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Understanding Teacher Feedback in Primary Education: A Comparative Analysis of a Three-Dimensional Framework

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Abstract: Teacher feedback plays a crucial role in supporting students' learning and engagement in primary education. While existing research often emphasized the cognitive function of feedback in improving academic performance, less attention has been paid to the affective and mediation dimensions involved in daily classroom practice. Therefore, this article aims to propose a three-dimensional framework for understanding teachers' feedback in primary education through integrating cognitive, affective, and mediation perspectives. The article adopts a qualitative comparative analysis approach by examining two previously published studies on teacher feedback practices in primary education conducted in Norway and Australia. The analysis shows that teacher feedback serves multiple functions in classroom interaction, including supporting the learning process, encouraging student engagement, and maintaining positive relationships. Therefore, this article highlights that teacher feedback should be viewed as a multi-dimensional pedagogical practice that dynamically integrates cognitive guidance, motivational support, and appropriate communication tools. And the proposed framework contributes to a wider theoretical understanding of feedback, offering a useful perspective for discussing feedback practices across diverse educational contexts.

Keywords: Teacher Feedback; Primary Education; Formative Assessment; Praise

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1. Introduction

Teacher feedback is widely recognized as an essential part of effective teaching and formative assessment. A large number of research shows that feedback can enhance learning outcomes by giving students information that helps them understand how to move from their current performance level to their learning goals (Black & Wiliam, 1998). In primary education, feedback holds particular importance. Piaget noted that young learners are still developing their cognitive and self-regulatory abilities (Piaget, J., 1972). As a result, they depend heavily on teacher guidance to interpret expectations and assess their progress

(Pekrun et al., 2014). Despite agreement on its significance, research on feedback has traditionally focused on its cognitive and instructional roles. Many key studies view feedback mainly as information that corrects errors or boosts task performance (Nicol & Macfarlane-Dick, 2006; Shute, 2008). While these perspectives have greatly advanced understanding of how feedback supports learning, they often ignore the relational and emotional aspects of feedback interactions, which can affect students' motivation, engagement, and participation in class (Panadero & Lipnevich, 2022).

From a sociocultural perspective, feedback can be viewed as a mediated exchange between educators and students in addition to being evaluative data. Based on Vygotsky and Cole (1978), feedback can serve as a scaffold to help students grow within their Zone of Proximal Development and guide them to more complex ways of thinking and problem-solving (Vygotsky & Cole, 1978). Within this view, feedback operates simultaneously as instructional guidance and relational support that shapes students' learning experiences and identities. In addition, recent developments in educational technology have further expanded the ways of providing and experiencing feedback. The rapid growth of digital learning environments, particularly during the COVID-19 pandemic, has led teachers to use a range of digital tools such as learning management systems, video conferencing platforms, and audio or video recordings to provide feedback. These changes highlight that feedback practices are not only shaped by their content but also by the media used to communicate them, affecting their timing, visibility and interaction status (Rapanta et al., 2020).

Although feedback has these advantages, there is still a significant gap between theoretical ideals and classroom practice. Recent scholarship has increasingly recognized that feedback practices are not neutral and are also shaped by national educational contextual constraints (Carless & Boud, 2018; Svanes et al., 2023). Thus, cross-cultural comparisons provide valuable opportunities to explore how feedback functions as a socially embedded pedagogical practice rather than a universal instructional technique.

Against this background, this article aims to develop a broader theoretical understanding of teacher feedback in primary education. Specifically, it adopts a comparative theoretical analysis of two empirical studies conducted in Norway and Australia that highlight different forms of feedback practices across contrasting educational contexts. By using the combined lens of social constructivist theory and the feedback model of Hattie and Timperley to examine these cases, the analysis seeks to demonstrate how feedback content, modality, and context interact in classroom practice (Hattie & Timperley, 2007). Finally, this article contributes to enriching the literature on feedback. It proposes a three-dimensional framework for analyzing teacher feedback, including cognitive, affective, and mediation, which provides a more integrated perspective for understanding feedback across educational contexts. Through these intersecting dimensions, the article demonstrates how feedback functions as a culturally embedded, technologically mediated, and developmentally sensitive practice.

