ABSTRACT

This paper examined the import of adopting reflective practice in the preparation of teacher trainees in the colleges of education in Ghana. It looked at the various dimensions of the knowledge base of teacher education curriculum in Ghana and various policy documents, especially the Colleges of Education Act, Act 847, which elevated the status of training colleges to tertiary institutions. Data from varied documents were explored and analysed from a discourse analytic perspective to ascertain how reflective practice is integrated into the pedagogy of teacher education in Ghana. The paper identified the adoption of reflective practice, with emphasis on artistry, which is reflection-in-action, as a suitable pedagogical skill to complement what the colleges of education are currently doing to actualize their mission. Policy recommendations included the restructuring of the curriculum of the colleges of education to address the development of students’ tacit knowledge by interfacing theory and experience. Research recommendations included an action research on teacher effectiveness using reflective practice.

Keywords: Reflective practice, Tacit knowledge, Teacher preparation, Pedagogy, Teacher education, Artistry.

1. INTRODUCTION

Most professionals, including teachers, after their academic training, experience shock when the theory and technical skills they acquired during their academic preparation prove to be ineffective when confronted with problems of practice. According to Kowalski (2012), their bewilderment stems from a misunderstanding of theory and limited insights about the effects of contextual variables on the consistency of applying theory. Kowalski describes context “as an intricate mix of people, resources, societal expectations, and organizational conditions” (p.ix). Contextual dissimilarities explain to a greater extent why practitioners in a profession may perceive problems of practice in different ways, even when presented with identical information.

Schon (1990) says that “in the varied topology of professional practice, there is a high hard ground overlooking the swamp. On the high ground, manageable problems lend themselves to
solutions through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution” (p.3).

The knowledge base for effective professional preparation, for example, teacher preparation, is a combination of theoretical and tacit knowledge. Practitioners therefore expect classroom learning experiences of student teachers to be relevant to address real classroom situations. Bjork et al. (2005) suggest that the curricula, clinical experiences, and internships of professional preparation should be designed to meet three objectives. According to Bjork et al., these goals first focus on student teachers’ ability to master theoretical knowledge that will help them to describe, explain, and predict behaviour that influences effective teaching. Second, student teachers will master the process of reflection and learn to critique their behaviour and outcomes in relation to existing professional knowledge. Finally, student teachers will use reflection to interface theory and experience by analyzing their decisions in relation to contextual variables in the classroom. The ultimate in meeting these objectives is to equip the teacher with the wherewithal to address problems of practice that defy textbook solutions. Schon (1990) identifies the adoption of reflective practice in the pedagogy of professional preparation as the tool to enable practitioners (e.g., teachers) reach this ultimate destination.

Darling-Hammond (2006) points out that the critical factor or the most significant indicator of student success is an excellent teacher; one who facilitates learning in the classroom. However, teacher education programmes leave new teachers poorly prepared and actually increase the attrition rate of these teachers.

Sergiovanni (2005) debunks the myth that excellent teachers are born and rather suggests a re-culturing of teacher preparation to produce excellent teachers. He proposes the incorporation of reflective practice into the pedagogy of teacher education. Sergiovanni opines that the adoption of reflective practice will lead teachers to consider the possible influence of contextual variables (e.g., students’ home situation, students’ individual learning differences, students’ health) on educational outcomes. The assumption that the quality of the teacher is directly linked to the quality of instruction and student learning has been embedded in nearly every major school reform strategy of the past decade. Stein and Gewirtzman (2003) argue that if high quality teachers are so important, it must be determined where they come from and whose responsibility it is to develop them.

2. UNDERSTANDING REFLECTIVE PRACTICE

The concept of reflective practice was popularized in education through the works of Schon (1983). Schon describes reflective practice as an experience which involves thoughtfully considering one’s own experiences in applying knowledge to practice while being coached by professionals. In simple terms, Schon sees reflective practice as the ability of professionals to think what they are doing while they are doing it. Schon (1987) further says that reflective practice is an engagement of the thought process and doing through which a practitioner gains knowledge and becomes more skillful. Reflective practice entails the integration of theory and practice; thought and action.
Reflective practice enables practitioners to move from a knowledgebase of distinct skills to where they are able to adapt their skills to function in specific contexts and situations. According to Osterman and Kottkamp (1993) 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” (p.5). They opine that engaging in reflective practice requires the practitioner to be an actor and a critic concurrently. They see the individual carry out a task and at the same time analyzing the entire performance.

