The New Normal in Teaching Practice Supervision: Digitalizing the Teaching Practice Activities

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ABSTRACT

The supervision of teaching practice is a critical component of teacher education and professional development. Traditional methods of supervision rely on face-to-face observation and feedback, which can be time-consuming and limited in reach. In recent years, there has been a growing interest in the use of digital technologies to enhance teaching practice supervision.This study provides an overview of innovative techniques for digitalizing teaching practice supervision. It begins by discussing the need to leverage technology to enhance supervision and provide new modalities for observation, feedback, and mentorship. It then explores the use of the Kobo toolkit.Itthen examines how digital technologies can be used to enhance feedback and evaluation, providing personalized coaching and support for teachers.It then concludes by discussing the benefits and considerations of digitalizing teaching practice supervision. It highlights the potential benefits the Kobo toolkit provides in flexibility, continuity in observation and feedback, and richer data collection to inform coaching. Furthermore, it identified some potential limitations, such as the potential lack of interpersonal dynamics and rapport in digital formats, the need for adequate technological fluency and training for users, and the importance of combining digital tools with in-person mentoring and development.It thensuggested that digital technologies can offer innovative new techniques for supervising and continuously developing teaching practice. However, careful implementation is required to maximize the benefits and mitigate the limitations of digitalization.

Keywords: Digitalization, Teaching Practice Supervision, Teacher Education, Kobo Toolkit.

Introduction

Teaching Practice(TP) is a crucial part of teacher education, where student-teachers apply their knowledge and skills in real-world classrooms. This helps them prepare to be effective teachers by developing their confidence and competence. Depending on their programme (NCE or B.Ed), student-teachers spend 12 weeks or one semester in TP. The World Bank and the UNESCO Institute for Teacher Education have both emphasized the importance of TP for ensuring quality teacher education.

However, the COVID-19 pandemic has disrupted TP and its supervision, which involves providing guidance, feedback, and evaluation to student-teachers. The pandemic has also posed several challenges and impacts on education in Nigeria, such as:

1. School closures due to lockdown measures
2. Poor online learning outcomes due to a lack of infrastructure, resources, skills, and support
3. Digital divide and socio-economic disparities, especially in rural areas affected by conflicts.
4. Teachers' difficulties in adapting to new modes of teaching, assessment, and support.

To address these issues, various initiatives and interventions have been implemented by the government, UNICEF, HITCH, TDP and other stakeholders to provide alternative and innovative ways of delivering education during the pandemic. For example:

The Federal Ministry of Education has used online and offline platforms, television, radio, and take-home materials to keep children learning.

UNICEF has collaborated with HITCH, an online/offline educational and vocational video platform that matches the Nigerian curriculum and caters to different levels and grades of students.

Public Private Partnerships (PPP) have been advocated to improve the quality and increase access to education for poor children in underserved communities.

TDP worked with several partners to implement its support for TP in twelve (12) Colleges of Education (CoEs) across five states in northern Nigeria (Jigawa, Kaduna, Kano, Katsina, and Zamfara). These partners include the National Commission for Colleges of Education (NCCE), the State Ministries of Education, and the National Teachers Institute (NTI). Both the NCCE and the State Ministries of Education have affirmed that the TDP's intervention has helped in strengthening the capacity of teacher educators and improving the quality of TP in Nigeria.

These initiatives and interventions have shown some positive results and the potential to transform teaching and learning and TP supervision during and beyond the pandemic. However, TP supervision still faces some challenges, such as:

Some supervisors delegate their supervision duties to others due to the high cost of managing the TP supervision and overcrowding caused by the high student-lecturer ratio.

The COVID-19 lockdowns and social distancing measures have disrupted academic activities in most parts of Nigeria and the world.

The lack of funding has hindered the continuity and maintenance of the skills and technology introduced by the TDP intervention.

To overcome these challenges, the Federal University of Education Zaria has adopted some innovative solutions to incorporate technology and leverage the skills gained from the TDP intervention. For example:

The selection of cooperating schools for TP by the qualified students was automated instead of being done manually. This initiative saved costs in the preparation of student-teachers for TP.

The supervisors used their mobile phones to assess the student-teachers using the Kobo toolkit, which was adapted to suit their needs. This adaptation also saved costs by reducing the amount of paper used during student-teacher supervision.