The remainder of this article is organized as follows. Section 2 develops the theoretical reviews for conceptualizing teacher feedback and introduces the proposed framework. Section 3 presents a comparative analysis of the two selected studies. Section 4 discusses the theoretical and practical implications of the feedback analysis, and Section 5 summarizes the article.

2. Theoretical Conceptualization of Teacher Feedback

2.1 Feedback as Cognitive Scaffolding

Feedback has traditionally been understood as a cognitive process that helps learners enhance their performance by providing information about the gap between their current understanding and their learning objectives. One of the most influential frameworks in this area is the model proposed by Hattie and Timperley, who argue that effective feedback addresses three questions: what the learning goals are, how the current performance relates to these goals, and how to improve in the next step (Hattie & Timperley, 2007). Furthermore, these questions relate to different levels of feedback, including task-level, process-level, and self-regulation feedback, which have become widely referenced in educational research.

Similarly, research in formative assessment emphasizes that feedback plays a crucial role in supporting students to monitor their learning and adjust their strategies accordingly. Black and Wiliam highlight that formative feedback is most effective when it provides specific guidance to help learners close the achievement gap (Black & Wiliam, 1998). However, rather than simply correcting errors, effective feedback is expected to promote deeper understanding and encourage learners to engage in reflective thinking about their learning processes.

From the perspective of social constructivism, feedback can also be interpreted as a scaffolding role that supports learners' development within their Zone of Proximal Development (Vygotsky & Cole, 1978). For instance, teachers guide students' learning by providing temporary support that enables them to accomplish tasks beyond their independent capabilities. In this sense, feedback serves both evaluative and instructional functions, facilitating the gradual development of advanced cognitive skills.

However, even though these frameworks emphasize how feedback supports cognitive improvement and task completion, their insights into how learners' emotional responses, self-perception, and social relationships influence whether feedback is actually accepted and used are rather limited (Dann, 2014; Voelkel et al., 2020). This narrow focus means that traditional cognitive models of feedback offer an incomplete account, particularly for contexts such as primary education, where social and affective factors are especially influential.

2.2 Feedback as Affective and Relational Practice

While the cognitive perspective has an important influence on feedback research, both Fiskerstrand and Gamlem and Kluger and DeNisi emphasize that feedback is also an emotional and social practice embedded in the interaction between teachers and students (Fiskerstrand & Gamlem, 2024; Kluger & DeNisi, 1996). The effectiveness of students' uptake of feedback largely depends on their understanding of the teacher's intentions, tone, and perceived support. To be more specific, if the feedback (such as written feedback or verbal feedback) is regarded as judgmental or low grades, students may reduce their motivation or even decrease their participation in learning behaviors (Lipnevich & Smith, 2009).

Educational psychologists have therefore highlighted the importance of considering the emotional dimensions of feedback. Pekrun et al.'s theoretical model of achievement emotions provides a robust framework, positing that students' emotional reactions to feedback can subjectively influence their motivation, persistence, and academic performance (Pekrun et al., 2014). To be more specific, positive feedback can enhance learners' sense of competence and agency, while poorly delivered feedback may generate anxiety, shame, or avoidance behaviors (Pekrun et al., 2014). Despite its theoretical strength, Putwain et al. also admit that such a theoretical approach limits causal inferences about how feedback emotions develop over time (Putwain et al., 2018).

In primary education, the affective dimension of feedback is especially pronounced. Young learners frequently interpret feedback not only as commentary on a task but also as an evaluation of their self-worth and capability as learners (Dann, 2014; Lipnevich & Smith, 2009). Supportive and respectful feedback can foster confidence, participation, and intellectual curiosity, while harsh and impersonal feedback will have the opposite effect.

