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Sensemaking in crisis: Unpacking how teachers interpret and respond to online education as street-level bureaucrats

Nguyen Van Bao^{1*}, Thao Ngoc Do², Yoon Cheong Cho¹ and Phan Thi Song Thuong³

Abstract: The COVID-19 pandemic has posed numerous challenges for Street-Level Bureaucrats (SLBs). This paper adopts the sensemaking framework to examine the teaching experiences of high school teachers in the online environment, specifically focusing on their interpretation and implementation of COVID-19-related policies. Sixteen teachers from different high schools in Vietnam were selected purposely as participants in this study by considering the geographical influence and school rankings. The study reveals that decision-makers tend to grant higher levels of discretion to SLBs during crises compared to normal circumstances in the Vietnamese context, emphasizing the role of socio-cultural and political contexts in shaping policy implementation within centralized education systems. Also, recognizing the significance of policy signals and adopting a bottom-up approach that acknowledges the impact of SLBs on policy outcomes is paramount. By providing valuable insights to policymakers and school officials, this study provides an implication for reevaluating how better-established policy signals are received during times of crisis to prevent unintended consequences that may arise from local-level policy implementation.

Subjects: Education Policy; Teachers & Teacher Education; School Leadership, Management & Administration



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Keywords: online education; sensemaking framework; street-level bureaucrats; high school teacher; COVID-19

1. Introduction

1.1. Necessity of policy implementation at the local level

Massive crises have emerged more frequently in modern societies, exacerbating challenges in policy formulation and implementation at multiple levels. In the case of the coronavirus pandemic, its severe impact on policy problems is undeniable (Roberts, 2020). This shock has led to an increase in newly adopted policies within and among governments, placing policymaking processes under significant uncertainties (Hogan et al., 2022). At the same time, policies at the national level may fail to achieve consistency in implementation at the subnational level as general regulations or guidelines are frequently adapted and customized by street-level bureaucrats (SLBs), such as teachers, police officers, and social workers (Sausman et al., 2016). The beliefs and experiences of policy actors influence how they interpret and make sense of policy reforms (McChesney & Aldridge, 2021) and shape the implementation process at the local level (Hodge, 2019; Stosich, 2016). The situation is even more complicated when local authorities have diverse levels of political power (Gong, 2006). For example, in the education sector, school officials, particularly school leaders and teachers, tend to develop their own strategies during the implementation stage (Ganon-Shilon & Schechter, 2019). This implies that local contexts matter significantly to the beliefs and sensemaking of educators in different approaches to reforming implementation. As a result, even when policies are standardized at the national level, their implementation processes and outcomes may vary significantly at the local level (Hudson et al., 2019).

It is also worth noting that much of the existing research on policy framing and interpretation has concentrated on the context of Western countries, such as the UK (Gu et al., 2018) or the U.S. (Bertrand & Marsh, 2015; Louis et al., 2005), which are characterized by their high degree of decentralization and diversity (Mangin, 2007). In the meantime, there needs to be more studies in Eastern countries characterized by highly centralized administrative systems, such as South Korea, China, and Vietnam. In these countries, major policies are frequently standardized at the national level by their governments and strict enforcement is carried out at all levels, from the state to the local level (Hoi & Mu, 2021; Xue & Li, 2020).

The policy implementation process will depend significantly on the local contextual factors when governance is centralized rather than dispersed (Lubell & Robbins, 2022). Research has shown that an effective intervention in one location may not automatically yield the same outcomes in another location (Braithwaite et al., 2018). The situation is further complicated because policymakers at the national level cannot succeed without better understanding what occurs in or close to the sub-national context, resulting in the gap between policy objectives and actual outcomes (Hudson et al., 2019). This calls for a response from the central authorities to bridge the gap between policy objectives and actual outcomes, especially where this gap occurs beyond policymakers' perspectives.

1.2. Necessity of policy implementation in education

Implementing education policies has been recognized as an increasingly complex and sophisticated process, with local interpretations playing a crucial role in shaping policy implementation (Braun et al., 2010). However, current research has focused mainly on the sensemaking process of school leaders, leaving out the perspectives of teachers, who often need to be considered in education policy formulation (Bridwell-Mitchell & Sherer, 2017). Stillman (2011) demonstrated that teachers can act as mediators between policy and practices and examined variations in teachers' responses and emphasized how contextual factors, especially that of local leadership, mediated teacher learning and agency in the context of school change. Stillman and Anderson

(2015) also investigated how teachers managed dilemmas and sense of self that informed their engagement with educational policy. The diverse and multifaceted work environment of teachers, shaped by different social-cultural, political, and historical contexts, further complicates predicting the outcomes of local implementation (Hodge & Stosich, 2022; Spillane et al., 2002). Therefore, understanding how teachers perceive, understand, and apply new policies in an increasingly complex world is important because it can offer mechanisms for explaining when and how implementing education policies starts deviating from the original ones.

Different from pre-scheduled online education, emergency remote teaching due to COVID-19 was implemented unexpectedly, leaving teachers who navigate policies on the ground with insufficient time to prepare effectively for the new method of instruction (Bao & Cho, 2022). The policy approach in this context was primarily top-down, with public announcements and regulations being issued without much consultation with teachers (Fotheringham et al., 2022). This approach often resulted in teachers feeling bound by the policy rather than being able to innovate or respond to local needs (Taylor, 2007). However, the difficulties and disruptions during school closures can also be viewed as opportunities to explore how policy interpretation and implementation were reshaped at the grassroots level (Fotheringham et al., 2022). However, a dearth of research studies clarifies how teachers as SLBs develop their perceptions and interpretations when implementing new policies in the midst of a crisis.

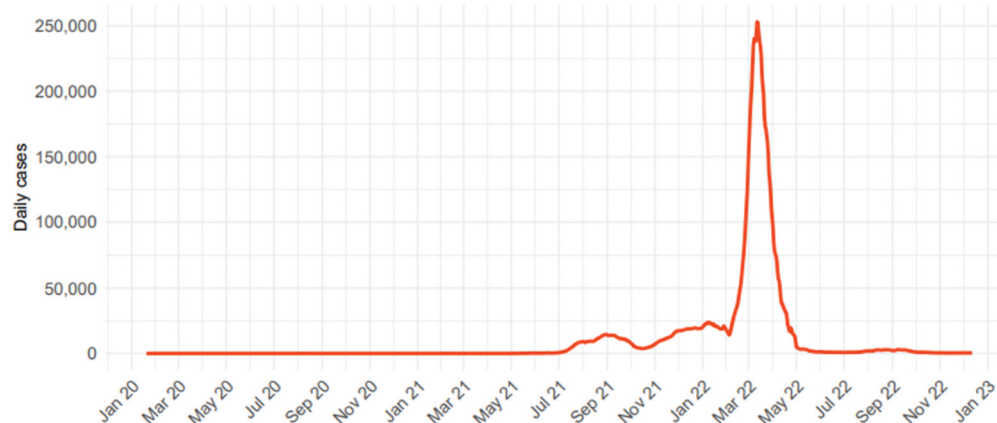
1.3. Research context: online education before and during the pandemic in Vietnam

The COVID-19 pandemic acted as a catalyst for the rapid expansion of online education worldwide. School closures and social distancing measures forced educational institutions to swiftly transition to remote learning models (Bao & Cho, 2022). According to UNESCO (2020), at the peak of the pandemic, more than 1.6 billion learners were affected globally, leading to a surge in online education platforms and tools to meet the sudden demand. In Vietnam, the pandemic had a significant impact on the education landscape as well. The Vietnamese Ministry of Education and Training (MOET) reported that during the 2019–2020 academic year, over 20 million students and 1.2 million teachers in Vietnam shifted to online learning platforms (Viet Nam News, 2020).

Figure 1 shows that during the first three waves of the outbreak, the number of confirmed cases was, on average, relatively low (The Institute for Health Metrics and Evaluation IHME, 2022; Minh et al., 2021). As a result, Vietnam was recognized as one of the few countries that successfully controlled the COVID-19 pandemic throughout 2020 and early 2021 (World Bank, 2021). However, with the hyper-infectious Delta coronavirus variant, the country faced many difficulties in the fourth wave, which began on 27 April 2021, with cases rising rapidly, breaking a strict zero-COVID policy (Minh et al., 2021).

Figure 1. Reported daily COVID-19 cases, moving average in Vietnam.

Source: The Institute for Health Metrics and Evaluation (IHME), 2022).



1.3.1. *Online education in Vietnam before COVID-19*

Prior to the outbreak of COVID-19, certain institutions, high schools, and universities in Vietnam had adopted online education to some extent (Maheshwari, 2021). However, its implementation and utilization were limited in nature. Students primarily relied on e-learning platforms for studying foreign languages, acquiring soft skills, and preparing for exams, rather than fully integrating them into their formal education (Hoi & Mu, 2021). Among the student population, online learning was more popular at the university level than in high schools (Bao & Cho, 2022). Notably, a handful of institutions, including Hanoi Open University, Ho Chi Minh City Open University, and Hanoi University of Science and Technology, had introduced online learning in their curriculum. However, considering Vietnam's substantial population, the number of institutions implementing e-learning was still modest when compared to the global landscape of online universities (Maheshwari, 2021). Therefore, online education in Vietnam before COVID-19 remained in its nascent stage.

