded in professional experience: “Competent practitioners usually know more than they can say. They exhibit a kind of knowing-in-practice, most of which is tacit”. Consequently, when asked, master teachers or master administrators are often unable to identify the components of their work that lead to successful outcomes. Similarly, practitioners who want to improve their performance are often unclear about how their own actions prevent them from being more successful. So, if the purpose of reflective practice is to enhance awareness of our own thoughts and action, as a means of professional growth, how do we begin this process of reflection? How do we begin to develop a critical awareness about our own professional practice? Where do we start?

Grimmett and Erickson (1990), for example, identify three different ways of describing reflection: (a) as thoughtfulness about action, (b) as deliberation and choice

among competing versions of good practice, and (c) as reconstructing experience, the end of which is the identification of a new possibility for action.

Preparation programs always have student teaching or administrative internships fulfilling the practice component of learning. As we argue, however, some very masterful professionals are unable to explain the underlying principles or theories-in-use that guide their practice. If this is the case, the student must either extrapolate the underlying principles for him- or herself or else treat the masterful performance as discrete actions to be copied without consideration of contextual factors. Reflective practice may be powerfully applied to internship experiences as a learning vehicle for both the novice and more experienced practitioners. We do not provide a specific “story” of such use of reflection, though, at Hofstra, our curriculum, including internship activities, is being organized around reflective principles.

Reflection can ensure before, during, or after the experience it examines. Adopting the Loughran’s labels (1996), we may refer to the reflective practices as anticipatory, contemporaneous, and retrospective reflection. Anticipatory reflection occurs prior to the experience, often in the form of planning as learners suggest to themselves and to their peers how they might approach a given situation. They may even wish to rehearse some possible scenarios as a way of anticipating the reactions of others and the responses one might offer in response to these reactions. Anticipatory reflection tends to probe a deeper level basic planning by considering alternative goals and approaches, such as by positioning a series of ‘if-then’ propositioning based upon the possible outcomes of one’s initial intervention. Subsequent intervention can be tried out, perhaps on an off-line basis with peers or mentors, to discern their possible effectiveness.

Contemporaneous reflection occurs in the moment, as in Schon's (1983) 'reflection-in-action' such that in the mist of performance one reframes un-anticipated problem situations in order to see experience differently. While engaged in experience, planned responses often don't go according to plan, triggering a series of unexpected reactions. In this situation, the learner often reframes the problems on the spot in order to release oneself as well as one's colleagues from fixed views, leading to the consideration of new approaches. Reflection of this nature can be described as taking one's experience outside oneself, temporarily, in order to examine it as an object. Although easier to do after the experience is over, talented reflective practitioners can look at experience in this way as the event unfolds.

Retrospective reflection looks back at recent experience. It can be initiated as the first instance of reflection, or it may be triggered by plans and hypotheses generated from anticipatory reflection or by insight evolving from contemporaneous reflection.

Reflective practice in which an individual thinks critically about a thought, experience, or action represents a means to increase self-awareness and professional competence (Epstein & Hundert, 2002).

Reflective practice also has implications for the development of professional competence. As physicians gain in experience they often act on tacit knowledge (intuition, pattern recognition) (Epstein and Hundert, 2002), however relying on tacit knowledge alone may lead them to ignore data or outcomes that do not fit within some pre-existing framework (Schon, 1983).

Reflective practice creates a more dynamic framework for the acquisition and application of knowledge in new contexts (Mamede & Schmidt, 2004).

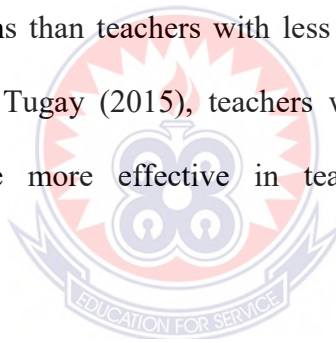
Reflection is defined as the process of thinking explicitly about a thought, experience or action (Bolton, 2001). Therefore, identified evidence of increased reflection is identified as segments of text, which described explicit awareness of one's thinking.

Valli (1997) states that there are six components of a teacher's knowledge that guide how they teach: behavioral, technical, reflection-in-action, reflection-on-action, deliberative, personalistic, and critical. All of these (except behavioral) involve the concept of reflection. The behavioral approach involves skills acquisition and assessment by education faculty and cooperating teachers. The assessment will indicate what behaviors the student needs to address. The five other ways incorporate the concept of reflection which is an expansion of Schon's original concepts. The first, technical reflection, involves the teacher candidate's reflection of their own performance and exhibits internal motivation to better themselves. Reflection-in-action and reflection-on-action are the second ways that Valli identifies and they have previously been described. The third type of reflection, deliberative reflection, involves the consolidation of several sources of information from a variety of perceived experts as the teacher makes decisions about practice (Killion, Joellen, Todnem & Guy, 1991). Personalistic reflection requires the teacher to draw links between their professional and personal life. In essence, how does being a teacher fulfill their personal life goals (Killion, Joellen, Todnem & Guy, 1991). The final type of reflection is critical reflection and it goes beyond the person and looks at the institution and political aspects of education and social injustices.

## **2.2 Age and Experience in Reflective Practice**

With regard to age and experience in teaching, Putman (2012) established that the more years of teaching experience a teacher has, the higher level of their self-efficacies to engage students and manage the classrooms.

Looking at experience factor, Kartini, Badariah and Ahamad (2010) found science teachers who had teaching experience of more than six years were more knowledgeable compared to teachers who had less years of teaching experience. Zafer and Aslihan (2012) revealed that teachers with more years of teaching experience showed significantly different attitudes toward classroom management like they seems to be more in control of their classrooms, good interactions with students and better in making decisions than teachers with less years of teaching experience. As endorsed by Fatma and Tugay (2015), teachers with a minimum of ten years of teaching experience are more effective in teaching and good in classroom management skills.



## **2.3 Teacher Trainees' Use of Reflective Practice in the Teaching of Physical Education**

There are numerous positive outcomes that teachers can see when they engage in reflection; increase in their teaching and lesson planning, increase in self-esteem, have greater control of their teaching practice, greater belief that they can influence student learning, greater interest in gathering data and information on their teaching and an increase in encouraging their students to engage in critical thinking practices. Cruickshank and Applegate (1981) state the following; reflective teaching gives students time to think carefully about their own teaching behaviours and an opportunity to view other experiences of professionals in action. Teachers find

themselves engaged in a meaningful process of inquiry which leads them toward renewed self-esteem and interest in teaching. As a result, teachers become more reflective about teaching and more interested in self-improvement. Reflective teaching is an opportunity for meaningful teacher growth.

The evolution of reflection in teaching and teacher education can be traced back to John Dewey who used the idea of the scientific method to scaffold how people think and learn. Dewey made a tremendous impact on education and how teachers use reflection in order to increase their personal and professional experiences. He defined reflection as “turning a subject over in the mind and giving it serious and consecutive consideration, thereby enabling us to act in a deliberate and intentional fashion. Reflection involves active, persistent and careful consideration” (Dewey as cited in Sweigard, 2007).

Since the inception of Dewey’s laboratory schools, reflection has become a major component for programs that prepare educators. Reflection can be a rich source of continued personal and professional growth. This provides an opportunity for professionals to renew and revive their practice. Educators gain information about their teaching from their own observations of themselves, coupled with their own reflections (Paulson & Kenneth cited in Sweigard, 2007). He further remarks that reflection is a gift that can be used by professionals to grow from experiences. Through reflection, professionals develop context specific theories that further their own understanding of their work and generate knowledge to inform future practice. When an educator engages in meaningful reflection, conclusions can be drawn that provide insight for future instruction.



Ur (1999) says that the first and most important basis for professional progress is simply the teachers' own reflection on daily classroom events. So, she gives emphasis to personal progress through reflecting on one's own activities and practices that happened in the class and thinking.

Lieberman & Miller (2000) pointed out that the practice of reflective teaching, reflective inquiry, and reflection-on practice, results in gaining of the personal and professional knowledge that is so important to being an effective teacher and in shaping children's learning.

Akbari (2007) suggests that reflective teaching will make teachers question clichés that have learned during their formative years and will also enable them to develop more informed practice.

Jacobs, Vakalisa and Gawe (2011) contend that reflective teaching offers teachers the opportunity to renew their practice and to understand the effects of their teaching. Some of the advantages of reflective practice are:-

The kind of knowledge base that is being developed through reflective approaches is much more comprehensive because it is directly tuned into what workers actually know about the work.

- Reflective practice provides opportunity for rapid and progressive refocusing a quality that is imperative in this new era of flexible specialization.
- Reflection can help us to recognize and continue good practices.
- Reflective practice can challenge practices that are taken for granted and can change and improve what is not working well.

- Reflective practice can also help us to develop emotional intelligence particularly if we include a consideration of feelings as part of our reflection.

The programme of study must provide appropriate opportunities and relevant experiences within its curriculum design and course content, which enable teacher trainees to acquire and develop the knowledge, skills and understanding identified within Standards necessary for the award of qualified teacher status (QTS) in England (TTA/DfES, 2003; TDA, 2007). Underpinning the programme of study, the aims and principles illuminate the rationale, epistemological stance and vision that has been adopted in designing a particular model of initial teacher education for the purpose of developing effective teachers. Teacher trainees must actively engage with opportunities and experiences presented within the programme of study and, upon completion of the course, successfully demonstrate competence and proficiency in their achievement of each Standard. Although teacher trainees on one course, in very large measure, experience a common programme, how they engage and learn from each component will be very different. Teacher trainees are unique individuals and differ in their personal biographies and prior experiences, disposition to enquiry, cognitive and perceptive abilities, communication and interpersonal skills, emotional intelligence and sensitivity, adaptability and flexibility, personal theories, values and belief systems. Shaped by their unique blend of such qualities, characteristics and personal background experiences, they journey through the process of learning about teaching and of learning about how to become an effective teacher.

The emphasis placed on the achievement of a prescribed set of Standards suggests there might be a tried and tested recipe or formula in learning about how to become an effective teacher. It has, however, been well documented (Boud, 1999; Borko &

Putnam, 1996; Elbaz, 1988; Loughran, 1996; Moore, 2000; Shulman, 1987; Taylor, 1997) that this is far from the case. Teaching is a highly complex activity and the dynamics operating in any given classroom environment will be influenced by a range of contextual and situational factors, the unique blend of qualities, characteristics and experiences that shape each and every pupil, in addition to those which shape the teacher trainees themselves.

Also, the professional landscape of teaching is in a constant state of flux as it responds to changes within the wider context of society. Teacher trainees working in twenty first century schools are very likely to encounter pupils who are computer literate and who expect knowledge and information to be instantly accessible at the touch of a button; alongside those from a range of cultural and ethnic backgrounds who have not as yet been immersed into western culture and for whom English is an additional language; alongside those who have been issued with an anti-social behaviour order; alongside those with a range of special learning and educational needs who are supported in the classroom by adults other than teachers; alongside those recognized as gifted and talented in a range of diverse ways. Thus, no two classes will respond to the same student teacher or lesson design in exactly the same way. This phenomenon, it can be argued, is what sows the seed for the development of teacher trainees' creativity and professional artistry in becoming effective within the classroom.

Teaching and learning about how to become an effective teacher centre on complex, interrelated sets of thoughts and actions. They can be perceived as demanding tasks, which might be approached in a number of different ways. As teacher trainees gain proficiency in the basic knowledge and skills of teaching, Loughran (1996) argues the more an understanding of the relationship between teaching and learning may

influence practice, and the more deliberately a teacher considers his or her actions the more difficult it is to be sure that there is one right approach to teaching, or teaching about teaching.

One strand, which permeates throughout the programme undertaken by teacher trainees featured in this study, is the development of reflective practice. Its significance in teaching and learning about teaching cannot be over emphasized as it positions the direct, concrete experience of professional practice at the heart of the process. Becoming a reflective practitioner is not so much about the acquisition or development per se of the skills and areas of knowledge required for successful teaching, but rather concerns the particular skills needed to reflect constructively upon ongoing experience as a way of developing those skills and knowledge and improving the effectiveness of one's work" (Moore, 2000).

Educational theorists and researchers have written extensively over past decades about the important role teacher trainees" play in their own development as they strive to become effective practitioners. Moore (2000) suggests teachers should perceive themselves as researchers and theorists as well as practitioners" and considers action research provides a particularly valuable way for them to evaluate and critique their own current practice and to move in an informed and principled way towards more effective future practice". Providing teacher trainees with opportunities to engage in contextually focused research activity should enable them progressively to become more effective in accurately assessing a situation, selecting an appropriate course of action, implementing the plan of action and evaluating the outcome to inform future practice. While the outcomes of research can have significant impact on teacher trainees" future actions and personal development, arguably, it is the process that

provides an essential tool for their ongoing professional development as teachers. The potential for improving professional practice through reflection and critical enquiry has also been in the foreground in recent literature on school improvement and on teachers' continuing professional development (Burton & Bartlett, 2005; Campbell et al., 1995; Dadds & Hart, 2001). It could be argued that teacher trainees who effectively internalise the process are well prepared to embrace numerous challenges, which working in twenty first century schools might pose, in addition to making informed judgments when contributing toward the culture of professional learning communities.

Zeichner and Liston (1996) suggest practical theories and beliefs become more articulate when teacher trainees engage in the process of reflection. Through practical and personal theorizing, they become more conscious and critical, reflection as a form of educational theorizing provides an insiders' perspective on teaching and learning and identifies the subtleties and nuances of teacher trainees' knowledge. However, the degree to which teacher trainees develop and reflect on their underlying theories and beliefs affect the extent to which they are likely to examine and enhance their own teaching practice. Individual differences can be evident in the level of development and articulation of practical theories and beliefs in relation to the teacher trainees' degree of concern about them and, in the reflection on their teaching in terms of their inclination toward it and environment within which they work.

Fook (2012) asserted that critical reflection is to assist the learner to unearth and unsettle assumptions (particularly about power) and thus to help identify a new theoretical basis from which to improve and change a practice situation. In essence, this is the critical reflection process: a reflective analysis, particularly of power

relations, which leads to change affected on the basis of new awareness derived from that analysis. It is important to emphasize these two aspects of the critical reflection process – analysis and change. In the process the learner is effectively researching their own practice and developing their own practice theory directly from their own experience. Not only does this function to evaluate and scrutinize practice, it also teaches the learner the process of learning directly from their own concrete practice.

Learners recognizing the role of reflection in learning and becoming familiar with the basic elements of reflective practice will allow students to begin to understand that knowledge is embedded in their learning experiences, and to realize the importance of this knowledge in improving their critical thinking skills. Very often, students are unaware of how their actions are connected to their learning and to the larger schema of Contextualization (Raelin, 2002).

Eyler and Giles (1999) discovered that the more rigorous the reflection in a course, the better the learning, including academic outcomes such as deeper understanding and better application of subject matter, increased complexity of problem solving, openness to new ideas, and critical thinking skills. Also, when reflective activities are integrated into class activities and discussions, and appear on exams, students report higher levels of satisfaction with the course and greater academic gains from the experience (Hatcher, 1998).

Kramer (2018) found positive effect of reflective practice on teachers' professional development. Therefore, novice prospective teachers need a repetitive process of planning, acting and reflecting to improve teaching strategies. Collaborative reflection also helps students to minutely analyse their practice with multiple angles and find

collective solutions. It is a collective learning process with manifold opportunities of correction and improvement (Foong, Nor & Nolan, 2018).

Reflective teaching practices also provide prospective teachers with power to overcome their academic issues, teaching methodologies and subject content that was delivered in the classroom (Rarieya, 2005).