Nevertheless, by browsing the literature (e.g., Hattie & Timperley, 2007; Shute, 2008), it is found that most empirical works are concentrated in the field of higher education, and there is insufficient research on affective and relational feedback in primary school settings. Furthermore, existing literature often prioritizes theoretical frameworks over context-sensitive, actionable guidance for teachers, leaving a gap between conceptual insights and classroom practice (Ryan et al., 2022). Together, these limitations highlight the need for context-based research to integrate and develop the affective dimension of feedback in primary classrooms.

2.3 Digital and Multi-modal Feedback

The increasing use of digital technologies in education has expanded how teachers provide feedback. Digital platforms allow feedback to be delivered through various modalities, including audio recordings, video explanations, and synchronous online discussions (Van der Kleij et al., 2015). Pachler et al. argue that these multi-modal forms of feedback can provide richer explanations and allow teachers to communicate tone and emphasis more effectively than traditional written comments alone (Pachler et al., 2010). Similarly, Dawson et al. point out that students particularly value audio and video feedback for their personal quality and clarity, suggesting that modality choice significantly influences how feedback is received and used (Dawson et al., 2019). Furthermore, Rapanta et al. report that digital feedback can enhance accessibility and immediacy in online learning environments, enabling students to receive guidance more quickly and revisit feedback multiple times (Rapanta et al., 2020).

However, differences in economic development across regions, coupled with the COVID-19 pandemic, have revealed serious

limitations in shifting traditional strategies to the digital environment. For example, feedback is frequently reduced to 'passive content delivery' via prerecorded videos rather than interactive guidance in Malaysian primary schools (Sari et al., 2026). What's more, this pedagogical degradation can be exacerbated by infrastructure disparities: schools in rural and low-income areas face technical barriers that prevent real-time digital support, leaving teachers unable to monitor student engagement or confirm understanding remotely (Van De Werfhorst et al., 2022; Sari et al., 2026). In addition, teachers' digital teaching ability can affect the assessment interaction and learning experience. If teachers lack digital literacy, it will be a struggle for them to effectively manage remote classrooms, understand, and provide feedback (Yang & Du, 2024).

Consequently, digital environments risk exacerbating educational inequities while failing to replicate the affective and relational dimensions of face-to-face feedback essential in primary education. Therefore, effective digital feedback must move beyond digitizing traditional comments to intentionally design for emotional connection and dialog interaction.

2.4 Towards a Three-Dimensional Framework of Teacher Feedback

The preceding discussion highlights that teacher feedback cannot be understood only as an instructional tool. Instead, it represents a multifaceted pedagogical practice that integrates informational guidance, relational interaction, and communicative mediation, which reflects dynamic interactions among the dimensions. Building on the literature reviewed above, this article proposes a three-dimensional framework for analyzing teacher feedback in primary education.

The first dimension, the cognitive dimension, refers to the informational role of feedback in supporting students' learning processes. This includes feedback that clarifies learning goals, identifies errors, and guides students toward improved strategies and understanding. The second dimension, the affective dimension, emphasizes the emotional and relational aspects of feedback interactions. Feedback influences students' motivation, confidence, and engagement, and therefore plays a significant role in shaping classroom relationships and learning atmosphere. The third dimension, the mediation dimension, focuses on the tools and communication modes for transmitting feedback. With the increasing integration of digital technologies in education, feedback is often mediated through various digital platforms and multi-modal formats, which determine the way feedback is communicated and interpreted.

Together, the three dimensions provide a dynamic integration framework for understanding teacher feedback as a complex pedagogical practice. This framework will be used in the following section to analyze and compare feedback practices in the selected studies from Norway and Australia.