Gibbs (1998) observes that reflective practice suggests individuals develop analysis of feelings and evaluation of experience. To achieve this perspective, Osterman and Kottkamp (1993) aver that individuals must develop a conscious awareness of their own actions and effects and the ideas or theories-in-use that shape their action strategies. They further argue that while learning is predicated on experience, learning cannot take place without reflection. Conversely, while reflection is essential to learning, reflection must be integrally linked with action.

Bridges (1992) describes reflective practice as experiential learning which is cyclical and consists of four stages: experience, observation and reflection, abstract re-conceptualization, and experimentation. According to Schon (1983) reflective practice is knowing-in-action, which is classified as useful knowledge; knowledge that addresses specific needs of the practitioner.


1. Reflection in practice. Schon describes this mode as the thinking the teacher does in the process of imparting knowledge to students and facilitating learning in the classroom. Engaging in reflection in practice enables teachers to think on their feet and find solutions to emerging problems in the course of their day-to-day teaching.

2. Reflection on practice. Schon describes this mode as the thinking the teacher does after the lesson. The teacher focuses on what transpired during the classroom interaction with the students and other components of the classroom experience that hindered or facilitated learning.

3. Reflection for practice. Schon describes this mode as the thinking the teacher does about future experience informed by the past practice. The teacher addresses what needs to occur in the future using the reflection of the past to guide decisions.

However, Schon emphasizes reflection in practice as the artistry practitioners urgently need. He sees reflection in practice as enabling teachers to look to their experiences, connect with their feelings, and attend to the theories in use. Reflection in practice offers teachers opportunity to build new understandings and construct meanings to inform their actions in the situation that is unfolding. Schon further observes that during reflection in practice, practitioners allow themselves to experience surprise in a situation which they find uncertain or unique. They reflect
on the phenomenon before them, and on the prior understandings which have been implicit in their behaviour. Reflection in practice gives teachers a new philosophy to operate with: teachers have to think things through and see every classroom case as unique.

Taken the modes together, reflective practice offers a unique pedagogical approach for teacher education as summed up by Freese (1999). Reflective practice is a “process of making sense of one’s experiences by deliberately and actively examining one’s thoughts and actions to arrive at new ways of understanding oneself as a teacher” (p. 2).

Reflective practice provides the means to engage in anticipatory reflection, (b) contemporaneous reflection, (c) retrospective reflection. That is, teachers continuously engage in reflection to assess and evaluate teaching and learning. Schon (1987) concludes that when looking at a situation, we are influenced by, and use, what has gone before, what might come, our repertoire, and our frame of reference, we are able to draw upon certain routines. As we work we can bring fragments of memories into play and begin to build theories and responses that fit a new situation.

Three major approaches that facilitate reflective practice have been identified in literature: self and peer assessment, problem-based learning, and personal development planning and portfolios.

2.1. Self and Peer Assessment

Boud (1995) describes self assessment as the act of judging ourselves through the act of questioning our actions and making decisions about the next step. Boud says that self assessment gives students the opportunity to identify standards or criteria to apply to their work and make judgments about the extent to which the standards or criteria have been met. Self assessment enables students to take responsibility for their learning by evaluating, judging, and improving their own performance. It allows students to engage in critical self reflection on their own learning, regulate their learning, and develop the ability to close the gap from current to desired performance. Liu and Carless (2006) see peer assessment as a communication process through which learners enter into dialogues related to performance and standards.

Peer assessment involves students making judgments about the quality of each other’s work in relation to agreed criteria. Peer assessment is a particularly useful device for supporting reflective practice, because of its focus on dialogue and shared interpretations of teaching and learning between staff and students. Students learn from each other and use the feedback provided by peers to inform their own learning. Chickering and Ehrmann (1996) argue that working with others often increases involvement in learning; Sharing one’s ideas and responding to those of others improve thinking and deepen understanding.

Problem-Based Learning

Problem-based learning uses case method and simulations to provide experiences for students; experiences that are an approximation of the practitioners challenges, problems, and opportunities (Kowalski, 2012). Problem-based learning is adopted to aid students in learning new information, concepts, and theories. It starts with a case or a problem and students are
expected to research, select, analyze, and apply information and theories to solve it. When cases are used to teach new knowledge, students learn inductively. According to Kowalski (2012) the cases are fact-driven and complete and are used to demonstrate associations between variables that reveal the nature of the concept being taught. Problem-based learning is also used for students’ skill development in critical thinking, decision making, and problem solving. To address the problems or cases, students are not expected to acquire a predetermined set of right answers. Instead they are expected to engage with the case presented to them and decide on the type of information they need to learn, and the skills they need to acquire in order to effectively address the problem or the case.

