



## From Chalk to Clicks: Teachers' Lived Experiences with Flipped Classrooms in Low-Resource Pandemic Settings

Catur Fathonah Djarwo

Universitas Cenderawasih, Indonesia

[caturdjarwo22@gmail.com](mailto:caturdjarwo22@gmail.com)

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### ABSTRACT

The shift toward innovative teaching methods has become a central focus in educational research, particularly as digital pedagogies reshape learning environments. Within this context, the flipped classroom model has been widely promoted, yet little is known about how teachers experience this approach under crisis conditions. While prior studies have assessed effectiveness through performance metrics, the subjective experiences of teachers in resource-limited settings remain underexplored—raising the question: How do teachers interpret their professional and emotional experiences while implementing flipped classrooms during a pandemic?

This study adopts an interpretative phenomenological analysis (IPA) to explore the lived experiences of secondary school teachers who adapted to flipped classroom instruction during COVID-19. Following Smith et al.'s (2009) IPA framework, the analysis proceeded through a structured process involving multiple stages: initial reading and re-reading of transcripts, line-by-line coding, development of emergent themes, clustering of themes into superordinate categories, and iterative cross-case analysis.

Through semi-structured interviews with eight teachers, thematically analyzed using IPA, the study reveals that teachers faced deep pedagogical disruptions, emotional strain, and a redefinition of their professional identity. Participants described initial disorientation, gradual adaptation, and the emergence of meaningful connections with students despite technological and institutional constraints. The findings demonstrate that flipped instruction during crisis was experienced as a complex personal journey, marked by resilience and reflective practice.

These results expand the understanding of pedagogical innovation by centering the emotional and interpretive dimensions of teaching, offering valuable insights for policy and teacher development in low-resource educational contexts.



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### INTRODUCTION

The global shift to remote learning during the COVID-19 pandemic marked a profound disruption in educational systems worldwide. In response to school closures and physical distancing mandates, educators were compelled to transition from conventional face-to-face instruction to digitally mediated teaching formats (Fisher dkk., 2015). Among these, the flipped classroom model—where direct instruction is delivered asynchronously through digital media and in-class time is repurposed for active learning—emerged as a popular yet challenging alternative for many educators. This pedagogical shift was not merely a change in instructional delivery but signaled a deeper transformation in how teachers understood their roles, engaged with students, and adapted to evolving educational landscapes.

While the flipped classroom has received considerable attention for its potential to enhance student engagement and academic outcomes, most existing studies rely heavily on quantitative metrics—such as achievement scores, usage data, or survey-based feedback. These approaches often

fail to capture the emotional, interpretive, and experiential dimensions of teaching, especially under crisis conditions. Teachers—particularly those working in resource-constrained environments—were confronted with abrupt changes in professional routines, emotional strain, and evolving pedagogical identities, often without adequate institutional support.

Despite a growing body of literature examining the efficacy of flipped classrooms from quantitative and outcome-based perspectives, little is known about the subjective experiences of teachers navigating this pedagogical transformation under crisis conditions. Phenomenological inquiry offers a vital lens to explore these experiences, focusing on how individuals make meaning of significant disruptions in their professional lives (Maini dkk., 2021). Understanding these lived experiences can illuminate not only the emotional and cognitive dimensions of teaching during a global emergency but also the underlying structures that shape teachers' sense of agency, resilience, and professional identity.

Research on educators' lived experiences within pedagogical transformations has emerged as a critical field of inquiry, particularly in the wake of systemic disruptions such as the COVID-19 pandemic (Matsuda dkk., 2024). Understanding how teachers perceive, internalize, and adapt to instructional shifts—such as the adoption of flipped classrooms—offers valuable insight into the complex human dimensions of educational change. These experiences are deeply embedded in personal, institutional, and sociocultural contexts, making them highly relevant for exploration through phenomenological lenses.