Involvement of teachers in reflective practices encouraged them to adopt student centered learning approaches. Reflective teachers usually break down teaching material into more understandable sections (Roadman, 2010). Involvement in reflective practices encouraged teachers to become responsive to their students and fulfil students learning needs in a better way (Moon, 2003; Titus & Gremler, 2010). Reflective teachers put serious efforts to investigate the effectiveness of their teaching and to meet the learning needs of their students in a better way (Myers, 2009).

When the teacher trainees begin to view their students as learners, they are able to focus on more than the descriptiveness of issues, such as classroom management, writing lessons, submitting course assignments and supervisor evaluations; they are focused more on attaining student achievement using best practices. Because it is difficult for teacher trainees to reach a less descriptive level of reflection, teacher preparation programs should scaffold the teaching of reflective thinking for their pre-service teachers so that they will be better prepared “to cope with the daily issues that arise from their future teaching with a creative and critical stance” (Lee, 2008).

Karl Attard published four articles concerning the development, outcomes and importance of reflection for himself as a novice teacher. Based on his auto-ethnographic research, Attard argues that critical reflections on his own experiences

enabled learning, and that reflection is best understood by engaging in reflection (Attard & Armour, 2006). More specifically, Attard (2007) states that “examining past experiences to understand and change present and future practices is a stronghold of reflective practice, but this is hard work as it goes against the natural tendency of creating routines.

#### **2.4 The Effects of Reflective Practice on Teacher Trainees Performance**

Some evidence drawn upon to illustrate ways in which teacher trainees demonstrated the capacity and commitment to enhance the quality of pupil learning is linked to findings reported within other dimensions of reflective practice.

In this study, the vast majority of teacher trainees“ reported one reason that guided their decision to select a particular research area was their concern to enhance the quality of pupil learning. This was perceived by a majority of these teacher trainees as highly important. Results also showed the majority of teacher trainees“ reported one purpose for gathering data through classroom research procedures was to monitor pupil learning and behaviour. There could be several reasons for these findings, including the perceptions of teacher trainees that not only pupil learning but the quality of pupil learning was of considerable importance to them and, in order to gauge how they might enhance the quality of pupil learning through their own teaching they perceived it was necessary to reflect upon whether the learning opportunities and experiences they provided for pupils were effective. Partial support for this view came from the findings that a majority of teacher trainees“ reported that reflecting upon pupil behaviour had been influential to the ongoing development of their research and approximately half reported they had refined their focus during their research investigation. This has resonance with one of the qualities.



Eraut (1994) attributes to the accountability of professional practitioners - notably, that they demonstrate, a moral commitment to serve the interests of pupils by reflecting on their well-being and their progress and deciding how best it can be fostered or promoted". As a result of reflecting on practice during their research enterprise, the vast majority of teacher trainees" reported their capacity to enhance the quality of pupil learning and development definitely, or probably, had improved. The three most common areas of pupil learning and development they identified include: pupil progress and achievement, pupil behaviour patterns and pupil affective states. Results also showed some teacher trainees" perceived they had influenced pupil learning and development in more than one area as their research evolved. In his quest to bring pupils into the loop of their own learning for example, one student teacher reports initially the pupils were very, very poor at self-assessment and hadn't a great deal of experience of it...I asked them to record what level they would give themselves each week and you tended to find they would give themselves the best level...so, yes I was brilliant...I don't think they were able to make full use of that as they weren't quite sure how to use the information I was giving them...I used the record of achievement folder to get them to reflect on what they had been doing so that they were more aware of learning outcomes and the assessment criteria...I wanted them to think each week about what they were doing well, what they were doing badly, how they could improve...by the end they were getting the hang of it and were more accurate in recording their level.

Further evidence this teacher trainee reported of his pupils' learning and development was: when we were playing games after about 3 or 4 weeks of doing the research they were bringing in work we'd been doing previously...normally you'd teach something to them and they would forget to use it as soon as they get into a game and that's in

the same lesson...but if they're bringing that in 3,4 weeks later they have understood it, I could see them actually using the skills...also, when they were answering questions, the language they used, if we talked about tackling they would be able to say we used a slide tackle, we used the shoulder chant (Eraut, 1994).

The capacity to enhance the quality of pupil learning is inextricably linked to the teacher trainees' own capacity to provide appropriate learning experiences and opportunities for their pupils. To this end, the opportunity to engage in action research and focus in-depth on one particular area of teaching was perceived by teacher trainees to have influenced their personal development in a number of areas. The most common areas of personal development they associated with their capacity to enhance the quality of pupil learning were identified as: their enhanced knowledge of pupils' ability levels and specific learning needs; greater understanding, awareness and insight of how to promote pupil understanding and accommodate individual pupils; and, thinking more about what teaching approaches and strategies promote pupil learning and how to plan future lessons. These perceived areas of personal development suggest the principles of potential and entitlement might have guided the learning experiences and opportunities teacher trainees provided for pupils in order to deliver an inclusive curriculum (DfEE/QCA, 1999). For example: the thing I've learned is ADHD pupils don't follow patterns, the behavioural issues are so very different...it's just finding what they like doing and it seemed to be independent learning and giving them responsibility...and just staying calm with them in lessons. The reciprocal teaching worked and the self-check didn't which was a bit strange. I experimented with groupings because that occurred as an issue halfway through, some of the pupils, their patience was short, they'd be getting on find with their partner and then it just seemed they'd 'spark off' and would be attacking each other...so to

change them around they'd be happy again...and then something else would happen. One girl was very aggressive...that was quite challenging, keeping her on task and making her work with pupils she wouldn't attack...trying to keep her calm and the girl who got excluded for striking a member of staff and beating up another child.

This supports the research undertaken by Tsangaridou (2005) who found the teacher trainees' ability to provide meaningful learning experiences for pupils was directly related to their ability to "set particular educational goals" for a "particular set of pupils". Overall, the perceptions of the vast majority of teacher trainees in this study would suggest that ethical and moral dimensions of focusing on the needs and interests of their pupils (Eraut, 1994) was in the foreground as they sought to enhance the quality of their pupils' learning experiences. However, dissertation supervisors' perceptions were not wholly congruent with those of the teacher trainees. Six perceived the action research experience had influenced *most* teacher trainees' ability to maximize learning opportunities for pupils whereas seven perceived *some* or *no* teacher trainees had been influenced in this area. A number of qualitative distinctions were found in the reflective conversations used by teacher trainees within this dimension of reflective practice, which, in part, might explain some of the dissertation supervisors' perceptions. Results showed more than two fifths of the reflective conversations used by teacher trainees were descriptive, approximately two fifths comparative and one sixth critical in nature. Female teacher trainees were found to use marginally fewer descriptive and critical and more comparative reflective conversations than male teacher trainees. The measure of dispersion was found to be moderately high (>5) in the comparative reflective conversations of both genders and the descriptive reflective conversations of female teacher trainees. These results

highlight differences between male and female teacher trainees and variance within both genders.

Thus, although the vast majority of teacher trainees might have equated pupil learning and development with changes, they perceived either in their own or in pupil behaviour, the capacity to fully explore reasons behind such changes or to fully investigate strategies to move all their pupils' learning forward might not have been realised by many of them or alternatively. Alternatively, they might not have been able to demonstrate their capacity to enhance the quality of pupil learning to some dissertation supervisors. Associated with the latter point, results showed not all teacher trainees sought discussions and tutorials with their dissertation supervisors which suggests, in some instances, judgments by dissertation supervisors were made exclusively on the basis of the teacher trainees' ability to provide evidence as to how they influenced pupil learning and development in their written action research report.

Moon (1999) argues there is a distinction between reflecting on practice and (re) presenting that process in written form, and some teacher trainees might struggle to present evidence of their learning in this way. This distinction suggests some teacher trainees might have shown the capacity to maximize learning opportunities for pupils through their teaching yet were unable to articulate this coherently in their written report.

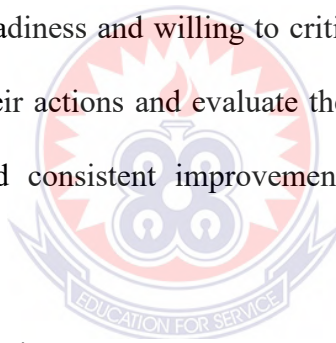
Dissertation supervisors' perceptions however showed variance and thus were inconclusive in relation to the teacher trainees' personal development within this dimension of reflective practice. This said, it is quite plausible that dissertation supervisors might have distinguished between the expressions "enhance the quality of

pupil learning” and “maximize `learning opportunities for pupils”, which in part, might explain their diverse perceptions.

According to National Council for Curriculum and Assessment (NaCCA, 2019) good reflective practices of both in-service and teacher trainees will aid learners to acquire some knowledge through some learning experiences. They may also show understanding of concepts by comparing, summarising, re-writing etc. in their own words and constructing meaning from instruction. The learner may also apply the knowledge acquired in some new contexts. At a higher level of learning behaviour, the learner may be required to analyse an issue or a problem. At a much higher level, the learner may be required to synthesize knowledge by integrating a number of ideas to formulate a plan, solve a problem, compose a story, or a piece of music. Further, the learners may be required to evaluate, estimate and interpret a concept. At the last level, which is the highest, learners may be required to create, invent, compose, design and construct. These learning behaviours “knowing”, “understanding”, “applying”, “analysing”, “synthesising”, “evaluating” and “creating” fall under the domain “Knowledge, Understanding and Application. Reflective practices raised the student’s self-confidence in learning that takes place outside the university (Pouget and Osborne, 2004). Reflection-in-action empowered teacher trainees to assess their own learning and gain academic recognition in reward. But reflection requires refined pedagogy and leads professionals towards development of professional practice (Anita, ND). Similar results of study in hand showed that reflection-in-action caused student teachers to identify and rectify their professional mistakes, which lead them towards professional development. Reflective teachers can find out the rationale of their teaching practices by developing a deeper understanding about their own

teaching style. Ability to question and understand of one's own actions results in professional growth of teachers (Ferraro, 2000; Amoh, 2011).

In experiential practices, learning from doing is basic principle of gaining concept, but doing is different from learning because by doing individual can more effectively involve in reflective process and the deliberation and consciousness occur as an important act (Hunt, 2005). Hunt reviews the nature of unspoken, tacit knowledge, where practitioners 'just know' even though it cannot be described or written about and considers the dangers of not defining and bounding practice. Reflective practice, in its gist is not just a set of practical practice neither a clearly recognizable group of academic skills but has slightly a critical aspect. Reflective practitioners go beyond mere ability of having readiness and willing to criticize their own practices, but they think for reasoning of their actions and evaluate their processes and outcomes. They strive for perfection and consistent improvement. A reflective practitioner may involve in thoughts like:



- An optimistic experience
- An event when her involvements seemed to have made an actual difference to someone's knowledge
- An adverse experience where things have gone badly incorrect
- A situation which she thinks hard to control
- Something inconsequential nevertheless which made her think, what's going on here?

Reflective thinking is a precursor for incorporating critical thinking and the use of reflective processes may help to stimulate critical thinking. Evaluations of instructional efficacy have often examined the demonstration of reflective practices as

part of the overall instructional approach as a way to examine level of critical thinking. For example, 60 participants from institutions of higher learning volunteered to answer a questionnaire to determine the level at which they reflected on their teaching practices as an indicator of their level of critical thinking. It was found that most of the teachers did not reflect deeply on their teaching practices. They did not seem to practice the four learning processes: assumption analysis, contextual awareness, imaginative speculation and reflective scepticism, which were indicative of reflection. It would suggest that critical thinking is practiced minimally among teachers (Choy & Pou San, 2012). As a result of their failure to adopt reflective practices in their own work, the probability that teachers will facilitate the use of reflective practices in others is diminished.

## **2.5 Measures to Improve Reflective Practice**

Journal writing is a common strategy used in almost all the studies, but only O'Connell and Dymont (2011) looked into the effectiveness of journal writing. Their results show that journaling can be an appropriate medium for encouraging reflection.

Senne and Rikard (2004) compared different approaches to the use of portfolios in combination with practicum experiences. Their results suggest that in the course of one short term, development in reflective thinking is sparse. When seen over a period longer than one semester, however, the portfolio was found to be a useful tool to assist pre-service teachers' reflectivity. It was also reported that the use of video recordings of pre-service teachers' own lessons can be a useful tool in developing teachers as reflective researchers (Palomaki & Heikinaro-Johansson, 2005).

Shulman (1992) over the last decade recounted that e-Portfolios have become an important tool and instructional scaffold providing our students with the opportunity



to craft and present an evidence-based, professional account of their emerging knowledge, skills, and dispositions as self-aware, reflective beginning teachers of not simply content, but also of children in today's 21st century classrooms. Electronic Portfolios have emerged as a way for students to begin to capture and illuminate the often elusive, ethereal, and context-specific complexities of knowledge growth in teaching, in terms of their emerging *pedagogical content knowing* (PCKg).

As Kilbane and Milman (2003) explained, Digital teaching portfolios are one of the best ways for teachers to communicate the level of their knowledge and skill within educational technologies. The increasing role of technology in learning environments makes the demonstration of technology competence more important now than ever before. Teachers who create portfolios in this way demonstrate their knowledge of hardware, software, and the integration of the two for the purpose of creating useful educational tools. Although the process of making traditional teaching portfolios helps teachers examine their competence and chart their future growth as professionals, the creation of digital teaching portfolios also provides them the opportunity to think more seriously about how their career will be affected by the role of technology in the classroom and society.

Educators have suggested various methods for fostering reflection among trainees, including the use of narrative writing (Brady, Corbie-Smith & Branch, 2002). They again suggest that interns may be encouraged to take time to reflect using very simple measures such as emailed prompts and that narrative writing encourages reflection and leads to increased self-awareness.

Green (2001) contends that the tutorial system is an integral part of Further Education as it provides opportunities for practitioners to support students with assessments,



exams, mentoring and discipline. It could be suggested therefore that practitioners provide support on personal and emotional levels. It could therefore be suggested that the tutorial system requires practitioners to support output which engineers thought and interpretation. Taken together the tutorial system facilitates in the understanding of strengths and identifies areas to improve. Facilitation can occur through many avenues of which reflective practice of Gibbs (1988) are a popular choice.

Knowles, Gilbourne and Tomlinson (2007) contend that reflective practice is the exploration of thoughts, feelings and actions. Through reflective practice and critical interpretation understanding and learning can be formed. Based on this supposition it could be suggested that the tutorial system is the fulcrum from which all other learning evolves. Research evidence quantifies the effectiveness of reflective practice because of its opportunity to support individuals and groups (see, education, Farrell, 2008; Lee, 2005; Ekebergh, 2007; Sport, Knowles, Gilbourne & Tomlinson, 2007). One benefit of reflective practice resonates with its impact when working in groups. For example, group work can lead practitioners to develop practices that include analysing work and designing strategies to maintain improvement. Given that student engagement is formed through dealing with interpersonal relationships, different situational perspectives and the ability to make decisions, practitioners can teach and support students (Farrell, 2008). Therefore, reflective practice can be postulated to benefit both practitioners and students in tutorial settings.

Through reflective practice a range of scenarios could be introduced by practitioners to enhance reflective practice during tutorials. One popular scenario that could be utilised is time management. In consideration of time-management it would be pertinent to explain the Gibbs (1988) six-stage model. Stage one (1) of the model

relates to description from which practitioners, working with students, can form a profile of assessment deadlines. Following identification of this profile the practitioner could task students to explain their feelings stage two (2) on how they time manage to meet deadlines. Having formed their feelings students could be tasked to evaluate their strengths and weaknesses of the process stage three (3). Following this evaluation, students could be encouraged to develop skills related to problem solving and independent thinking when managing their time stage four (4). Further opportunities are then afforded to assess the different requirements and needs that would support the process stage five (5). From this, an action plan stage six (6) is formed to support the process of time management.

