

SUPERVISING AT SCALE: A COHORT-BASED MODEL INTEGRATING PEER AND SELF-ASSESSMENT IN POSTGRADUATE EDUCATION

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Abstract

The massification of higher education and South Africa's performance-based funding framework have intensified pressures on postgraduate supervision. Increasing enrolments, combined with institutional expectations for improved throughput rates, have significantly increased supervisors' workloads and exposed the limitations of traditional one-to-one supervision models. These challenges call for innovative and contextually responsive approaches to postgraduate supervision. This paper examines an alternative model that combines cohort-based supervision with structured peer and self-assessment practices to support sustainable and transformative postgraduate education. The study employed a qualitative reflective research design. The cohort consisted of five students enrolled in the Master of Education degree on a part-time basis. Data were collected through reflective supervision journals, peer-review artifacts, and observations of engagements during the sessions held twice per month over a year. A thematic analysis was used, guided by the Community of Practice (CoP) theory. The study demonstrated that the cohort model fosters a community of practice in which postgraduate students engage in shared learning, collaborative critique, and collective knowledge production. Combining structured peer and self-assessment processes within the cohort model encourages students to critically engage with their own work and that of their peers, fostering reflective scholarship, academic accountability, and research confidence. Drawing on practical experience implementing this model, the paper concludes that the collaborative supervision approach can support both student development and supervisory sustainability. By distributing aspects of feedback and scholarly dialogue across the cohort, the model not only alleviates supervisory pressures but also challenges hierarchical structures traditionally associated with postgraduate supervision promoting a more effective learning environment. Furthermore, the cohort approach aligns with broader transformation and decolonial agendas in South African higher education by promoting participatory, dialogic, and inclusive forms of knowledge production. Consequently, the paper argues that integrating cohort learning with peer and self-assessment offers a viable strategy for supervising postgraduate students at scale while maintaining academic quality. Such approaches are increasingly necessary for navigating the intersecting demands of massification, throughput imperatives, and epistemic transformation in contemporary higher education.

Keywords: *Cohort-based learning, collaborative learning, community of practice, peer assessment, self-assessment.*

1. Introduction

There has been a notable surge in the number of postgraduate students enrolling in higher education, straining universities worldwide, including those in South Africa. In South Africa, the national goals for knowledge production and performance-driven funding, aligned with admission subsidies, research output, and graduation rates, have driven this surge in university enrolments (Ngulube, 2021). While these efforts align with broader objectives of economic growth and the building of a knowledge-based society on one hand, they have also highlighted the challenges of traditional one-on-one postgraduate supervision models on the other hand (Bitzer, 2007; Ngulube, 2021). This increase in student numbers, coupled with limited supervisory resources and institutional performance pressures, has raised concerns about the sustainability of one-to-one supervisory practices and the quality of postgraduate learning experiences.

Given these challenges, there is a growing realization that universities need to rethink and transition towards more collaborative and participatory models in postgraduate supervision. As a result, cohort-based postgraduate supervision has emerged as a powerful response to these issues. This approach encourages students to form communities of practice, enabling them to engage in meaningful scholarly discussions, share knowledge, and support one another (De Lange, Pillay & Chikoko, 2011).

Moreover, peer and self-assessment practices are gaining traction in higher education. They offer students the opportunity to reflect on and critically engage with their own work, and that of their peers (Boud & Falchikov, 2006; Nicol & Macfarlane-Dick, 2006). In postgraduate supervision settings, these practices encourage students to explore their own research and that of their peers in depth, bolstering their academic confidence, accountability, and overall research skills. Moreover, incorporating both peer and self-assessment approaches into the cohort supervision model challenges the traditional hierarchical structures of the conventional student-supervisor model, thereby building a more inclusive and collaborative scholarly environment.

This paper explores how integrating peer and self-assessment within a cohort-based supervision model can support sustainable postgraduate supervision amid increasing enrolments and supervisory pressures, drawing on reflections from part-time Master of Education students at a historically disadvantaged university in South Africa. The paper argues that collaborative supervisory practices ease supervisors' workload and promote inclusive, dialogic, transformative postgraduate education, aligning with decolonial goals in South African higher education.

2. Theoretical framework

The study is grounded in the Communities of Practice (CoP) theory developed by Jean Lave and Etienne Wenger (1991) and expanded by Wenger (1998). CoP theory conceptualises learning as a social, situated, and participatory process occurring through sustained interaction, mutual engagement, and shared practice within a community (Wenger, 1998; Wenger, McDermott & Snyder, 2002). Central to this theory is the concept of legitimate peripheral participation, which explains how newcomers gradually move from peripheral to full participation by engaging in the community's practices (Lave & Wenger, 1991). In postgraduate education, this suggests that research identities are developed not only through formal supervision but also through scholarly dialogue, peer critique, and collaborative knowledge production.