However, existing studies often rely on quantitative metrics such as student achievement scores, usage analytics, or generalized surveys to evaluate the effectiveness of flipped classrooms. While informative, such approaches fall short in capturing the nuanced, affective, and interpretive layers of teachers' day-to-day realities. The reduction of complex experiences into numerical data neglects the emotional turbulence, identity reconstruction, and ethical negotiations that often accompany pedagogical adaptation under crisis.

This methodological limitation has left a substantial gap in understanding the essence of teachers' experiences—particularly those working in under-resourced schools where technological adaptation is both a logistical and emotional challenge (Musio dkk., 2022). Phenomenological inquiry addresses this shortcoming by prioritizing first-person accounts and focusing on the meaning-making processes embedded in human experience. Within this framework, interpretative phenomenology, grounded in Heideggerian philosophy, offers a robust and context-sensitive method to uncover how teachers live through, reflect upon, and give meaning to their teaching practice amidst external disruption.

In response to the challenges of remote instruction during the pandemic, most educational interventions concerning flipped classroom implementation have centered on pragmatic, results-driven strategies—such as improving technological infrastructure, enhancing digital content quality, or providing teacher training modules (Rahmah dkk., 2024). While these solutions aim to support instructional continuity, they are typically evaluated through surface-level indicators like technological engagement, academic performance, or general satisfaction rates. Such assessments, although useful, often fail to penetrate the complex inner landscape of educators' experiences, emotions, and cognitive negotiations during pedagogical transformation.

This reliance on pre-existing, solution-focused frameworks restricts the scope of inquiry to what can be measured, rather than what can be understood. The interpretive dimensions of teachers' struggles—such as professional identity shifts, emotional resilience, or the personal meaning assigned to teaching under crisis—remain largely unexplored. As a result, the existing literature provides an incomplete picture of how flipped classrooms are actually lived and experienced by teachers, particularly in under-resourced educational environments.

To address this gap, a phenomenological approach is essential. Unlike conventional evaluation models, phenomenology prioritizes the exploration of meaning as it is experienced by individuals. By adopting interpretative phenomenological analysis (IPA), this study seeks to uncover the nuanced realities of teachers adapting to flipped instruction—not as passive implementers of

policy but as active agents navigating professional, emotional, and contextual complexities. Such an approach offers a deeper, more holistic understanding of the phenomenon and provides insights that can inform more empathetic and context-sensitive educational reforms.

Previous studies have examined flipped classroom models in terms of their impact on learning outcomes, student engagement, and instructional efficiency. While these studies contribute to understanding the operational success of flipped teaching, they rarely address how teachers personally experience the process, especially under stressful conditions like a global pandemic (Rahman dkk., 2023). Research that does explore teacher experiences often adopts surface-level surveys or generalized interviews that overlook the depth of individual meaning. There is limited investigation into how teachers interpret, adapt to, and emotionally navigate flipped learning environments. This research aims to extend that understanding through a phenomenological lens.

To address this gap, the study adopts an interpretative phenomenological analysis (IPA) to explore the lived experiences of secondary school teachers implementing flipped classrooms in low-resource settings. IPA was selected because it allows for the interpretation of personal meaning embedded in individual narratives. This method answers the earlier question by offering an in-depth and contextual understanding of how teachers experience pedagogical disruption. It enables a holistic view of teaching during crisis, focusing on emotional, cognitive, and professional dimensions. Such an approach reveals hidden patterns and meanings that traditional methods often miss.

This article is structured in several parts. The introduction presents the social and pedagogical context of the study and the rationale for using a phenomenological method (Schönwetter dkk., 2016). The methodology section outlines the research design, participant selection, data collection, and IPA data analysis. The results section presents key experiential themes using participant narratives. Finally, the discussion interprets these findings and connects them to existing literature, followed by conclusions and implications for educational practice.