Problem-based learning prepares students for real life situations that do not have simple solutions, but require comparison and analysis of resources, strategies, and costs. Problem-based learning offers a scenario in which students can develop reflective capacities by demonstrating how theoretical knowledge can be integrated with tacit knowledge. That is, students develop the skills to filter situational knowledge through personal values, beliefs, experiences, and previously acquired knowledge to address problems.

2.2. Personal Development Planning and Portfolios

Personal development planning offers students the opportunity to assume responsibility to plan their own development. Personal development planning and portfolios provide students with a structure and process of thinking about their learning. Bernhardt (2002) describes portfolio as a purposeful, ongoing, dynamic, and fluid collection of works depicting the student’s systemic continuous improvement efforts. It provides documentary evidence of the capabilities of the student’s personal development planning—a checklist of skills or competences achieved, evidence of achievement, and a reflection on how the skills have been acquired and developed.

Personal development planning offers a framework for reflection for students to understand how they are learning and relate their learning to a wider context. Personal development planning enables students to think about the knowledge they have acquired, the knowledge they are expected to acquire, and how they might develop their skills to fill the gaps in their knowledge so they can address problems of practice.

3. EMERGING ISSUES IN TEACHER EDUCATION IN GHANA

Teacher education in Ghana has undergone several reforms in terms of programmes and structure and expansion of facilities all in an attempt to meet the need for qualified teachers. The development of teacher education in Ghana is a chequered one, often based on ad-hoc programmes to meet emergency situations and needs of the education system. As the needs of basic education have changed over time, teachers have been required to undertake more institutional training to upgrade. The Education Act of 2008, Act 778, established that teacher training institutions in Ghana shall be named colleges of education. They were mandated to award diploma in basic education degree to student teachers after successful completion of three-year post secondary teacher education. The Colleges of Education Act, 2012 (Act 847) made the
colleges of education fully tertiary institutions. Act 847 outlines certain basic functions of the
colleges of education, which include (a) exposing students to modern and innovative techniques of
teaching and learning in order to promote critical thinking and problem-solving skills in the
classroom and (b) ensuring that basic research and action research form an integral part of
teacher education to promote quality teaching and learning in the classroom.

The colleges run a curriculum that consists of a two-year on-campus academic preparation
and a one-year off-campus supervised teaching. The two-year on-campus academic preparation
draws heavily on positivist model to education with deductive instructional pedagogy as the basic
approach to transmit knowledge. With the deductive instructional pedagogy, the instructor
introduces a topic by lecturing on general principles, and then shows illustrative applications of
the principles to the students (Prince and Felder, 2006). The instructor conducts lessons by
introducing and explaining concepts to students, and students are expected to complete tasks by
practicing the concepts. The instructor has a carefully outlined plan intended to convey
information to the learners. The instructor’s role is to convey information in a clear and concise
manner; the learner’s role is to absorb it.

Knowledge is perceived to be in the province of the instructor and learners have access to it
through the instructor. Although the learners may have an opportunity to ask questions and
experiment with the new skills, for the most part, they sit facing the instructor and listen.
Questions tend to be infrequent, and presentations are seldom interrupted. The interactions in
the classroom are focused on knowledge acquisition and testing the acquisition of that knowledge.
According to Schon (1983) the kind of knowledge transmitted in this interaction is “specialized,
firmly bounded, scientific, and standardized” (p. 23). The knowledge is described as theory-in-use
whose application assumes standardization across individuals and situations.

The one year off-campus supervised teaching offers the student teacher the opportunity to
teach under the tutelage of a master teacher. The master teacher serves as a mentor to the student
teacher. The mentor is expected to guide the development of the student teacher in a caring and
helping relationship that provides professional support to the student teacher. Mentoring,
incorporated into the off-campus teaching, is to assist the student teacher develop effective
instructional strategies, practice successful classroom techniques, and develop successful
interaction strategies.

