

Journal of Education and Practice (JEP)

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Teaching Practice: A Case of Molepolole College of Education**



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Assessing the Efficacy of Peer Teaching as an Alternative to Teaching Practice: A Case of Molepolole College of Education

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Accepted: 3rd Nov 2023 Received in Revised Form: 15th Nov 2023 Published: 1st Dec 2023

Abstract

Purpose: The study sought to assess the effectiveness of peer teaching as a replacement of school-based teaching practice.

Methodology: The study used a case study research design and applied mixed methods approach to evaluate the viability of peer teaching as an option for school-based teaching practice. Questionnaires, interviews and group discussions were used to collect data. Different participants were randomly selected to respond to a questionnaire and they comprised sixty (60) year 3 students and sixty (60) lecturers. Ten (10) lecturers including four (4) Heads of Departments were purposively selected for interviews while six (6) student teachers were conveniently selected for group discussions.

Findings: The results indicated that peer teaching is a useful strategy to introduce teacher interns to the art of teaching. However, the peer teaching practice environment does not represent the realities of the school classroom. Thus, peer teaching is inadequate to be used as a substitute for school based teaching practice. The results point to need for a thorough review of the use of peer teaching in place of the school-based teaching practice.

Unique contribution to theory, practice and policy: Pedagogical content knowledge remains key form of knowledge in teacher professional development. The comparative study findings affirm the utility of the two strategies of peer teaching and teaching practice in teacher professional development. It highlights the limitations of peer teaching and underscores the uniqueness of teaching practice. Thus, it cautions against the use of peer teaching as a replacement for the traditional school-based teaching practice. This challenges both practitioners and policy makers to think of alternative practices to be used instead of teaching practice in the event the usual experiential on-field practice option is not available.

Keywords: *Peer Teaching, Teaching Practice, Pre-Service, Teacher Professional Development*



INTRODUCTION

The closure of schools during the Covid-19 pandemic adversely affected pre-service teacher professional development (PTPD) in two broad ways. Firstly, like in all other public schools, lectures could not continue as teacher training institutions closed down during lockdown period. Secondly, the closure of the schools brought to a dead end the field experience of year two and three student teachers who had only joined practice schools for two weeks. Since the stoppage of the 2019 teaching practice cycle, student teachers were constantly faced with the possibility of progressing or graduating without practical exposure to the classroom. The phased return of students to schools following the national lockdown did not help the situation as teacher interns were not allowed to go back to the practice schools.

Globally, teaching practice or experiential learning is one of the cornerstones of pre-service and in-service teacher professional development (Adu-Yeboah & Kwaah, 2018; Varela & Desiderio, 2021). Aptly, Aigbavboa, et al., (2018) explicate that in order for them to effectively practice their chosen careers, professionals of any discipline require appropriate work experience. In Botswana public teacher training institutions, PTDP program culminates with student teachers undertaking the field practicum during which they are assessed. Molepolole College of Education (MCE) is one of the two secondary colleges of education in the country. It offers a three-year diploma PTDP programme for teachers who, on successful completion, teach in junior secondary schools (JSSs). The college programme includes two teaching practice sessions at the end of year 2 and 3. The practicum lasts between 6 and 10 weeks. Often, student teachers are placed in JSSs they would have identified at which they have accommodation. However, due to insufficient funds, trainees are requested to identify schools in close proximity to the college. Otherwise the teaching practice coordinating office identifies schools for them around which they can access rented accommodation.

At the schools, the interns are attached to two mentor teachers depending on the student teacher's subject combinations. The mentor teachers are expected to assist the student teacher settle in the school, oversee their progress, assess them and help in other key areas such as scheming, lesson planning and record keeping. The actual practice begins with an observation week during which the trainee observe the mentor teacher conduct lessons. After the observation week, the student teacher is left to take sole responsibility for at least two of the classes belonging to the mentor teachers. It is expected that the mentor teacher would approve the lesson plans that the trainee would be using in the lessons prior to the lessons and attend the lessons with the teacher trainee. It is also expected that together the two would evaluate the first few lessons without assessment. Assessment by the mentor teachers and college teacher educators often begins on the third week. The college academic regulation prescribes that each student teacher be assessed twice by the college and as many times as possible by the schools without necessarily overwhelming the student teacher.