Arguably, reflective practice allows practitioners to become aware of student emotions, recognise individual needs and develop strategies to regulate thinking. These skills are important, as practitioners must take care of student academic requirements and overall wellbeing.

One important concept that supports and nurtures reflective practice in teaching is feedback. Askins and Imwold (1994) recognises a key feature of lifelong learning as being able to “reflect on one’s own practice and use feedback to assess and manage one’s own performance” (cited in Hinett & Weeden, 2000). Feedback can provide us with the impetus to embark upon reflective practice systematically and diligently, and also the evidence we need to make judgments about our performance as a teacher. Glendenning and Cartwright (2011) discuss the principles and processes of constructive feedback and the ways teachers can appreciate the information they receive, effectively respond to, take actions, and implement strategies as a result of the feedback and reflection process in their teaching. Glendenning and Cartwright

(2011) provide the following structure for reflecting on feedback about teaching. It is useful for encouraging teachers to reflect on the feedback they have received in the past. The process of reflection on feedback also assists us to shape thoughts and ideas around what types of feedback we would like to receive in the future to support our teaching.

#### Reflective Task:

1. Jot down your individual thoughts on the following:
  - Why is it important to receive feedback on your teaching?
  - Who could provide feedback on your teaching?
  - What kind of feedback could you receive?
  - Is all feedback equally useful? Why/why not?
  - Can you give an example of feedback that you think has been really useful, and an example of some that has been less useful?
  - Do you think you need different feedback at different stages in your professional learning?
2. If possible, compare your own thoughts with those of your peers or colleagues.
3. Reflect on the extent to which there is a common ground. It is always useful for you to reflect on the extent to which your ideas are congruent with those of others, and if not, what the reasons for this might be.

Reflective journal (and portfolios) should be able to demonstrate the ability to learn from reflective practice, and the ways practice has developed. A personal diary or journal, in fact, is a flexible way of reflecting and it does not need to be kept every day. The key point to remember is that it must both describe and examine learning

and teaching situations or events. Generating reflection is an emotional journey which may make us feel uncomfortable at first, but the result is that our knowledge and practice will improve and continue to develop. FitzPatrick and Spiller (2010) discuss the ways in which compiling a (multi-purpose) teaching portfolio through a reflective process can generate complex emotions among teachers. In the course of writing journals or any other forms of generating and recording reflection that our initial views of the situation or event change, and we gain a different perspective of something that happened. The questions below can assist us to be more focused in the reflection process:

- Have I (critically) questioned my actions, behaviours and speech? What justification do I have?
- Have I been honest and open with myself?
- Have I learned anything from the experience?
- Have I identified the new learning I need to put in practice?
- What is it exactly that I need to do now?

According to Beed (2005), writing depicts someone's mind and attitude about something. At the same time, writing forms thinking. This complex activities of representing individual thought and shaping individual thought about something in writing makes it a challenging activity. Constant writing practice is necessary for teacher trainee's not only to improve their writing skills but also to promote their thinking capacity. To practice writing, Reflective Writing is considered to be the gate to sharpen general writing skill and encourage thoughtful and balanced level of thinking of teacher trainees. Reflective writing helps learners to process and explore ideas, and analytical skill about their own thoughts, opinions, and experiences (Moon,

2006). Dymont and O'connell (2003), posit that involving the teacher trainees in writing reflectively opens widely a chance to reflect and record concrete experiences, to improve writing ability, to encourage observational, critical and creative skills. In addition, thinking reflectively is considered as important as writing reflectively.

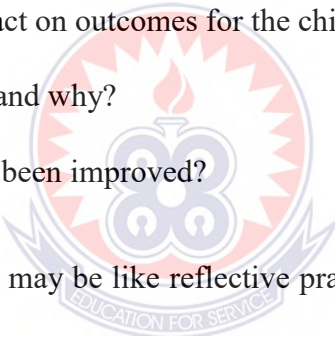
Thinking by writing is an effective way to make decision carefully and deeply, and it can also improve awareness to the environment, situation, experience, and themselves in order to act better in the future life. Writing becomes an incisive weapon for the writer in expressing oneself and conveying thought through words. Writing enables the writer to share meaning and understanding (Hyland, 2002). There are three ways of evaluating writing. They are teacher evaluation, self-evaluation, and peer evaluation (Rothschild & Klingenberg, 1990). The use of reflective writing in education is not a new case. It facilitates teacher trainees to practice writing. Reflective writing formed from the process of reflections or reflective thinking. Moon (2006) considers the reflective writing involves a conscious and stated purpose, a specified learning outcome, and an action or clarification. The outcome is mostly represented in a written form that can be seen and assessed by others. Meanwhile, according to Chinniah and Nalliah (2012), the common types of assignment that have been used for reflective writing are portfolios, learning journals, log book, case summary, web based learning, peer review, and self-assessment. Reflective Writing helps the students in personally engaging in the learning process through writing. The form of Reflective Writing is based on the reflective cycle theory by (Gibbs, 1988). In a classroom situation, the structured RW is preferable because it keeps students on the topic and guides the students decide what to write. In the Reflective Cycle by Gibbs, there are seven steps in making the reflection. They are Description, Feeling,

Evaluation, Analysis, Conclusions (general), Conclusions (specific), and Personal Action Plans. In addition, every step has detailed description that could guide students in making reflection from their real-life experience.

Using a reflective diary, this can capture a range of personal developments, thoughts, experiences, feelings and reflections (Bolton, 2014). It can be a good starting point on your journey of self-reflection. Ask yourself what, how and why questions.

Think of a recent activity that you planned and carried out with children. Ask yourself:

- What worked well? How and why did it work?
- What was the impact on outcomes for the children?
- What didn't work and why?
- How could it have been improved?

The logo of the University of Education, Winneba, is a circular emblem. It features a central sunburst design with a flame-like shape at the top. Below the sunburst are three interlocking circles. The text 'UNIVERSITY OF EDUCATION' is written around the top inner edge of the circle, and 'EDUCATION FOR SERVICE' is written around the bottom inner edge.

“As important as methods may be like reflective practice, the most practical thing we can achieve in any kind of work is insight into what is happening inside us as we do it. The more familiar we are with our inner terrain, the surer footed our [work] – and living- becomes.” Palmer (cited in Skovholt, 2001). By engaging in a reflective process the teacher trainee begins the ongoing process of blending solid and effective teaching techniques with their applied practice. Reflection therefore, requires thoughtful and honest recording, reporting and analysis of actual practice, philosophy, and experience. Understanding why an activity or practice was productive or non-productive in the teaching context is an important component in the progression from novice to master (Self -assessment, 2006). The self-reflection cycle can assist the teacher trainee to learn how to guide their questions in an effort for them to be better

able to understand the reflection process. It also offers a structure or process to guide the teacher trainee, whilst at the same time allowing flexibility for teacher trainees to be able to apply their knowledge, skill, and ability in the context of their practice area (Self- assessment, 2006).

It is essential that pre-service teachers develop their capacity for reflection as they would be required to continue their learning not only during their education period, but also in the course of their professional work. Due to the central role of reflective practices, Greene (1978) suggests that teacher educators should encourage the practices of self-reflection for their pre service teachers so that they can become expertise in the world of teaching practice. Teacher educators and their students need to be motivated, as Greene calls, “to think about their own thinking, and to reflect upon their own reflecting” (Greene, 1978) Greene argues that such practices can be intrinsically liberating and very likely can improve their capacity to teach. To reflect on reflection has also been essential in pre service teacher education as revealed by the study of Kabilan (2007) in Malaysian context. His research purposes were to identify the professional development of some pre-service teachers through reflecting their learning journals. Kabilan describes that the research results were convincing as the participants demonstrated more positive attitude towards teaching and learning indicated in their creativity and critical thinking in the content and context of reflection. His participants were also able to name the aspects in which they can improve as effective future teachers.

Regardless of the flourishing benefits of reflective practice, reflection may be a tedious task which many teachers would avoid, not only because it may be time consuming, thus unpractical to write after the experience has been completed, but also

because they may not want to ruminate themselves on past experiences which may be disagreeable for them. As yet, this may not be the only issue. Hart in the foreword of Barnett, O'Mahony, and Matthews' book (2004) asserts that the most problematic area of lack of reflection in teaching is perhaps the fact that some teachers are in fact unable to identify or name what they do not know. She hence urges that teachers need to focus on deliberately finding challenges in order that they could shape their inquiry into knowledge and action. This inquiry into knowledge as an essential part of reflection is important to grapple and build up knowledge because of the following reason: As experiences and learning accumulate and inappropriate inferences and judgements are reduced, knowledge improves. As knowledge increases and you learn to draw inferences from past problems and features of new situations, the ability to draw appropriate inferences improves. The more difficult the problem, the more accelerated the learning if the problem is successfully resolved. (Hart in Barnett, et al., 2004) From the above inferences, it is clear that reflection is a media or arena in which people exercise their minds in order to eliminate weaknesses and alleviate good strengths of their practices in a given context.

Benson (1987) recommends that maintaining and developing professional competences and sharing expertise is important in continuous professional development (CPD) process. He proposed reflective practices as essential component of CPD for in service teachers also. Benson suggested that such reflection and reviews involve attentiveness, perseverance and hard work. Benson advises a process of ongoing recording of action for a group observation as microteaching process is conducted. This would allow participants or practitioners to observe individual and group performance to become good reflective experts by developing dialogue among



themselves to illuminate feelings, appraise practice, express moods, increase a deeper consciousness and then improve themselves (Beard & Wilson, 2006).

Verbeek (2014) described learning to teach as a life-long process. Teaching requires continuous professional development through engaging in self-study with the support of other professionals. Ongoing personal development is also encouraged by Osman and Booth (2014) as teachers investigate their personal practices. Both teachers discussed the importance of using reflective practice as a means of personal and professional self-development. Teaching is a socially constructed occupation and the teacher's own experiences of being a child in a classroom influence their teaching style. Zeichner and Liston (2014) referred to teaching as 'emotional labour'. Teachers create their teaching style and methods based on their personal experiences of being taught. Russell (2018) explained that every teacher has internalised how they were taught and this affects their personal approach to teaching. Reflecting on personal teaching styles and approaches may provide the opportunity for personal awareness of this influence.

Pollard (2002) has identified the following seven characteristics of reflective practice as useful in helping early childhood professional's gain a collective understanding of what reflective practice involves and how it can improve child learning outcomes:

1. An active focus on goals, how these might be addressed and the potential consequences of these.
2. A commitment to continuous cycle of monitoring practice, evaluating and re-visiting it.
3. A focus of an informed judgements about practice, based on evidence.
4. Open-minded, responsive and inclusive attitude

5. The capacity to re-frame one's own practice in light of evidence-based reflections and insights based on research.
6. Dialogue with other colleagues, in-house and with external works
7. The capacity to mediate and adapt from externally developed frameworks, making informed judgements and defending or challenging existing practice (Pollard, 2002).

Research has shown that a period of deep reflection on information being taught can lead to deeper meaning and can aid in the synthesizing and application of the learning. For example, Baldwin and Lucas (2012) suggested that a formative reflective journal included as a component of an educational program can enhance critical thinking. Reflective practices can also help to increase creativity (Roberts, 2009), document progress made, and plan for future teaching (Baldwin & Lucas, 2012). Reflective practices can positively affect professional growth and development by a deep period of reflection on information being taught can leader to deeper meaning and can aid in the synthesizing and application of the learning. Leading to greater self-awareness, to the development of new knowledge about professional practice, and to a broader understanding of the problems that confront practitioners (Osterman, 1990). Finally, reflective practices, particularly journaling, can demonstrate what has been learned, accentuate favourable learning conditions conducive to independent thought, and offer a safe place to express feelings, examine poorly structured problems, and encourage deeper learning (Kerka, 2002). Reflective practices can also be taught by providing a platform for the activity. For example, instructors of adult learners could assign journaling or other autographical writing and have the student either share the writing with the instructor (as part of a reciprocal writing process) or report on progress while keeping the actual writing content personal and confidential.

Autographical writing, in particular, is a unique form of journaling requiring more distance from the self than journal writing (Merriam, Chaffarella & Baumgarnter, 2007). According to Karpiak (2000), because autographical writing requires evaluating a life for its larger meaning, it expands the knowledge of the self and the world and therefore it is learning in the best sense. Undertaking reflective practice on a regular basis can increase your self-awareness and emotional intelligence as well improving your decision-making abilities. It could also help you to form more effective working relationships and to better cope with stress. Reflective practice extracts value from experiences, enabling a greater appreciation and awareness of development needs. It enhances personal and professional effectiveness and is therefore of benefit to you, your force and the public we serve.

## **2.6 Theoretical Framework**

### **2.6.1 ALACT model**

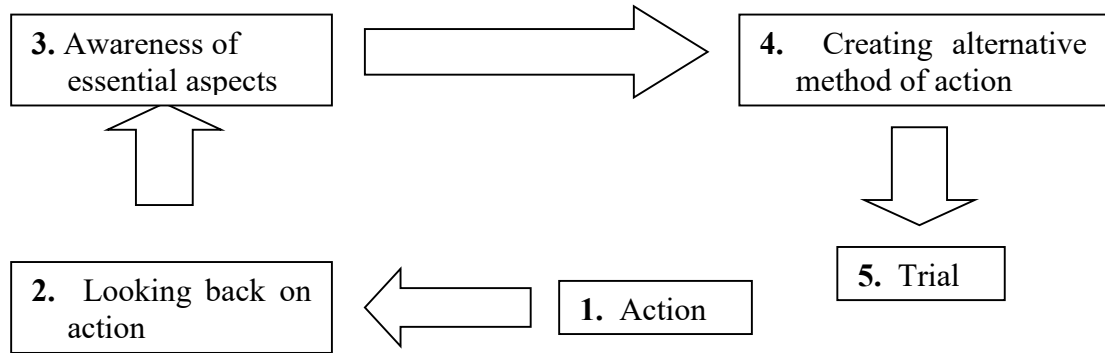
The “ALACT Model” (Action – Looking back on the action – Awareness of essential aspects – Creating alternative methods of action – Trial) of the University of Utrecht (Korthagen, 2001, p. 44, 2010a, p. 414 -) is an example where the process starts with the practical – the students’ own experiences. According to Korthagen (2001), this five-phase model of reflective practice in teacher education was designed with the principles of a *realistic approach* in mind:

- Starting with the concrete practical.
- Promoting systematic reflection on teacher trainees’ own and their learners’ feeling, thinking and acting, the role of context and the relationships between these aspects.

- Building on interaction amongst students and between students and teacher educators.
- Using a three-level model (gestalt, schema and theory).
- Integrating theory and practice as well as several disciplines (Korthagen 2010a, p.414)

It is an inductive process, part of professional development and designed to incorporate students' assumptions, their feelings and their perceptions right from the beginning of their professional development. They look back on the action (reflection-on-action), become aware of the “essential aspects” of the action (including theoretical aspects), then go on to create alternative methods of action and start again, now with alternative methods. The student educator calls on theoretical aspects when needed. Central to the approach is a feeling of “safety” for the learner, created through the encouragement of the teacher educator. Thus, the student “owns” the learning (Korthagen 2001:46) It is about knowledge creation rather than given knowledge. Whereas the process starts with technical competence, it works towards evidence-based practice, life-long learning and learner-independence (Korthagen 2001:48).