Wenger (1998) identifies three core dimensions of CoPs: mutual engagement, joint enterprise, and shared repertoire. These dimensions provide a useful lens for understanding cohort-based supervision. Within such models, students move from passive recipients of knowledge to active contributors within an intellectual community. Mutual engagement is fostered through peer discussions, collaborative reflection, and feedback processes, while the joint enterprise reflects the cohort's shared commitment to research progression and academic milestones. Shared repertoire emerges through the collective development of scholarly language, tools, and research practices. This aligns with socio-cultural perspectives that emphasise the co-construction of knowledge through social interaction (Vygotsky, 1978).

The framework further incorporates peer and self-assessment practices. Peer assessment supports the development of evaluative judgment, an essential scholarly competence (Boud & Falchikov, 2006), while self-assessment promotes reflexivity, autonomy, and self-regulation in postgraduate learning (Nicol & Macfarlane-Dick, 2006). These practices also strengthen collective responsibility and contribute to supervisory sustainability. Moreover, CoP theory aligns with transformative and decolonial agendas in higher education by promoting participatory, inclusive, and democratic forms of knowledge production (Wenger, 1998). In this study, CoP therefore functions as both a conceptual and an analytical lens for examining how cohort-based supervision, integrated with peer and self-assessment, supports research development, learning at scale, and sustainable supervision.

3. Methodology

This section explains the collaborative and reflective approach used to explore the implementation of the cohort-based postgraduate supervision model.

3.1. Research design and context

A qualitative reflective research design was adopted for the study. A reflective inquiry design was appropriate for the study as it provides a systematic means of interrogating pedagogical practice and lived professional experience (Schön, 1983). This design was particularly useful, as the aim of the inquiry was not to pursue statistical generalisability but rather to offer a contextually situated reflection on implementing a cohort-based postgraduate supervision approach.

The study was conducted at a historically disadvantaged university located in a predominantly rural province of South Africa. The cohort consisted of five part-time Master of Education students enrolled on a part-time basis. All the participants were practising teachers who had to balance postgraduate study alongside their professional responsibilities. The cohort meetings were conducted twice monthly, with one session being face-to-face session and the other online.

3.2. Data sources, analysis

Data were generated from different sources including reflective field notes of the students, my supervisory journals, observations of the cohort interactions and the peer review feedback sessions and selected peer-review artifacts. Ethical principles of confidentiality and anonymity were observed and maintained throughout the study. A thematic, reflective approach to analysis informed by Communities of Practice theory was used. Particular attention was directed to the patterns in participation, peer engagement, feedback practices, and supervisory dynamics.

3.3. Limitations

The findings are shaped by the author's positionality and institutional setting, as the study is reflective and context-specific. While the study does not claim broad generalisability, it, however, offers transferable insights into innovative approaches to postgraduate supervision, particularly in contexts characterised by increasing enrolments, supervisory pressures, and the need for sustainable models of research support.

4. Description of the cohort-based supervision model

The cohort-based supervision model emerged in response to growing calls within higher education for collaborative and distributed approaches to postgraduate supervision, particularly in contexts characterised by increasing enrolments, supervisory pressures, and student isolation (CHE, 2023). The model reconceptualises supervision as a participatory and collaborative process grounded in peer engagement, shared accountability, and collective knowledge production rather than as an exclusively individual relationship between supervisor and student.

The model was implemented with five part-time Master of Education students. The students are practising teachers studying at a historically disadvantaged university located in a predominantly rural province of South Africa. The cohort meetings took place twice per month. The sessions were blended, with one being face-to-face and the other online. The sessions focused on research presentations, peer reviews, collaborative discussion, and reflective engagement. A key feature of the model was the integration of structured peer feedback as a dialogic, reciprocal scholarly process instead of a one-way transmission of comments (Bearman et al., 2024). The students gradually developed analytical thinking, disciplinary understanding, and confidence in academic critique by engaging with clearly defined evaluative criteria guiding the peer review process (Herborg, 2023). The guided self-assessment further strengthened reflexivity, student agency, and self-regulated learning (Bearman et al., 2024).

Over time, the supervisor's role gradually shifted from being the sole evaluator to a facilitator and mentor of collaborative learning, a feature that is consistent with emerging collective supervision approaches (Kálmán et al., 2022; Pyhältö, Tikkanen, & Anttila, 2024). The model operated through iterative cycles of presentation, critique, reflection, and revision, which supported ongoing scholarly interaction and academic identity formation (Byrne et al., 2025). Moreover, the cohort approach complemented rather than replaced the individual supervision by expanding opportunities for feedback, interaction, and peer support. By distributing aspects of scholarly engagement across the cohort, the model provided a more sustainable and intellectually supportive approach to postgraduate supervision at scale (Flenady, Byrne, Wise, & Nijkamp, 2026).