However, the year 2019 was disrupted by the COVID-19 pandemic. The closure of schools meant that year 2 and 3 student teachers who had just joined the practice schools to start their field practicals could not continue. Unfortunately for the student teachers, the college academic regulations prescribe that to progress to the next year, year 2 student teachers must successfully complete their teaching practice. Meanwhile, to be considered to have completed the diploma programme and enrolled for graduation, third year teacher trainees must have successfully completed their final teaching practice exercise. Technically, this implied that the year 2s would not progress to third year while the year 3s would not graduate. To ensure that student teachers were not punished for something beyond their control, the college adopted the peer teaching model dubbed Peer Teaching Practice. In this model, and in contrast with the traditional teaching practice exercise, student teachers taught their peers in the college. The content taught was either derived from the student teachers' college subjects or from the junior secondary school syllabi. This study sought to assess the effectiveness of the peer teaching practice model as a potential replacement of the conventional teaching practice.

LITERATURE REVIEW

The Role of School-Based Teaching Practice in Teacher Preparation

Teaching practice represents the nexus between theory and practice (Aigbavboa et al., 2018; Thuketana, 2020). The practicum gives teacher interns the chance to apply the knowledge and theories learnt from study programs to classroom situations (Adu-Yeboah & Kwaah, 2018; Schaffer & Welsh, 2014). During this time, novice teachers get to discover their potential and weaknesses, develop strong networks for job placement potential (Varela & Desiderio, 2021), improve their personal teaching competence and develop effective teaching skills (Adu-Yeboah & Kwaah, 2018). Also, they do self-introspection concerning their initial beliefs and assumptions about teaching before practice in real terms as well as re-assess their decision to pursue teaching as a career (Schaffer & Welsh, 2014). The internship programme encourages students to find greater meaning in their studies, develop greater sense of responsibility, place more reliance on their judgement, get exposure to real world of work and become readily employable (Aigbavboa et al., 2018). Thus, field experiences significantly contribute to students' readiness to perform the role of teachers and have significant impact on their self-efficacy (Mulyati & Sopiah, 2023).

Teaching practice accords teacher interns experiential learning opportunities when they observe, teach and reflect on lessons they observed and taught in different schools across the socio-economic spectrum of a country. The varied practice contexts provide them with the opportunity to gain some insight into mediating knowledge in diverse social settings, with specific kind of learners as well as making appropriate pedagogic choices in relation to the prevailing circumstances (Robinson & Rusznyak, 2020). Student teachers have the opportunity to build on their Personal Practical Knowledge (PPK) generated through practice in specific contexts (Talaee et al., 2023). Thus teaching practice provides teacher interns with practical experiences that best

represent the realities of classroom settings (Adu-Yeboah & Kwaah, 2018; Varela & Desiderio, 2021).

The Place of Peer Teaching in Teacher Professional Development

Peer teaching is one of the instructional strategies used to promote constructivist practices; learners are pro-active participants in the learning process (Sukrajh et al., 2021). It is a common teacher professional development technique used to introduce teacher trainees to the practical aspects of teaching prior to actual teaching practice; peers engage in purposeful and meaningful instruction of each other (Manchishi & Mwanza, 2016; Stigmar, 2016). During peer teaching, actively learn through preparation for peer teaching activities and through the actual teaching itself (Sukrajh et al., 2021). The activity involves administration of shorter lessons to small groups of learners followed by reflections on lessons (Adu-Yeboah & Kwaah, 2018; Manchishi & Mwanza, 2016; Voinohovska & Goravona, 2017).

Like teaching practice and micro teaching, peer teaching permits trainees to put theory into practice. It allows teacher trainees to practice effective teaching practice strategies, learn from their peers and improve in areas such as preparation of lesson plans, choosing teaching goals and appropriate teaching/learning resources, and time management (Adu-Yeboah & Kwaah, 2018). It can enhance learning, content mastery and knowledge retention (Stigmar, 2016) leading to improved performance (Abdelkarim & Abuiyada, 2016). Similarly, students improve their communication skills and confidence (Ozbal & Ezki, 2019). However, peer teaching has inherent weaknesses: it depends on the quality of feedback from peers and effective organization of the practicum (Adu-Yeboah & Kwaah, 2018) and often, pre-service teachers are poor substitutes for actual children (Perry et al., 2022).

Theoretical Framework

Literature on nature of teaching indicate that it is complex and draws from different disciplines. In fact, researchers refer to it as ill-structured (Mishra & Koehler, 2006; 2008). This study took into consideration the complex challenge associated with the assessment of the peer teaching model as used by the college. Thus, the study drew from the Shulman's pedagogical content knowledge (PCK) framework (Shulman, 1986), the approved instrument used by the colleges in assessing practicing teachers and extant literature on teacher professional development and teaching practicum. The PCK framework identifies two critical forms of knowledge, content and pedagogical knowledge that are important for effective teaching. Content knowledge (CK) is knowledge of the subject matter: 'knowledge of concepts, theories, ideas, organizational frameworks, knowledge of evidence and proof as well as established practices and approaches toward developing such knowledge...' and teachers should understand the deeper knowledge fundamentals of the disciplines in which they teach' (Koehler & Mishra, 2009, p. 63). Pedagogical knowledge (PK) represents teacher's comprehensive knowledge of processes and teaching and learning strategies. Such knowledge includes areas such as educational goals and values,