Korthagen refers to this approach as a “Pedagogy of Realistic Teacher Education”. The guidance of the teacher is prominent since it makes provision for links between cognitive, affective, social and the context.



**Figure 1: ALACT model**

The ALACT Model differs substantially from the traditional university model whereby the university is expected to provide the Theory (expert knowledge), while the school provides the practical. When the theory fails to impact, we blame either the University for being “too theoretical” or the practical for not doing what we think it should be doing and blame it on the teacher or the teacher trainees’ lack of efficiency.

One theorist, Schon (1983), describes two different types of reflection: *Reflection-on-Action* and *Reflection-in-Action*. Reflection-on-Action occurs when a teacher reflects on their daily lessons and classroom actions and uses the information gathered to adjust their lessons/teaching (Killion, Joellen, Todnem & Guy, 1991). The goal of this form of reflection is for educators to become more effective and conscientious teachers. This type of reflection is reflecting back on lessons that have been taught and is a skill that teachers need to acquire in their early teaching experiences.

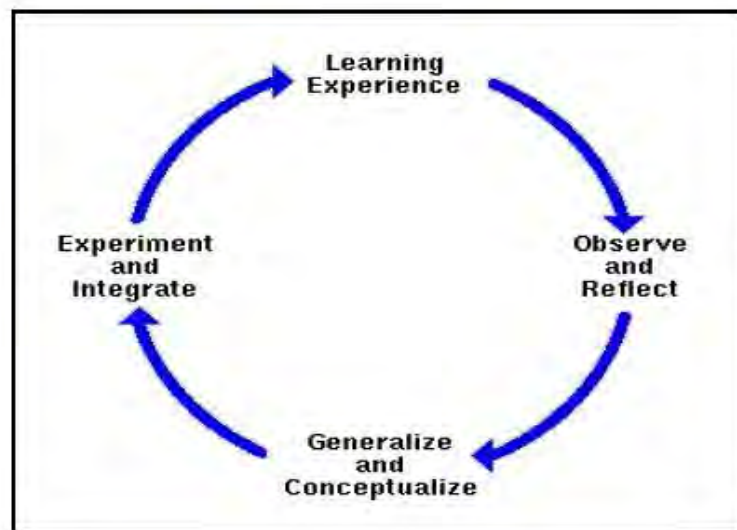
The second type of reflection that Schon describes is Reflection-in-Action. This type of reflection occurs during teaching and involves acting immediately to improve your teaching. Paulson and Kenneth describe the difference between these two types of reflection; if a teacher thinks reflectively about an episode of teaching after class, he or she engages in reflecting-on-action. In contrast, if they think about the episode while in the midst of teaching, then reflection-in-action takes place (Paulson &

Kenneth as cited in Sweigard, 2007). Schon's reflection theory has been used as a foundation for several researchers. Killion (1991) used Schon's two types of reflection (reflection-on-action and reflection-in-action) and added a third type (reflection-for-action).

Reflection-for-action is stated as the desired outcome of Schon's reflection-in-action and reflection-on-action. This type of reflection looks at what has occurred in the past and how this can help change our teaching process in the future. Consequently, this will provide students with an enriched learning environment. An example of reflection-for-action in the classroom is when a teacher critiques events from the past and makes a conclusion or judgment that will impact future teachings/lessons.

From the discussions of the above models, emphasis on reflection was keenly placed on the after mouth of the teacher's action rather than reflections during the planning stage as to how to integrate theory and practice. By this the researcher attempts to bridge the gap between reflections done during the planning stage and reflections after an action or the enactment of the teaching.

There are several modes and frameworks for reflective practice used for the enhancement of students' learning experience and also professional development. Kolb (1984) has described the 'experiential learning cycle' where he offers four phases of learning process. In the first phase, the learner has a specific experience of learning. In the second phase, the learner observes and reflects on the experience of learning and also responds to it. In the third phase, observations are related to other concepts in the learner's past experience and knowledge. In the fourth phase, the learner figures out the implications for action that can be tested in and applied to different situations.



**Figure 2: Experiential learning cycle**

The second phase of Kolb's (1984) 'experiential learning cycle' has direct bearing on reflective practice. It is in the second phase that the learner observes and reflects on the experience of his/her learning – a concrete experience that has happened or been completed in the first phase. The reflection provides a basis for the learner to relate to or assimilate with past and present experience and knowledge (the third phase). As the result, the increased self-awareness, change of behaviour, and the acquisition of new skills are expected to engage the individual actively in the learning process.

## **2.7 Conceptual Framework**

### **2.7.1 The PIP reflectivity model**

#### **I. Pre-teaching reflectivity**

The beginning stage of reflectivity in the teaching and learning process deals with the planning or incorporates all the planning activities to transfer intent into practice. This stage requires the teacher to organise the suitable teaching resources, appropriate methodologies to aid give a chronological presentation. The step-by-step presentation should be well arranged to induce better understanding of concepts to the learners.

The teacher owns the opportunity to consider the learners' relevant previous knowledge on the topic to be taught. It is prudent on the part of the teacher to carefully rehearse all the activities included in the lesson note in order to critique his/her strategies before the enactment of the teaching.

## **II. In-teaching reflectivity**

This stage lends itself for the teacher to craftily introduce his intent in the lesson based on the learners' relevant previous knowledge. The linkage here should be captivating enough to sustain learners' interest throughout the presentation period. The reflections here should align it to as how to carry out the activities practically to inform learners about the meaning of the concepts. For instance, the teacher needs to employ appropriate teaching strategies in systematic activities to promote teaching and learning.

Again, acknowledging essentials, that is, giving constructive feedbacks to ensure progress of enactment. During the teaching, the teacher from time to time through questions or other means summarizes the lesson to create more understanding in the lesson delivery.

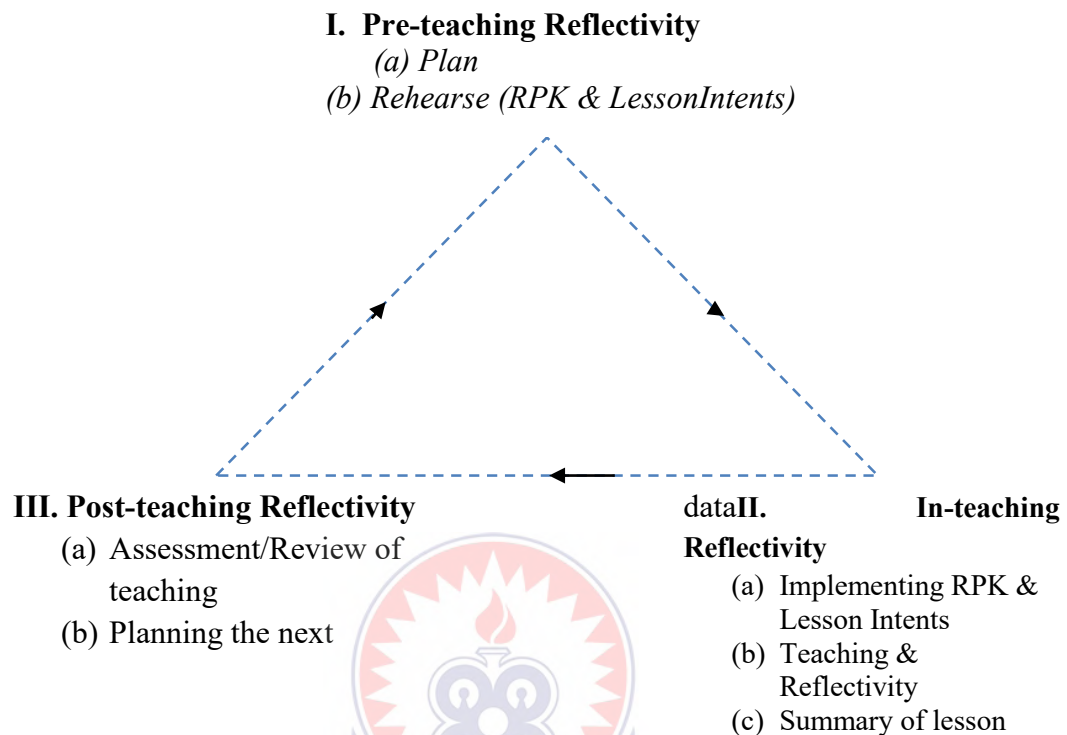
## **III. Post-teaching reflectivity**

This stage of reflectivity provides the general assessment of the enactment process. A holistic assessment of lesson is being done to find out whether the objectives set for the lesson has been achieved or not. The teacher could give total account or review the whole lesson for learners to reproduce it. In other words, he/she can employ any of the assessment procedures like exercises, assignments, tests, or any other form of assessment to evaluate the lesson. Critically, this stage also presents another form of movement. The general assessment could suggest or direct the teacher as to the



decision to be made in his teaching, as to whether to plan again to give a remedial teaching or make progress in his/her teaching.

All the three stages explained above is summarized in figure 3 below.



**Figure 3: PIP reflectivity model**

Comparing the PIP Model in figure 3 above with Korthan’s ALACT Model and Kolb’s Experiential Learning Cycle, one can identify the following similarities and differences:

- (a) The phase two of the PIP Model (In-teaching Reflectivity: a. Implementing RPK & Lesson Intent; b. Teaching & Reflectivity) is equivalent to the first three phases of Korthagen’s ALACT Model (a. Action; b. Looking back on the action; c. Awareness of essential aspects), which can also equate to the first two phases of Kolb’s Experiential Learning Cycle (a. Learning Experience; b. Observe and Reflect). Moreover, the phase three of the PIP Model (Post-teaching Reflectivity: a. Assessment/Review of teaching; b.

Planning the next lesson) is also comparative to the last two phases of both Korthagen's ALACT Model (a. Creating alternative methods of action; b. Trial) and Kolb's Experiential Learning Cycle (a. Generalize and Conceptualize; b. Experiment and Integrate). This shows that both the ALACT Model and Experiential Learning Cycle could be seen in the last two phases of the PIP Model.

(b) The difference between the PIP Model to both ALACT Model and Experiential Learning Cycle is the Pre-teaching Reflectivity phase (Planning and rehearsing of intent) which are considered to be the fundamentals of reflectivity thereby emphasizing the need to plan and rehearse before any action or learning experience.

## **2.8 Summary of the Literature Review**

Reflective practice is important as it deepens what we as teachers think teaching is, and stimulate awareness of our 'real' conception of teaching. Reflective practice challenges our emotionally settled impostor ship that we may develop on different occasions. What we do is often driven by the exigencies of the moment and we do not always have the opportunity to act the way serve the learning situation best. Reflection enquires in the imperceptibly oppressive aspects of our teaching that neither students, nor us may be aware of. We recognize these aspects only when we deliberately think and question our own practices, behaviours, communicative styles, teaching methods, and beliefs that underlie our teaching. As a result of reflection teachers become more aware of what is the best to happen for students' learning.

More recently, such recognition and awareness has led teachers to conduct research on their own teaching (There are, of course, other prompts for conducting research on

teaching). You can refer to *Teacher's Reflective Practice Handbook: Becoming an Extended Professional through Capturing Evidence-Informed Practice* (Zwozdiak Myers, 2012) for learning the stages involved in conducting research on your teaching.

The researcher is in agreement with Priya et al. (2017) who concluded that reflective practice is a cyclical process, because once we start to implement changes, then the reflective and evaluative cycle begins again. As a result of reflection, the teacher may decide to do something in a different way, or may just decide that what she/he has been doing is the best way. Therefore, being a teacher, one needs to reflect on the experiences or activities one is doing for one's growth.

In a nutshell, by developing knowledge and understanding the setting practice and the ability to identify and react to the problems the teacher trainees can become effective teachers. Teachers can deal with the needs and different issues of the learner's and demand of time if they reflect on their daily teaching learning activities for their professional growth. To deal and survive in their professional field, the teacher trainees need to grow and bring changes in their behaviour and style. Reflection is a flash back that the teachers need to mediate for their development.

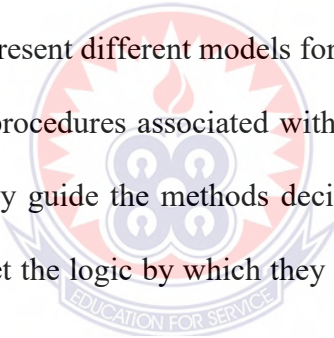
## CHAPTER THREE

### METHODOLOGY

This chapter presents an overview of the methods used in the study. These include the research design, rationale and assumptions, population, sample and sampling procedure, instrument for data collection, data collection procedures, managing and recording of data, reliability and validity and data analysis procedures.

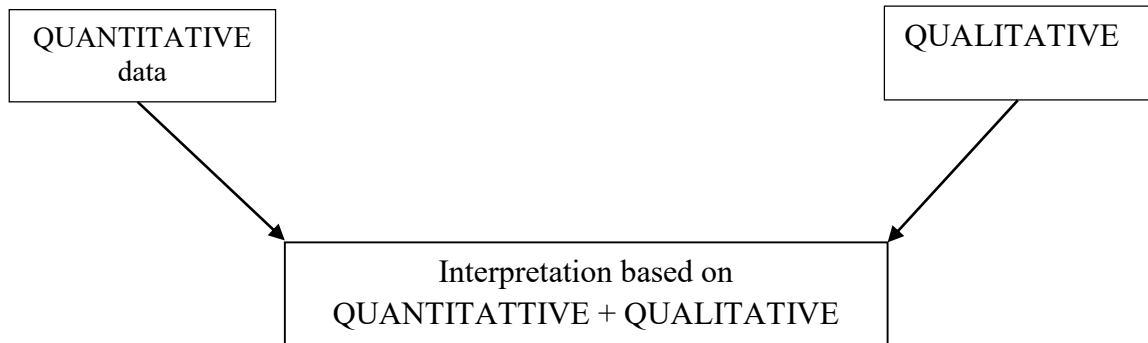
#### 3.1 Research Design

In this study, a mixed-method approach was used. The particular research design used under this approach was the Concurrent or Triangulation Research Design. Research design is a procedure for collecting, analyzing, interpreting, and reporting data in research studies. They represent different models for doing research, and these models have distinct names and procedures associated with them. Rigorous research designs are important because they guide the methods decisions that researchers must make during their studies and set the logic by which they make interpretations at the end of studies.



The purpose of adopting the concurrent or triangulation research design for this study was “to obtain different but complementary data on the same topic” (Morse, 1991) to best understand the research problem. The intent in using this design was to bring together the differing strengths and non-overlapping weaknesses of quantitative methods with those of qualitative methods (Patton, 1990). This design is used when a researcher wants to directly compare and contrast quantitative statistical results with qualitative findings or to validate or expand quantitative results with qualitative data.

The Triangulation Design is a one-phase design in which researchers implement the quantitative and qualitative methods during the same timeframe and with equal weight (see figure 4 below).



**Figure 4: Triangulation design**

The single-phase timing of this design is the reason it has also been referred to as the “concurrent triangulation design” (Creswell, Plano Clark, Gutmann & Hanson, 2003). It generally involves the concurrent, but separate, collection and analysis of quantitative and qualitative data so that the researcher may best understand the research problem. The researcher attempted to merge the two data sets, typically by bringing the separate results together in the interpretation or by transforming data to facilitate integrating the two data types during the analysis.

