

Chapter 13

Pedagogical Content Knowledge (PCK) and Assessment Practices: Teachers' PCK and Their Assessment Practices and Their Influences on Student Learning Outcomes

Mohit Yadav

 <https://orcid.org/0000-0002-9341-2527>

O.P. Jindal Global University, India

Ashutosh Pandey

 <https://orcid.org/0000-0002-8255-8459>

FORE School of Management, India

Ajay Chandel

 <https://orcid.org/0000-0002-4585-6406>

Lovely Professional University, India

Ta Huy Hung

 <https://orcid.org/0009-0008-6835-3036>

Vietnam National University, Hanoi, Vietnam

ABSTRACT

This study explores the impact of Pedagogical Content Knowledge (PCK) on assessment practices and their subsequent influence on student learning outcomes. Through case studies of three educators—Ms. Sarah Thompson at Lincoln Middle

DOI: 10.4018/979-8-3693-0655-0.ch013

School, Mr. David Martinez at Crestwood High School, and Ms. Emily Chen at Brookfield Elementary School—the research examines how deep subject matter expertise and pedagogical strategies shape both formative and summative assessments. The findings reveal that effective integration of PCK into assessment practices enhances student performance, engagement, and feedback quality. Despite these insights, the study acknowledges limitations such as context-specific findings and qualitative data reliance, suggesting the need for further research across diverse settings and methodologies. The study highlights the importance of PCK in creating equitable and effective assessments and provides implications for educational practice, professional development, and policy.

INTRODUCTION

Background and Rationale

In an emerging paradigm in education, quality teaching and assessment practice forms the most essential factor that determines the outcomes of student learning. Among the numerous factors that can help in fostering the desired effectiveness in teaching, Pedagogical Content Knowledge (PCK) has emerged to be a crucial factor (Razak, 2023). PCK relates to the interaction between content within which teachers engage students in the course of learning. This concept by Lee Shulman in the late 1980s points out that good teaching is not just about mastering subject matter but is essentially about knowing what to teach and knowing how to give it to the students in a way that it is not only accessible but engaging (Mapulanga et al., 2022).

Practices of assessments become equally important in this context since they provide a mechanism to evaluate student comprehension, guide instructions, and improve learning outcomes. Good practices of assessment are those that harmonize with the instructional intentions, provide meaningful feedback, and support the learning process (Can-Kucuk et al., 2022). The confluence of PCK and the assessment practices is a rich area to explore, since it looks at how teachers' understanding of content and how the implementation of the pedagogical strategies affect their approach toward assessment and hence student achievement.

Purpose of the Study

This research will investigate, directly or indirectly, the relationship between a teacher's PCK and their assessment approach and how both aspects affect the performance and learning achievement of students (Tröbst et al., 2018). Within the context of this convergence, the study is informed by a number of key areas of enquiry:

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/pedagogical-content-knowledge-pck-and-assessment-practices/369719

Related Content

Virtual Education Impact During Pandemic Times: The Case of Higher Education in the Ecuadorian Context

Carla C. Florez Ferrer, Yolvy J. Quintero Cordero, Mayra A. Bustillos Peñaand Renato Mauricio Toasa Guachi (2022). *International Journal of Online Pedagogy and Course Design* (pp. 1-11).

www.irma-international.org/article/virtual-education-impact-during-pandemic-times/305725

The Efficacy of Maker Education and STEAM Content Delivery Through Cooking: A Case Study of the Chef Koochooloo Project

Layla Sabourian (2022). *International Journal of Online Pedagogy and Course Design* (pp. 1-12).

www.irma-international.org/article/the-efficacy-of-maker-education-and-steam-content-delivery-through-cooking/304082

Epic Boss Battles: How to Addict Your Students by Creating Asynchronous Course-Based Games

Janna Jackson Kellinger (2022). *Handbook of Research on Transformative and Innovative Pedagogies in Education* (pp. 1-17).

www.irma-international.org/chapter/epic-boss-battles/297588

Social Networks in University Classrooms: An Experience of Teaching and Learning with Pre-Service Teachers through Facebook

Inmaculada Gómez Hurtadoand José Manuel Coronel Llamas (2014). *International Journal of Online Pedagogy and Course Design* (pp. 34-48).

www.irma-international.org/article/social-networks-in-university-classrooms/117455

Using Asynchronous Activities to Promote Sense of Community and Learning in an Online Course

Jesús Trespalaciosand Jennifer Rand (2015). *International Journal of Online Pedagogy and Course Design* (pp. 1-13).

www.irma-international.org/article/using-asynchronous-activities-to-promote-sense-of-community-and-learning-in-an-online-course/129963