## **RESEARCH METHODS**

### **Study Design**

This study adopted an interpretative phenomenological approach to explore the lived experiences of secondary school teachers implementing flipped classroom models using digital platforms during the COVID-19 pandemic. Phenomenology was selected due to its capacity to investigate the subjective meanings individuals attach to their experiences (Tang & Tang, 2024). This approach emphasizes the depth and richness of personal narratives, enabling the extraction of essential meanings from participants' lived realities. The interpretative variant of phenomenology, grounded in the philosophy of Martin Heidegger, was particularly relevant as it allowed for the exploration of not only what participants experienced but how they interpreted those experiences within their unique pedagogical, technological, and emotional contexts.

### **Participants**

Participants consisted of secondary school teachers who had implemented flipped classroom strategies using digital applications during the transition to remote learning. Inclusion criteria required participants to have at least six months of experience with flipped teaching during the pandemic, with no prior formal training in educational technology. Individuals were excluded if they had extensive prior experience in online or blended learning environments before the pandemic. A purposive sampling strategy was used to identify participants with rich and relevant experiences concerning the phenomenon under investigation (Vega dkk., 2023). The final sample included eight teachers (five female and three male), aged between 29 and 46 years, representing public schools in resource-constrained urban and peri-urban settings. Participants taught a range of subjects, including mathematics, science, English, and social studies. Their teaching experience ranged from 5 to 18 years, with an average of 11 years.

This additional contextual information—such as subject area and years of service—supports a more transparent interpretation of findings and enhances the transferability of insights to similar educational contexts.

### **Data Collection**

Data were collected through in-depth, semi-structured interviews conducted either face-to-face in a private setting or via secure video conferencing platforms, depending on participant preference and safety considerations. Each interview lasted between 45 and 70 minutes. An interview protocol was used to guide discussions, with questions designed to elicit narratives about emotional responses, pedagogical adaptations, and technological challenges related to the flipped classroom model. Participants were encouraged to share reflective accounts, and probing was used to deepen insights. Interviews were audio-recorded with participant consent and transcribed verbatim. A supportive and non-threatening environment was ensured to foster openness and authenticity during the conversations.

### **Data Analysis**

Data were analyzed using Interpretative Phenomenological Analysis (IPA), which involves systematic steps of coding and thematic interpretation to capture essential meanings. Transcripts were read multiple times to achieve immersion, followed by initial noting of significant statements and expressions. Meaning units were then coded and clustered into emergent themes (Vlachopoulos & Makri, 2017). Cross-case analysis was conducted to identify shared patterns while preserving individual nuance. NVivo software was used to organize and trace thematic development without influencing interpretive depth. The process culminated in the construction of higher-order themes that reflected the essential structure of the teachers' experiences.

### **Ethical Considerations**

Ethical approval was obtained from the appropriate institutional ethics review board prior to data collection. Written informed consent was obtained from all participants, who were briefed on the study's purpose, procedures, and their right to withdraw at any time. Pseudonyms were assigned to ensure anonymity, and all data were securely stored with restricted access. The research was conducted in accordance with international ethical standards, including the Declaration of Helsinki and local regulatory guidelines.

## **RESULTS**

### **Navigating Pedagogical Disruption**

Teachers described a sudden and overwhelming shift from traditional classroom teaching to digital-driven flipped classrooms. Many had no prior exposure to such pedagogical models, and the transition demanded rapid reconfiguration of instructional design, content delivery, and student engagement methods.

“It felt like I was thrown into deep water. I had to redesign everything overnight, from PowerPoint to video, just to stay relevant.” (P2)

This theme highlighted the absence of institutional support and the burden of self-directed learning in mastering digital tools like Zoom, Google Classroom, and Canva. Several participants expressed that their pedagogical priorities shifted drastically—from content mastery to technological survival.