1.3.2. *Online education during and post- COVID-19*

Since the first case of COVID-19 was presented in Vietnam in January 2020, the MOET has responded quickly by introducing changes to the education sector. With the motto “suspending school, not stopping learning”, the response policies varied from closing all schools across the country, reducing the amount of school curriculum, deploying online education and educational television nationwide, promoting support for ethnic minority children (UNICEF & UNESCO, 2021). A series of official documents were introduced, such as Official Document 1061/BGD-T-GDTrH on providing official guidelines for online education and recognizing its results; official document 793/BGDDT-GDTrH on enhancing teaching via the Internet and television during the COVID-19 pandemic; official document 795/BGDDT-GDDH on implementing online education to cope with the COVID-19 pandemic; official document 988/BGDĐT-GDĐH on ensuring the quality of online education during the COVID-19 pandemic, among others (a list of example policy responses from the MOET is available in Table A1 - Annex 1).

Through four waves of COVID-19, there were two major continuous school closure periods nationwide (Minh et al., 2021). The first one was from February 2020 to May 2020 during the first wave and the second one was from April 2021 to April 2022 in the fourth wave. By the middle of February 2022, the majority of schools had been fully opened following the “new normal” strategy of “living with COVID-19” of the Vietnamese government. In between these periods, schools were partially or fully opened, with some variations depending on the local context. Teaching was transitioned from traditional face-to-face classes to online learning and hybrid mode - a combination of online and offline teaching.

Despite having little experience in online education, many schools and universities in Vietnam have flexibly and innovatively adopted new modes of teaching and learning (Dinh & Nguyen, 2020; Vu & Bosmans, 2021). There have been many initiatives to support teachers and students in their teaching and learning. For example, training workshops on guidance on online teaching were provided to teachers; video lessons were developed nationally for adaptation and usage at the school level; and students received support from NGOs or private sectors on fee reduction, Internet access and laptop purchase (UNICEF & UNESCO, 2021). However, not all schools, teachers and students would keep the same pace. Unequal access to digital facilities, further exacerbated by socio-economic hardship during COVID-19, deepened digital inequalities, especially for students in rural areas, ethnic minority students, students with disabilities, students from poor households, and young children and girls (Do & Kasper, 2022). The rapid transition to online teaching also creates challenges for teachers in adapting to new teaching methodologies, managing online classes, involving students in learning activities, and getting familiar with digital teaching platforms (Linh, 2020). Even in the hybrid mode, teachers experienced difficulties conducting face-to-face classes while interacting with online students, not to mention the lack of digital facilities such as webcams and cameras for hybrid teaching (Bao & Cho, 2022). On the other hand, many

students reported experiencing stress, COVID-19-related anxiety, lack of motivation, and decreased satisfaction with online learning (Dinh & Nguyen, 2020; Vu & Bosmans, 2021).

In this context, school and local teachers had to respond quickly to an unexpected and “forced” transition from face-to-face to online teaching (Linh, 2020). Besides, teachers have been overwhelmed by rapid changes that have required, in a very short time, to change traditional methodologies and adapt to virtual classrooms (Dinh & Nguyen, 2020; Vu & Bosmans, 2021). As a lower-middle-income country with unequal access to the Internet, online education in Vietnam is still relatively new and challenging to both teachers and students (Linh, 2020). As a result, the waves of the COVID-19 crisis have prompted unpredictable changes in policymaking, leading to inadequacies in teaching activities over the past two years.

1.4. The purpose of the study

Using Vietnam as a case study, we extend research on policy framing and implementation by exploring how high school teachers made sense of multiple policies during the COVID-19 crisis. With a centralized system influenced by traditional Confucian values, particularly its emphasis on hierarchy and collectivism, Vietnam provides a compelling case study to investigate the factors contributing to policy deviation among high school teachers during the pandemic. Drawing from the sensemaking framework, the main purpose of this study is to answer the questions: (i) How have high school teachers made sense of education policy changes during the pandemic? (ii) How do teachers as SLBs understand, interpret, and implement these policies and how do they apply their understanding and experience into practice?

Research on this topic can assist policymakers and school officials in reconsidering how new policy signals are received during times of crisis, thereby avoiding inconsistencies when implementing new policies at the local level. It also assists school authorities in understanding the elements that influence their decision-making process and how different approaches to a new policy may affect the academic environment and the activities associated with learning. Understanding this process is critical for explaining how policy actors at the local level understand and interpret policy messages and when the implementation starts deviating from proposed policies (Spillane, 2009). By analyzing the current theoretical and practical frameworks and applying research on the Vietnamese context, this study explores how a top-down, centrally controlled education system can enhance sensemaking and policy implementation literature in the context of the COVID-19 pandemic.

2. Teachers as street-level bureaucrats

According to Buffat (2013), conventionally, SLBs can be described as public service employees who have direct interactions with citizens, often involving face-to-face encounters and conversations at work. They possess significant discretion in carrying out their duties, especially in how they handle individuals and the general public before making decisions (Buffat, 2013). Lipsky (2010) has defined the core nature of SLBs as being individuals who are tasked with making judgements or decisions regarding other citizens. Frequently portrayed as “policymakers” rather than “policy takers” (Gofen, 2014), SLBs serve as the face of government for citizens (Smith, 2012) and as the intersection of the government, its policies, and individuals (Brodkin, 2013). These individuals play a key role in structuring the relationship between citizens and their respective governments at both local and national levels (Brodkin, 2013). However, for many decades, scholars have stressed the discretion between policymakers’ intentions and the implementation actions that take place on the grassroots level (Lipsky, 2010). In this case, SLBs would modify and interpret the policies and even deviate from the original policies (Davidovitz & Cohen, 2022). Furthermore, the implementation at the local level is complicated by the inherent ambiguity created by the original policies because policies in their “as written” forms frequently fail to instruct implementers what and how they need to implement policy effectively (Hill, 2006). Policy decisions made at the national level are disseminated to lower levels, offering generalizable advice and identifiable patterns (Matland, 1995). For example, in Vietnam, the MOET sets educational policies and

curriculum standards to be followed by all educational institutions, from primary schools to universities (Nguyen et al., 2017). Under the MOET, the various levels of government bodies are responsible for implementing national policies and standards within their jurisdictions. Provincial education departments oversee schools' operations within their provinces and ensure compliance with national policies. District and division-level bodies provide further support to schools and teachers, including resource allocation and professional development opportunities. As a result, the gap still exists between what is designed into policy elements and the situational factors that make it impossible to carry it out as intended (Lipsky, 2010; Maynard-Moody & Musheno, 2000).

Exceptional situations such as natural disasters and crises have a disruptive impact on daily activities at the local level (Gofen & Lotta, 2021). The COVID-19 pandemic is a recent example of a crisis that has disrupted current frames of reference and can, therefore, be a significant disruptor for policy reforms, altering the trajectory and changing traditional patterns across countries and sectors (Capano et al., 2022). Street-level bureaucracy, which serves as the frontline of public service delivery during normal times, must always be fully prepared to effectively manage such crises (Gofen & Lotta, 2021). However, during times of crisis, the relationship between policymakers and street-level bureaucrats becomes increasingly complex, as rules and regulations are contingent upon the information provided by higher authorities (Wakisaka, 2022). Meanwhile, government officials are responsible for adjusting policies based on the available information, aiming to maximize socio-economic benefits in their communities while remaining responsive to public concerns amidst unexpected situations (French & Raymond, 2009). Consequently, the COVID-19 pandemic and the associated policies pose significant threats and present complex challenges to the implementation efforts of street-level bureaucrats (Boin et al., 2020).

Schools are characterized by several bureaucratic organizational structures, including hierarchy, division of labor, and rules and regulations, which serve to establish clear lines of authority, facilitate efficient task completion, and promote accountability (Hoy, 2003). While these structures offer benefits, they can also hinder creativity and innovation, limiting schools' ability to adapt to changing circumstances and cater to the unique needs of individual students (Mansour & David, 2021). As local bureaucrats, teachers consider various factors when making decisions for their students, including their own values, perspectives, and pedagogical expertise (Taylor, 2007). Responsible for instructing entire classes and addressing challenges that arise during classroom instruction, teachers often need to adjust their approaches and make decisions amidst the uncertainties inherent in their profession (Tummers & Bekkers, 2014). Consequently, teachers are recognized as policy agents and influential contributors to policy implementation, playing a vital role in delivering essential public services (Hall & Hampden Thompson, 2022). This recognition grants teachers, as SLBs, considerable autonomy to exercise professional judgment in meeting their students' needs (Hall & Hampden Thompson, 2022). However, this freedom comes with significant responsibility, as teachers must navigate complex policies and regulations while ensuring the delivery of high-quality education to their students.