understanding how students learn, classroom management skills, lesson planning, and assessment. As such, teachers should have a great understanding of key learning theories (Koehler & Mishra, 2009). Pedagogical content knowledge represents the intersection of the two forms of knowledge; transformation of the subject matter for teaching and learning. At this stage, the teacher interprets the subject matter, identifies different ways of representing and presenting it. Nonetheless, the PCK framework does not explicitly outline the competence areas to guide objective assessment of teacher interns during practice teaching. Therefore, this study drew from an officially approved instrument used in the colleges to appraise trainees during the teaching practicum.

The teaching practice assessment instrument outlines different areas in which students must demonstrate competence during practice teaching. These nine competence areas are largely derivatives of such frameworks as PCK: lesson planning, introduction, development, lesson content, classroom management, assessment, conclusion, professionalism and record keeping. Individually and collectively, these areas provide a picture of how practicing teachers mediate subject content knowledge.

Table 1: Key Competence Areas and their Descriptors

The descriptors captured in Table 1 below represent the lowest and highest scores that could be attained by competent practicing teacher.

Competence Area	Matching Descriptors	Score
Lesson Planning	<ul style="list-style-type: none"> • Excellent linkage to scheme of work & lesson plan • Clear achievable objectives identified • Well-timed activities • Adequate & accurate content • Evidence of use of previous of feedback from previous self-evaluation 	12 13 14 15
Lesson Content	<ul style="list-style-type: none"> • Excellent mastery of content • Accurate and engaging content • Relevance to real life • Appropriate to pupils' level 	12 13 14 15
Introduction	<ul style="list-style-type: none"> • Creative & captivating • Good link to prior learning experiences in or outside the classroom & stated objectives • Arouses curiosity in pupils 	4 5
Development (presentation)	<ul style="list-style-type: none"> • Logical sequence • Varied & suitable teaching methods/learning activities • High level of individual/group student participation • Correct presentation of content/rules/generalization/demonstration of skills related to real life • Effective use of relevant & varied T/L aids • Safety awareness (where applicable) is maximized • Use of remedial/extension/enrichment work as necessary 	16 17 18 19 20
Assessment/Evaluation of pupils' learning	<ul style="list-style-type: none"> • Challenging/Appropriate individual/group exercises/homework • Correct pupils'/teacher's responses & feedback • Objectives achieved • Evidence of checking/marking & correcting classwork 	8 9 10
Conclusion	<ul style="list-style-type: none"> • Excellent effective summary linked to objectives & real life situations 	4 5
Classroom Management	<ul style="list-style-type: none"> • Very good time management • Expertly exploits varied learner needs • Effectively uses reinforcement techniques • Sustains pupil motivation • Very orderly & safe learning environment 	12 13 14 15
Professionalism	<ul style="list-style-type: none"> • Business-like approach to work • Displays initiative & receptivity to supervision • Adheres to appropriate dress code 	4 5
Record Keeping	<ul style="list-style-type: none"> • Up-to-date, neat & informative records • Critical self-evaluation • Evidence of use of feedback from previous lesson plans when planning for future plans 	8 9 10

Table 1 displays the different areas in which students must demonstrate competence during practice teaching. Each of the key areas is unpacked through matching descriptors to guide assessors.

Conceptual Framework

The study designed the following integrated framework to capture selected components from the PCK framework, the teaching practice assessment instrument and literature to assist guide the assessment of the effectiveness of peer teaching as a viable alternative to school-based teaching practice. Figure 1 below presents the framework.