In this study, both quantitative and qualitative data were collected from the five colleges of education in Bono, Bono East, and Ahafo regions of Ghana. Data collection for both quantitative and qualitative was done concurrently. That is to say, quantitative data were collected from teacher trainees whereas the qualitative data were obtained from the mentors. The analysis and discussions were made on the basis of the quantitative and qualitative data retrieved. The findings accrued were as a result of the data gathered revealing a converged or triangulated data from both quantitative and qualitative methods to effectively aid the understanding of the research problem of this study.

### **3.2 Rationale and Assumptions**

The rationale for the study was to analyse teacher trainees' understanding and use of reflective practice in the teaching of Physical Education. The study assumed that all teacher trainees undergo training in reflective practice during the course of their studies. The study also assumed that all teacher trainees apply their knowledge in reflective practice in their teaching during the internship programme.

### **3.3 Population**

The study was carried out on final year teacher trainees on teaching practice in Bono, Bono East and Ahafo regions of Ghana. These regions are located along the forest zone or the green belt of Ghana. Culturally, the people or dwellers of these regions are Akan communities and they are predominantly farmers who seize the opportunity to cultivate the forest for their survival. Although in all the colleges selected, the teacher trainees were culturally from diverse backgrounds, however, the Bono people dominate the tribes in the various colleges of education.

There are five Colleges of education in these regions namely St. Joseph's College of Education- Bechem, St. Ambrose College of Education- Dormaa Akwamu, Berekum College of Education, Atebubu College of Education and Al-farouq College of Education- Wenchi.

The final year teacher trainees were the focus of the study since they were in the period of their off-campus teaching practice. These final year teacher trainees on practice within their catchment areas were approximately one thousand four hundred (1400). Moreover, college tutors (mentors) were also involved in the study for obtaining significant information on reflective practice. Details of the total population for this study have been summarized in Tables 3.1 and 3.2 below.

**Table 3.1: Population of teacher trainees**

<b>Colleges</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
St. Ambrose College of Education	168	42	210
Berekum College of Education	244	96	340
Al-Farouq College of Education	149	51	200
Atebubu College of Education	214	106	320
St. Joseph's College of Education	261	69	330
<b>Total</b>	<b>1,036</b>	<b>364</b>	<b>1,400</b>

**Source:** All the five colleges' registry, 2020

**Table 3.2: Population of mentors**

<b>Colleges</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
St. Ambrose College of Education	3	0	3
Berekum College of Education	3	1	4
Al-Farouq College of Education	2	0	2
Atebubu College of Education	3	0	3
St. Joseph's College of Education	2	1	3
<b>Total</b>	<b>13</b>	<b>2</b>	<b>15</b>

**Source:** All the five colleges' registry, 2020

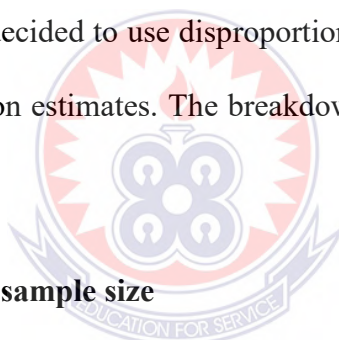
### 3.4 Sample and Sampling Procedure

The sample for the study was derived from final year teacher trainees actively undergoing their internship programme in their various schools or post. This category of teacher trainees was considered for the study because they were in the teaching field and expected to implement reflective practice, and are therefore considered as “knowledgeable informants” (Lincoln & Guba, 1985).

Sampling in educational research is generally conducted in order to permit the detailed study of part, rather than the whole of the population. The information derived from the resulting sample is customarily employed to develop useful generalizations about the population (Kenneth & Ross, 2005).

In selecting a representative part of the teacher trainees' population for the study, the researcher referred to the Morgan and Krecjie (1970) sample size determination table. According to this table, a population of 1400 corresponds to a sample size of 302. Hence, the researcher sampled only 302 teacher trainees out of the total of 1400.

Since the respondents were from different colleges of education, the researcher adopted the stratified sampling procedure in selecting the three hundred and two (302) teacher trainees. According to Kuranchie (2016), stratified sampling refers to the process of identifying and grouping members of a population into homogenous subgroups so that each stratum will contain subjects with similar characteristics. Due to the huge differences among the population of the five colleges as can be seen in table 3.1, the researcher decided to use disproportionate stratified sampling procedure in order to obtain precision estimates. The breakdown of the sample size can be seen in Table 3.3.



**Table 3.3: Details of the sample size**

<b>Colleges</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
St. Ambrose College of Education	36	9	45
Berekum College of Education	53	21	74
Al-Farouq College of Education	32	11	43
Atebubu College of Education	46	23	69
St. Joseph's College of Education	56	15	71
<b>Total</b>	<b>223</b>	<b>79</b>	<b>302</b>

**Source:** All the five colleges' registry, 2020

Simple random sampling technique was later used to draw the respondents from each stratum. Kuranchie (2016) opines that the simple random sampling technique provides each and every member of the group an equal and independent opportunity to be part of the sample for the study. The equal chance given every member of the



group helps to eliminate selection bias. The members' chance of being selected is not, in any means, dependent on the selection of others.

In implementing the simple random sampling procedure for the selection of respondents from each of the five colleges, the researcher:

- defined the target population,
- identified an existing sampling frame (i.e. the class register) of the target population,
- evaluated the sampling frame for undercoverage, overcoverage, and multiple coverage,
- assigned a unique number to each element in the frame,
- determined the sample size, and
- randomly selected the targeted number of population elements.

Moreover, the purposive sampling technique was used in selecting college tutors (mentors) from the five colleges. According to Cohen, Manion and Morrison (2007), purposive sampling technique allows researchers to deliberately choose subjects to be included in a study on the basis of their judgment of the typicality or possession of a particular characteristics needed. In other words, purposive sampling procedure is used in selecting key informants for the study. In this study, the researcher purposively selected five (5) mentors who teach Physical Education in each of the five colleges of education in order to obtain significant information on reflective practice.

### **3.5 Instruments**

In relation to the research instruments adopted for the study, both questionnaires and interview were used in collecting data from teacher trainees and mentors respectively.

The questionnaire used in obtaining information from the respondents (teacher trainees) was open and close-ended in nature. The questionnaire was structured under the following themes in relation to the research questions: (a) background information; (b) understanding of teacher trainees about reflective practice; (c) teacher trainees' use of reflective practice in teaching; (d) effects of reflective practice on teacher trainee's performance; and (e) measures for improving reflective practice.

On the other hand, Semi-structured interview was used in collecting data from mentors. Out of the fifteen (15) mentors from the five colleges of education, the researcher was able to interview only five (5) of them representing approximately thirty three (33%) of the total size. The tutors interviewed were from each of the five colleges so as to have diverse views from mentors based on their locations.

The interview schedule was structured in relation to the research questions: (a) understanding of reflective practice; (b) the use of reflective practice; (c) challenges of implementing reflective practice; (d) the impacts of reflective practice on performance; and (e) measures to improve reflective practice.

### **3.6 Data Collection Procedure**

A permission letter was accessed by the researcher from the department of Physical Education, Recreation and Sports to all the selected colleges for permission to carry out the research. Due to the movement restrictions during the COVID-19 pandemic, questionnaires were sent to the three hundred and two (302) respondents (teacher

trainees) through online via whatsapp. The answered questionnaires were later retrieved for analysis.

Again, the five (5) sampled physical education tutors (mentors) in the five colleges of education were interviewed via phone call. The conversation was recorded, transcribed and later analysed. In a bid to gather information from the mentors, the researcher sought consent from them before recording their information and assurance was given for confidentiality. This was done in order not to breach any ethical rule. The researcher spent minimum of twenty minutes on each of the interviewees.

### **3.7 Reliability and Validity**

The instrument was administered on thirty (30) students in Offinso College of Education and the reliability Cronbach Alpha co-efficient was determined to be  $r = 0.79$ , an indication that the instrument was good to be used to collect data for the main study as established by Nunnally and Bernstein (1994) that any value higher than 0.70 is good.

The content validity was used to check whether the items developed from instrument used truly represented or related to the content being measured. By this, the researcher gave the items developed to some experts with good knowledge in the subject area to scrutinise and approve on its adequacy to cover the objectives stated. The supervisor's expertise was also sought to test the face validity of the items, to ensure that the intended outcomes are achieved through the data gathering process.

### **3.8 Data Processing and Analysis**

The data was analyzed both quantitatively and qualitatively using appropriate procedures and thematic analysis respectively. Quantitative data on teacher trainees understanding and use of reflective practice was determined by computing the responses into frequencies, percentages, pie charts and bar charts using Microsoft Excel software. Data analysis for inferential and descriptive statistics used both Statistical Package for Social Sciences (SPSS) version 22 and Microsoft Excel. Qualitative data was analyzed using thematic analysis. Thematic analysis is a method for identifying, analyzing and reporting patterns, called themes, within data by organizing and describing the data set in rich detail (Braun & Clarke, 2006). Interviews from the interviewees (mentors) were tape-recorded, transcribed, interpreted, themes and sub-themes emerged and coded as in Raburu (2011). Thematic analysis was performed using the five phases of Braun and Clarke (2006), which were, verbatim transcription, initial coding, searching for themes, reviewing themes, defining and naming the themes.

Specifically, the data gathered were edited and coded for data entry into statistical software. The data was analysed based on the research questions. The data gathered for research question one through Microsoft Excel software generated it into frequencies, percentages and other charts for the analysis. Descriptive statistics were used to describe the demographic background of the respondents. Both research question two and three were also quantitatively processed through Microsoft software to generate frequencies, percentages and other forms of charts for easy analysis on how useful, effective and significance of reflective practice is to teaching and learning process. Research question four, also through frequencies and percentages

descriptively analysed issues on how well measures could be put in place to ensure effectiveness of reflective practice as a tool for effective delivery.

With the content analysis on the qualitative data from the mentors, the recorded data was transcribed verbatim and coded. The data was then organised into broad thematic themes which were in line with the research questions. Sub-themes were further derived based on the responses from the mentors. Direct quotations were made from the responses to provide further explanations on issues that were identified in the study. The findings of the study were compared to the issues in the literature to help ascertain the extent of agreement or disagreement. Implications on the findings in relation to teacher trainees understanding and use of reflective practice were provided.



## CHAPTER FOUR

### RESULTS, ANALYSIS AND DISCUSSIONS

This chapter discusses the information gathered from respondents. Questionnaires were implemented in the survey of the study. The result and findings of the study was presented and discussed using tables and diagrams. The analysis of the data was based on the following variables in relation to the research questions.

- Background Information of the Respondents.
- Understanding of Teacher Trainees about Reflective Practice.
- Teacher Trainees use of Reflective Practice.
- Effects of Reflective Practice on teacher trainee's performance.
- Measures for Improving Reflective Practice.

#### 4.1 Background Information of the Respondents

##### 4.1:1 Ages of respondents: Teacher trainees and mentors

**Table 4.1: Age distribution of teacher trainees**

Age	Frequency	Percentage (%)
20-24	150	49.7
25-29	120	39.7
30-34	25	8.3
35 and above	7	2.3
<b>Total</b>	<b>302</b>	<b>100</b>

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Table 4.1 shows that 150 (49.7%) of the respondents were within the age of (20-24), 120 (39.7%) of the respondents fell within the age of (25-29), 25 (8.3%) of the respondents also fell within the age of (30-34), again 7 (2.3%) of the respondents were also within the age of (35- above). Ages from 20 – 29 constitutes 89.4% of the

respondents. This shows that the majority of the respondents (teacher trainees) at the college level are within their youthful ages, hence, may have less experience.

**Table 4.2: Age distribution of mentors**

Age	Frequency	Percentage (%)
30-39	3	60
40-49	1	20
50 and above	1	20
<b>Total</b>	<b>5</b>	<b>100</b>

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Table 4.2 shows that out of the five mentors interviewed, three (3) of them representing (60%) within the age of (30-39), one (20%) respondent fell within the age of (40-49), and ages from fifty and above also constitutes just a respondent, representing 20%. This shows that the majority of the respondents (mentors) at the college level are within 30-39.

#### **4.1.2 Analysing the ages of respondents in relation to reflective practice**

With regard to age and experience in teaching, Putman (2012) established that the more years of teaching experience a teacher has, the higher level of their self-efficacies to engage students and manage the classrooms. Looking at experience factor, Kartini, Badariah and Ahamad (2010) found science teachers who had teaching experience of more than six years were more knowledgeable compared to teachers who had less years of teaching experience. In relation to the data gathered, majority of the respondents (teacher trainees) at the college level were within their youthful ages. Based on Putman and Kartini et al. assertions, these respondents (teacher trainees) could be regarded as less experienced.

Zafer and Aslihan (2012) also revealed that teachers with more years of teaching experience showed significantly different attitudes toward classroom management. They seemed to be more in control of their classrooms, good interactions with students and better in making decisions than teachers with fewer years of teaching experience. The data retrieved on mentors through interview revealed that majority of the respondents (mentors) at the college level were within 30-39, hence, experienced.

#### 4.1.3 Sex of respondents: Teacher trainees and mentors

**Table 4.3: Sex distribution of teacher trainees**

Sex	Respondents	Percentage (%)
Male	245	81.1
Female	57	18.9
<b>Total</b>	<b>302</b>	<b>100</b>

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Table 4.3 shows that 245 (81.1%) and 57 (18.9%) of the respondents were males and females respectively. The differences between male and female respondents were enormous. The involvement of both sexes would ensure a judicious assessment of gender on reflectivity in the teaching and learning process.

**Table 4.4: Sex distribution of mentors**

Sex	Respondents	Percentage (%)
Male	4	80
Female	1	20
<b>Total</b>	<b>5</b>	<b>100</b>

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

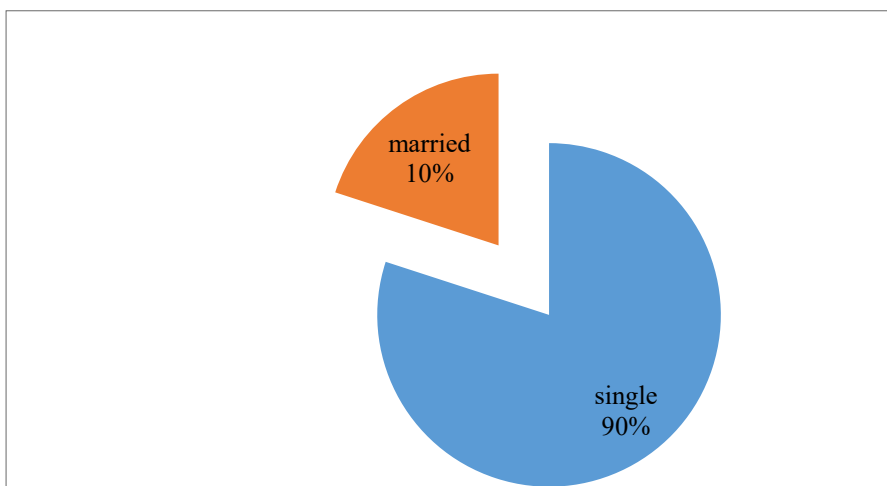


Table 4.4 shows that out of the five (5) mentors, four (80%) and one (20%) of the respondents were males and females respectively. The differences between male and female respondents were enormous. The involvement of both sexes would ensure a judicious assessment of gender on reflectivity in the teaching and learning process.