3. Theoretical framework

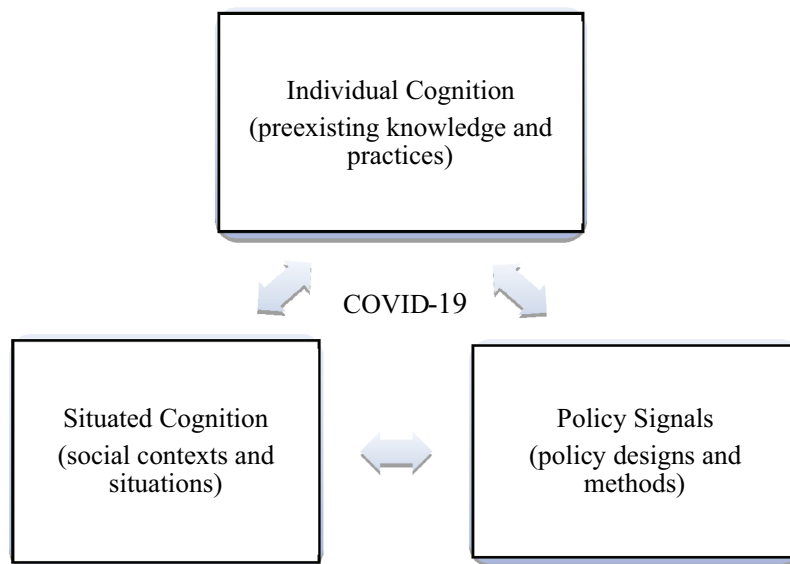
Using the sensemaking framework, this study examines how high school teachers interpreted online education policies during the COVID-19 pandemic (i.e., online classes, school reopening, or hybrid classes) and how they implemented online teaching throughout the pandemic. By focusing on teachers' perceptions, this framework allows for a comprehensive analysis of interpretation and implementation of new policies in a given context. This framework is essential for understanding subnational variation in policy implementation, which can either reinforce, modify, or contradict the rationale of policy reforms (Siczek & Engel, 2019; Spillane et al., 2002). Policies would be reconstructed and reshaped during policy implementation, depending on how relevant stakeholders from different environments understand policy objectives.

According to Spillane et al. (2002), the sensemaking framework is made up of three major components: (1) local-level implementers - also known as "individual cognition", (2) situations in

which the process of sensemaking occurs or “situated cognition”, and (3) policy changes and reforms or “policy signals” (see Figure 2). The first component of the framework claims that when getting the same information about a new policy, individuals frequently construct different understandings based on their previous experiences and perceptions (Coburn, 2005; Siczek & Engel, 2019; Stosich, 2016). This constructed knowledge shapes how policy implementers interact with their colleagues and students and how they apply their understanding to practices, particularly in learning environments (Coburn, 2006; Spillane, 2000). Teachers are viewed as subjects in policy enactment and as agents of translating policy messages (Coburn, 2005). As a result, teachers may communicate with their colleagues and students in different ways, resulting in variations in policy implementation and gaps in policy implementation (Spillane et al., 2002).

Figure 2. Sensemaking framework.

(Modified from Siczek & Engel, 2019; Spillane et al., 2002).



However, enactment is a rather complex interaction of different policy actors in broader societal contexts, including policy content and context and policy translation into a learning environment (Marz & Kelchtermans, 2013). Hence, the second component, known as situated cognition, puts emphasis on the role of context and situation where each individual makes sense and how aspects of the context and situation influence their decision-making process (Spillane et al., 2002). It is grounded in the relationship among school officials, communities, and other stakeholders within and across diverse contexts (Coburn, 2006). Their sensemaking occurs in specific thought communities with diverse backgrounds and characteristics (Zerubavel, 2000), influencing how implementing agents understand policy objectives and put them into practice.

Policy signals, the third component, emphasize the importance of policy stimuli such as policy designs and methods by which policymakers communicate their ideas and expected outcomes about policy reforms with local implementers (Spillane et al., 2002). The divergence of individual implementers’ understandings and interpretations from policymakers’ original intentions may arise from the nature of the policy changes and how they are presented, as policy announcements frequently present underlying ideas rather than clear and comprehensible instructions (Siczek & Engel, 2019).

Unlike other short-lived crises, such as earthquakes or financial shocks, the COVID-19 pandemic is rare but has simultaneously disrupted many different aspects of people’s lives. The rapid responses of policymakers provide a unique opportunity for social scientists to revisit social

theories during crises and re-examine policy outputs, results, and trajectories through time (Capano et al., 2022). Therefore, the sensemaking framework becomes more important for policy implementation when facing high levels of ambiguity and unpredictability. This study integrates the sensemaking framework concerning crises to understand in more in-depth the sensemaking issues that lie at the local level and show how such location-based knowledge affects policy implementation. Over the past few decades, research on policy implementation has shifted from a top-down approach that primarily focused on statutes and policy language (Mazmanian & Sabatier, 1983) to a bottom-up approach that recognizes the influence of SLBs on policy outcomes (Lipsky, 2010). Within the field of education, the sensemaking lens has been employed to explore how school leaders and teachers interpret and comprehend new educational policies. Numerous studies have emphasized the significance of the school environment and contextual messages in shaping classroom practices. For instance, Coburn's (2004) study on reading reforms revealed that instructional messages influenced classroom practices, which were further shaped by teachers' existing attitudes, practices, and the content of the messages. Louis et al. (2005) demonstrated how teachers' interpretations of accountability policies influenced their strategies for adapting classroom practices. Furthermore, Stillman (2011) elucidated the impact of local leadership and mediated learning on teachers' perceptions of accountability reforms and the implementation of new practices in their classrooms. Nonetheless, it is essential to recognize the importance of policy signals by which policymakers convey their concepts and the anticipated outcomes of policy reforms to local implementers (Lipsky, 2010; Spillane et al., 2002).

4. Methodology

4.1. Sampling

This study applied criterion sampling that aimed to recruit a sample that met predetermined criteria (Moser & Korstjens, 2018). Specifically, we selected high school teachers based on geographical areas and their school rankings. Geographically, Vietnam was divided into two areas: "Area 1" (rural area—less advantaged) and "Area 2" (urban area—more advantaged). For rankings, we relied on the High School National Examination ranking table provided by the MOET to select high schools. A total of four schools were chosen, with two schools from each of the aforementioned areas (one high-ranking and one low-ranking school). Additionally, we considered the number of COVID-19 cases in each province/city while selecting participants. The nationally-standardized policies in these areas were subject to frequent changes and heavily influenced by the prevailing circumstances.

This study was examined in the Vietnamese context due to technological support and local government support in education differ in the case of urban and rural areas, particularly during COVID-19, which significantly affects the results of the national standard examination for entering college. During this period, the government was afraid of COVID-19 and implemented a strict lockdown across the country by introducing many new policies related to teaching and examinations (Veettil & Van, 2023; Vo et al., 2023). In this study, 16 participants were recruited, primarily focusing on high school teachers (see Table 1). These teachers were not only affected by online education policies but also by nationally standardized policies concerning the National High School Graduation Examination. Furthermore, teachers were involved in teaching activities and some exposure to online education. When selecting interviewees, we aimed to maximize diversity in terms of education levels and years of experience (Miles et al., 2018). Participation in the study was voluntary, and participants had the right to withdraw at any stage. Strict adherence to privacy, anonymity, and confidentiality of the participants was maintained. We expected that teachers, acting as "street-level bureaucrats", would express their perspectives and provide dynamic responses based on shared experiences. After obtaining informed consent from all schools, we conducted on-site visits to each school between August 2022 and May 2023. All participants did not have online teaching experience before the COVID-19.

Table 1. Summary of characteristics/demographics of participants

Name	Gender	Level of Education	Years of Teaching	Area	School Ranking	Teaching Subjects	Online Teaching Experience
A	Male	Master	22 years	Urban	High	Math	12 months
B	Female	Master	18 years	Urban	High	English	12 months
C	Female	Master	7 years	Rural	Low	English	15 months
D	Male	Bachelor	10 years	Rural	Low	Math	15 months
E	Male	Master	12 years	Rural	High	English	12 months
F	Male	Master	15 years	Rural	High	Math	12 months
G	Female	Bachelor	5 years	Urban	High	Literature	15 months
H	Female	Master	9 years	Urban	High	Math	15 months
I	Female	Bachelor	15 years	Urban	Low	Literature	12 months
J	Male	Master	4 years	Urban	Low	Math	12 months
K	Female	Master	8 years	Rural	Low	Literature	14 months
L	Female	Master	10 years	Rural	Low	English	14 months
M	Male	Master	11 years	Rural	High	Math	15 months
N	Male	Master	12 years	Rural	High	English	15 months
O	Female	Bachelor	6 years	Urban	Low	Literature	12 months
P	Male	Master	12 years	Urban	Low	English	12 months

Source: Data are compiled from in-depth interviews

4.2. Data collection and analysis

The interview questions focused on the sensemaking process of the MOET's policy decisions and decision-making in schools and their teaching experience during different waves of the COVID-19 pandemic in Vietnam. The interview questions were transcribed into Vietnamese and then translated back into English. To enhance accuracy, verbal data from the interview underwent a thorough double-checking process before analyzing and formulating policy recommendations. This study employed a thematic analytical approach for data analysis, which involves coding and evaluating qualitative data based on recurring themes (Shkedi, 2019). Using this method, the results of this study identify and compare common themes among participants in the interview as well as connect with the sensemaking framework while conducting the data analysis.

In the subsequent sections, this study sequentially presents the main findings and addresses the three components of the sensemaking framework. Additionally, this study explores how high school teachers make sense of new policies in the context of COVID-19 and how they implement them in their teaching processes, drawing on their individual and situational cognition. Finally, this study discusses the implications of policy implementation and its relevance for educators and policymakers, providing recommendations based on the study's insights.