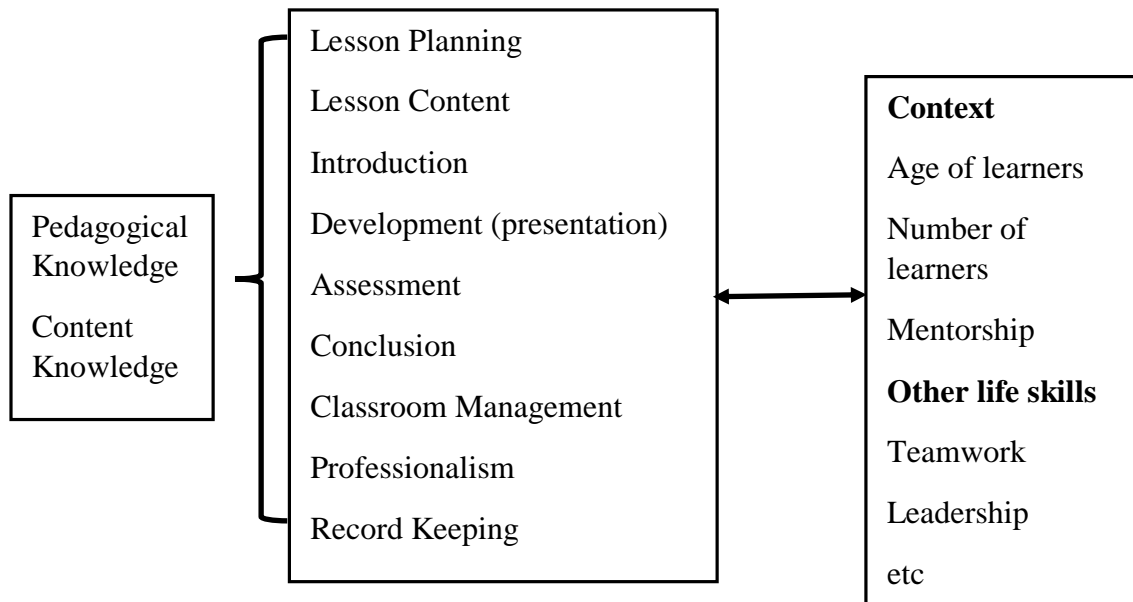


Figure 1: Integrated Conceptual Framework for Assessment of Value of Peer Teaching

Research Questions

The study sought to answer the following questions as guided by the theoretical framework:

1. How useful is peer teacher in preparing teacher interns for the teaching profession?
2. What are staff and student teachers' perceptions about the suitability of peer teaching as an alternative to the conventional practice teaching?
3. How well-organized was the peer teaching exercise to ensure its effectiveness?
4. How adequately did peer teaching prepare teacher interns for professional practice?

METHODOLOGY

Study Design

The study used a case study research design and applied mixed methods approach to evaluate the viability of peer teaching as an option for school-based teaching practice. The case study design permitted the researchers to explore in-depth and provide insight into the potential of peer teaching as a replacement for conventional school-based teaching practice. Mixed method approach allowed the researchers to use multiple data sources and triangulate data (Lucas et al., 2018).

The Setting

This study was conducted in one of the two secondary colleges of education in Botswana. This is a public teacher training institutions fully funded by the government. It offers a three-year diploma in secondary education programme. The programme offered at the college is approved by both the University of Botswana and the recently launched Botswana Qualifications Authority. On successful completion of the programme, candidates are ready to take up employment as teachers in junior secondary schools which offer junior certificate education.

Selection of Study Site

The research site was purposively selected as one of the pre-service teacher professional development institutions that opted to use peer teaching in place of the traditional school-based teaching practice during the COVID-19 rampage. The peer teaching practice model was used for two groups of student teachers: year 2 and 3. The year 3 group completed their programme with no exposure to school-based practice teaching. Having progressed to year 3, the year 2 group got their first and final teaching practice experience at the end of the 2021/22 academic calendar. This is the group targeted by this study.

Participants

Stratified sampling involving random and non-random sampling techniques were used to select different participants. Sixty (60) year 3 students and (60) lecturers were randomly selected to respond to a questionnaire. The students had participated in the peer teaching exercise while the lecturers had supervised the exercise. These represented more than a third of each group. Ten (10) lecturers including 4 Heads of Departments were purposively selected for interviews. Ten (10) students were conveniently selected for interviews while six (6) student teachers were purposively selected for a group discussion. This enabled the researchers to attain views across the different groups.

Data Collection Instruments and Procedures

Data was collected through questionnaires, semi-structured interviews and a group discussion. Data collection started with questionnaires for lecturers and student teachers. This was followed by interviews with lecturers and focus group discussion with student teachers. Next was a follow

up questionnaire followed by interviews with lecturers. This permitted the researchers to collect rich data, and triangulate the findings. Since education is a social activity, the study adopted the sequential explanatory design so that quantitative data can be clarified by qualitative data. Also, this would enhance the credibility and trustworthiness of the results (Terrel, 2012).

Ethical Considerations

Permission was sought from the college and individual participants. Participants were briefed about the purpose of the study and how it was bound to benefit the college. Participants consented to taking part in the study.

Data Analysis

Statistical data collected through questions was entered into a spreadsheet, cleaned and analyzed. Data from interviews were transcribed using word. Thematic analysis was used to analyze the data. The study questions were used as the frame for generating the key themes of the study. The data was integrated during interpretation.