#### **4.1.4 Analysing the sexes of respondents in relation to reflective practice**

There were more male respondents than females in the study area. As shown in Table 4.3 and Table 4.4 among teacher trainees and mentors respectively. There is the likelihood that the effect of reflective practice would have more influence on males than females per this study. The reasons could be that, among the respondents picked for the study, men showed up as compared to the women, hence, men showing more interest in reflective practice than women. Again, culturally females are likely to have less time for reflections than males since they are mostly engaged in homes and other places. Rafferty (2018) explains that students navigate gender roles—the behaviours, attitudes, and expectations associated with being either male or female. These differences have to do with physical behaviours, styles of social interaction, academic motivations, behaviours, and choices. It could be deduced from Rafferty's assertion that student's reflective behaviours may be based on their gender differences with respect to choices, academic motivations, and interest.

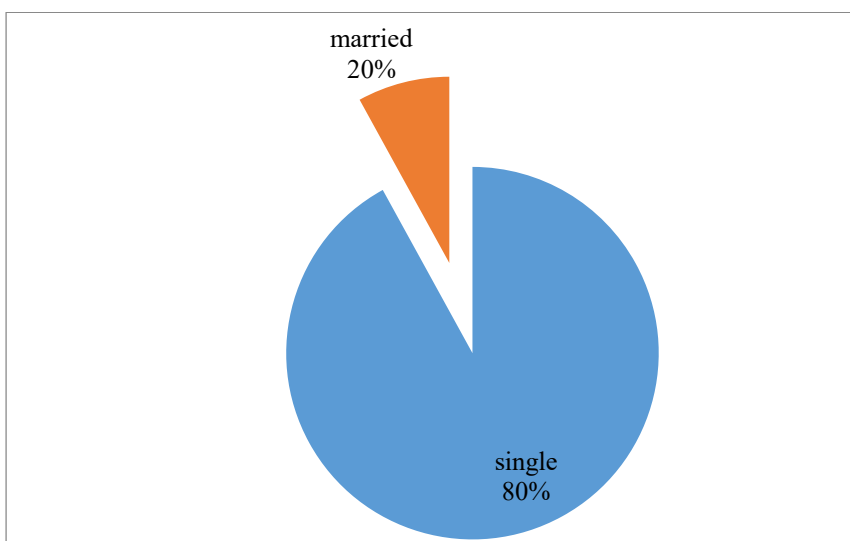
#### 4.1.5 Marital status of respondents: Teacher trainees and mentors



**Figure 5: Marital status of teacher trainees**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Figure 5 shows that 272 (90%) of the respondents were single while the remaining 30 (10%) were married. Responses to the questionnaires indicate that at the time of this research singles are highly enrolled at the colleges of education than the married. This statistics about the respondents were gathered by the researcher to find out whether marriage has influence on the reflective practice of teacher trainees.



**Figure 6: Marital status of mentors**

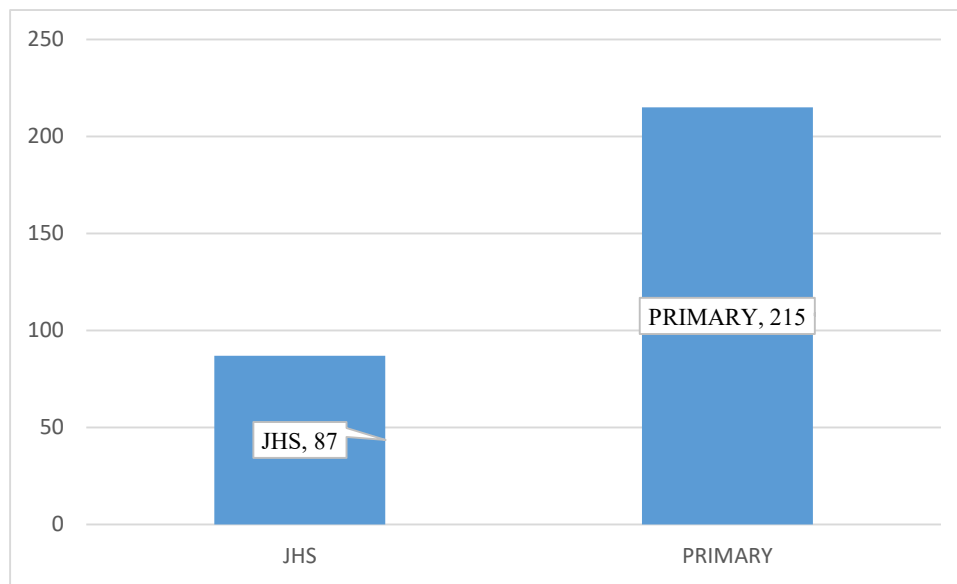
**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Figure 6 shows that one (20%) of the respondents was single while the remaining four (80%) were married. Responses to the interview indicate that at the time of this research most of the respondents (mentors) at the colleges of education were married. This statistics about the respondents were gathered by the researcher to find out whether marital status has an impact on reflective practice.

#### **4.1.6 Analysing the marital status of respondents in relation to reflective practice**

In reference to the greater percentage of respondents (teacher trainees) being single as shown in figure 5, it implies that, they may have ample time to do reflection in the teaching and learning process. As reflective practice demands of practitioners to look back on their activities for constructive assessment and modifications, the opportunity lend itself to single practitioners to have enough time to critically analyse their activities, hence, good performance. The interview conducted on the mentors shown in figure 6 also revealed that the majority were married; it implies that, they may have children and other dependents to care for as well as other responsibilities, hence less opportunity for reflectivity. This above discussion is supported by Tyagi (2013), who revealed in his study that unmarried teachers have higher level of classroom management than married teachers did. He further disclosed that married and unmarried people display different kinds of policies when they manage people.

#### 4.1.7 Major programmes of respondents (Teacher Trainees)



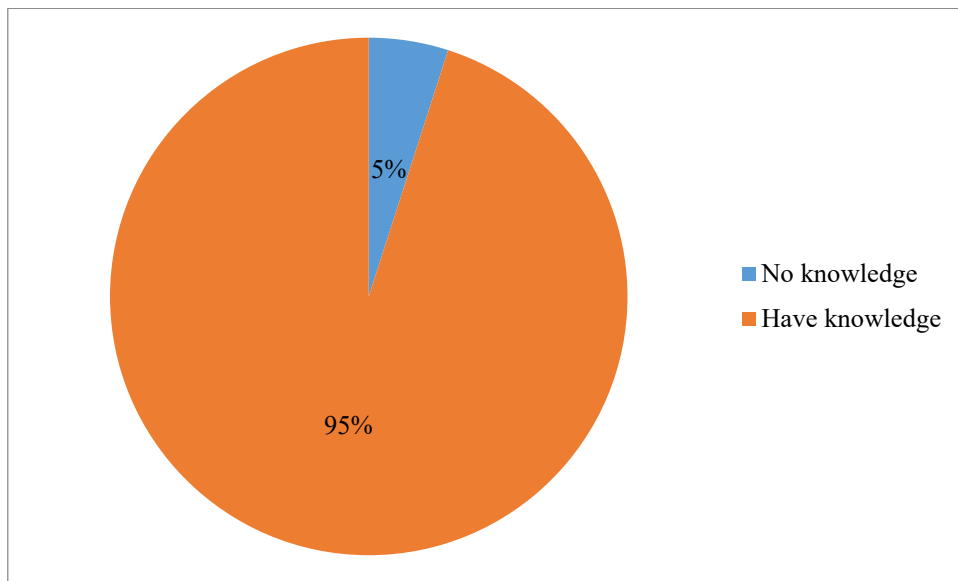
**Figure 7: Major programmes of respondents**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Figure 7 shows that 87 representing 28.8% of the respondents were JHS Teacher Trainees, while the remaining respondents (215) representing 71.2% were Primary Teacher Trainees. This reveals that more Teacher Trainees were enrolled in the Primary Education programme than the JHS. This data about the respondents informed the researcher whether there is a bridge or gap between the major programmes enrolled and reflectivity.

## 4.2 Understanding of Reflective Practice

### 4.2.1 Teacher trainees' understanding of reflective practice



**Figure 8: Teacher Trainees' understanding of reflective practice**

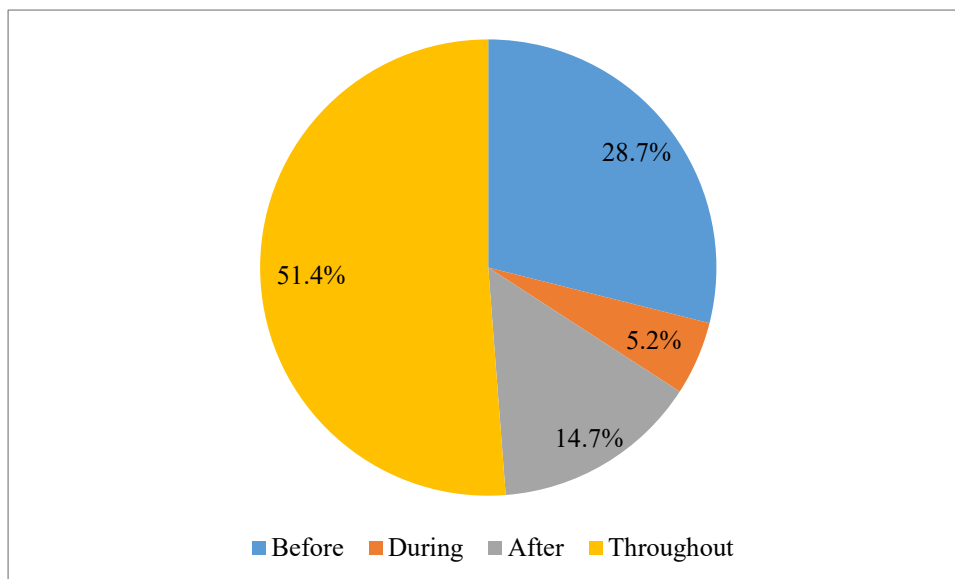
**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Figure 8 above indicates that, out of the three hundred and two (302) respondents, the data retrieved through questionnaires revealed that three (15) respondents were uninformed about the term 'reflective practice', whereas the remaining two hundred and eighty-seven (287) respondents also claimed to be informed about the term 'reflective practice'. This reveals that majority of the respondents do reflective practice in their teaching and learning situations. At this point, it can be said that reflective practice is a common phenomenon in the colleges of education studied.

According to the retrieved data, some of the respondents explained reflective practice as how carefully a teacher plans his/her lessons before, during and after to improve upon their practices. A respondent also explains reflective practice as the preparation that a teacher does either before, during, throughout or after teaching.

One respondent also opines that reflective practice is the process of evaluating your pupils about what you have taught them, being successful or not. Another respondent also defines reflective practice as the preparation and reflection the teacher does before he/she goes to class to deliver a lesson. A section of respondents also assert that reflective practice is the process of planning lessons systematically to be able to deliver a lesson for better understanding of pupils. A respondent is also of the view that reflective practice refers to all thinking and planning that a teacher does in his/her teaching profession to enhance effective teaching. Example is the preparation of the lesson notes, the teaching methods to use and how to assess his teaching.

Through the data gathered from the questionnaires, two hundred and eighty-seven (287) respondents on the understanding of reflective practice revealed that reflective practice is a series of processes or activities which go on throughout the teaching process to enhance pupils' performance and also helps the teacher to evaluate his/her work or objectives. Some respondents also see reflective practice as a day-to-day activity carried out by teachers to know the strengths and weaknesses in the teaching activity for correction or improvement. From these views of the respondents, reflective practice can be explained as the various preparations and logical ideas developed by teachers before, during, after, or throughout the lesson to enhance effective teaching and learning.



**Figure 9: Periods for reflective practice**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

From figure 9 above, the data gathered reveals that 82 (28.7%) of the respondents do reflective practice before the teaching process, whereas 15 (5.2%) of the respondents also do reflective practice during the course of the teaching. In addition, 42 (14.7%) of the respondents do reflective practice after the teaching process, while 147 (51.4%) of the respondents also do reflective practice throughout the teaching and learning process. This reveals that, majority of the respondents observe reflective practice throughout the teaching and learning process.

#### 4.2.2 Mentors' understanding of reflective practice

Below are some of the responses shared by the interviewees (mentors) on the understanding of reflective practice:

*M1/M2: "reflective practice is the kind of self- reflection teachers do to plan, teach and solve problems of teaching and learning"*

*M3: "it is a skill teachers apply in teaching and learning to ascertain whether or not teaching was effective and addressed objectives set"*

*M4: “reflective practice involves retrospective self-assessment of one’s pedagogical process”*

*M5: “when a teacher looks back at what he/she has taught to figure out his/her strengths and weakness”.*

#### **4.2.3 Analysing teacher trainees’ understanding of reflective practice**

With respect to research question one on teacher trainees understanding of reflective practice, this study revealed that two hundred and eighty seven of the teacher trainees representing ninety five (95%) are informed and make use of reflective practice in their teaching and learning process. This implies that reflective practice is a common phenomenon in the colleges of education studied. This finding is in consonance with what Schon (1993) ascribed that reflective practice is a process where teachers think over their teaching practices, analyse how something was taught and how the practice might be improved or changed for better learning outcomes. This indicates that reflectivity in teaching has an influence in learner’s assimilation of concepts.

To further confirm this finding, when mentors were interviewed, the majority asserted that “reflective practice is the kind of self-reflection teachers do to plan, teach and solve problems of teaching and learning”. The implication is that when reflectivity is adopted in the teaching and learning process, it highlights the effectiveness and professionalism in teaching. Therefore, the mentor’s attitude and understanding of reflective practice may have an influence on teacher trainee’s reflectivity.

### **4.3 Teacher Trainees use of Reflective Practice in Teaching**

#### **4.3.1 How teacher Trainees use reflective practice in their teaching**

Since fifteen (15) of the total respondents already claimed that they have no knowledge about reflective practice, the remaining two hundred and eighty seven (287) respondents shall be the focus of the study. Out of the remaining two hundred

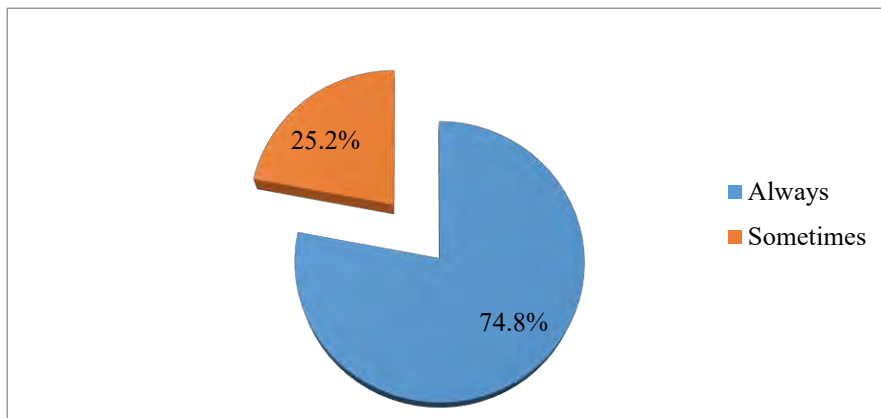


and eighty-seven (287) respondents for the study, only one respondent claimed he does not use reflective practice in his lesson. He is of the view that reflectivity throughout the teaching process is time consuming. On the contrary, the remaining respondents (286) claimed to have been making use of reflective practice in their teaching and learning processes. This shows that the majority of the respondents know the value of reflective practice in the teaching and learning process.

Based on the data gathered, most of the respondents organize their reflective practice in various stages. They claim that, before the lesson, they prepare lesson notes including TLMs as well as considering suitable methods to be used at each stage in the teaching and learning process. At the end of the lesson, teacher trainees assess their pupils as part of the reflection process. Moreover, some respondents use questions and feedbacks as a tool to facilitate reflection during the teaching process.