5. Findings

5.1. Individual cognition: How teachers made sense of education policies related to COVID-19

This section explains the cognitive process and decision-making that shaped how teachers made sense of and responded to COVID-19 educational policies. Our guiding question was, "Under what circumstances did you receive the guidelines for online teaching?" We also asked follow-up questions such as, "Have you previously taught online? If so, how was your experience?" We aimed to capture teachers' perspectives on online learning and incorporate their feedback into school policy and practice changes, including transitions from online to offline learning and vice versa.

5.1.1. Initial responses to school closure policies

Teacher A mentioned that "School closure added several weeks to our vacation." This prevailing attitude among teachers persisted until April as they anxiously awaited information on the evolving crisis, feeling helpless in controlling the virus's spread. While prioritizing their students' health and safety, teachers expressed shock at the difficult decision to close in-person schools, highlighting that such an unprecedented situation had never been encountered before. Some senior teachers drew upon their past experiences with disease control measures, such as H5N1, leading them to believe that the coronavirus would pass swiftly initially. These responses are in accordance with the concept of sensemaking during a crisis (Shrivastava et al., 2013), wherein teachers construct their interpretations based on their prior experiences and perceptions (Stosich, 2016). Even teachers in Hanoi, where COVID-19 cases were prevalent after Vietnam confirmed its 17th COVID-19 patient, believed that "they would be able to eliminate all cases and return to normal within a few weeks" - as stated by Teacher P.

5.1.2. Challenges in implementing online teaching and hybrid classes

Teachers had to implement online classes during the unpredictable COVID-19 pandemic, a format for which they had little to no previous experience. Teacher B said, "Have you ever thought we would have to conduct online schooling during our professional career? It is doubtful that many teachers in Vietnam thoroughly comprehend online teaching." They have been faced with additional daunting responsibilities in preparing for online classes, such as creating online course syllabus and assisting students in grasping fundamental disease prevention and control concepts. Transitioning to an online format was primarily an immediate response to deal with the intricate progression of the pandemic. While some teachers, like Teacher M, appreciated the flexibility in teaching and embraced participatory decision-making, others, like Teacher G, felt pressure to work

with other colleagues and school leaders to “proactively manage their students and provide support to them remotely; at the same time, take care of their family member”. The situation presented significant challenges for teachers with family responsibilities as they struggled to balance the demands of their profession with their familial obligations.

This study found that even though all participants received consistent policy information from the MOET, how they understood and interpreted the policy varied significantly, which led to concerns. The primary reason is that policy documents lagged behind the actual situation, and there was a lack of comprehensive guidance on what needed to be accomplished and how to carry out the tasks effectively. Most participants were shocked by multiple policies for creating unexpected changes that were sudden and stressful for teachers and students, while they tended to normalize these frequent changes and recognized their importance in supporting government agencies in combating the pandemic. As each province faced unpredictable situations, particularly in major cities such as Hanoi, Da Nang, and Ho Chi Minh City, participants drew on their prior knowledge, experiences, beliefs, and values based on how SLBs explain education policy changes, which aligns with the sensemaking framework (Spillane et al., 2002). The differences in understanding and interpretation of policies led to inconsistent approaches in implementing them among the participants. Teacher H expressed that whenever the MOET introduced a new policy and presented it to teachers, teachers were expected to apply adequately for the implementation of school reopening and online learning. However, in reality, this was not the case. Teacher H further explained that their school had to constantly rearrange academic schedules and curricula to comply with the guidelines. This cycle of frequent changes and additional demands became exhausting for Teacher H and their colleagues. The discrepancy between the policies imposed from the top down and the actual implementation at the school level posed a significant challenge for teachers, who were expected to adequately address parents’ inquiries and grievances.

When the MOET announced the shift from fully online to hybrid classes, which involved a combination of offline and online classes, the participants’ degree of safety concerns were increased due to the ongoing pandemic. Teacher C expressed her apprehension, stating, “*Every school was accountable for any new infection cases, and I felt extremely anxious considering the highly contagious nature of COVID-19.*” The hybrid learning model presents a new set of challenges for teachers, who are now tasked with catering to the needs of both face-to-face and remote learners by utilizing technology. Since hybrid teaching model requires significant preparation, investigation, and investment in various domains such as technology, adaptable curriculum, effective learning materials, and assessment systems, as well as teacher training and skills for executing hybrid teaching, teachers who are not fully prepared face difficulties in providing quality education to students both in-person and remotely. The need to quickly adapt to new policies and guidelines from the MOET has led to a sense of chaos and uncertainty among participants, but at the same time, it has pushed them to become more innovative and creative in their teaching methods. While it initially caused uncertainty and challenges, the pandemic situation prompted teachers to explore innovative pedagogical approaches, such as interactive online lessons, virtual simulations, and collaborative projects using digital platforms.

Teacher D expressed concern about the continuous media reporting of new COVID-19 cases and emphasized the importance of receiving timely updates about virus cases and school-related policies through television. The transition to hybrid classes was challenging for most participants, who had only recently become accustomed to online classes in a month. To mitigate risks, teachers followed infection prevention guidelines when conducting socially distanced in-person sessions. When faced with risks, participants engaged in intensive sensemaking activities, such as making sense of online education environment, gathering relevant information, and exploring available resources. It is encouraging to see that some participants recognized the efforts made by the MOET to gather feedback and opinions from local districts and teacher associations. This is an example of a bottom-up approach to policymaking, where input from those on the ground is

taken into consideration before making decisions at higher levels. It is important for policymakers to listen to and understand the needs and perspectives of those who are directly impacted by their policies, as this can lead to more effective and sustainable solutions. By incorporating feedback from local districts and teacher associations, the MOET was able to make more informed decisions and create policies that were more responsive to the needs of teachers and students.

5.1.3. Positive changes during the COVID-19 pandemic

Still, it has emerged as a significant trend in the education sector amidst the pandemic. The “new normal” situation would be expected to continue until the COVID-19 pandemic was completely under control. Nevertheless, it should be highlighted that COVID-19 has contributed solely to the growing popularity of online teaching and learning, but it has yet to replace conventional teaching approaches due to factors such as awareness, preferences, resources, technology infrastructure, legal frameworks, and more.

This study revealed how the role of teachers as SLBs is important in adapting to online education policies appropriately. While the Department of Education and Training provided guidelines for schools to follow, teachers had a degree of discretion and autonomy when faced with unexpected situations. One key finding was the significance of pedagogical adaptations during the transition to remote learning environments. Teachers demonstrated resourcefulness and ingenuity in modifying their teaching practices to ensure student engagement, regardless of the communication channels (such as TV, mobile devices, online platforms, etc.). Their ability to think outside the box and adapt to various mediums showcased their dedication to providing quality education despite the challenges posed by the pandemic.

The policy is made for all learners, all provinces and all schools. But the situation in each province is not the same. It is my responsibility to see how best I can implement it in my school class with my learners. – Teacher M

It appears that Teacher M had some autonomy in deciding on their online teaching approach, as they recorded their lessons and allowed students to view them in advance, followed by synchronous sessions where they could offer feedback. They found that having flexibility in teaching was beneficial. However, the results of this study suggest that teachers had limited autonomy in decision-making regarding online classes and evaluation methods, as these had to align with the MOET’s policy decisions. The teachers’ responses indicated less opportunity for teachers to make decisions in the classroom compared to the pre-pandemic period. They were also required to ensure consistency in curriculum and assessment methods simultaneously for both in-person and online classes, despite the inherent disparities between these two modes of teaching. They need to simultaneously meet the expectations of their job and ensure the well-being of their families placed considerable strain on these teachers. It became essential for education systems to recognize and address the unique circumstances faced by teachers in this situation.

Interestingly, the COVID-19 pandemic brought about unexpected positive changes in the education landscape of Vietnam, sparking innovation in classrooms nationwide. Teacher G highlighted that initially, some teachers adhered to traditional teaching methods, while others embraced more innovative approaches. One notable change was the increased utilization of multimedia elements in teaching, such as images, audio, and videos. Teachers recognized the value of incorporating visual and auditory stimuli to enhance student engagement and comprehension. This shift allowed for more interactive and dynamic lessons, capturing the attention and interest of students in the virtual classroom. Nevertheless, the adoption of new teaching methods, particularly in an online setting, also presented challenges in classroom management. Teachers faced difficulties in maintaining discipline, ensuring active participation, and managing technological issues during online classes. The absence of physical presence and the need to adapt to digital platforms added complexity to classroom management. Despite the challenges, participants acknowledged the benefits of online teaching. Teacher O emphasized that educators have developed the capacity

to create high-quality online content, and these skills should continue to be utilized through blended learning even after the pandemic. Additionally, teachers appreciated the elimination of certain administrative burdens, allowing them to focus more on the act of teaching itself. Due to the pandemic, the emergence of online classes presented a unique opportunity for teachers to dedicate additional time and effort to collaborative decision-making processes. This encompassed various aspects such as professional development opportunities, curriculum redesign, and student evaluation. It also allowed teachers to invest more of their time and energy in collaborative endeavors, resulting in enhanced teamwork and cooperation among the teaching staff. Teachers should explore online resources, collaborate with other educators, and access a broader range of educational materials. This newfound openness enhanced knowledge sharing and innovative teaching practices among teachers, fostering a sense of professional growth and community.