The one year off-campus teaching is not without academic work. Student teachers go back to
the college for lectures (i.e., guidance and counseling, trends in education) once every month.
After completing the one year off-campus teaching experience, student teachers return to their
various institutions and prepare for final examinations on the academic courses they took during
the year. Missing from the one year off-campus teaching is a guided reflection on their teaching
experiences. The emphasis on teacher education is placed more on acquisition of theoretical
knowledge.
4. IMPLICATIONS FOR PRACTICE

The elevation of the colleges of education in Ghana to tertiary institution status gives the colleges institutional autonomy, but also makes the colleges more accountable to Government and the public in terms of actualizing the mission of the colleges. The upgrading of the colleges requires many changes in areas such as the management of the colleges as tertiary institutions, curriculum design, and the upgrading of all resources - human, physical, and material. Of prime importance is a shift in the how students are perceived in the colleges. As tertiary institutions, the students in the colleges of education are expected to be treated as adult learners and are to be provided with learning opportunities that benefit adult learners.

Merriam and Caffarella (1991) proffer five assumptions about adult learners:

1. Mature adults are self-directed.
2. Adults accumulate a reservoir of experience.
3. An adult's readiness is closely related to the developmental tasks of their social role. In other words, if I need to know it, I will learn it.
4. Adults are more concerned about problem solving than simply acquiring knowledge.
5. They are motivated by internal factors. (p. 272)

Peel et al. (1998) identify four pedagogies they consider consistent with the knowledge base of preparation programmes and also appropriate with adult learners: (a) theory to practice, (b) mentoring, (c) internship, and (d) cohort study (p. 23). The theory-to-practice pedagogy allows students to apply their theoretical knowledge to real-life situations in non-threatening environment using reflective practice approaches. The mentoring orientation utilizes an experienced resource person who offers feedback and guidance to the prospective practitioner.

Playko (1992) opines that the internship orientation provides aspiring professionals with a more realistic perception of the field by placing them in a school setting where it is possible for them to observe and reflect on the day-to-day tasks of a teacher. The cohort orientation emphasizes the shared experiences among aspiring teachers as they create network of peers and journey together through their education.

Many researchers (Geltner et al., 1998; McCarthy, 1999; Petzko, 2008) argue that effective professional preparatory programmes consist of field experiences that incorporate the development of craft knowledge as an essential component of the programme. The authors point out that aspiring practitioners value programmes with integrated experience. That is, the aspiring practitioners (e.g., student teachers) respond favorably to the knowledge base of preparatory programmes when the pedagogy utilizes cohorts, applied knowledge, the use of practitioners, reflective practices, and field-based research.


1. Strong coherence and integration between courses and coursework
2. Extensive and intensely supervised clinical work that supplements course work and allows students to see how to put material into practice.
3. Reflective practices such as case studies or action research that help to bridge
theory and practice by allowing student teachers to apply what they have learned and connect it to their subjects.

Teacher education in Ghana utilizes all the pedagogy identified as effective for teacher preparation, except reflective practice. This missing link creates urgency in reviewing teacher education in Ghana in the context of the colleges of education being tertiary institutions. Incorporating reflective practice into the pedagogy in teacher education in Ghana will provide learners with the opportunity to engage in cooperative learning activities and examine practice in the context of espoused theories. When practitioners engage in reflective teaching, they demonstrate a capacity (or disposition) to analyze the process of what they are doing, to reconstruct their professional and personal knowledge schemes, while simultaneously making judgments to adapt their practice so that it best matches the needs of students.

5. CONCLUSION AND RECOMMENDATION

The ultimate purpose of teacher education is to equip practitioners with the requisite knowledge and skills to learn how to identify what the classroom needs are and appropriately respond to the needs to improve students’ learning. To arrive at this ultimate destination in teacher education in Ghana requires the adoption of the pedagogy that utilizes cohorts, applied knowledge, the use of practitioners, reflective practices, and field-based research. The pedagogy integrates theory and craft knowledge so that the polar opposites of theory and practice or textbook and experience can be seen as complements to one another.

Darling-Hammond (2006) posits that teachers must learn from practice as well as learn for practice. To accomplish this, teacher education programmes must not only provide knowledge, but help teachers access the said knowledge and reflect on their practice. Agreeing with Darling-Hammond, this paper recommends to the Nation Council for Tertiary Education in Ghana to adopt of reflective practice into teacher education pedagogy in Ghana. The paper further recommends an action research on teacher effectiveness using reflective practice.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Contributors/Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES


Petzko, V., 2008. The perceptions of new principals regarding the knowledge and skills important to their initial success. NASSP Bulletin, 9(3): 224-250.


Views and opinions expressed in this article are the views and opinions of the author(s). International Journal of Education and Practice shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.