RESULTS

Usefulness of Peer Teaching in Preparing Teacher Interns for the Teaching Profession

The study results show that peer teaching is a useful strategy that contributes immensely to teacher professional development. Across all pedagogic and content areas, there was overwhelming majority in general agreement that the strategy gives student teachers foundational teaching skills. Study results suggested that the exercise provided student teachers with the opportunity to gain initial practice on planning for and presenting lessons. Participants explained that peer teaching ‘introduced student teachers to the art of teaching’ and helped ‘prepare teacher trainees for the actual teaching practice’. Others praised it ‘dispelling student teachers’ misconception that teaching is easy’.

Tables 2 to 6 capture results on the usefulness of peer teaching as a teaching strategy according to participants who generally agreed (GA) or generally disagreed (GD) with different questionnaire statements.

Table 2: Lesson Planning

Lesson Planning	GA	GD	%	%
Link lesson plans to scheme of work	54	6	90	10
Formulate SMART objectives for your lessons	57	3	95	5
Prepare well-timed lesson activities for your lessons	47	13	78	22
Prepare adequate content for your lessons	45	15	75	25
Prepare accurate content for your lessons	49	11	82	18
Infuse feedback from previous self-evaluation	39	21	65	35
Conduct a lesson to its successful conclusion	47	13	78	22

Table 3: Classroom Management

Classroom management	GA	GD	%	%
Use different strategies to curb misbehavior in class	39	21	65	35
Creatively exploit varied learner needs during lessons	34	26	57	43
Effectively use a variety of reinforcement techniques in your lessons	43	17	72	28
Effectively motivate learners during lessons	40	20	67	33
Keep a very orderly learning environment during lessons	45	15	75	25

Table 4: Assessment

Assessment	GA	GD	%	%
Select suitable assessment techniques for your lessons	42	18	70	30
Prepare appropriate individual tasks for your lessons	38	22	63	37
Prepare appropriate group exercises for your lessons	45	15	75	25
Correct pupils responses during lessons	41	19	68	32

Table 5: Lesson Presentation

Lesson Presentation	GA	GD	%
Present content in a logical sequence in lessons	54	6	90
Use a variety of suitable teaching methods in your lessons	49	11	82
Ensure a high level of individual student participation during lessons	43	17	72
Ensure a high level of group student participation during lessons	43	17	72
Use real life examples to clarify concepts in your lessons	47	13	78
Effectively use a variety of relevant teaching and learning aids during lessons	47	13	78

Table 6: Public Speaking

Public Speaking	GA	GD	%	%
Verbal Communication skills (Appropriate language of instruction)	58	2	97	3
Non-verbal communication skills (Use of body language)	49	11	82	18
Confidence level when speaking in front of a group of learners	49	11	82	18

One content participant explained that:

Yes, peer teaching may not be as realistic as teaching practice in schools... but students still gained practice... ability to plan for a lesson is very important and needs practice... creative students made good attempts at showing ability to teach and assess learning... of course some of our students' weaknesses such as designing learner-centred plans are still there in teaching practice...

Suitability of Peer Teaching as an Alternative to the Conventional Practice Teaching

The study results indicated college-based peer teaching cannot be used as a replacement for school-based teaching practice. Majority of participants (48/60) (80%) generally disagreed peer teaching can take the place of the conventional school-based teaching practice. Participants revealed that peer teaching has inherent weaknesses that overshadow its utility in enhancing student teachers' pedagogic content competencies. Moreover, contextual challenges such as poor planning negatively affect the utility of peer teaching. One of the major shortcomings pointed out by study participants is that peer teaching does not provide student teachers with authentic practice environment otherwise provided by the schools. As a result, they expressed concern that the peer teaching environment was not suitable to permit meaningful evaluation of trainees' competencies in the areas of pedagogy and content knowledge. According to them, the peer teaching classroom environment was 'too artificial', 'unrealistically favourable to students' and 'not representative of the natural classroom environment in schools'. Participants added that relative to the school-based classroom environment, 'everything was so smooth and not challenging at all... it seemed like students had connived'. One Head of Department strongly felt that the:

peer teaching environment failed to produce the teacher out of the student teachers... the practice environment has to be as natural as possible to produce credible results on trainees' deep knowledge of content and appropriate pedagogies... it is important that student teachers' stark realities of a school-based classroom environment and dynamics.

Table 7 presents some of the peer teaching conditions which, in their view, favoured student teachers.

