



Analysis of Prospective Physical Education Teachers' Instructional Skills Using Video Feedback

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Abstract

Introduction: The success of Physical Education (PE) learning greatly depends on the quality of the teacher's instruction. Many pre-service PE teachers still demonstrate low teaching skills, particularly in lesson planning, classroom management, instructional delivery, and reflective ability. These challenges limit the effectiveness of the learning process and contribute to low performance in teaching assessments and field teaching practice. **Objectives:** This study aims to analyze the teaching skills of prospective Physical Education teachers through the application of the Video Tape Feedback (VTFB) method as a reflective tool to enhance teaching performance. **Method:** A cross-sectional research design was employed with 58 pre-service teachers from FKIP Universitas Sriwijaya, cohort 2024. Data were collected through observations, video recordings, and document analysis using an instrument consisting of 12 core teaching skill components. **Result:** The study shows that reviewing their own teaching through VTFB helps pre-service teachers notice things they often miss when they are in the classroom. By watching the recordings, they tend to see their weak spots more clearly and can think back on their decisions in a more honest and practical way. Many of them also become more aware of how they explain lessons, how they handle the class, and how they respond to students during activities. Supervisors and spectators may overlook what happens during education in video reviews. VTFB improves PE teacher candidates overall. **Conclusion:** The findings suggest that teacher education programs should employ this method to promote continuous learning and consistent performance evaluation.

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INTRODUCTION

How well pre-service teachers teach PE has a affects impact on student learning outcomes. The main research problem in this study is that many pre-service physical education teachers struggle with basic teaching skills. Several tests show many struggles with basic training. Planning lessons, organizing materials, clarifying topics, and sustaining classroom flow are regular obstacles. Moreover, their post-teaching reflection is limited. Which affects their ability to improve teaching quality and student learning outcomes. According to Mulyasa (2017), teachers must be able to offer courses and create to design meaningful relevant learning experiences and deliver effective instruction. According to Aditya (2020), reported that many pre-service teachers fail to actively engage students, which negatively affects learning outcomes.

The Teaching Performance Assessment and practicum are commonly used to tests evaluate pre-service teachers. Because They provide a more accurate and complete appraisal of their teaching strengths and flaws. One increasingly video tape is popular approach method allowing in a pre-service teacher education is the use of video recordings which allow to review their teaching practices, recorded lessons and identify for instructional errors in their teaching. According to Sari and Yulianto (2020) showed video-based reflection enhances teaching quality and student-teacher interaction, whereas Mu'in (2024) found it improves self-evaluation skills among increasing service teachers.

Although Video Tape Feedback (VTFB) has been works shown to be effective, its rarely implemented among Indonesian pre-service PE teachers seldom use remain limited. This issue is urgent because practicums are essential and crucial role in developing effective to prospective teaching skills and competencies, and limited use of VTFB hinders pre services teachers from improving reflective practice and overall teaching competence. Furthermore, although previous studies have demonstrated the effectiveness of video-based reflection in improving teaching quality and student teacher interaction (Sari & Yulianto,2020; Mu.in 2024), there is limited empirical evidence on the systematic application of video tape feedback (VTFB to Indonesia pre-service PE teachers during teaching practicums.

Therefore, this study applies VTFB as a reflective, evidence-based approach to evaluate the teaching skills pre-service Physical education teachers. The findings should expect to contribute to improvement of teacher education programs, allow support data-driven monitoring and evaluation, and foster the development of more generate competent and professional Physical education teachers.

METHOD

This Study A cross-sectional study mixed method research design, combining quantitative and qualitative approaches to examined pre-service PE instructors' teaching ability without help. The project used 10 Palembang public junior high schools as practicum