3. Comparative Analysis of Feedback Practices

3.1 Analytical Approach

This study adopted a qualitative comparative analysis, which was selected for its appropriateness in synthesizing cross-cultural educational research and generating theoretical insights regarding context-sensitive practices (Bray et al., 2014). In addition, rather than generating new empirical data, the analysis interpreted findings from two published studies from Norway and Australia. The two studies chosen for analysis were identified through purposive sampling based on the following criteria: (a) empirical focus on teacher feedback in primary education; (b) publication in peer-reviewed journals; (c) representation of distinct cultural and educational contexts; and (d) methodological rigor providing rich contextual data.

To be more specific, the Norwegian study by Svanes et al. investigates feedback practices during remote teaching implemented during the COVID-19 pandemic, which is a crisis state (Svanes et al., 2023). In contrast, the Australian study by Burnett and Mandel focuses on the role of praise as a form of teacher feedback in traditional and normal face-to-face primary classrooms (Burnett & Mandel, 2010). While both studies examine feedback in primary education, the contrast between digitally mediated feedback and praise provides a useful basis for investigating how feedback practices differ across communication environments and teaching contexts.

Furthermore, the analysis next applied the three-dimensional framework proposed in this article to interpret how feedback functions in each context. This approach enables a systematic examination of how informational guidance, motivational support, and communication modes interact in feedback practices.

3.2 Feedback Practices in the Norwegian Context

The study by Svanes et al. provides insight into how teacher feedback was adapted to digital learning environments during

the COVID-19 school lockdown in Norway (Svanes et al., 2023). In this crisis situation, teachers were required to maintain instructional interaction with students despite the absence of physical classroom contact. This suggests that feedback became one of the main mechanisms through which teachers attempt to guide learning and sustain student engagement and is closely intertwined with digital communication technologies.

From the perspective of the cognitive dimension, the study suggests that teachers frequently use feedback to clarify learning goals and guide students' understanding of tasks. Written comments on students' submitted work often included explanations of errors and suggestions for revision. These practices reflect a formative feedback approach, where the focus is not only on evaluating performance but also on supporting students' ongoing learning processes.

In addition, the study also highlights the importance of the affective dimension of feedback in the remote learning context. Teachers reported that students sometimes experienced reduced motivation and feelings of isolation when learning from home. In response, feedback frequently included encouraging comments and personalized messages intended to maintain students' confidence and sense of connection with their teachers. In this sense, feedback functioned not only as instructional guidance but also as a means of sustaining relational ties within the learning process.

Finally, the most distinctive feature of the Norwegian case lies in the mediation dimension of feedback. Teachers relied on a variety of digital tools, including learning management systems, written online comments, recorded video messages, and synchronous online meetings. These tools allowed teachers to combine asynchronous feedback with synchronous discussion, thereby creating multiple opportunities for dialogue about students' study. This aligns with Dawson et al.'s finding that effective feedback requires careful attention to design choices, as digital tools alone do not guarantee quality feedback interactions (Dawson et al., 2019). Thus, the study illustrates how technological mediation can reshape feedback practices by expanding the modes through which feedback is communicated.

However, correspondingly, the reliance on digital platforms also brings certain limitations. First, written online feedback lacks the immediacy and nuance of face-to-face interaction, which potentially affects students' understanding of teachers' comments. This suggests that although digital technologies create new possibilities for the transmission of feedback, they also require teachers to carefully consider how clarity and emotional tone are conveyed in intermediary communication. Another important issue highlighted by this study is the increased demands placed on teachers when providing feedback in the digital environment. For example, preparing video comments, organizing online meetings, and monitoring students' submissions required significant time and effort. This suggests that while digital tools expand the possibilities for personalized feedback, they also create additional challenges for teachers in maintaining consistent communication with students.

3.3 Feedback Practices in the Australian Context

In contrast to the Norwegian case, the study conducted by Burnett and Mandel investigates feedback practices in normal face-to-face primary classroom environments in Australia, with a specific focus on the use of praise (Burnett & Mandel, 2010). The findings indicate that praise constitutes a common element of daily classroom interaction. Teachers frequently provide verbal praise in response to students' effort, participation, and successful task completion.

