Addressing Academic Loneliness in the PhD Journey: The Peer-Triad Exercise as a Structured Feedback Approach

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Introduction: The power of feedback

Feedback has been described as one of the most powerful influences on learning and is widely recognized as a cornerstone of effective learning in higher education (HE) (Hattie & Timperley, 2008). In *The Power of Feedback*, Hattie and Timperley define feedback as "information provided by an agent regarding aspects of one's performance or understanding." They further propose that effective feedback addresses three key questions: where am I going? (feed up), how am I going? (feedback), and where to next? (feedforward). This echoes the findings from Hounsell and colleagues, who find that learning is more effective when students have a clear sense of how well they are performing and of what is required to improve in relation to the intended learning outcomes (ILOs) (Hounsell et al., 2008). Because ILOs in PhD education are often broadly formulated and encompass a wider range of knowledge and competencies than those addressed in assessment practices, they are not always constructively aligned with what is actually assessed (Sharmini & Spronken-Smith, 2020). However, as emphasised in *The Power of Feedback Revisited*, feedback is a complex and multifaceted construct that encompasses many different forms, which may have varied and sometimes contrasting effects on student learning (Wisniewski et al., 2020). Within this landscape of feedback practices, peer feedback has emerged as a core approach in HE.

Background: The role of peer-feedback in the PhD program

A PhD program encompasses a research program that train students to conduct active research under supervision. At the University of Copenhagen (UCPH), Faculty of Health and medical sciences, the PhD students have the right to supervision and the duty to accept it. However, the PhD journey can sometimes be challenging and isolating heading to accomplish knowledge, skills and competences to conduct top-class, international-level research, and to take responsibility for research, development and teaching tasks. Therefore, there is an increasing need for a structured feedback system that supports the development and demonstration of these academic competencies and helps prevent loneliness.

Drawing on the UCPH booklet *"To Lead the Way,"* which aims to inspire reflection on supervisory practice, the theme *"Working with a range of different feedback techniques"* is highlighted as a core component. From a student perspective, the booklet in particular emphasises the "4 Cs" of feedback: feedback should be caring, concrete, constructive, and critical (Due et al., 2012). While these structured supervisory feedback practices remain essential for learning in HE, it does not fully address the need for continuous dialogue, critical reflection, and active engagement in the feedback process. Nicol & Macfarlane-Dick make the argument that formative assessment and feedback can help students take control of their own learning and become self-regulated learners (Nicol & Macfarlane-Dick, 2006). More specific, to make the shift from a passive recipient to become an active co-creator of academic dialogue, having students give feedback on each other's work (peer feedback) is one way of helping support the development of self-regulated learning (Nicol & Macfarlane-Dick, 2006; Gibbs & Simpson, 2004). In this project we therefore initiated an exploration of how a structured peer-triad feedback exercise can support PhD students' development of academic competencies while fostering a sense of academic community.

The IMPACT research environment at the Heart Centre, Rigshospitalet

The Research Unit for Clinical Nursing at the Heart Centre, IMPACT: Research & Care, was established in 2019 to strengthen and structure clinical nursing research and is where we are affiliated as postdocs. The unit conducts high-quality research across the full continuum, including descriptive studies, qualitative research, registry-based studies, surveys, pilot studies, and randomized controlled trials, including multicenter trials. Currently, eight PhD students, four post docs, three senior researchers and one professor are affiliated with IMPACT.

The unit's collegial feedback culture can be understood as a form of self-regulated learning, in which researchers refine their work through dialogue, reflection, and iterative improvement. Rather than serving solely as a mechanism for quality assurance, feedback supports deeper learning processes and fosters academic independence. However, making these processes more explicit by introducing a peer triad feedback tool could further enhance the pedagogical value experienced as deeper learning within this research environment. In addition, structured peer feedback offers an opportunity for PhD students to actively evaluate the work of peers, thereby strengthening own self-regulated learning.

Design and planning: Initial interviews with PhD students in IMPACT

We engaged five PhD students from the research unit to explore their experiences with and expectations of peer feedback. Individual interviews were conducted in January 2026 in a quiet conference room and lasted between 30 and 60 minutes. A semi-structured interview was used to guide the discussions (See table 1). The participants were female, trained nurses and PhD students aged 30 to 64 years. All were clinically and academically affiliated with the Heart Centre, Rigshospitalet. Both interviewers were clinical nurse specialists with independent postdoctoral-level research portfolios.