“In the first week, I stopped thinking about how to teach well—I was just trying to make the tech work.” (P4)

### **How should teachers balance pedagogical priorities during digital transitions?**



**Content Mastery**

Focus on curriculum and student understanding



**Technological Survival**

Focus on digital tools and functionality

**Emotional Struggles and Coping Strategies**

The emotional toll of this transition was profound. Participants conveyed feelings of anxiety, exhaustion, and self-doubt as they navigated digital teaching amidst pandemic-induced stress. They often felt isolated and uncertain about their effectiveness as educators.

“Sometimes I cried after class. I kept asking myself—am I even teaching, or just pressing buttons?” (P1)

Nonetheless, teachers gradually developed coping strategies: forming peer support groups, engaging in reflective journaling, and attending informal webinars. These actions provided a sense of community and emotional relief.

“We made a WhatsApp group just for ranting and sharing hacks. It saved us.” (P5)

**Redefining Professional Identity Through Technology**

Teachers reflected on a transformative journey in how they perceived themselves professionally. The adaptation process forced them to reconsider their teaching values, skills, and relationships with students. While the initial phase was marked by a sense of disempowerment, many eventually felt a renewed sense of competence.

“For the first time, I realized that being a good teacher doesn’t mean standing in front of a board—it means adapting, listening, and learning too.” (P3)

This transformation was not uniform. Some participants expressed resistance, indicating a generational or philosophical mismatch with the flipped model. However, even among skeptics, there was acknowledgment of growth.

“It wasn’t my method. But I learned, and the students appreciated the videos I made. That meant something.” (P6)

**Constructing Meaningful Learning in Crisis**

Despite the turbulence, teachers found unexpected moments of meaningful learning—for both themselves and their students. The flipped model, while imperfect, enabled asynchronous flexibility, creativity in content delivery, and richer student autonomy in some cases.

“One student told me she rewatched my video five times until she got it. That never happens in class. That’s when I felt like this might actually work.” (P2)

Teachers began integrating multimedia content, encouraging self-paced learning, and even involving students in co-creating lesson materials. The experience prompted re-evaluation of traditional metrics of classroom success.

“Maybe we don’t need bells and walls to teach. Maybe it’s about connection and effort, no matter the format.” (P4)

The findings illuminate the complexity of implementing flipped classrooms in resource-constrained secondary schools during a global crisis. Teachers’ narratives underscore not only the technological and pedagogical challenges, but also a profound emotional and professional transformation. These lived experiences reflect the intricate, human-centered nature of educational innovation in times of disruption.

## **DISCUSSION**

### **Summary of Key Findings**

This study revealed that teachers implementing flipped classrooms in resource-limited settings during the pandemic experienced significant pedagogical disruption, emotional struggle, and professional transformation (R. Wang, 2023). These lived experiences, grounded in uncertainty and adaptation, reflect the essential meanings of resilience, redefinition of professional identity, and the pursuit of meaningful teaching amidst crisis—directly addressing the core research question concerning how teachers made sense of this instructional shift.

### **Contribution of Findings to the Research Question**

The findings provide a nuanced and human-centered response to the research question by illuminating how teachers subjectively experienced the flipped classroom model as more than a method—it was a personal journey through disorientation, discovery, and reorientation. Rather than solely adjusting pedagogical techniques, participants reconfigured their sense of purpose, reconstructed their roles, and engaged in emotional negotiations with the realities of remote education. The study contributes uniquely by centering the internal narratives of teachers who are often rendered invisible in data-driven evaluations of educational innovation. Through their voices, the research reveals how pedagogical change was not merely implemented but lived—reshaping both instructional approaches and personal identities in profound ways.