From the perspective of the affective dimension, praise feedback plays a significant role in fostering positive classroom relationships. Students in the study reported that praise from teachers helped them feel recognized and valued, which in turn encouraged them to participate more actively in classroom activities.

Nevertheless, when considered through the cognitive dimension of the proposed feedback framework, praise-based feedback provides limited information about how students can improve their learning. General statements such as "good job" or "well done" acknowledge successful performance but do not necessarily explain why the work is effective or how it could be further developed. As a result, praise functions primarily as motivational reinforcement rather than as a specific instructor guide.

In terms of the mediation dimension, the Australian classroom reflects an immediate face-to-face communication environment. Feedback is delivered directly through verbal interaction between teachers and students during classroom activities, allowing teachers to respond quickly to students' behavior and learning progress. This immediacy enables spontaneous encouragement and rapid correction of mistakes. However, the informal and spontaneous nature of praise

sometimes limits opportunities for more elaborate feedback that requires reflection or detailed explanation.

Therefore, this analysis of the Australian context highlights both the strengths and limitations of praise-based feedback practices. Although praise can contribute to a supportive classroom atmosphere and strengthen students' enthusiasm, it is most effective when combined with more specific feedback that helps students understand how to further develop their skills and knowledge.

3.4 Comparative Discussion

The comparison between the Norwegian and Australian studies illustrates how feedback practices are shaped by the interaction between pedagogical goals, classroom relationships, and communication environments. Both studies demonstrate that feedback serves multiple important functions in primary education, including supporting learning, encouraging participation, and maintaining positive classroom relationships. However, depending on the different pedagogical conditions in which the teaching takes place, the relative emphasis on different dimensions of feedback varies, and so does the potential impact on students' learning.

3.4.1 Contexts Reflection: Crisis Teaching versus Normal Teaching

A critical reflection on the research contexts reveals that the two studies represent fundamentally different instructional conditions that extend beyond mere geographical or technological differences. The Norwegian data were collected during the COVID-19 school lockdown. This was a period of forced emergency remote teaching, with teachers and students being pushed into an unfamiliar digital environment without adequate preparation time or online teaching training (Svanes et al., 2023). This crisis context fundamentally shaped feedback practices in ways that may not represent sustainable or optimal teaching choices. What's more, teachers' reliance on written comments and recorded videos was partly driven by the asynchronous nature of remote learning and the absence of real-time interaction opportunities, rather than by deliberate instructional design (Svanes et al., 2023).

In contrast, the Australian study by Burnett and Mandel examined feedback practices in stable, face-to-face classroom environments where teachers had developed their approaches through years of professional experience and established classroom routines (Burnett & Mandel, 2010). The praise-based feedback observed in Australian classrooms represents accumulated pedagogical wisdom developed through ongoing interaction with students, rather than passive adjustments to external constraints. This distinction is crucial for interpreting the findings: Norwegian practices may demonstrate the potential of digitally mediated feedback under constrained conditions, whereas Australian practices illustrate the patterns that emerge when teachers have full command of their instructional environment.

This contextual difference has significant implications for the universality of the comparative insights. The Norwegian case may overstate the challenges of digital feedback because teachers work under crisis conditions and do not have sufficient time to develop digital teaching skills, losing the immediacy and emotional nuances of feedback. Conversely, the Australian case may understate the potential limitations of praise feedback, as teachers were required to document their assessment practices. Future comparative research would benefit from examining digitally mediated feedback in normal contexts, as well as investigating how face-to-face feedback practices change when teachers are required to convert their daily oral communication with students into digital records.

3.4.2 Dynamic Analysis: Interactions Among the Three Dimensions

The proposed three-dimensional framework conceptualizes cognitive, affective, and mediation dimensions as interacting rather than operating independently. The comparative analysis of the Norwegian and Australian cases reveals important tensions among these dimensions, which are worthy of in-depth examination.