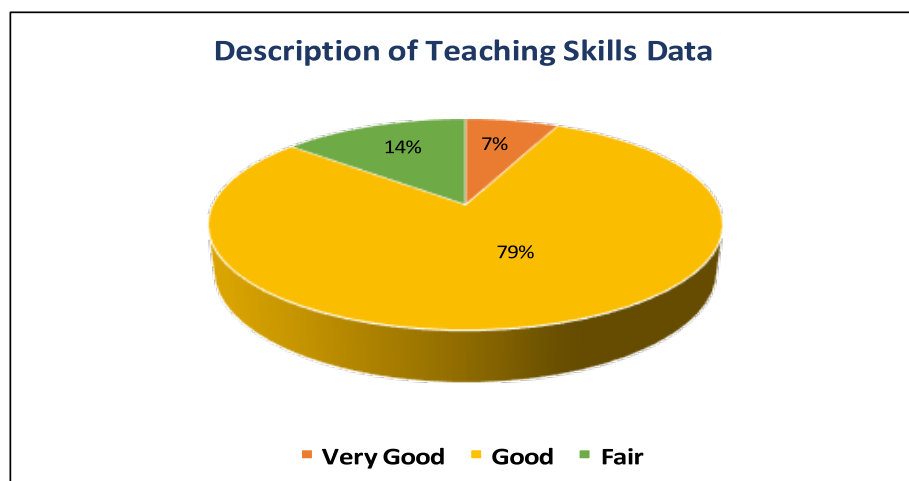
locations from June to October 2025. Total sampling technique selected 58 Universitas Sriwijaya pre-service teachers who were fully involved inclusion criteria, namely full participations in the practicum and had instructional video recordings. Three steps comprise the research procedure. A research topic, observation instruments, and the Video Tape Feedback (VTFB) system were planned. Second, data were collection using multiple techniques, includes classroom teaching, structured observations, document analysis, and questionnaires. 3: Evaluation and Reflection, including video analysis, VTFB feedback, and participant teaching skills evaluation.

The primary research instrument was a teaching skills observation sheet adapted from Khory et al. (2017) and Suroto (2005) provided a teaching skills observation sheet with 12 fundamental skills and 60 indications. Aiken's $V = 0.82-0.95$ and Cohen's $Kappa = 0.78-0.90$ and Cronbach's $Alpha = 0.89$ indicate strong content validity and reliability. Objective assessment was done via classroom observations and video analysis. Quantitative data were analyzed using Descriptive statistics were employed to assess teaching skill levels, and a One-Sample T-Test compared the sample mean to the "Good" minimum criteria. We evaluated classroom interaction, instructional approaches, and VTFB reflective were analyzed findings using qualitative descriptive analysis. This study was conducted with the informed consent of all participants. Participation was voluntary, and all teaching videos were used solely for research and educational purposes.

RESULT AND DISCUSSION

Result

In a cross-sectional study, pre-service PE instructors used Video Tape Feedback (VTFB) to enhance training. From 28 to 51, 58 pre-service teachers' teaching skill averaged 39.41, "Good". This suggests most practicum instructors were qualified. 4 Very Good (6.9%), 46 Good (79.3%), 8 Fair (13.8%), and 0 Poor participated. All pre-service teachers fulfilled minimum teaching skills requirements, demonstrating their ability to teach.



Picture 1 Description of Teaching Skills Data

These results support Slavin (2018), who claimed good teaching needs clear course delivery, classroom management, and student interaction. This study shows competent pre-service instructors. Career and Physical Education program delivery benefit from this experience.

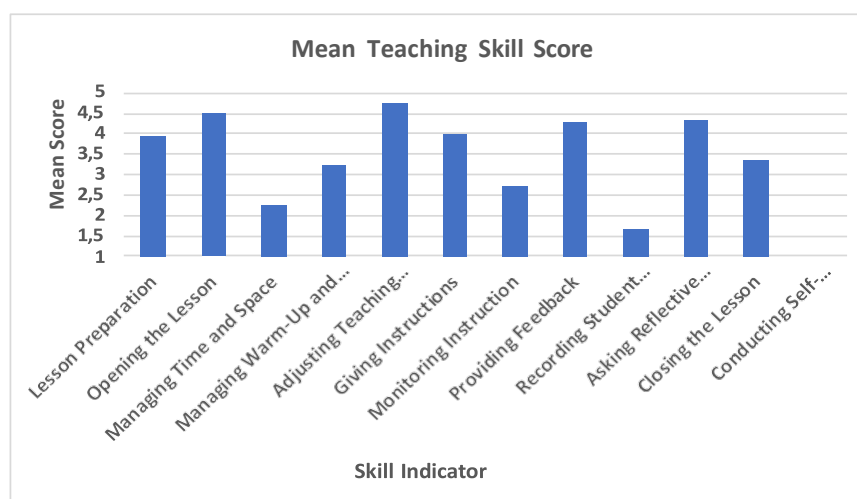
Tabel 1 Statistic Test Results

	N	Mean	Std. Deviation	S.E. Mean
Teaching Skills Scores of Prospective Physical Education Teachers	58	39,41	4,49	,59