Literature Review

The concept of TP supervision has undergone significant transformations in recent years, driven by the evolving landscape of education and the impact of global events, such as the COVID-19 pandemic. TP supervision plays a pivotal role in shaping the professional development of future educators and ensuring the delivery of high-quality education. As educational institutions adapt to the "new normal," characterized by digitalization and technological advancements, it becomes imperative to explore how these changes have influenced TP supervision methodologies.

The purpose of this literature review is to examine the recent developments and research findings within the last five years pertaining to TP supervision. By synthesizing and analyzing a wide range of scholarly works, this review aims to shed light on the key factors that shape TP supervision and explore the implications of digitalization in this domain.As TP supervision continues to evolve in response to the changing educational landscape, it becomes essential to examine recent research to inform effective supervision practices. This literature review will provide an analysis of the existing body of knowledge, highlighting key trends, challenges, and opportunities within the field of TP supervision. By understanding the implications of the SAS model and the impact of digitalization, educators and policymakers can better design and implement supervision strategies that support the growth and development of aspiring teachers.

Recent research by Eze et al. (2021);Schleicher, (2020); UNICEF Nigeria, (2020) and NCCE (2019) have discussed the impact of the COVID-19 pandemic on education in Nigeria. They argue that the pandemic has had a significant negative impact on education, leading to school closures, learning disruptions, and increased poverty among students and their families. They call for urgent action to address the challenges facing education in Nigeria in the wake of the pandemic. This has ushered in the new normal in teaching and learning in Nigeria and around the world.

The quality of TP supervision in Nigeria has received the attention of researchers as evidenced in the works

carried out by Ngara, &Magwa, (2017); Banda, (2016); Adeyemo, (2020); Oluwatayo, &Adebule, (2013) and Ayodele, & Oyewole, (2012). They argue that TP supervision is essential for ensuring the quality of education provided by Colleges of Education and Universities in Nigeria. However, they also argue that there are several challenges to effective TP supervision in the context of the lack of resources, the lack of qualified supervisors, and the geographical distance between students and supervisors.This is evidenced by the high student-teacher/supervisor ratio during supervision. As corroborated by the works of Adeyemo, (2020) and Oluwatayo, &Adebule, (2013) who identified that contributing to poor effective supervision, is the lack of time and resources for supervision.

Even though, the NCCE/TDP TP Toolkit and UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training both focus on teacher professional development. The NCCE/TDP TP Toolkit guides how to effectively supervise student-teachers during their TP, while the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training report describes the promising practice of distance learning for teacher professional development. They did not address how the use of the technological tools will be sustained when their intervention ends. This informed the adaptation of the Kobo toolkit to suit the peculiarities of the Federal College of Education, Zaria. Specific items for checks have been configured in the mobile application to detect the time, location, and visuals of where the supervision took place. This eliminates the challenge of supervision by proxy.

Interestingly, Ayodele, & Oyewole, (2012), concurs with Adeyemo, (2020) and Oluwatayo, &Adebule, (2013), as they identified that the supervisor's understanding of the Nigerian context will greatly help their ability to provide culturally sensitive feedback, and the supervisor's ability to work with the student-teacher to develop a plan for professional development. Hence, the Kobo toolkit was adapted to ease the TP supervision and to suit our cultural context. Thus, rather than spend more time filling papers in assessing the student-teacher, the supervisor uses their mobile phone to assess the student-teacher which is faster by clicking on the phone as against writing on paper for as many students-teacher they are supervising.

This has thereby freed up time to guide the student-teacher more. Adeyemo, (2020) and Oluwatayo, &Adebule, (2013) discuss the importance of the supervisor's relationship with the student-teacher. This is, evidently realistic as the supervisor has more time to engage with the student and guide the student teacher for better productivity.

Theoretical Framework

The SAS model is a theoretical framework for understanding and improving teacher supervision. It proposes that the supervisory relationship is the core dimension of supervision and that it is influenced by six other dimensions: supervisor, supervisee, client, institution, learning tasks, and supervisory strategies.In this study, we used the SAS model as a theoretical lens to guide our research questions, data collection methods, and data analysis techniques. We will explore how the six dimensions of the SAS model (supervisor characteristics, supervisee characteristics, client characteristics, institutional characteristics, learning tasks for supervisees, and supervisory strategies for supervisors) interact and influence the quality and effectiveness of the supervisory relationship, which is the core dimension of the model. We will also examine how the supervisory relationship impacts the learning outcomes and professional development of the supervisees in terms of their knowledge, skills, attitudes, and behaviours. By using the SAS model, we aim to gain a deeper and more holistic understanding of the complex and dynamic process of teacher supervision in our context and to identify the strengths and challenges of the current supervision practices.