5.2. Policy signals: How education policies were introduced under the COVID-19 crisis

Policymakers face complex and uncertain decisions in response to pandemics, particularly those caused by previously unidentified pathogens (Hafsi & Baba, 2023). The rapid pace and vast scale of change posed significant stressors for policymakers in formulating responses to the COVID-19 pandemic (Fotheringham et al., 2022). In Vietnam, the COVID-19 pandemic has resulted in substantial changes to education policies and pedagogy, affecting all stakeholders at different levels of the education system. These policies were introduced to provide teachers with standardized practices for online education or transition back to in-person classrooms. However, the implementation of these policies faced challenges due to the lack of clear guidelines and consensus, leading to a rapid shift to online teaching without sufficient training and tools. Besides, policies were issued from higher levels of authority and required immediate action, often with limited time for preparation. This sudden implementation posed significant difficulties for teachers who had to adapt to new teaching methods and technologies quickly. In response to these circumstances, as SLBs, teachers were compelled to develop remote learning plans that rely on multichannel strategies combining different technologies (TV, Internet, and mobile phones) and incorporating synchronous and asynchronous learning during the major waves of COVID-19 infections.

Navigating the constantly evolving situation during the pandemic and ensuring that students continued learning was difficult, as policies had to be updated daily to keep up with the rapid changes. As a result, I found it challenging to adapt to this new reality. – Teacher K.

Similarly, Teacher J mentioned that *“The closure of schools during the pandemic was an unprecedented event that left little time for preparation. With each subsequent wave of the virus or new government guidelines, there was added stress and difficulty in keeping up with the rapidly changing situation, making effective communication challenging.”*

In addition to the challenges posed by the unprecedented and intricate nature of the pandemic itself, policymakers also faced the daunting task of updating and modifying education policies to keep pace with rapidly changing circumstances. This involved adapting teaching methods, reducing curriculum loads, and adjusting national and local exams. The rapid pace and vast scale of change created significant stress for those tasked with implementing these policies, as they were required to navigate uncertainty and rapidly evolving information. Teachers, in particular, were often burdened with the responsibility of quickly adapting lesson content designed for physical classrooms to an online or remote format, which was especially challenging for high school teachers who were also responsible for preparing their students for national exams.

While the national graduation exam was delayed by nearly two months compared to previous years, our exam schedule was further delayed by almost three months, leaving us a month behind other provinces. Teacher I

As the COVID-19 pandemic continued, policymakers shifted from urgent decision-making to longer-term crisis management, focusing on maximizing learning and reducing the impact on

vulnerable populations. National government announcements, particularly from the MOET and the Ministry of Health (MOH), provide formal guidance and are crucial for staying informed. Effective policy responses have emerged from stakeholder networks and collaborative policy formulation, but top-down communication was a significant challenge for teachers during COVID-19. Our research indicates that teachers strongly desire sharing and cooperation to manage rapid change, which could benefit policymakers outside the school context. They also recognize significant opportunities to enhance communication through social networks, thereby managing policy changes effectively. However, they found it challenging to keep up with changes to previously published government policy guidance, which required line-by-line cross-checking against older documents. Although teachers can communicate with mid-level bureaucrats through online networks before announcements are made, speed of response is often a key determinant of the quality of outcomes.

We often had online meetings with the Department of Education and Training, but the situation was very complicated, requiring policymakers to modify or adjust education policies. Plans for each school year are usually planned in advance, but the pandemic has slowed and changed these plans said Teacher E

Effective communication during public health emergencies requires consistent messaging between top-level and mid-level bureaucrats. However, our research findings indicate that the frequency, length, and complexity of policy communication often overwhelm teachers. During the COVID-19 pandemic, teachers utilized various communication channels, including Messenger and Zalo groups, to stay connected and receive regular updates on online education. Daily communication ensured that teachers remained informed about policy changes, instructional strategies, and support resources, enabling them to adapt quickly to the evolving situation. While this constant flow of information was advantageous in keeping teachers up to date, it could also become overwhelming, especially as they faced the challenges of transitioning to online teaching. Sending numerous messages and notifications alongside the demands of remote instruction added to teachers' workload and potential stress levels. Furthermore, it is evident that teachers encounter difficulties in receiving and interpreting top-down communication, processing policy advice, and translating it into practical and meaningful school guidance.

While major education policies are frequently standardized at the national level by governments and strictly enforced at all levels, from state to local, the pandemic has underscored the importance of granting these front-line practitioners' greater discretion and agency in policy implementation. In particular, the crisis has demonstrated that where rapid adaptation and flexibility are paramount, teachers should play an active role in understanding and executing policies. This shift involves granting teachers more autonomy to make informed decisions tailored to their unique classroom situations, thus promoting a bottom-up approach to policy reformation. From this perspective, the policies implemented by teachers often deviate from the ones outlined in official policy documents. Instead, teachers tend to adapt and reshape these policies to align with their own unique interests, requirements, values, and the specific contextual conditions they face, especially during unexpected circumstances. This adaptation occurs as a response to the various pressures and challenges that teachers encounter in their roles as SLBs (Lipsky, 2010).

5.3. Situated cognition: How situational contexts affected policy implementation

The significance of taking into account the cultural and institutional context when interpreting education policies is emphasized in this study. The Vietnamese bureaucratic school system proved to be highly effective in facilitating communication and disseminating policy decisions, which greatly aided the MOET in controlling policy messages and promoting a shared sense of community in policy implementation. In Vietnam, the national government has centralized control over personnel and curriculum policies at the school, district, and provincial levels. This highly structured bureaucracy operates under rules and codes set by national law, and teachers are expected to engage directly with the public as SLBs. As a result of these cultural and institutional factors, the MOET plays a crucial role in setting national policy agendas.

Throughout the pandemic, Vietnamese teachers encountered substantial societal pressure to act as “role models.” In other words, teachers were expected to not only impart knowledge but also embody moral values and provide emotional support to students and their families. Participants consistently expressed feelings of being overwhelmed by the expectations placed upon them as SLBs, as they were burdened with an extensive level of responsibility. Despite their best efforts to ensure a safe learning environment, teachers were unfairly held accountable for unavoidable circumstances, such as COVID-19 infections, which were beyond their control.

The study findings also suggest that school rankings significantly influence teachers’ attitudes towards and interpretations of various changes, including those related to online education. In highly ranked schools, teachers may perceive online education changes as necessary adjustments to maintain their school’s reputation and academic excellence. They view these changes as opportunities to showcase their teaching capabilities and adaptability. Conversely, teachers in lower-ranked schools may perceive online education changes differently, seeing them as a reflection of their school’s disadvantaged status and limited resources. Consequently, they approach online education with skepticism or frustration, perceiving it as an additional burden or compromise in teaching quality. The impact of school rankings on teachers’ attitudes and interpretations emphasizes the need for tailored support and resources that address the specific challenges faced by teachers in different school contexts.

Moreover, systemic inequalities embedded in these situational contexts result in significant differences in how teachers interpret new policies, contributing to educational inequities. Due to policy changes, teachers in higher-ranking schools often face considerable difficulties in their professional work and overall performance. They argue that the disruption caused by the pandemic can substantially impact their students’ academic achievements. Given the immense pressure to achieve “good results” in Vietnam’s education system, even minor policy changes can lead to significant setbacks in a school’s pursuit of maintaining its ranking and performance in national exams. Furthermore, policy modifications occur more frequently in higher-ranking schools, as they need to prepare for more competitions or due to students’ involvement in numerous extracurricular activities outside regular class hours rather than focusing solely on core academic studies. As a result, teachers in these schools bear a considerably greater responsibility for comprehending and implementing multiple policies. These findings highlight the need for support systems that address the specific challenges faced by teachers in high-ranked schools during crisis and address the educational inequities arising from these contextual disparities.

Our teaching was disrupted a lot, but I believe that our students could do well on the exams despite the unexpected situation. – Teacher H

Conversely, teachers from lower-ranked schools expressed their apprehensions and anxieties regarding the repercussions that policy changes would have on their students. They found the policy transition to be unfamiliar and sudden, disrupting the teaching and learning routines they had carefully established for their students. Additionally, they were concerned about their student’s academic challenges and experienced “frustration” with online education when witnessing significant disparities in learning outcomes and well-being among students from lower socio-economic backgrounds. These disparities highlighted the challenges faced by students from less privileged families, further adding to the difficulties faced by educators in providing equitable education opportunities for all. This also indicates how situational contexts, such as school ranking, can shape teachers’ perceptions and interpretations of policies, perpetuating educational inequities.

Each school must adapt to policy changes, but the ease of this process depends on the academic performance of their students. Schools with high-performing students have more responsibilities to fulfill, whereas schools serving low-performing students prioritize ensuring

that all students are able to keep up with the curriculum. It is crucial to exhibit patience and positivity in order to motivate and encourage students to progress. said Teacher L

Apart from school ranking, geographic location was also a key factor influencing how teachers responded to new policies during the pandemic. Teachers from highly infected regions, mainly urban areas, were more likely to express their apprehensions and worries about the quality of teaching and learning at their schools. According to them, policy changes would require additional work hours and effort to navigate the teaching and learning process. Health considerations in addition to the role as a teacher are a significant workload, particularly in stressful environments. However, teachers in less affected areas (mainly rural areas) viewed the changes as expected and believed they would not make a substantial difference in their teaching process and methods. During the crisis, teachers in rural and under-resourced schools were more concerned about accessing digital learning materials and activities. This was because students in these areas typically have limited access to advanced technologies and resources compared to those living in urban areas.