In the Norwegian remote learning context, the mediation dimension became dominant due to the demands of technology. Consequently, the shift to digital platforms fundamentally restructured how feedback could be delivered, creating support and constraints, and thus reshaping the other two dimensions. For example, the asynchronous nature of much digital feedback allowed for more elaborated cognitive guidance—teachers could craft detailed written explanations, and students could revisit feedback multiple times, which supports deeper reflection than spontaneous verbal comments permit. However, this cognitive gain appears to come at a cost to the affective dimension. Teachers explicitly reported concerns about maintaining emotional

connection and motivation in the absence of physical presence, leading them to deliberately embed encouragement and personalized messages within written feedback (Svanes et al., 2023). Therefore, this reflects the three-dimensional framework by which digital platforms use text messages to restore and convey emotional support.

The Australian case presents an inverse pattern. The affective dimension was strongly activated through immediate praise in face-to-face interaction. The mediation dimension (instant communication in the classroom) supported rapid feedback delivery and allowed teachers to consider student emotional responses in real-time, adjusting their communicative approach instantaneously. However, this configuration seems to limit the cognitive dimension. The study found that praise often remained generic (e.g., "good job," "well done") without specific explanatory content about why the work was effective or how it could be developed further (Burnett & Mandel, 2010). Although face-to-face praise is emotionally satisfying, it may limit the opportunity for the kind of continuous cognitive guidance that takes time to form and reflect. Unlike the Norwegian teachers who could compose thoughtful written comments away from the pressures of simultaneous classroom management, Australian teachers operating in busy classroom environments may have prioritized maintaining a positive atmosphere and participation over providing detailed instructional guidance.

These observations suggest that the three dimensions do not merely coexist but are in dynamic tension, where enhancement of one dimension may inadvertently suppress others. Effective feedback practice, therefore, requires not simply attending to all three dimensions but striking an appropriate balance based on specific circumstances and adopting strategies to address the dimensions that are weakened by situational constraints. The Norwegian teachers' deliberate affective scripting of written feedback and the potential for Australian teachers to supplement praise with more structured reflection opportunities represent such strategies. This dynamic analysis extends the theoretical understanding and supports the assertion that feedback is 'multidimensional' to specify how dimensions interact, under what conditions particular configurations emerge, and what kind of teaching work is required to maintain balance.

3.4.3 Shared Limitations Across Cases

Despite their contrasting contexts, both studies reveal common limitations in feedback practices that persist across technological and cultural boundaries, pointing to systemic challenges in primary education feedback.

Both cases indicate a relative neglect of student feedback literacy development. The Norwegian study focused primarily on teachers' feedback delivery strategies and their perceptions of student responses, without a systematic examination of how students interpreted, utilized, or were affected by digital feedback. Similarly, the Australian study emphasized teachers' praise practices and students' general appreciation of recognition but did not investigate whether students could distinguish between motivating praise and actionable guidance or whether they developed capacities to seek and implement feedback independently. This shared limitation reflects a broader area in feedback research where the focus remains disproportionately on the teacher providing rather than the student absorbing (Carless & Boud, 2018). Thus, neither of these two studies answered the key question about how primary school-aged children develop metacognitive and self-regulatory abilities to engage productively with different forms of feedback.

In addition, both cases highlight challenges in balancing motivational and instructional functions. Norwegian teachers struggled to maintain motivation without the relational immediacy of physical presence; Australian teachers risked motivating without sufficiently instructing. This shared tension suggests that integrating affective support with cognitive guidance represents a persistent professional challenge that neither technical support nor established classroom practices can automatically resolve. Therefore, it indicates that teacher education and professional development need to specifically address how to combine encouragement with clear strategic guidance, how to make praise informative and motivating, and how to maintain affective support relationships while pushing students toward cognitive extension (Yang & Du, 2024).