The data retrieved also revealed that some respondents later assess themselves after the lessons taught and find remedy to what did not go on well during the teaching process. Another respondent noted that she mostly introduces her lessons by linking pupils' relevant previous knowledge to the new topics to be taught. Furthermore, she varies the teaching methods to enhance pupils' understanding in the lessons. A respondent also asserted that in his reflective period, he tries to think of what to teach, who to teach, how to teach and how best his teaching can be done to get the best out of his pupils.

### 4.3.2 Number of times for reflective practice

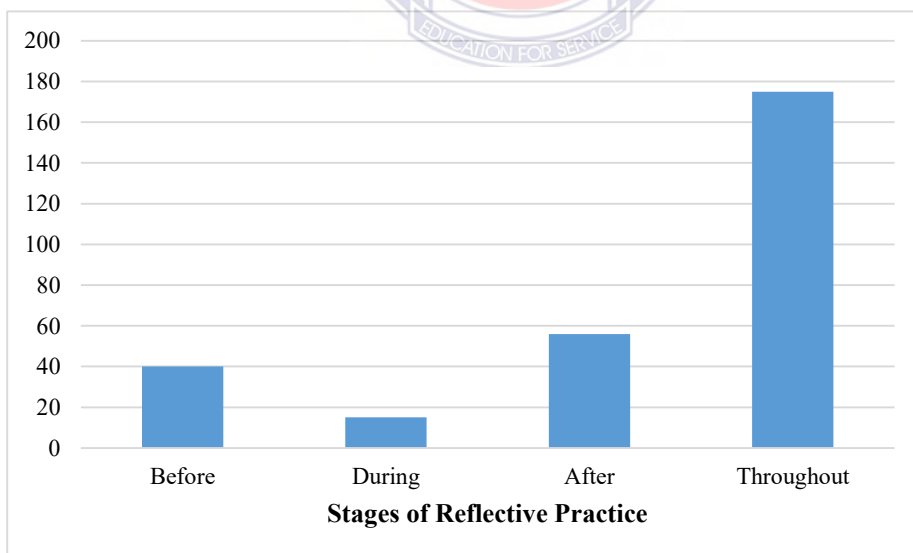


**Figure 10: Number of times for reflective practice**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

From figure 10 above, 214 (74.9%) of the respondents always use reflective practice in their teaching, whereas 72 (25.1%) of the respondents sometimes use reflective practice in their teaching. This shows that the majority of the respondents are conversant with the usage of reflective practice in their teaching and learning process.

### 4.3.3 Periods for reflective practice



**Figure 11: Periods for reflective practice**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

From figure 11, the researcher also noticed that 40 (14%) and 15 (5.2%) of the respondents adopt reflective practice before and during their teaching process respectively. On the other hand, 56 (19.6%) of the respondents apply reflective practice after the teaching process, while 175 (61.2%) of the respondents also implement reflective practice throughout their teaching and learning process. This reveals that majority of the respondent's exercise reflective practice throughout their teaching process.

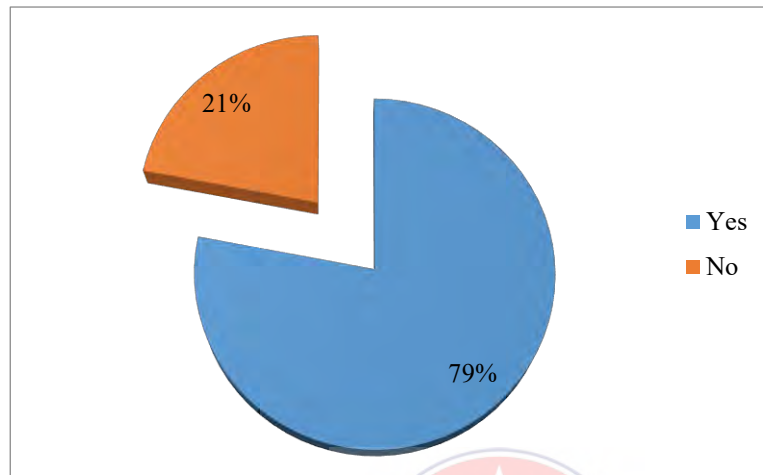
#### 4.3.4 Reasons why respondents apply reflective practice in their teaching

**Table 4.5: Reasons why respondents apply reflective practice in their teaching**

S/N	Themes	Description	Frequency	(%)
1	<i>Pedagogy</i>	(i) It helps the teacher to adopt the appropriate teaching strategies which makes lessons enjoyable and understandable. (ii) Lessons are taught sequentially. (iii) It helps the teacher to break the topics into teachable units. (iv) It helps teachers to abreast themselves with new teaching standards.	222	78.0
2	<i>Teaching and Learning Materials</i>	It helps the teacher to use the appropriate teaching and learning materials to be used.	201	70.3
3	<i>Assessment and Evaluation strategy</i>	(i) It is used to know whether the set objectives by the teacher have been achieved. That is, to ensure competency. (ii) It helps the teacher to identify pupils' strengths and weaknesses. (iii) It aid teachers to adopt correct forms of assessment.	185	65.0
4	<i>Feedbacks</i>	It helps the teacher to give appropriate feedback.	205	72.0
5	<i>Lesson explorations</i>	It helps the teacher to do a lot of explorations and researches on the lessons.	157	55.0

From table 4.5 above, the feedback from respondents shows that reflectivity has an impact on their teaching and learning process. This is to say that there is importance attached to reflective practice at the college level.

#### 4.3.5 Challenges in implementing reflective practice



**Figure 12: Challenges in implementing reflective practice**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

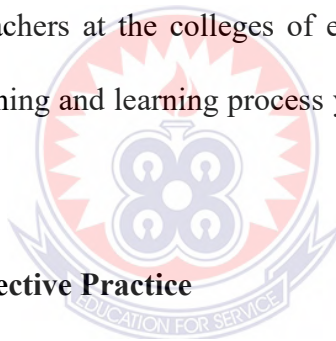
From the figure 12 above, the researcher's findings indicate that majority of the respondents [representing 225 (79%)] claim to have challenges in implementing reflective practice in their teaching and learning process. On the contrary, the minority of the respondents [representing 61 (21%)] claimed to have no challenges in executing reflective practice in their teaching and learning process.

Here are some of the challenges noted by some of the respondents who try to implement reflective practice in their teaching as already explained in figure 12 above.

**Table 4.6: Challenges in implementing reflective practice**

S/N	Description	Frequency	(%)
1	Planning reflective practice is costive and time consuming	272	95.0
2	Reflective practice delays teaching and learning	213	74.5
3	Reflective practice puts one into critical thinking	250	87.4
4	Learners sometimes do not give answers in connection to what has been previously learnt.	195	68.1
5	Less time for teaching and learning, leading to ineffectiveness of reflective practice.	199	70.0
6	Reflective practice requires a lot of investigations (research) of which resources are inadequate.	230	80.4

All the above points mentioned by respondents indicate that the implementation of reflective practice comes with a price. These responses from the respondents reveal that, although student teachers at the colleges of education understand the value of reflective practice in teaching and learning process yet it requires a lot of resources to make it more effective.



#### 4.4 Mentors' use of Reflective Practice

Below are some of the responses shared by the interviewees (mentors) on the use of reflective practice in the teaching and learning process (preparation stage, teaching stage, and after teaching stage):

M1/M2: *“reflective practice is done at the preparation stage, teaching stage and after teaching”*.

M3: *“reflective practice is ensured at the teaching stage”*

M4: *“reflective practice is accorded at the preparation stage”*.

M5: *“reflective practice is solely done after the lesson”*.

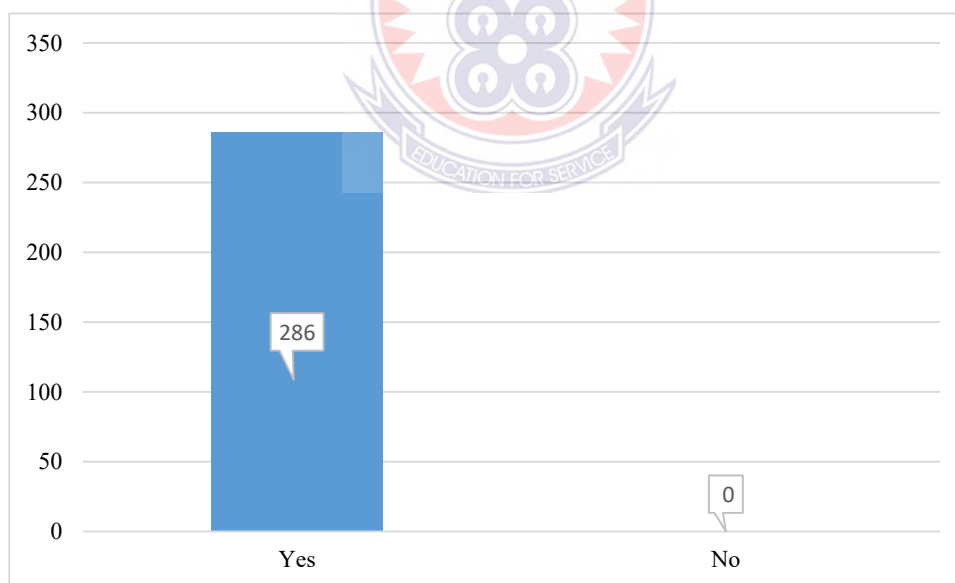
#### **4.4.1 Analysing teacher trainees' use of reflective practice**

In relation to research question two on how teacher trainees use reflective practice in their teaching, the responses of teacher trainees on the use of reflective practice revealed that two hundred and eighty seven respondents representing ninety five (95%) of them know the value and use of reflective practice in the teaching and learning process. This was shown as they testify as to how they often use it in the teaching and learning process. Thus, they employ the use of reflective practice to plan, teach and evaluate lessons after teaching. This is in agreement with Moore (2000) which postulate that becoming a reflective practitioner is not so much about the acquisition or development per se or the skills and areas of knowledge required for successful teaching but rather concerns the particular skills needed to reflect constructively upon ongoing experience as a way of developing those skills and knowledge and improving the effectiveness of one's work. This implies that per standards of teaching, it is required of teachers who give little attention to reflective practice in their teaching to incorporate it in their dealings so to promote effectiveness of teaching yielding to improved performance.

Responses from mentors through interview also justified that the majority is in line with the trainees that “reflective practice is done at the preparation stage, teaching stage and after teaching”. They further disclosed that reflectivity should be done very often to facilitate understanding and performance. Their reasons are that the practice can address “adjustment and improvement of teaching skills”, and “purposefully do corrections and to give remedial lessons through proper assessment to meet the intended objectives”.

Schön (1987) affirms that “we may reflect in the midst of action without interrupting it”. This type of reflection is defined as *reflection in action* as we reflect while actions are taking place. “Our thinking serves to reshape what we are doing while we are doing it”. On the other hand, “we may reflect *on action* to discover how our knowing-in-action may have contributed to an expected outcome”. This reflection takes place after actions are carried out. An example of reflection on action is when a teacher critiques events from the past and makes a conclusion or judgment that will impact future teachings or lesson, which invariably becomes *reflection-before-action* or *reflection-for-action* as established by Killion (1991). Procee (2006) would affirm it that because of how complex the nature of teaching and learning is, teachers are required to be reflective and be able to adjust to the diverse classroom situations.

#### 4.5 Effects of Reflective Practice on teacher trainees Performance

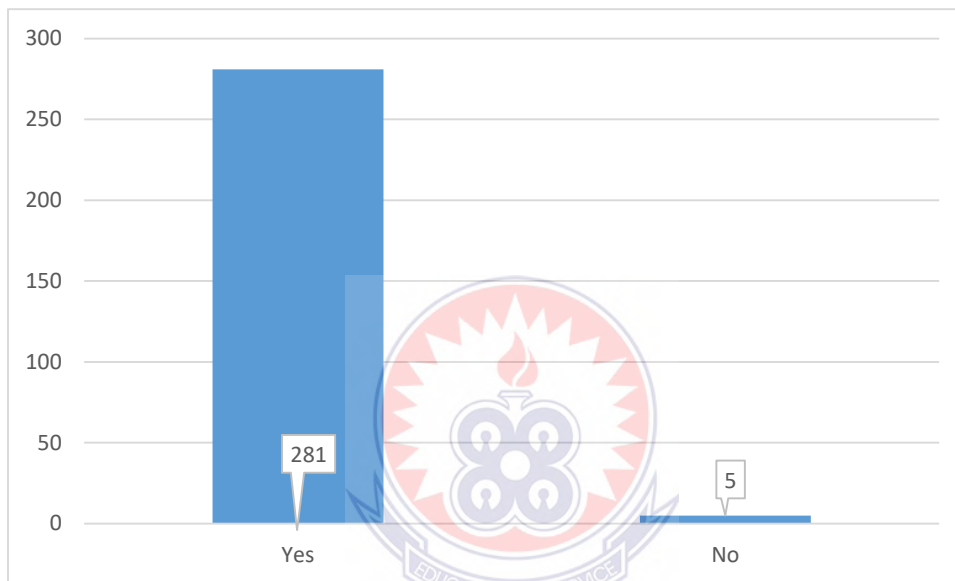


**Figure 13: Reflective practice as a tool to enhance teacher trainee’s performance**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

From figure 13 above, data gathered indicate that all the two hundred and eighty-six (286) respondents who implement reflective practice acknowledge that reflective

practice is and can be used as a tool to enhance teacher trainees performance in the teaching and learning process. This shows that they have all tested and testify that irrespective of the few challenges it posed in its implementation in the teaching process cannot deny its effectiveness in using it as a tool to enhance teacher trainees performance. In other words, its usage has proven to them that it is one of the best options to create understanding in the teaching and learning process in attainment of educational goals.

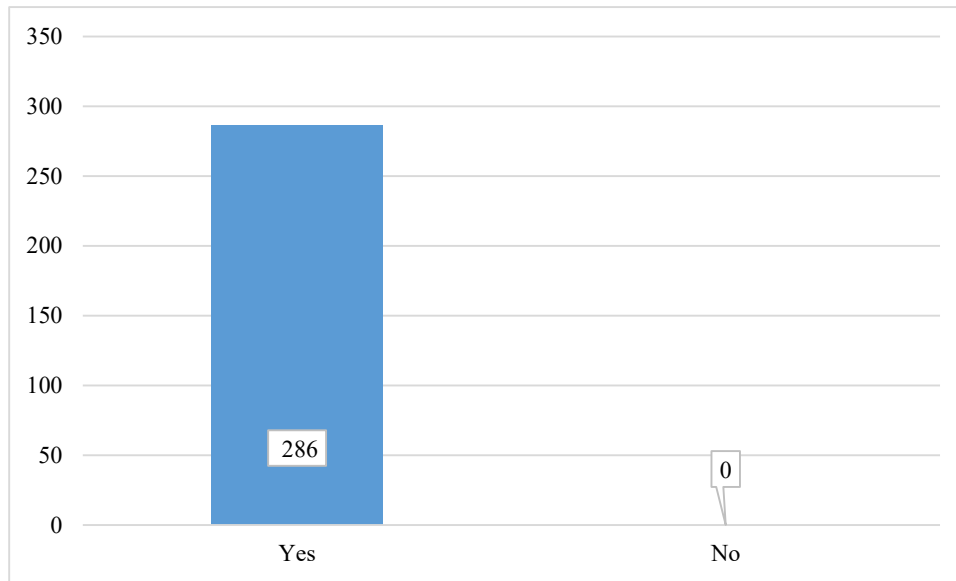


**Figure 14: Pupils' participation in lessons**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

From figure 14, the data retrieved point out that two hundred and eighty-one (281) representing 98.3% of the respondents admit that reflective practice call for pupils' participation in their lesson deliveries. On the other hand, the remaining five (5) respondents representing 1.7% have the view that reflective practice does not call for pupils' participation in teaching and learning process. This shows that the reflections that teachers employ in their teaching stages actually induce and sustain pupil's interest throughout their lessons.