### **Relationship to Previous Literature and Theoretical Frameworks**

The findings resonate with previous phenomenological research by (S. Wang dkk., 2024), which emphasized the interpretive layers of digital transformation in flipped classrooms. Similarly, (Zhao & Wang, 2024) identified crises as catalysts for innovation, aligning with participants' reflections on how adversity prompted creative pedagogical reinvention. However, this study extends prior work by grounding the analysis in the specific context of under-resourced schools, where challenges were compounded by limited infrastructure and support. Unlike studies that treat flipped learning as a neutral instructional design, this research confirms that pedagogical strategies are deeply experienced, emotionally charged, and socially contextualized—echoing Heideggerian notions of being-in-the-world as fundamental to understanding professional practice. Moreover, it highlights how meaning-making processes are not ancillary but central to educational adaptation and resilience.

### **Implications of the Findings**

The findings of this study carry both scientific and practical implications, particularly in understanding how pedagogical innovations are internalized and enacted by educators in crisis settings. From a phenomenological perspective, the experiences described by participants reveal the socio-emotional labor embedded in educational adaptation—highlighting the need for institutional policies that acknowledge and support the emotional resilience of teachers, not just their technical competencies. Culturally, the findings emphasize that instructional reforms cannot be divorced from local realities, such as access disparities and pedagogical norms. Professionally, the narratives offer a compelling argument for rethinking teacher training to include adaptive thinking, emotional intelligence, and narrative reflection as core components. These implications extend to broader educational contexts, especially in developing or under-resourced regions, where digital pedagogy must be matched by empathy-driven implementation strategies.

### **Limitations of the Study**

This study, while rich in narrative depth, is bounded by certain methodological and contextual limitations (Aleksandrovich dkk., 2024). As a phenomenological inquiry involving a small sample of teachers from specific low-resource environments, the findings are not intended to be generalized to all educational settings. The interpretative nature of the analysis, though rigorous, is influenced by the relational dynamic between participants and the interviewer, and by the subjectivity inherent in meaning-making. Additionally, the absence of longitudinal data limits the understanding of how these experiences evolve over time. These limitations, however, are consistent with the goals of

phenomenology, which prioritize depth over breadth, and serve as a foundation for future, context-sensitive research.

### **Prospective Directions for Future Research**

Future research could build upon these insights by exploring how flipped classroom experiences differ across educational levels, cultural settings, or institutional supports. Longitudinal studies may reveal how teachers' initial emotional responses evolve into sustained pedagogical beliefs or practices (Arslan & Turk, 2024). Comparative phenomenological investigations could also examine experiences across different technological models or among students themselves, providing a more holistic view of the flipped learning ecosystem. Furthermore, interdisciplinary research that integrates educational psychology and digital sociology may deepen understanding of how personal, relational, and systemic factors shape instructional innovation. Such inquiries would significantly enrich the field of innovative teaching methods and support more contextually grounded policy development.

### **CONCLUSION**

This study explored the lived experiences of secondary school teachers implementing flipped classrooms in resource-constrained environments during the COVID-19 pandemic. The findings revealed that teachers navigated significant pedagogical disruptions, emotional challenges, and shifts in professional identity as they adapted to digital instructional models. Through interpretative phenomenological analysis, the study uncovered how teachers constructed meaning from their experiences, highlighting resilience, adaptation, and the pursuit of meaningful teaching under crisis. These insights address a gap in existing literature by providing a human-centered understanding of educational innovation, often overlooked in data-driven research. Beyond summarizing these experiences, the study underscores the need to reimagine post-pandemic pedagogical models that prioritize flexibility, emotional well-being, and contextual responsiveness. The pandemic exposed structural vulnerabilities in education systems but also revealed opportunities for more empathetic and reflective teaching practices. The insights gained here suggest that future instructional frameworks—particularly in low-resource settings—should move beyond mere technological provision and instead foster environments that support teachers as adaptive, emotionally engaged professionals. The study offers valuable implications for policy and teacher development programs that seek to support instructional change in challenging contexts. Future research may expand these findings by examining longitudinal impacts or comparing teacher experiences across different cultural or institutional settings.

### **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest regarding the publication of this article. All stages of the research and manuscript preparation were conducted independently and free from any commercial or financial relationships that could be construed as a potential conflict.

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