Tabel 2 Sample Test Results

Test Value = 36						
Skills Score	T	Df	Sig. (2-tailed)	Mean Difference-	95% Confidence Interval of the Difference	
					Lower	Upper
	5,79	57	,000	3,41	2,23	4,59

The 36-point One-Sample T-Test evaluated pre-service PE instructors. The t-value was 5.79, below 0.05, with 57 degrees of freedom and 0.000 (2-tailed). The gap between 39.41 and 36 teaching competence ratings is significant. Although the null hypothesis (H_0) was rejected, the alternative hypothesis (H_1) was validated, showing exceptional teaching skills among pre-service teachers. Participants may teach successfully because their skills go above basic competence. To deliver quality and relevant learning, instructors need pedagogical and professional abilities, according to Fakhruddin et al. (2023). Reflective practice, structured coaching, and continual professional development may assist pre-service teachers instruct.



Picture 2 Mean Teaching Skills Score

Individual indicator studies on teaching abilities varied greatly. “Adjusting Position in the Learning Area” (4.75, Very Good) scored highest, indicating potential teachers' expertise, supervision, and student participation. However, “Conducting Self-Evaluation” rated the lowest (0.98, inadequate), showing weak introspective and analytical skills following training. “Recording Student Learning Progress” (1.69, Poor) and “Managing Time and Learning Space” (2.25, Fair) scored low. These results show that pre-service teachers excel in technical execution and classroom engagement but not reflective and administrative abilities. Focused mentorship, planned coaching, and systematic feedback may enhance teaching and career success. Pre-service teachers may improve administrative, reflective, and learning process planning, monitoring, and evaluation by addressing these weaknesses. Completely improving pedagogical competence prepares students for real-world teaching.

Tabel 2 Distribution of Teaching Skills of Prospective Teachers by School

School Name	Number Of Students	Mean Score	Category
SMP Negeri 3 Palembang	10	38,2	Good
SMP Negeri 4 Palembang	5	37,4	Good
SMP Negeri 13 Palembang	5	35,4	Fair
SMP Negeri 15 Palembang	5	37,8	Good
SMP Negeri 16 Palembang	4	43,5	Good
SMP Negeri 20 Palembang	5	41,0	Good
SMP Negeri 33 Palembang	5	39,8	Good
SMP Negeri 35 Palembang	10	39,6	Good
SMP Negeri 39 Palembang	4	42,5	Good
SMP Negeri 50 Palembang	5	41,6	Good
Total	58	39,43	Good

Teaching competence was best at SMP Negeri 16 Palembang (43.5, Good) and lowest at SMP Negeri 13 (35.4, Fair). Despite these disparities, all schools scored 39.43, Good. According to Halimah (2017), “professional teachers who are able to manage learning effectively directly reflect school performance; therefore, improving teacher quality is a key strategy for enhancing school quality.” Excellent instruction and professionalism show the school's greatness. Thus, educational reform and standards need pre-service teacher preparation. Teacher training and assistance may boost student achievement.

Discussion

The Results are analyzed based on research subjects and teaching skill development theory. These finding suggest that show pre-service PE instructors have basic teaching abilities but however they still require improvement in real-time decision-making, classroom management, and reflective practice. High Score on the “Adjusting Position in the Learning Area” indicator show indicate adequate spatial awareness, supervision, and student communication. In Contrast, the weak scores for “Conducting Self-Evaluation” and “Recording

Student Learning Progress” indicate limited reflective capacity and weak introspection instructional and management skills.

These findings are consistent with the Perspectives teaching development theory and align with the views of Sundari & Fatimah (2022) as well as Slavin (2018) argue that novice teachers often fail in systematically to evaluate student learning progress, provide timely feedback, and manage respond to unexpected classroom situations. Although Pre-service teachers can teach technically and interactively, they still require systematic and structure mentoring to strengthen in their reflective, evaluative, and administrative abilities. Continuous Teaching practice, professional development, and adaptive instructional training are therefore essential to support their improvement.