**Figure 15: Impacts of reflective practice on pupils' performance**

**Source:** Colleges of Education in Bono, Bono East, and Ahafo Regions in Ghana, 2020.

Figure 15 reveals that all the two hundred and eighty-six (286) respondents who implement reflective practice claim that reflective practice has a lot of impact on pupil's performance. This means that reflective practice is highly regarded at the colleges of education as far as teaching and learning is concern.

With reference to figure11, here are some of the impacts of reflective practice on the pupils' performance as stated by respondents.

**Table 4.7: Impact of reflective practice on teacher trainee's performance as stated by respondents**

S/N	Description	Frequency	(%)
1	Reflective practice helps teacher trainees to become self-reliant	165	57.7
2	It helps teacher trainees to become problems solvers	180	63.0
3	It promotes pupils; participation in teaching and learning.	255	89.2
4	It improves pupils' performance and better understanding.	183	64.0
5	It enhances critical thinking among teacher trainees and pupils.	196	69.0
6	It helps teacher trainees to identify pupils with special needs and address them appropriately.	234	82.0
7	Reflective practice helps both teacher trainees and pupils to explore in various teaching pedagogies.	240	84.0
8	It enhances assessment of lessons.	229	80.1
9	Reflective practice gives both teacher trainees and pupils the platform for revision of previous lessons.	209	73.1

From the interviews conducted with the mentors on the account of challenges that reflective practitioners face in their teaching revealed that, three (3) respondents representing sixty percent (60%) remarks that they are confronted with additional workload. One (1) respondent representing twenty percent (20%) sees that reflective practice is time consuming. Again, the remaining one (1) respondent also representing twenty percent (20%) asserts that although one can make use of the available teaching learning materials yet coming by the appropriate ones is very costly.

The teachers' responses on the influence that reflective practice can have on teacher trainees' performance shows that, one (1) respondent representing twenty percent (20%) revealed that "reflective practice help improve teaching strategies". Another one (1) respondent also representing twenty percent (20%) assert that "reflective practice help improve pupils' performance". Two (2) respondents representing forty percent (40%) collectively agree that "reflective practice helps to select appropriate

content” whereas the remaining (1) respondent representing twenty percent (20%) revealed that “it exposes teachers to the best practices”.

#### **4.5.1 Analysing the effects of reflective practice on pupils’ performance**

In addressing research question three, data retrieved on effects of reflective practice on teacher trainees performance revealed that all the respondents (teacher trainees) testified to the effectiveness of reflective practice as a tool for successful delivery. They disclosed that it is a tool which can induce and sustain pupil’s participation, promote understanding and improve performance in the teaching and learning process. This revelation can be supported by Procee (2009) assertion that; because of how complex the nature of teaching and learning is, teachers are required to be reflective and be able to adjust to the diverse classroom situations.

According to National Council for Curriculum and Assessment (NaCCA, 2019), good reflective practices of both in-service and teacher trainees will aid learners to acquire some knowledge through some learning experiences. This implies that, as teacher trainees carefully and purposefully apply reflective practice in their dealings, they stand the chance to improve their performance. In this regard, reflectivity in teaching has a great or positive impact on teacher’s delivery. The majority of the teacher’s when interviewed also revealed that “it is a tool that aid improvement in teaching strategies, improvement in performance, as well as improvement in best practices.”

Although, there are few challenges that the adoption of reflective practice posed on practitioners as stated in *table 6*, yet the majority of the trainees discovered that in spite of the challenges, it can still be deemed as one of the best options to promote success in the teachers work.

#### 4.6 Measures for improving Reflective Practice

Below are some of the measures that can be used to improve reflective practice in the teaching and learning process as mentioned by the respondents:

**Table 4.8: Measures for improving reflective practice**

S/N	Description	Frequency	(%)
1	Constant variation of teaching techniques	229	76
2	Engaging pupils throughout the teaching process	115	38
3	Teacher trainees need to constantly consult the experienced teachers	151	50
4	Through research and reading of required books and magazines	180	60
5	Teacher trainees need to be more innovative in their delivery	98	32
6	Ghana Education Service should organize workshops to sensitize teacher trainees with the new trends	205	67
7	Providing constructive assessments and evaluations	61	20
8	Critically consider the pupils performances before, during, and after the teaching and learning process	266	88
9	Constant use of teaching and learning resources	261	86
10	Constant planning and preparation of lesson notes	289	96
11	Regular monitoring from supervisors and mentors	88	29
12	Giving constructive feedbacks to pupils	220	73

Responses on suggested measures that will improve on reflective practice as indicated by the three hundred and two (302) teacher trainees through the questionnaires answered indicated that, two hundred and twenty nine (229) respondents representing seventy five percent (75%) opined that “teacher trainees should have constant variations of teaching techniques”. One hundred and fifteen (115) respondents representing thirty eight percent (38%) acknowledged that teacher trainees should be encouraging pupils throughout the teaching process. One hundred and fifty one respondents (151) representing fifty percent (50%) asserted that teacher trainees needs to constantly consult the experienced teachers. One hundred and eighty (180)

respondents representing sixty percent (60) of the teacher trainees also acknowledged that through research and reading of required books, teacher trainees can improve their workout-put. Ninety eight (98) respondents representing thirty percent (32%) agreed that they should be more innovative in their delivery. Two hundred and five (205) respondents representing sixty eight percent (68%) indicated that Ghana education service should organize workshops to sensitize teacher trainees with the new trends. Sixty one (61) respondents representing twenty (20%) percent suggested that teacher trainees should be able to provide constructive assessments and evaluations. Two hundred and sixty six (266) respondents representing eighty eight (88%) proposed that they should critically consider the pupils performances before, during, and after the teaching and learning process. Two hundred and sixty one (261) respondents representing eighty six percent (86%) again agreed that there should be constant use of teaching and learning resources. Two hundred and eighty nine (289) respondents representing ninety six percent (96%) asserted that there should be constant planning and preparation of lesson notes. Eighty eight (88) respondents representing twenty nine percent (29%) remarks that there should be regular monitoring from supervisors and mentors. Moreover, two hundred and twenty (220) respondents representing seventy three percent (73%) emphasized on giving constructive feedbacks to pupils.

#### **4.6.1 Analysing the measures for improving reflective practice**

With respect to suggested measures that would improve reflective practice, mentors interviewed revealed that trainees should incorporate reflective practice through the stages or phases of teaching. Reflective practice at the planning stage, teaching stage, and after teaching is likely to have a tremendous influence in the teaching and learning process like “constant variation of teaching techniques”, “constant use of

teaching and learning resources”, “providing constructive assessments and evaluations” and others.

Further interrogation with the mentors also revealed that writing reflective journal weekly to keep addressing challenges in their teaching will lead to the following benefits: “critically consider the pupils performances before, during, and after the teaching and learning process”, “trainees innovativeness” and others. As O’Connell and Dymont (2011) looked into the effectiveness of journal writing, their results revealed that journaling can be an appropriate medium for encouraging reflection. This indicates that when trainees properly adopt this strategy, it will call for pupil’s participation, improve understanding and promote performance.



## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter provides a summary of the relevant issues and the key findings of the study as well as policy recommendations and areas relevant for further research. The issue of reflective practice has received greater recognition in academic discourse. However, the analysis of teacher trainees understanding and use of reflective practice in the teaching of physical education have not been adequately addressed.

#### 5.1 Summary of Findings

The study aimed at analysing teacher trainees' understanding and use of reflective practice in the teaching of Physical Education in all the five colleges of education in the Bono, Bono East and Ahafo regions of Ghana. In order to do this, the study was guided by four specific objectives. The first and second objectives of the study assessed the teacher trainees' demonstration of understanding and use of reflective practice in the teaching of physical education. The third and the fourth objectives of the study also looked at identifying the effects of reflective practice on pupil's performance and measures for improving reflective practice. To achieve these objectives, a total of three hundred and two (302) teacher trainees as well as five (5) mentors were selected for the survey inquiry. Questionnaires and interview guide were the key tools and methods used for the study. The questionnaires answered were computerised into frequencies, percentages, pie charts and tables using Microsoft Excel for the analysis of the quantitative data whereas content analysis was used for the analysis of the qualitative data. The key findings are summarised as follows:

### **5.1.1 Understanding of reflective practice**

It was found out from the study that reflective practice is a common phenomenon in the colleges of education studied. This is because almost all of the teacher trainees as respondents to the study were able to explain the term reflective practice. Not only could the teacher trainee explain the term reflective practice, as they can also tell the stages reflective practice is applicable in the teaching and learning process. The mentors also gave a confirmation to the finding that reflective practice is the kind of self- reflection teachers do to plan, teach and solve problems of teaching and learning.

### **5.1.2 The use of reflective practice in teaching**

Again, it was found out that the majority of the teacher trainees know the value and use of reflective practice in the teaching and learning process. They are aware of the relevance of the concept and the need to use it very often in the various stages of teaching developments to induce assimilation of concepts in the process. The mentor's assertion that reflectivity should be done very often to facilitate understanding and performance signified that they also know the effectiveness of the use of the concept "reflective practice".

### **5.1.3 Effects of reflective practice on teacher trainees performance**

The study found out that the teacher trainees testified to the effectiveness of reflective practice as a tool for successful delivery. They affirmed their point by saying that it is a tool that can induce and sustain pupil's participation, promote understanding and improve performance in the teaching and learning process. The mentors were also on the same page with the trainees as they also ascribe that reflective practice as a tool has a positive impact on strategies and performance.



#### **5.1.4 Measures for improving reflective practice**

In general, both teacher trainees and their mentors suggested that frequent use of reflective practice as a tool would yield to a constructive assessment and evaluation. It was also documented that the adoption of the concept would provide constant variation of techniques in the teaching and learning process. They also established that writing reflective journal weekly would also help address the anticipated challenges in the teaching and learning process.

#### **5.2 Conclusion**

The objectives of the study were appropriately validated by the findings and results. For instance, the analysis done on teacher trainees understanding of reflective practice brought to light that the subject reflective practice is a common phenomenon in the college of education. Under the use of reflective practice, it was recorded that the respondents recognized its use as an effective process to enhance performance in the teaching profession. As often as it is being used, its relevance is being felt at the various stages of developing concepts for better understanding and assimilation. Again, it was ascertained through the study that reflective practice is an effective tool for delivery in the teaching and learning process. This is so because it makes use of strategies to enhance performance. Constructive suggestions on measures were also unravelled to improve the concept reflective practice. However, some challenges with regard to its use were discovered as being costive and time consuming, work load, lack of resources and few others.

### **5.3 Recommendation**

Based on the findings of the study, the researcher recommended the following action:

- In relation to research question one, the study recommends that mentors should intensify their supervision to reinforce reflective practice become part and parcel of teacher trainee's programme of activities for effective teaching as to be able to explain the concept and show how and when they apply it in stages of lesson development.
- Also, in responding to research question two, the study recommends that the colleges of education should put in place policies that will compel teacher trainees to incorporate reflectivity in their teaching and learning process.
- There should be workshops organised on reflective practice at regular intervals for teacher trainees during and after their internship period in order to be sensitised on the effectiveness of reflective practice being used as a tool.
- Finally, the study recommends that the teaching practice coordinators and the entire team should intensify their supervision by having a regular check on teacher trainee's process of observing the practice of the weekly journal during the period of training.

### **5.4 Areas for Further Research**

- For further studies, this particular work was focused on the public sector practitioners on teacher trainees understanding of reflective practice but in future private sector practitioners understanding and attitude towards reflective practice should be considered.
- Future studies on reflective practice should delve into both prescriptive and descriptive, that is the study should focus on strategies for improving

reflection and describing what reflection is and how it actually takes place among pre-school teachers in physical education teacher education (PETE).

- For further studies, influence of mentor's knowledge on understanding of reflective practice on mentees could be researched.



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## APPENDICES

### APPENDIX A

#### Questionnaire Schedule to Assess Teacher Trainees Understanding on Reflective Practice

##### A. BACKGROUND INFORMATION

1. Age .....
2. Sex [ ] Male [ ] Female
3. Academic Status [ ] Student
4. Marital Status [ ] Single [ ] Married
5. Major Programme [ ] JHS [ ] Primary

##### B. UNDERSTANDING OF TEACHER TRAINEES ABOUT REFLECTIVE PRACTICE

6. Have you heard about the term 'reflective practice'?  
a. Yes [ ] b. No [ ]
7. Have you ever observed any reflective practice in teaching before?  
a. Yes [ ] b. No [ ]
8. Which part of your preparation and teaching process do you see reflective practice in the teaching process?  
a. Before [ ] b. During [ ] c. After [ ] d. Throughout [ ]
9. Can you in your own words, explain how you understand reflective practice?  
a. Yes [ ] b. No [ ]
10. If yes, explain below  
.....  
.....

**C. TEACHER TRAINEES' USE OF REFLECTIVE PRACTICE IN TEACHING**

11. Do you use reflective practice in your teaching?

- a. Yes [ ]                      b. No [ ]

12. If yes, explain below

.....  
.....

13. How often do you use reflective practice in your teaching?

- a. Always [ ]                      b. Sometimes [ ]

14. Which part of your preparation and teaching process do you implement reflective practice in your teaching?

- a. Before [ ]                      b. During [ ]                      c. After [ ]  
d. Throughout [ ]

15. Why do you apply reflective practice in your teaching?

.....  
.....

16. Do you encounter any challenge(s) in implementing reflective practice in your teaching?

- a. Yes [ ]                      b. No [ ]

17. If yes, explain below

.....  
.....

18. Write down your challenge(s) below.

.....  
.....

**D. EFFECTS OF REFLECTIVE PRACTICE ON PUPILS' PERFORMANCE**

19. Do you see reflective practice as a tool to enhance pupils' performance?

- a. Yes[  ]                      b. No [  ]

20. Does reflective practice call for pupils' participation in your lessons?

- a. Yes[  ]                      b. No [  ]

21. Are there any impact(s) of reflective practice on pupils' performance?

- a. Yes[  ]                      b. No [  ]

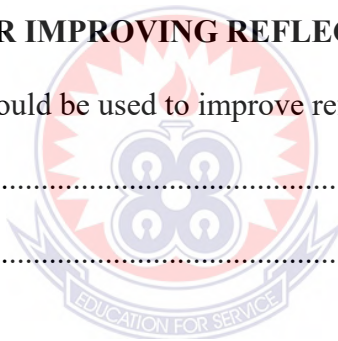
22. Mention some of the effects of reflective practice on pupils' performance.

.....  
.....

**E. MEASURES FOR IMPROVING REFLECTIVE PRACTICE**

23. What measures could be used to improve reflective practice in teaching?

.....  
.....



## APPENDIX B

### Physical Education Teachers' (Mentors) Interview Guide

1. In your view, how would you explain reflective practice?
2. In which part of your preparation and teaching process do you use reflective practice?
3. How often do you use reflective practice in the teaching and learning process?
4. How do you integrate reflective practice in your teaching?
5. Why do you apply reflective practice in your teaching?
6. What are some of the challenges in implementing reflective practice in your teaching?
7. What are some of the differences that reflective practice can have on teacher trainees' performance?
8. Which measures could you put in place to improve reflective practice in trainees' teaching?