We were facing a completely new experience, which included not only teaching online but also helping students navigate through online learning tools. In transitioning to hybrid learning, our responsibilities extended beyond teaching as we must also take care of students' health. Teacher N

The pandemic has brought about unprecedented changes in the educational landscape, leaving many teachers struggling to adapt to the new institutional context. As schools shifted to remote or hybrid learning models, teachers have grappled with modern technologies, teaching methods, and administrative procedures. At the same time, the pandemic has introduced new anxieties and uncertainties, including concerns about the health and safety of themselves and their students and worries about the impact of the pandemic on student learning outcomes. In this context, sensemaking, the process of interpreting and making sense of new information, has become a critical skill for teachers. By engaging in sensemaking, teachers can better understand the institutional context in which they operate, anticipate potential challenges, and develop strategies to support their students and themselves.

6. Discussion and conclusion

The purpose of this study is to explore how teachers as SLBs made sense of education policy change during the pandemic and how they interpreted and put these policies into practice. Further, this study has important implications for policy framing and implementation, especially in an educational environment with uncertainties.

First, this study highlights how teachers faced increased duties and responsibilities during the COVID-19 crisis, leading to higher exposure to risk and policy ambiguity. In contrast to normal situations, where decision-makers aim to restrict the discretion of SLBs (Shim et al., 2017), the crisis prompted a greater level of discretion granted to SLBs in decision-making. This discovery aligns with recent studies highlighting teachers' potential risks (Davidovitz et al., 2021; Karseth & Møller, 2020), particularly when confronted with substantial workloads that contribute to a stressful professional environment (Davidovitz & Cohen, 2022; Lipsky, 2010). Teachers drew on their prior knowledge, experiences, beliefs, and values to explain education policy changes, which aligns with the sensemaking framework (Siczek & Engel, 2019; Spillane et al., 2002). The differences in understanding and interpretation of policies led to inconsistent approaches in their implementation among the participants. However, we found that receiving multiple signals eventually spurred them to take a strategic deliberation approach in which they reconciled the signals. Respondents in this study had to constantly update themselves with new information, communicate with stakeholders and peers, and adapt to new and challenging circumstances. This is not to say that creating teacher confusion is ideal but that in a national context with multiple policies, teachers benefit from receiving signals about the various policies so they can leverage them to create an individualized plan. Crises, therefore, can lead to innovation and transformation in policymaking processes and the development of new skills and

capacities among policy actors. This highlights the necessity for policymakers, when formulating and introducing new policies, to acknowledge uncertainty through and beyond the crisis by creating space for SLBs to explore alternative and innovative methods. By doing so, teachers as SLBs can navigate the challenges that are an intrinsic part of the teaching profession and policy implementation (Kraft et al., 2015), thereby maintaining a more responsive and sustaining education system.

Second, this study highlights the importance of considering the socio-cultural and political contexts that shape policy implementation in centralized education systems. The findings suggest that teachers' interpretations are influenced by social contexts and situations in which they encountered. While it is widely acknowledged that sensemaking varies across various contexts (Philip, 2011; Spillane et al., 2002), the case of Vietnam underscores how social and educational inequalities can have a profound impact on the sensemaking processes of teachers as SLBs, especially when the government feared COVID-19 and implemented strict lockdowns during different waves (Veetil & Van, 2023; Vo et al., 2023). Teachers were expected not only to impart knowledge but also to embody moral values and provide emotional support to students and their families. Thus, policymakers should prioritize creating a better educational environment by improving the policy-making processes and ensuring their effective implementation. The results of this study also suggest that policymakers should consider social and educational equality when introducing new policies and recognizing the impact on policy sensemaking and implementation at the local level. To resolve disparities in educational equity among schools and across different geographic areas, policymakers can adopt a targeted approach by developing distinct agendas tailored to specific groups of schools. This strategy has the potential to benefit teachers by providing them with additional time and resources, enabling them to interpret and implement policies effectively.

Third, recognizing the significance of policy signals and adopting a bottom-up approach that acknowledges the impact of SLBs on policy outcomes is paramount. As argued by Spillane et al. (2002), policy signals underscore the significance of policy designs and how policymakers at the central level communicate their ideas and anticipated policy reform outcomes to local implementers. However, the results of this study indicate that during the pandemic, the lack of contingency plans by governments for education services has generated crucial concerns that were also evidenced in the slow response of public services during the crisis. In this context, the sensemaking framework emerges as a valuable tool for policymakers to understand and involve higher-ups and SLBs in decision-making processes. It also helps policymakers to identify the multifaceted dimensions of uncertainty within the education sector. This, in turn, enables them to make more informed decisions and formulate policies that would better serve citizens and achieve policy goals. By engaging in sensemaking, teachers can better understand the institutional context in which they operate, anticipate potential challenges, and develop strategies to support their students and themselves.

In conclusion, the current study substantially contributes to our understanding of policy sensemaking during the COVID-19 crisis by delving into the perspectives of teachers as SLBs. In essence, it demonstrates that SLBs are not merely passive policy implementers; instead, they actively "make" policy through their day-to-day practices and decisions. This realization underscores the significant influence and discretion of SLBs during unexpected circumstances. As such, it calls for a deeper understanding of the interplay between grassroots actions and overarching policy frameworks, highlighting the need for a more inclusive and collaborative approach to policy development that values the perspectives and expertise of these front-line practitioners.

7. Limitations and future research

While significant for sensemaking within the Vietnamese context, there exist certain limitations. This study is limited to the perspective of teachers in the education sector and does not include the viewpoints of other stakeholders such as students, parents, or local community members. To obtain a more comprehensive understanding of policy sensemaking during the COVID-19 crisis, future research could involve these groups to gain their perspectives and explore how their sensemaking process differs from normal situations. In this context, there is a pressing need for longitudinal studies as sensemaking is a continuous and ongoing process (Ganon-Shilon & Schechter, 2019). Additionally, it would be valuable to

explore how middle-level bureaucrats (such as school principals) navigate their dual roles as teachers and policy implementers during a crisis. This could shed more light on how sensemaking occurs in educational contexts and the factors that influence policy implementation at the local level. Moreover, this study solely focuses on Vietnam's context, and the findings may need to be more generalizable to other countries or contexts. Replicating this study in different cultural and institutional contexts with a larger and more diverse pool of participants would provide more nuanced insights into the role of policy sensemaking during crises. In other words, gathering additional data from SLBs considering different schools or disciplines in Vietnam or from educational systems with highly centralized administrative systems would facilitate the development of a comparative analytical framework building upon the existing research foundation.

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References

- Bao, N. V., & Cho, Y. (2022). Investigating factors of transitioned-online courses on satisfaction and learning effectiveness in higher education during the era of the COVID-19. *East Asian Journal of Business Economics*, 10(3), 1–15. <https://doi.org/10.20498/EAJBE.2022.10.3.1>
- Bertrand, M., & Marsh, J. A. (2015). Teachers' sensemaking of data and implications for equity. *American Educational Research Journal*, 52(5), 861–893. <https://doi.org/10.3102/0002831215599251>
- Boin, A., Ekengren, M., & Rhinard, M. (2020). Hiding in plain sight: Conceptualizing the creeping crisis. *Risk, Hazards, & Crisis in Public Policy*, 11(2), 116–138. <https://doi.org/10.1002/rhc3.12193>
- Braithwaite, J., Churruarín, K., Long, J. C., Ellis, L. A., & Herkes, J. (2018). When complexity science meets implementation science: A theoretical and empirical analysis of systems change. *BMC Medicine*, 16(1), 1–14. <https://doi.org/10.1186/s12916-018-1057-z>
- Braun, A., Maguire, M., & Ball, S. (2010). Policy enactments in the UK secondary school: Examining policy, practice, and school positioning. *Journal of Education Policy*, 25(4), 547–560. <https://doi.org/10.1080/02680931003698544>
- Bridwell-Mitchell, E. N., & Sherer, D. G. (2017). Institutional complexity and policy implementation: How underlying logics drive teacher interpretations of reform. *Educational Evaluation and Policy Analysis*, 39(2), 223–247. <https://doi.org/10.3102/0162373716677567>
- Brodin, E. Z. (2013). Street-level organizations and the welfare state. In E. Z. Brodick & G. Marston (Eds.), *Work and the welfare state: Street-level organizations and welfare politics* (pp. 17–34). Georgetown University Press.
- Buffat, A. (2013). Street-level bureaucracy and e-government. *Public Management Review*, 17(1), 149–161. <https://doi.org/10.1080/14719037.2013.771699>
- Capano, G., Howlett, M., Jarvis, D. S., & Ramesh, M. (2022). Long-term policy impacts of the coronavirus: Normalization, adaptation, and acceleration in the post-COVID state. *Policy and Society*, 41(1), 1–12. <https://doi.org/10.1093/polsoc/puab018>
- Coburn, C. E. (2004). Beyond decoupling: Rethinking the relationship between the institutional environment and the classroom. *Sociology of Education*, 77(3), 211–244. <https://doi.org/10.1177/003804070407700302>
- Coburn, C. E. (2005). Shaping teacher sensemaking: Principals and the enactment of reading policy. *Educational Policy*, 19(3), 476–509. <https://doi.org/10.1177/0895904805276143>
- Coburn, C. E. (2006). Framing the problem of reading instruction: Using frame analysis to uncover the microprocesses of policy implementation. *American Educational Research Journal*, 43(3), 343–349. <https://doi.org/10.3102/00028312043003343>
- Davidovitz, M., & Cohen, N. (2022). Playing defence: The impact of trust on the coping mechanisms of street-level bureaucrats. *Public Management Review*, 24(2), 279–300. <https://doi.org/10.1080/14719037.2020.1817532>
- Davidovitz, M., Cohen, N., & Gofen, A. (2021). Governmental response to crises and its implications for street-level implementation: Policy ambiguity, risk, and discretion during the COVID-19 pandemic. *Journal of Comparative Policy Analysis: Research and Practice*, 23(1), 120–130. <https://doi.org/10.1080/13876988.2020.1841561>
- Dinh, L. P., & Nguyen, T. T. (2020). Pandemic, social distancing, and social work education: Students' satisfaction with online education in Vietnam. *Social Work Education*, 39(8), 1074–1083. <https://doi.org/10.1080/02615479.2020.1823365>
- Do, T., & Kasper, E. (2022). *The impact of covid-19 response policies on select vulnerable groups in Vietnam*. Institute of Development Studies.