Table 7: Peer Teaching Conditions vs School-Based Practice Environments

College-based peer teaching	School-based teaching practice
Peers were classmates and known to each other	Students and teacher are new to each other
Classes were largely characterized by very few students (between 2 and 5)	Classes often have not less than 30 students
Peers already knew the content they were taught (JSS content)	Content is often new to learners
Peers already knew answers to questions	Not all students would know all answers
Peers behaved themselves well like adults knowing what was at stake	Learners would behave naturally, like teenagers
Student teachers assisted their peer teachers during instructions	Learners do not assist their teachers in the same manner
Student teachers did not challenge their peer teachers	Learners would challenge their teachers in their eagerness to learn
Peers were not motivated because the content was way below their level	Students would often be eager to learn something new

Related to the uncondusive practice environment, study participants indicated that the success of college-based peer teachers was limited by the fact student teachers taught their peers and classmates, and taught them content they already knew. They argued that ‘peers would always behave themselves favourably for the sake of their peer and classmate’. Further, they explained that the situation was compounded by the fact that this was an examination, that ‘none of the peers would want the other to fail’ and student teachers ‘were bound to assist each other’. Participants concluded that due to this arrangement, student teachers were not able to trial and apply some of the invaluable teaching and learning theories and techniques they learnt.

Table 8 presents some of the extracted examples of theories and techniques as well as reason(s) why student teachers were not able to practice these.

Table 8: Examples of Forgone Opportunities During Peer Teaching

Teaching and Learning Theories and Techniques	Practice Outcome
Mixed ability teaching	Not possible – all peers knew all answers
Questioning	Not possible: <ul style="list-style-type: none"> ▪ peer teachers scared as some peers were higher achievers compared to their peer teachers ▪ peers knew answers ▪ peer teachers lacked the skills to use other questioning skills such as probing and redirecting
Reinforcement	Did not achieve any purpose as content was of low standard
Organizing group work	Not possible due to limited number of peers
Classroom management	Not necessary – peers were orderly
Motivation	Not necessary – peers directed the lesson and were self-driven – all was well-planned

In a related matter, study participants, felt that college-based peer teaching denied student teachers opportunity to get exposure to a real school environment for personal growth and experience. They argued that teaching experience ‘goes beyond the classroom’. As such they contended that student teachers missed out on learning about other aspects of school life such as working in a team, assuming leadership roles and engaging in other areas of responsibility and accountability as well as establishing future networks.

Organization of Peer Teaching

The findings of this study found that the peer teaching exercise was poorly organized. Majority of participants (42/60), 70% said that the duration for the exercise (two weeks) was too short. They explained that already there were complaints about the teaching practice time being short (5 weeks) and that “two weeks ... and two lessons in quick succession ... were not enough to give useful feedback about teacher competencies...” They argued that everything was rushed, making the

activity a ‘purely marks collection exercise’. In fact, some participants revealed that in the midst of Covid-19 and related stress, they were ‘very considerate’ and ‘flexible’ so that student teachers did not fail and suffer further ‘distress’.

One of the areas that indicated weak planning was the use of an instrument that did not fit the circumstances. Majority of participants (23/30), 77% said that the assessment instrument used was not appropriate for use in assessing peer teaching. Rather, the instrument was tailored-made for school-based teaching practice. As a result, they explained that student teachers scored ‘unreasonably’ high marks because the assessment instrument was unsuitable for that setup. They reasoned that since the instrument was not fit-for-purpose, it allowed for ‘free and easy’ marks in areas such as record keeping, planning, lesson evaluation, mastery content and classroom management. In fact, documented reports revealed that student teachers’ performance for the academic year 2019/20 was outstanding with a record 23 distinctions before external moderation. This was the period in which peer teaching was used in place of teaching practice.

One angry participant remarked that:

When we adopted peer teaching with the first group in 2019, we were under pressure to think creatively... we reviewed this exercise in different departments and recommended suggestions, where are they?... now we use the same strategy... this is an examination and should have been treated as such... we needed to reduce the artificiality and homogeneity of this peer teaching where students teach peers from the same subject... it’s boring students... far from ideal...

Perceptions about How Peer Teaching Adequately Prepared Teacher Interns for Practice

The study results indicated that peer teaching had failed to adequately prepare student teachers for classroom teaching. Participants observed that student teachers showed signs of gross ineptitude in key areas such as classroom management, questioning techniques and assessment during the actual school-based teaching practice. Participants blamed the peer teaching environment for not exposing student teachers to realities of classrooms in schools particularly with respect to students’ behaviour according to age and how students learn. They explained it was clear that student teachers were ‘scared and had no idea what to do’ and that they ‘looked lost and new to the atmosphere’. They concluded that students were ‘overwhelmed by the reality in schools’. One participant from the supervisory team described the year 3 students as ‘year 2s cloaked in year 3 uniform’. Another explained that ‘they were scared by the learner numbers, raw behaviour, learner achievement differences... it was clear that this was their first teaching practice experience’.