Data Presentation and Analysis

521 supervisors were mobilized to supervise 4845 student-teachers across the 5 states in northern Nigeria. The columns in the SAS model used are explained as:

*Supervisor Characteristics:*This column represents the traits and attributes of the TP supervisors. Each entry under this column provides specific characteristics of a supervisor, such as their years of experience, communication skills, and pedagogical knowledge.

Supervisee Characteristics: This column represents the traits and attributes of the student teachers or supervisees undergoing the TP. Each entry under this column provides specific characteristics of a supervisee, such as their teaching competence, confidence level, and willingness to learn.

Pupil/Student Characteristics: This column represents the characteristics of the clients or students in

the classroom setting. Each entry under this column provides specific characteristics of the students, such as their age range, diversity in the classroom, and whether there are students with special needs.

Institutional Characteristics: This column represents the attributes of the educational institution where the TP takes place. Each entry under this column provides specific characteristics of the institution, such as the type of school (elementary, middle, high school, etc.), the resources available, and the facilities provided.

Learning Tasks for Supervisees: This column represents the specific tasks and activities assigned to the student teachers during their TP. Each entry under this column provides examples of learning tasks, such as planning and delivering lessons, classroom management, assessment, and feedback.

Supervisory Strategies for Supervisees: This column represents the methods and approaches used by the supervisors to guide and support the student teachers during their TP. Each entry under this column provides examples of supervisory strategies, such as observations and feedback sessions, reflective discussions, co-teaching, and modelling.

Table: SAS Model for TP Supervision

Supervisor Characteristics	Supervisee Characteristics	Pupil/Student Characteristics	Institutional Characteristics	Learning Tasks for Supervisees	Supervisory Strategies for Supervisees
Years of Experience: 10	**Teaching Competence:** High	**Age Range**: 6-7 years	**School Type:** Elementary School	Planning and delivering lessons	Observations and feedback sessions
Communication Skills: Excellent	**Confidence Level:** Moderate	**Diversity in Classroom**: Yes	**Resources:** Limited	Classroom management	Reflective discussions
Pedagogical Knowledge: Advanced	**Willingness to Learn**: High	**Students with Special Needs:** No	**Facilities**: Well-equipped	Assessment and feedback	Coteaching and modelling
Years of Experience: 5	**Teaching Competence:** Moderate	**Age Range**: 12-14 years	**School Type:** Middle School	Designing instructional materials	Collaborative lesson planning and review
Communication Skills: Good	**Confidence Level:** Low	**Diversity in Classroom:** No	**Resources:** Adequate	Facilitating group discussions	Individual goal-setting and monitoring
Pedagogical Knowledge: Intermediate	**Willingness to Learn**: Low	**Students with Special Needs:** Yes	**Facilities:** Limited	Conducting formative assessments	Modelling effective teaching techniques
Years of Experience: 15	**Teaching Competence:** High	**Age Range:** 15-18 years	**School Type:** High School	Guiding student research projects	Providing constructive feedback on classroom management
Communication Skills: Excellent	**Confidence Level**: High	**Diversity in Classroom**: Yes	**Resources:** Extensive	Facilitating virtual classrooms	Peer observation and feedback
Pedagogical Knowledge: Advanced	**Willingness to Learn**: High	**Students with Special Needs**: No	**Facilities:** State-of-the-art	Developing and implementing assessments	Promoting inclusive TPs
Years of Experience: 8	**Teaching Competence:** Moderate	**Age Range:** 4-5 years	**School Type:** Preschool	Organizing field trips and outdoor activities	Collaborating with other teachers for cross-disciplinary lessons
Communication	**Confidence**	**Diversity in**	**Resources:**	Fostering	Using technology for