In conclusion, these differences suggest that feedback effectiveness cannot be understood only from the perspective of information quality. On the contrary, feedback should be viewed as a multi-dimensional practice shaped by both relational and contextual factors. The Norwegian and Australian cases, despite their contrasting environments, converge in revealing that effective feedback requires a balance between cognitive guidance and motivational support, as well as careful consideration of the tools through which feedback is delivered. However, they also jointly clarify the persistent challenges, particularly in

student feedback literacy and teacher professional literacy, which demand continued attention from researchers and educators. Finally, the comparative analysis reinforces the usefulness of the three-dimensional framework proposed in this article and also determines the direction for its further improvement. By examining cognitive, affective, and mediation aspects together, the framework contributes to feedback research and provides a more comprehensive understanding of how teacher feedback operates across diverse educational environments, moving beyond isolated treatments of feedback content, relationships, or tools.

4. Implications

4.1 Implications for Feedback Theory

The discussions of this study suggest the need to expand existing feedback theories by considering multiple interacting dimensions of feedback practice in primary education rather than viewing it as a purely instructional technique. Much of the existing feedback literature has focused primarily on the cognitive role of feedback in supporting learning improvement. For example, research has demonstrated that feedback can significantly influence students' achievement when it helps them understand the gap between their current performance and desired learning goals (Hattie & Timperley, 2007). While this perspective provides valuable insights into how feedback supports learning, it may not fully capture the complexity of feedback practice in real classroom contexts. In addition, the comparison between the Norwegian and Australian cases indicates that feedback also performs important affective and mediation functions that shape how students experience and respond to feedback.

Building on the comparative analysis above, the three-dimensional framework proposed in this article contributes to feedback theory by integrating cognitive, affective, and mediation perspectives into a single analytical model. The cognitive dimension highlights the informational value of feedback in guiding learning processes, while the affective dimension emphasizes the motivational and relational role of feedback in supporting student engagement. At the same time, the mediation dimension draws attention to the tools and communication environments through which feedback is delivered. This dynamic integrated perspective aligns with recent discussions in feedback research that emphasize the interactive and socially situated nature of feedback processes. For instance, Carless and Boud argue that effective feedback depends not only on the quality of teachers' comments but also on students' ability to interpret and use feedback in their learning (Carless and Boud, 2018). By considering cognitive, affective, and mediation elements together, the framework developed in this article provides a broader theoretical perspective for understanding how feedback operates within educational environments.

4.2 Implications for Primary Teaching Practice

Although based on Norwegian and Australian cases, these findings also have practical implications for Asia-Pacific and even global teaching practice in primary education.

First, teachers should recognize that feedback serves various purposes in the teaching and learning process. In addition to providing information about students' performance, feedback can also influence students' motivation and confidence with learning tasks. Therefore, teachers may benefit from designing feedback strategies that not only clarify how students can improve their work but also encourage sustained participation in classroom activities. In primary education in particular, combining constructive guidance with supportive communication may help create learning environments in which students feel both challenged and supported. As formative assessment research supported, feedback is effective when it helps students understand learning goals while also maintaining their confidence and willingness to engage with challenging tasks (Black & Wiliam, 1998).

Second, teachers need to consider how the mode of feedback delivery influences students' engagement with feedback. As demonstrated in the Norwegian study, in digitally mediated learning environments, written feedback, recorded comments, and so on can provide opportunities for students to revisit teachers' suggestions and reflect on their own learning over time. When designed and used effectively, these tools can encourage more sustained engagement with feedback (Dawson et al., 2019). However, teachers should also ensure that digital feedback remains supportive and accessible to students, particularly in primary education, where learners may require additional guidance to interpret written feedback (Piaget, 1972).

Third, the analysis suggests that praise-based feedback should be used carefully and strategically. While praise can play

an important role in building a positive classroom climate and encouraging student participation, it is most effective when combined with specific feedback that helps students understand how to improve their work and focus on learning progress. Therefore, integrating motivational encouragement with constructive guidance may support both students' emotional well-being and their cognitive development. In this sense, teachers may benefit from considering feedback not only as information about performance but also as a pedagogical practice that integrates cognitive guidance, affective support, and appropriate mediation tools.