- Fotheringham, P., Harriott, T., Healy, G., Arengé, G., & Wilson, E. (2022). Pressures and influences on school leaders navigating policy development during the COVID-19 pandemic. *British Educational Research Journal*, 48(2), 201–227. <https://doi.org/10.1002/berj.3760>
- French, P. E., & Raymond, E. S. (2009). Pandemic influenza planning: An extraordinary ethical dilemma for local government officials. *Public Administration Review*, 69(5), 823–830. <https://doi.org/10.1111/j.1540-6210.2009.02032.x>
- Ganon-Shilon, S., & Schechter, C. (2019). School principals' sense-making of their leadership role during reform implementation. *International Journal of Leadership in Education*, 22(3), 279–300. <https://doi.org/10.1080/13603124.2018.1450996>
- Gofen, A. (2014). Mind the gap: Dimensions and influence of street-level divergence. *Journal of Public Administration Research and Theory*, 24(2), 473–493. <https://doi.org/10.1093/jopart/mut037>
- Gofen, A., & Lotta, G. (2021). Street-level bureaucrats at the forefront of pandemic response: A comparative perspective. *Journal of Comparative Policy Analysis: Research and Practice*, 23(1), 3–15. <https://doi.org/10.1080/13876988.2020.1861421>
- Gong, T. (2006). Corruption and local governance: The double identity of Chinese local governments in market reform. *The Pacific Review*, 19(1), 85–102. <https://doi.org/10.1080/09512740500417723>
- Gu, Q., Sammons, P., & Chen, J. (2018). How principals of successful schools enact education policy: Perceptions and accounts from senior and middle leaders. *Leadership and Policy in Schools*, 17(3), 373–390. <https://doi.org/10.1080/15700763.2018.1496344>
- Hafsi, T., & Baba, S. (2023). Exploring the process of policy overreaction: The COVID-19 lockdown decisions. *Journal of Management Inquiry*, 32(2), 152–173. <https://doi.org/10.1177/10564926221082494>
- Hall, M., & Hampden Thompson, G. (2022). The teacher as street-level bureaucrat: Science teacher's discretionary decision-making in a time of reform. *International Journal of Science Education*, 44(6), 980–999. <https://doi.org/10.1080/09500693.2022.2059588>
- Hill, C. J. (2006). Casework job design and client outcomes in welfare-to-work offices. *Journal of Public Administration Research and Theory*, 16(2), 263–288. <https://doi.org/10.1093/jopart/mui043>
- Hodge, E. M. (2019). “Common” instruction? Logics of ability and teacher decision making across tracks in the era of common standards. *American Educational Research Journal*, 56(3), 638–675. <https://doi.org/10.3102/0002831218803328>
- Hodge, E. M., & Stosich, E. L. (2022). Accountability, alignment, and coherence: How educators made sense of complex policy environments in the common core era. *Educational Evaluation and Policy Analysis*, 44(4), 543–566. <https://doi.org/10.3102/01623737221079650>
- Hogan, J., Howlett, M., & Murphy, M. (2022). Re-thinking the coronavirus pandemic as a policy punctuation: COVID-19 as a path-clearing policy accelerator. *Policy and Society*, 41(1), 40–52. <https://doi.org/10.1093/polsoc/puab009>
- Hoi, V. N., & Mu, G. M. (2021). Perceived teacher support and students' acceptance of mobile-assisted language learning: Evidence from Vietnamese higher education context. *British Journal of Educational Technology*, 52(2), 879–898. <https://doi.org/10.1111/bjet.13044>
- Hoy, W. K. (2003). An analysis of enabling and mindful school structures: Some theoretical, research and practical considerations. *Journal of Educational Administration*, 41(1), 87–109. <https://doi.org/10.1108/09578230310457457>
- Hudson, B., Hunter, D., & Peckham, S. (2019). Policy failure and the policy-implementation gap: Can policy support programs help? *Policy Design and Practice*, 2(1), 1–14. <https://doi.org/10.1080/25741292.2018.1540378>
- The Institute for Health Metrics and Evaluation (IHME). (2022). *COVID-19 Results Briefing Viet Nam*. The Institute for Health Metrics and Evaluation. Retrieved from: https://www.healthdata.org/sites/default/files/covid_briefs/20_briefing_Viet_Nam.pdf
- Karseth, B., & Møller, J. (2020). Legal regulation and professional discretion in schools. *Scandinavian Journal of Educational Research*, 64(2), 195–210. <https://doi.org/10.1080/00313831.2018.1531918>
- Kraft, M. A., Papay, J. P., Johnson, S. M., Charner-Laird, M., Ng, M., & Reinhorn, S. (2015). Educating amid uncertainty: The organizational supports teachers need to serve students in high-poverty, urban schools. *Educational Administration Quarterly*, 51(5), 753–790. <https://doi.org/10.1177/0013161X15607617>
- Linh, H. (2020). Online education remains unfamiliar in Vietnam. *VietNamnet Global*, 3 March. Retrieved from: <https://vietnamnet.vn/en/society/online-education-remains-unfamiliar-in-vietnam-620964.html>
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public service*. Russell Sage Foundation.
- Louis, K., Febey, K., & Schroeder, R. (2005). State-mandated accountability in high schools: Teachers' interpretations of a new era. *Educational Evaluation and Policy Analysis*, 27(2), 177–204. <https://doi.org/10.3102/01623737027002177>
- Lubell, M., & Robbins, M. (2022). Adapting to sea-level rise: Centralization or decentralization in polycentric governance systems? *Policy Studies Journal*, 50(1), 143–175. <https://doi.org/10.1111/psj.12430>
- Maheshwari, G. (2021). Factors affecting students' intentions to undertake online learning: An empirical study in Vietnam. *Education and Information Technologies*, 26(6), 6629–6649. <https://doi.org/10.1007/s10639-021-10465-8>
- Mangin, M. M. (2007). Facilitating elementary principals' support for instructional teacher leadership. *Educational Administration Quarterly*, 43(3), 319–357. <https://doi.org/10.1177/0013161X07299438>
- Mansour, H. F., & David, S. A. (2021). Teacher's organisational commitment in mechanistic school structures: A study conducted on the job characteristics of a private school in Abu Dhabi. *Asia-Pacific Journal of Educational Management Research*, 6(1), 11–26. <https://doi.org/10.21742/ajemr.2021.6.1.02>
- Marz, V., & Kelchtermans, G. (2013). Sense-making and structure in teachers' reception of educational reform. A case study on statistics in the mathematics curriculum. *Teaching and Teacher Education*, 29, 13–24. <https://doi.org/10.1016/j.tate.2012.08.004>
- Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. *Journal of Public Administration Research and Theory*, 5(2), 145–174. <https://doi.org/10.1093/oxfordjournals.jpart.a037242>
- Maynard-Moody, S., & Musheno, M. (2000). State agent or citizen agent: Two narratives of discretion. *Journal of Public Administration Research and Theory*, 10(2), 329–358. <https://doi.org/10.1093/oxfordjournals.jpart.a024272>
- Mazmanian, D. A., & Sabatier, P. A. (1983). *Implementation and public policy*. Scott Foresman.