DISCUSSIONS

This study confirmed what other studies (Adu-Yeboah & Kwaah, 2018; Ozbal & Eski, 2019) have reported that the peer teaching strategy is useful for introducing teacher trainees to the practicalities of teaching. Student teachers gain some instructional experience and practice in different areas of

pedagogy such as lesson planning, lesson presentation, communication and confidence levels. At this stage, educators begin to evaluate student teachers' pedagogic competencies and knowledge of subject content. Meanwhile, student teachers are also able to reflect on their strengths and weaknesses. This is in line with the pedagogical content knowledge framework (Shulman, 1986) which stresses that competent teachers must show deeper knowledge subject content as well as processes and teaching techniques.

Conversely, the results of this study showed that college-based peer teaching is not a suitable replacement for school-based teaching practice. The technique has embedded weaknesses that undermine its usefulness in helping student teachers improve their pedagogic and content knowledge and skills. One of the major weaknesses of peer teaching is its environment. The peer teaching environment failed to replicate the realities of the school-based teaching practice. Literature on experiential learning emphasizes the need for student teachers to practice in an authentic school environment (Aglazor, 2017; Schaffer & Welsh, 2014; Thaba & Kanjere, 2014). Schools present and represent unique environment that may not be easily reproduced or choreographed. Studies on the conduct of teaching practice (Aigbavboa et al., 2018; Robinson & Rusznyak, 2020; Thuketana, 2020) have shown immense support for school-based sessions in which the school setting provides a natural environment for real experience. It is for this reason that some researchers such as Robinson and Rusznyak (2020) suggest that ideally student teachers should be exposed to various school contexts. For the same reason, it is a policy in some countries that students should be based in schools for a period not less than 8 weeks or a whole semester (Vo et al., 2018). In the context of this study, peer teaching did not provide an environment identical to the one in a school set up. This contextual mismatch implies that the results obtained from the peer teaching exercise cannot be deemed a true reflection of student teachers' performance and competence in the areas of pedagogy and content knowledge.

As demonstrated by the results and observed by Adu-Yeboah and Kwaah (2018), the efficacy of peer teaching in helping student teachers improve their pedagogical content competence can be weakened further by other factors such as poor planning. In the context of this study, the peer teaching exercise was allocated a very short time of two weeks. Under the circumstance, student teachers did not have enough time to practice let alone evaluate their strengths and weaknesses as Aglazor (2017) suggest. The shortened period coupled with the trauma caused by the pandemic put immense pressure on both the student teachers and the educators to the detriment of any quality work. This has the potential to impact on the quality of teaching in the country in the long term.

Since the participating group was going for its conventional school-based teaching for the first time, indications were that peer teaching had failed to adequately prepare them for their final practicum. Again, participants criticized the inappropriate peer teaching environment. Research on teaching show that teaching practice course is meant to bridge theory learnt in the training college and the actual practice of teaching (Thaba & Kanjere, 2014). In this study, indications are that the peer teaching environment did not challenge student teachers to apply learnt theories such

as classroom management. As observed by researchers such as Makamure (2020), it was highly likely that the student teachers would experience practice shock.

CONCLUSIONS

This study showed that peer teaching is a useful strategy for introducing novice teachers to the art of teaching. However, the study revealed that it is essential that teacher interns carry out their practice in an appropriate environment that exposes them to the realities of a classroom. The peer teaching environment failed to provide a credible and realistic practice teaching environment matching the natural school environment suitable for teacher interns. As the study demonstrated, the peer teaching strategy could not adequately prepare teacher interns for professional practice. The study showed that peer teaching is an unsuitable replacement for the school-based teaching practice. Meanwhile, the study indicated the usefulness of peer teaching can be enhanced by careful planning.

RECOMMENDATIONS

This study recommends that the peer teaching strategy be reviewed to enhance its utility in teacher preparation. Also, it recommends continued search for appropriate alternatives to teaching practice as well as ways in which technology can be used to conduct teaching practice when the traditional face-to-face is rendered impractical.