4.3 Implications for Future Research

This study highlights several directions for future research on teacher feedback. One important area concerns the growing role of digital technologies in mediating feedback practices. As schools increasingly adopt online platforms and blended learning models, further research is needed to explore how digital communication tools influence the clarity, accessibility, and effectiveness of feedback in different educational contexts.

A second direction involves examining how different feedback dimensions interact across diverse cultural and institutional settings. The comparison between the Norwegian and Australian cases suggests that feedback practices may prioritize different aspects depending on classroom norms, pedagogical traditions, and instructional conditions. Thus, comparative studies across additional educational systems could provide deeper insights into how feedback operates as a socially embedded pedagogical practice.

Finally, future research should continue to explore students' views on feedback. While many studies focus on teachers' feedback strategies, understanding how students interpret, value feedback, and act on it remains crucial for evaluating its educational impact. Therefore, investigating students' feedback literacy and their capacity to engage productively with feedback may contribute to the development of more effective feedback practices in primary education.

In conclusion, these implications highlight the importance of viewing teacher feedback as a complex pedagogical practice shaped by cognitive, affective, and mediation dimensions. Understanding how these dimensions interact may help educators design more effective feedback strategies and provide useful directions for future research on feedback practices in primary education. The final section concludes the article by summarizing the main findings and reflecting on the limitations of the study.

5. Conclusion

This article examined teacher feedback practices in primary education through a comparative analysis of two studies conducted in Norway and Australia. Drawing on the three-dimensional framework that combines cognitive, affective, and mediation perspectives, the study aimed to explore how different feedback dimensions operate within diverse instructional contexts. By analyzing feedback practices in both digitally mediated and face-to-face classroom environments, the study demonstrates that teacher feedback is not only an instructional technique for correcting student performance but also a complex pedagogical practice that simultaneously supports the learning process, student motivation, and classroom interaction.

The comparative analysis shows that different educational contexts emphasize different dimensions of feedback. In the Norwegian remote and crisis learning environment, the mediation dimension of feedback becomes particularly important, as teachers rely on digital platforms and written communication to maintain interaction with students. This form of feedback may provide students with continuous and repeated opportunities to engage in more reflective learning. By contrast, the normal Australian classroom context highlights the affective dimension of feedback through the use of praise and verbal encouragement during face-to-face teaching. While this type of feedback can effectively foster a positive classroom climate and support student participation, it may also provide fewer opportunities for sustained reflection on learning improvement. These findings suggest that feedback practices are shaped by the interaction between teaching goals, classroom relationships, and communication environments.

By integrating these observations within the three-dimensional analytical framework, the study helps to adopt a more diversified and dynamic perspective to understand teacher feedback in primary education. The framework emphasizes that effective feedback practices require the integration of cognitive guidance, motivational support, and suitable digital teaching

tools, rather than merely treating feedback as information for improving learners' grades. Recognizing these dimensions can help educators better understand the role of feedback in different educational settings and how to adjust the form of feedback to support the learning process and student engagement.

Despite these contributions, several limitations should also be acknowledged. First, the study relies on the analysis of two selected research cases, which may limit the universality of the research results. While the comparison provides useful insights into how feedback practices operate in different contexts, additional studies involving a wider range of educational systems and classroom environments would help to further test and refine the proposed framework. Second, the analysis focuses primarily on teachers' feedback practices rather than on students' responses to feedback. Therefore, future research could investigate how students interpret, use, and respond to different forms of feedback, particularly in the digitally mediated environment.

In conclusion, the findings of this study highlight the importance of viewing teacher feedback as a multidimensional pedagogical practice shaped by both relational and contextual factors. By bringing together cognitive, affective, and mediation perspectives, the proposed framework offers a useful lens for analyzing feedback practices in contemporary primary education. In the future, continued research in this area may further deepen our understanding of how feedback can effectively support both student learning and meaningful classroom interaction.

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