Skills: Good	Level: Moderate	Classroom: Yes	Limited	creativity and critical thinking skills	remote supervision and feedback
Pedagogical Knowledge: Intermediate	**Willingness to Learn**: Low	**Students with Special Needs:** Yes	**Facilities:** Basic	Implementing project-based learning	Encouraging self-reflection and goalsetting for improvement

TP supervisors are chosen from the lecturing staff from Lecturer III to Chief Lecturers in the College of Education which represents the variation in the years of experience. This will give the student-teacher variety of feedback to improve their TP exercise. This is reflected in the teaching competence of the supervisors as they vary between low and high teaching competencies.This suggests that the supervisors will need more training to tailor their supervisory strategies to the needs of their student-teacher. Since the student-teachers do their TP in various schools of different levels (nursery, primary and junior secondary school) the age range will vary with some having age ranges between 4-7 years and others between 15-18 years. Schools in rural areas will be homogeneous while those in urban areas will be heterogenous with students from different backgrounds and abilities. This suggests that the supervisors sent to each area will need to encourage the student-teacher to be flexible in their teaching and supervisory strategies to meet the needs of their students.This is also evident in the resources available in schools that form the institutional characteristics. Extensive and state-of-the-art resources are mostly found in urban schools as compared to rural schools respectively.

The duration of supervision was greatly reduced, and this gave more time to the supervisor to provide guidance to the student-teacher.

Teaching practice is an essential part of teacher training. It provides student teachers with the opportunity to put their skills and knowledge into practice in a real-world setting. However, conducting teaching practice supervision can be time-consuming for supervisors. They need to meet with student teachers regularly to observe their teaching, provide feedback, and offer guidance.

The Kobo toolkit is a digital platform that hashelped to reduce the time used to conduct teaching practice supervision. It provides supervisors with a variety of tools to help them plan, observe, and provide feedback to student teachers. These tools include:

1. A pre-observation checklist that helps supervisors to identify the areas that they need to focus on during their observation.
2. A digital observation tool that allows supervisors to record their observations and feedback.
3. Supervisors can collaborate with other supervisors to share their experiences and insights.
4. A personalized dashboard that provides supervisors with a summary of their teaching practice supervision activities.

How the Kobo toolkit can reduce time

The Kobo toolkit can help to reduce the time used to conduct teaching practice supervision in several ways. First, the pre-observation checklist helps supervisors to identify the areas that they need to focus on during their observation. This saves time because supervisors do not have to go into the observation without a plan. Second, the digital observation tool allows supervisors to record their observations and feedback electronically. This saves time because supervisors do not have to write up their observations by hand. Third, the discussion forum allows supervisors to collaborate with other supervisors to share their experiences and insights. This can save time because supervisors do not have to reinvent the wheel. Fourth, the personalized dashboard provides supervisors with a summary of their teaching practice supervision activities. This helps supervisors to track their progress and identify areas where they need to focus their time and attention.

How the Kobo toolkit frees up time for guiding the student teacher

The Kobo toolkit can free up time for supervisors to guide student teachers in several ways. First, the pre-observation checklist helps supervisors to identify the areas that they need to focus on during their observation. This allows supervisors to spend more time providing feedback to student teachers on the areas that are most important. Second, the digital observation tool

allows supervisors to record their observations and feedback electronically. This frees up time for supervisors to have more meaningful conversations with student teachers about their teaching. Third, the discussion forum allows supervisors to collaborate with other supervisors to share their experiences and insights. This can help supervisors to develop a deeper understanding of the challenges that student teachers face. Fourth, the personalized dashboard provides supervisors with a summary of their teaching practice supervision activities. This helps supervisors to track their progress and identify areas where they need to focus their time and attention.

Prompt Sending of results to the TP Unit

The results of the Kobo toolkit are readily sent to the TP unit for on-ward processing electronically. This saves time and reduces conversion from paper to electronic format that the results will be presented.

Recommendations

The Kobo toolkit is a valuable resource for supervisors who are conducting teaching practice supervision. It can help to reduce the time that supervisors spend on administrative tasks and free up time for them to provide meaningful guidance to student teachers. Thus, we recommend that:

1. The Kobo Toolkit is encouraged to be used in TP Supervision.
2. There is a need for training for supervisors on the use of the Mobile App.
3. Timely presentation of results can be achieved if the Kobo toolbox is used.
4. The Mobile App should be improved upon to meet current proclivities in the TP supervision.

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