REFERENCES

- Abdelkarim, R. E., & Abuiyada, R. (2016). The effect of peer teaching on mathematics academic achievement of the undergraduate students in Oman. *International education studies*, 9(5), 124-132. doi:10.5539/ies.v9n5p124
- Adu-Yeboah, C., & Kwaah, C. Y. (2018, October 26). Preparing teacher trainees for field experience: Lessons from the on-campus practical experience in colleges of education in Ghana. *SAGE Open*, 8(4). doi:https://doi.org/10.1177/2158244018807619
- Aglazor, G. (2017). The role of teaching practice in teacher education programmes: Designing framework for best practice. *Global Journal of Education Research*, 16(2), 101-110. doi:http://dx.doi.org/10.4314/gjedr.v16i2.4
- Aigbavboa et al. (2018). Influence of experiential learning on education of construction students in South Africa. *Proceedings of International Conference on Industrial Engineering and Operations Management*, Paris, France, July 26-27, 2018 (pp. 2779-2786). Paris, France: IEOM Society International. Retrieved from <http://www.ieomsociety.org/paris2018/papers/517.pdf>
- Koehler, M. M., & Mishra, P. (2009). What is technological pedagogical content knowledge? *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-90. Retrieved from

- <http://eddl.tru.ca/wp-content/uploads/2018/12/What-Is-Technological-Pedagogical-Content-Knowledge-M.J.Koehler2009.pdf>
- Lucas et al. (2018). The utility of case study as a methodology for work-integrated learning research. *International Journal of Work-Integrated Learning, Special Issue*, 19(3), 215-222. Retrieved from <https://files.eric.ed.gov>
- Makamure, C. (2020). Pre-service teachers' prior expectations and their actual experiences of teaching Mathematics during pedagogical internship in Zimbabwe. *Problems of Education in the 21st Century*, 78(6), 983-999. Retrieved from <https://files.eric.ed.gov>
- Manchishi, P. C., & Mwanza, D. S. (2016, November). Teacher preparation at the University of Zambia.: Is peer teaching still a useful strategy? *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 3(11). doi:<http://dx.doi.org/10.204331/2349-0381.0311012>
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054. doi:<https://doi.org/10.1111/j.1467-9620.2006.00684.x>
- Mishra, P., & Koehler, M. J. (2008). Introducing technological pedagogical content knowledge. *Annual Meeting of American Educational Research Association New York City, March 24-28, 2008*, (pp. 1-16). New York. Retrieved from <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.605.9082&rep=rep1&type=pdf>
- Mulyati, S., & Sopiah, S. (2023). Influence of field experience practices on student readiness to become teachers and their self-efficacy levels. *International Journal of Studies in Education and Science*, 4(2), 137-150. doi:<https://doi.org/10.46328/ijres.71>
- Ozbal, A. F., & Eski, T. (2019, June 30). Students' and teachers' opinions about ski lessons taught by using peer teaching model. *Cypriot Journal of Educational Sciences*, 14(2), 171-177. doi:<https://doi.org/10.18844/cjes.v14i2.4136>
- Robinson, M., & Rusznyak, L. (2020). Learning to teach without school-based experience: Conundrums and possibilities in a South African context. *Journal of Education for Teaching*, 46(4), 517-527. doi:<https://doi.org/10.1080/02607476.2020.1800408>
- Schaffer, C., & Welsh, K. (2014). Transforming field experiences to create authentic teaching opportunities. *The Nebraska Educator: A Student-Led Journal*, 116-134. Retrieved from <http://digitalcommons.unl.edu/nebeducator/21>
- Shulman, L. S. (1986, February). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. Retrieved from <http://www.jstor.org/stable/1175860>

- Sukrajh et al. (2021, June 25). Promoting active learning in medical education using the peer teaching model: Perceptions of senior medical students. *SN Soc Sci*, 1(158). doi:<https://doi.org/10.1007/s435445-021-00170-1>
- Talae, E., Bozorg, H., & Schritteser, I. (2023). Implications of Teachers' Personal Practical Knowledge for Teacher Training Programs: A Case Study of Primary Teachers. *International Journal of Education in Mathematics, Science and Technology*, 11(2), 407-423. <https://doi.org/10.46328/ijemst.2494>
- Thaba, K. L., & Kanjere, M. M. (2014, December). Experiential Learning in initial teacher education: Do schools have mentoring capacity? *Mediterranean Journal of Social Sciences*, 5(27), 537-537. doi:10.5901/mjss.2014.v5n27p537
- Thuketana, N. S. (2020, May 1). Mutual benefits of an experiential learning community project in South Africa: perceptual skills development and learning support. *The Independent Journal of Teaching and Learning*, 49-62. Retrieved from <https://hdl.handle.net/10520/EJC-1d6699cf94>
- Varela, D. G., & Desiderio, M. F. (2021, January). Perceptions of COVID-19 pandemic impact on the student teaching experience. *Research in Higher Education Journal*, 39, 1-12. Retrieved from <https://eric.ed.gov/?id=EJ1293799>
- Voinohovska, V., & Goravona, E. (2017). Student peer teaching: An innovative instructional method to foster student problem-solving and in-depth learning. 10th Annual International Conference of Education, Research and Innovation, (pp. 0741-0748). Seville, Spain. doi:10.21125/iceri.2017.027