Pre-service PE teachers were able to identify their strengths and weakness using of Video Tape feedback (VTFB). By reviewing recordings of their teaching sessions, Participants were able to be watched videos of their courses to become aware of behaviors and classroom interactions overlooked during live teaching, improving reflection and self-assessment. VTFB evaluated course design, clarity, classroom management, and feedback. This reflective process supported improvements in lesson organization, instructional clarity, classroom control and feedback delivery. Moreover, in line with educational theory Video-based reflection improves pedagogical awareness, metacognitive skills, and instructional teaching method accuracy and efficacy, according to educational theory Restuningrum (2018) and Irawan & Hadi (2023). Visualizing one’s own teaching pre-service teachers' performance improves reflection and teaching contributes to meaningful instructional improvement.

The Comparison between teaching skill scores to competency standard requirements indicates that VTFB enhances teaching contributes positively to teaching skill development. VTFB enhanced teaching because pre-service teachers' One-Sample T-Test scores differed significantly from the reference value, indicating measurable improvement in teaching skills following VTFB implementation. However, these results imply that pre-service physical education teachers require more supervision and structured mentoring, and focused practical training to meet competency expectations. Nevertheless, several aspects such as Class delivery, time management, learning space, and student progress were below expectations highlighting areas where guidance and intervention are necessary. Qualitative data research showed persistent inadequate teaching in classroom management, communication, and reflection practice. Effective interventions, structurer mentoring, and target practical experiences and suggestions may assist pre-service teachers enhance their teaching and professionalism growth, ultimately preparing them for real-world classroom challenges.

However, this study has several limitations that should be considered. The Sample size was relatively small and drawn from a single educational institution, which limit the generalizability of the findings. In addition, the assessments of teaching skill was largely

based on observation and self-reflection through video recordings, which could involve subjective interpretation. The relatively short duration of the VTFB intervention also limits the ability to fully capture the long-term impact on the professional development and consistency of teaching skills among preservice PE teachers.

Based on these limitations, future research is recommended to involve larger and more diverse samples from multiple teacher education institutions to enhance the representativeness of the findings. Longitudinal studies are also needed to examine the sustained impact of VTFB on teaching competence and professional growth. Moreover, integrating VTFB with structured mentoring models, such as mentoring or peer coaching, and employing mixed-method approaches is expected to provide a more comprehensive understanding of the reflective process and the development of competencies among preservice PE teachers

Overall, the discussion indicates that video-based reflection effectively supports the improvements of teaching skills, promoting reflective practice and developing videos and help pre-service PE teachers in Improving teaching approaches, discover development areas, and establish classroom relationships to develop potential teachers. The use of video recordings enables pre-service teacher to refine their instructional approaches, identify areas for professional development, and build more effective classroom interactions. Through the Systematic integration of reflective VTFB into teacher education program, preservice teachers can increase their awareness of their pedagogical preparation, cultivate reflective habits, and enhance both technical and socio-emotional teaching skills, and ultimately improving the quality of PJOK learning.

CONCLUSION

VTFB-trained pre-service PE instructors are usually great. Communication, classroom management, lesson delivery, and feedback were good, but self-reflection, monitoring instruction, and time and learning space management still require improvement. The use of VTFB increased pre-service teachers' technical teaching abilities and reflective awareness, allowing them to identify their strengths and weaknesses, improve instructional strategies, and more effective teaching. This study demonstrates that VTFB is an effective tool for addressing key research questions regarding its impact on teaching skill development, specific areas of instructional strength and weaknesses, and the overall professional growth of pre-service teachers.

The conclusion discusses the study's key findings and future research. To learn how peer review, self-assessment journals, and mentoring programs enhance teaching, study teachers from different fields, levels, and institutions. Mentoring, systematic training, and self-reflection improve teaching and professionalism. Such strategies promote kids' physical, character, and social development via more effective, engaging, and student-

centered PE. The study also highlights practical implication peer review, self-assessment journals, and mentoring programs can further support teaching improvement across different fields, levels, and institutions. Mentoring, systematic training, and self-reflection are essential for developing teaching competence and professional growth.

For a productive lesson, lecturers, mentor teachers, and pre-service teachers must collaborate, according to this study. Mentoring, seminars on active learning, classroom management, and creative teaching media may enhance pedagogy, encourage collaborative learning, and inspire educationally sound Physical Education practices. Pre-service teachers improve teachers and schools, according to research. Pre-service teachers may create, engage, and student-centered classes using reflective tools like VTFB to improve their Physical Education teacher competency and overall student development. The research indicates that pre-service teachers can positively influence teachers, schools, and student. Using reflective tools such as VTFB, they can design and implement student-centered, engaging classes that improve both their own competences and the holistic development of learners.

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