5. Reflective insights and discussion

The implementation of the cohort-based supervision model demonstrates how postgraduate supervision can function effectively as a CoP, with a capacity to foster collaborative engagement, shared learning, and collective scholarly development. The students developed a stronger sense of scholarly identity and belonging through the sustained interaction and participation in the cohort engagements, reflecting Wenger's (1998) view of learning as active participation within a community. The cohort structure also fostered a research-rich and intellectually stimulating environment (CHE, 2023), where the students had an opportunity to co-construct knowledge, exchange diverse perspectives, and participate more confidently in academic discourse (Byrne et al., 2025). Peer feedback emerged as a central pedagogical aspect of the whole process, facilitating dialogic engagement and strengthening critical thinking, disciplinary understanding, and evaluative judgment (Bearman et al., 2024; Herborg, 2023). Additionally, the peer engagement redistributed authority within the supervision process, disrupting traditional hierarchical relationships between the supervisor and participating students, thereby positioning students as active contributors to scholarly knowledge production.

The process also revealed that meaningful peer engagement required deliberate cultivation rather than occurring automatically. *I realised that in the early cohort sessions, some students appeared hesitant to critique the work of their peers and often relied on me to provide evaluative comments. I attribute this hesitation to prior experiences of supervision as a predominantly hierarchical process in which authority resided primarily with the supervisor.* However, gradually, through regular collaborative interactions and the use of structured feedback guidelines, students gained more confidence to critique and engage in scholarly dialogue. These experiences align with the assertions by Byrne et al. (2025) that effective participation in collaborative supervision requires intentional structuring, ongoing facilitation, and supportive scaffolding, particularly during the initial stages when student confidence and participation levels are often low and varied.

Additionally, guided self-assessment further enhanced student agency, reflexivity, and ownership of learning. The students became increasingly capable of identifying their own learning needs, critically evaluating their work, and engaging more independently in the research process, aligning with Lave and Wenger's (1991) notion of movement from peripheral to fuller participation within a community. This reflected a gradual shift from dependence on supervisory direction towards greater scholarly autonomy and confidence. *I observed that as the cohort interactions became more established, students increasingly used the sessions to test ideas, raise methodological uncertainties, and discuss challenges emerging from their research contexts before seeking my direct intervention as a supervisor.* This development suggests a growing trust in the collaborative scholarly engagements and a greater ownership of the research process by the cohort members.

Through the implementation of the cohort model, the supervisor's role was redefined from a primary evaluator and authority figure to a facilitator, mentor, and coordinator of the collaborative learning processes, a position consistent with emerging models of collective supervision (Kálmán et al., 2022; Pyhäntö et al., 2024). Even though feedback became distributed across the cohort, the supervisor remained central in maintaining academic standards, guiding intellectual development, and safeguarding the integrity of the research process (Flenady et al., 2026).

The cohort-based model enhanced both the quality and sustainability of scholarly engagement when supervising at scale, even if it did not necessarily reduce the supervisory workload. Thus, the collective nature of cohort interactions expanded opportunities for feedback, strengthened peer support, and reduced the isolation often experienced during postgraduate study (Naidoo et al., 2023; Flenady et al., 2026). *This was particularly evident among my students who were registered part-time and had to balance postgraduate study with full-time teaching responsibilities.* These findings suggest that the value of cohort supervision lies less in reducing workload and more in creating sustainable, participatory, and intellectually supportive supervision environments.

Despite these strengths, the model also presented challenges that were more pronounced in the early phases. The challenges included uneven participation, resistance to peer critique, and the ongoing need for careful pedagogical design and facilitation. These tensions emphasise the importance of intentionally structuring cohort sessions, having clear expectations, and ensuring sustained supervisory guidance for the effectiveness of collaborative supervision models (Byrne et al., 2025). Nonetheless, the findings show that cohort-based supervision represents a transformative and pedagogically robust approach to postgraduate supervision. This approach is more inclusive, participatory, and a socially responsive practice in higher education, given the pressures and challenges hounding the sector.

6. Conclusions

The findings demonstrate that cohort-based supervision integrated with peer and self-assessment provides a viable and pedagogically robust approach to postgraduate supervision at scale. The model challenges traditional hierarchical supervision approaches and promotes collective knowledge production by repositioning supervision as a collaborative, participatory, and dialogic process. Drawing on CoP theory, the study concludes that students progressively develop scholarly identity, autonomy, reflexivity, confidence, and evaluative judgment through sustained peer engagement and collaborative learning (Wenger, 1998; Bearman et al., 2024).

Supervision at scale should not be seen just as a way to be more efficient, but also as an opportunity to rethink supervision as a teaching and relationship-building activity. The paper concludes that while group supervision may not reduce academic workload, it does improve the quality, inclusivity, and sustainability of supervisory interactions. In South African higher education, this model can promote transformation and decolonisation agendas by encouraging more inclusive, socially responsive learning and knowledge creation. The study, therefore, recommends rethinking and reimagining postgraduate supervision as a collaborative, socially embedded practice capable of balancing scale, quality, and meaningful participation in scholarship.

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