- McChesney, K., & Aldridge, J. M. (2021). What gets in the way? A new conceptual model for the trajectory from teacher professional development to impact. *Professional Development in Education*, 47(5), 834–852. <https://doi.org/10.1080/19415257.2019.1667412>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2018). *Qualitative data analysis: A methods sourcebook*. Sage Publications.
- Minh, L. H. N., Khoi Quan, N., Le, T. N., Khanh, P. N. Q., & Huy, N. T. (2021). COVID-19 timeline of Vietnam: Important milestones through four waves of the pandemic and lesson learned. *Frontiers in Public Health*, 9, 709067. <https://doi.org/10.3389/fpubh.2021.709067>
- Ministry of Education and Training. (2023). Legal documents. <https://moet.gov.vn/van-ban/vanban/Pages/default.aspx>
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, 24(1), 9–18. <https://doi.org/10.1080/13814788.2017.1375091>
- Nguyen, H. C., Evers, C., & Marshall, S. (2017). Accreditation of Viet Nam's higher education: Achievements and challenges after a dozen years of development. *Quality Assurance in Education*, 25(4), 475–488. <https://doi.org/10.1108/QAE-11-2016-0075>
- Philip, T. M. (2011). An “ideology in pieces” approach to studying change in teachers’ sensemaking about race, racism, and racial justice. *Cognition and Instruction*, 29(3), 297–329. <https://doi.org/10.1080/07370008.2011.583369>
- Roberts, A. (2020). The third and fatal shock: How pandemic killed the millennial paradigm. *Public Administration Review*, 80(4), 603–609. <https://doi.org/10.1111/puar.13223>
- Sausman, C., Oborn, E., & Barrett, M. (2016). Policy translation through localisation: Implementing national policy in the UK. *Policy & Politics*, 44(4), 563–589. <https://doi.org/10.1332/030557315X14298807527143>
- Shim, D. C., Park, H. H., & Eom, T. H. (2017). Street-level bureaucrats’ turnover intention: Does public service motivation matter? *International Review of Administrative Sciences*, 83(3), 563–582. <https://doi.org/10.1177/0020852315582137>
- Shkedi, A. (2019). *Introduction to data analysis in qualitative research*. SAGE Publications.
- Shrivastava, P., Mitroff, I., & Alpaslan, C. M. (2013). Imagining an education in crisis management. *Journal of Management Education*, 37(1), 6–20. <https://doi.org/10.1177/1052562912455418>
- Siczek, M. M., & Engel, L. C. (2019). Teachers’ cognitive interpretation of US global education initiatives. *Educational Policy*, 33(3), 486–515. <https://doi.org/10.1177/0895904817719517>
- Smith, S. R. (2012). Street-level bureaucrats and public policy. In B. G. Peters & J. Pierre (Eds.), *The Sage Handbook of Public Administration* (pp. 431–446). Sage.
- Spillane, J. P. (2000). Cognition and policy implementation: District policymakers and the reform of mathematics education. *Cognition and Instruction*, 18(2), 141–179. https://doi.org/10.1207/S1532690XC1802_01
- Spillane, J. P. (2009). *Standards deviation: How schools misunderstand education policy*. Harvard University Press.
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and re-focusing implementation research. *Review of Educational Research*, 72(3), 387–431. <https://doi.org/10.3102/003465430720033>
- Stillman, J. (2011). Teacher learning in an era of high-stakes accountability: Productive tension and critical professional practice. *Teachers College Record*, 113(1), 133–180. <https://doi.org/10.1177/016146811111300107>
- Stillman, J., & Anderson, L. (2015). From accommodation to appropriation: Teaching, identity, and authorship in a tightly coupled policy context. *Teachers & Teaching*, 21(6), 720–744. <https://doi.org/10.1080/13540602.2015.1044330>
- Stosich, E. L. (2016). Joint inquiry: Teachers’ collective learning about the common core in high-poverty urban schools. *American Educational Research Journal*, 53(6), 1698–1731. <https://doi.org/10.3102/0002831216675403>
- Taylor, I. (2007). Discretion and control in education: The teacher as street-level bureaucrat. *Educational Management Administration & Leadership*, 35(4), 555–572. <https://doi.org/10.1177/1741143207081063>
- Tummers, L., & Bekkers, V. (2014). Policy implementation, street-level bureaucracy, and the importance of discretion. *Public Management Review*, 16(4), 527–547. <https://doi.org/10.1080/14719037.2013.841978>
- UNESCO. (2020). COVID-19 educational disruption and response, 8 February, France. Retrieved from: <https://en.unesco.org/covid19/educationresponse/>
- UNICEF & UNESCO. (2021). Vietnam case study: Situation analysis on the effects of and responses to COVID-19 on the education sector in Asia. October, Thailand. Retrieved from: <https://unesdoc.unesco.org/ark:/48223/pf0000379519>
- Veettil, B. K., & Van, D. D. (2023). Did the COVID-19 restrictions influence land surface temperatures in Southeast Asia? A study from Ho Chi Minh City, Vietnam. *Environmental Science and Pollution Research*, 30(25), 66812–66821. <https://doi.org/10.1007/s11356-023-26892-8>
- Viet Nam News. (2020). Nearly 23 million Vietnamese students enter new academic year. 5 September, Retrieved from: <https://vietnamnews.vn/society/772020/nearly-23-million-vietnamese-students-enter-new-academic-year.html>
- Vo, T. H., Nguyen, T. H., Nguyen, H. C., & Nguyen, T. H. (2023, July 13). Impacts of the COVID-19 pandemic on patients with chronic conditions in Vietnam: A cross-sectional study. *Chronic Illness*, 17423953231188755. Bethesda, MD. <https://doi.org/10.1177/17423953231188755>
- Vu, B. T., & Bosmans, G. (2021). Psychological impact of COVID-19 anxiety on learning burnout in Vietnamese students. *School Psychology International*, 42(5), 486–496. <https://doi.org/10.1177/01430343211013875>
- Wakisaka, D. (2022). Beyond street-level bureaucracy: The organisational culture of migration policy-making and administrative elites. *International Migration*, 60(4), 150–163. <https://doi.org/10.1111/imig.12919>
- World Bank. (2021). *A year deferred – early lessons and experiences from COVID-19 in Vietnam*.
- Xue, E., & Li, J. (2020). Top-down education policy on the inclusion of ethnic minority population in China: A perspective of policy analysis. *Educational Philosophy and Theory*, 52(3), 227–239. <https://doi.org/10.1080/00131857.2019.1629903>
- Zerubavel, E. (2000). *Social mindscapes: An invitation to cognitive sociology*. Harvard University Press.

Annex 1

Table A1. Examples of response policies from MOET

Date	Policies	Main focus of the policies
25 February 2020	Letter No. 550/BGDĐT-GDTC	On the implementation of measures in prevention and control of COVID-19 in schools.
4 March 2020	Letter No. 696/BGDĐT-GDTC	On things to do in prevention and control of COVID-19 in schools
10 March 2020	Letter No. 757/BGDĐT-VP	On strict implementation of regulations on prevention and control of COVID-19
12 March 2020	Official letter 793/BGDĐT-GDTrH	On enhancing teaching via the Internet and television during the COVID-19 pandemic
13 March 2020	Official letter 795/BGDĐT-GDĐH	On implementing distance education in response to COVID-19 pandemic at the university level for full-time and in-service students
14 March 2020	Dispatch No. 1247/BGDĐT - GDCTHSSV	On enhancing the safety of preschool children and students during their study over the Internet to ensure the continuous learning of students.
23 March 2020	Dispatch No. 988/BGDĐT. GDDH	On ensuring the quality of distance learning during the COVID-19 outbreak for higher education institutions
25 March 2020	Official document No.1061/BGDĐT-GDTrH	On guidance for teaching via the internet and on television for general and continuing educational institutions during the time students are absent from school due to COVID-19 for the 2019–2020 academic year
30 March 2020	Official Letter 1113/BGDT-GDTRH	On guidelines for the adjustment of teaching contents for 2019–2020 academic year
6 April 2020	Official Letter 1175/BGDT-GDTrH	On guidelines for the adjustment of teaching content 2nd-semester academic year 2019–2020 at the basis of the implementation program of continuing education
23 April 2020	Letter No. 1398/BGDĐT-GDTC	On guidance on conditions ensuring safety for students to return to school and handling suspected COVID-19 cases in schools.
15 May 2020	Letter No. 1700/BGDĐT-GDĐT	On the implementation of policies for children and students in areas with extremely difficult socio-economic conditions in the second semester of the 2019–2020 academic year.
18 May 2020	Letter No. 1709/BGDĐT-GDĐT	
18 June 2020	Letter No. 2187/BGDĐT-GDDT	On the implementation of policies for children and students in the second semester of the 2019–2020 academic year

(Continued)

Table A1. (Continued)

Date	Policies	Main focus of the policies
24 August 2021	Directive 800/CT-BGDĐT	On implementing tasks for the school year 2021–2022 in response to the COVID-19 pandemic, continuing to innovate, and persisting in education and training quality goals.
1 September 2021	Dispatch 3782/BGDĐT-CSVC	On proactively responding to natural disasters, floods and storms in the context of complicated developments of the COVID-19 pandemic
3 September 2021	Directive No. 24/CT-TTg	On accelerating the implementation of tasks and solutions for organizing safe teaching, ensuring educational quality programs and objectives, COVID-19 pandemic response training
10 September 2021	Dispatch 905/CD-BGDĐT	On organizing teaching to respond to the COVID-19 pandemic
14 September 2021	Dispatch 3969/BGDĐT-GDTH	On guiding the implementation of the primary school education program in the 2021–2022 school year in response to the COVID-19 pandemic.
23 February 2022	Decision No. 543/QĐ-BGDĐT	On approving the Handbook to ensure safety in the prevention and control of COVID-19
18 April 2023	Official Letter 1687/BGDĐT-GDTC	On strengthening the prevention and control of COVID-19 in schools

Source: Author's summary (<https://moet.gov.vn/van-ban/vanban/Pages/default.aspx>). (2023)