Table 1: Interview guide

PhD students' experiences with feedback	□ What experiences have you had with feedback during your PhD? □ How do you understand good feedback in research work? □ Can you describe positive experiences you've had with feedback? □ What made it a good experience? □ Can you describe less positive experiences with feedback? □ What made it a less good experience / what did you feel was missing?
PhD students' experiences with and wishes for peer feedback	□ What experiences do you have with giving and receiving feedback among PhD students? (Prompt: peer-to-peer feedback or cluster/group supervision, formal or informal — is it something you've discussed?) □ How did it take place, and how did you experience it? □ What worked well / less well? □ We are considering testing a systematic peer-feedback session

	where PhD students give feedback to each other — what are your thoughts on that? □ What would be important for you in such a setup? (Which conditions — frequency, group size, structure — would work best for you?) □ What types of challenges would you feel comfortable bringing into a group? □ Can you mention examples of learning activities that give you deeper understanding? (Prompt: e.g., writing groups, cluster supervision, journal clubs

Collectively, the participants had varied experiences with peer feedback. Most had no formalized experience with the method. Only two of the participants were currently engaged in an interdisciplinary peer-feedback research environment outside IMPACT, initiated either by a senior colleague or by the participant herself. One participant explained: *"Feedback gives me a lot, the chance to practice and to gain new perspectives on my research"* (I.1).

When asked about a future peer-feedback setup, the participants emphasized that a planned and formalized structure is essential for supporting learning: *"It is important that it [peer feedback] is formalized in some way"* (I.2). Another participant stated:

> "Especially, as a new PhD student, I experienced that it was difficult to know the structure around feedback… what was the framework, was it all up to me, what was the expectations and what was my role as a student? You know, it is a totally new world…" (I.4)

Another participant described

> "I guess, we all have some kind of unformal go to persons, but I believe that there has to be a specific aim, some kind of template. It is a leaning activity with an academic focus, so aim, template, framework and clearly defined roles is what it takes... we have to take this seriously." (I.3)

All participants agreed that in a future set-up, the primary goal should be to broaden own academic perspectives while also taking responsibility for contributing to each other's academic development during the PhD journey. Participants narrated that constructive feedback could help reveal aspect of your own work that may not be visible to yourself. At the same time, they highlighted the importance of all participants being well prepared but also dedicated and engaged in the feedback sessions. One participant described: *"Feedback sessions is an opportunity to be vulnerable together and thereby creating a feeling of belonging together, not feeling all alone*" and "*You need someone beyond your supervisors"*. (I.3). These initial interviews led us to the following overarching aim: to try out and evaluate a systematic peer feedback method among PhD students.

In this study, peer feedback is understood as a context-dependent activity where the outcomes are co-constructed by the interacting participants (Wertsch, 1998). So in social construction, the peer feedback participants achieve a shared purpose and understanding when interacting in groups.

The experiment: The peer-triad exercise as a structured feedback approach

We invited three PhD students to engage in the peer-triad exercise (see Figure 1). The exercise was inspired by Lauvås and Rump (2001) and an exercise introduced at UP course at Copenhagen University in May 2025. We presented the purpose with the session as the following:

> The purpose is to provide an opportunity to reflect on and discuss a self-selected academic issue within one's own research in

> collaboration with colleagues. This may include, for example, the structuring of an upcoming presentation, a challenging article draft, or a methodological issue that one wishes to discuss and receive feedback on from peers.

The pedagogical considerations for the peer-triad exercise were to introduce a structured peer feedback method to increase PhD students' awareness of the potential for receiving feedback from peers, rather than relying solely on supervisors. Peer feedback has been shown to be more empathetic, encouraging, applicable, and particularly helpful compared to feedback from teachers or supervisors (Rienecker, 2013). The peer-triad format was chosen to encourage participants to identify and articulate a specific, self-selected research issue on which they sought feedback. Allowing students to define the focus of the feedback encourages metacognitive reflection (Zimmerman, 2002; Flavell, 1979), and enhances motivation and engagement, since the feedback addresses issues that are personally relevant. Furthermore, it fosters self-regulated learning and ownership of the research process, while increasing the specificity and applicability of the feedback received (Roxå & Mårtensson, 2015). The exercise was designed to position participants as feedback providers, thereby offering an additional opportunity for learning through the process of giving feedback. Providing PhD students with the opportunity to give feedback is grounded in the argument that "feedback teaches the giver more than the recipient" (Rienecker, 2013, p. 275).

Therefore, the peer-triad exercise was designed with the following ILOs: That the PhD students are able to: 1. develop the ability to provide structured and constructive peer feedback on academic work, 2. reflect on and articulate specific research challenges in order to seek targeted feedback and 3. engage in collegial dialogue that supports self-regulated learning and the development of an academic peer community.

In the peer triad exercise, participants assume three distinct roles: interviewer, interviewee, and observer. Each role entails specific responsibilities. The interviewer facilitates the dialogue by posing questions and providing feedback, the interviewee engages with the

questions and receives feedback, and the observer systematically monitors the interaction, including time management and process-oriented observations (Gibbs & Simpson, 2004). Throughout the whole session, consisting of three rounds, each will try out the three roles.

The students participated in a single 75-minute session, divided into three 25-minute rounds. Each round consisted of a 15-minute interview, followed by 5 minutes during which the observer shared their perspective on the interaction. During the final 5 minutes, the interviewee reflected on their experience of the interview.

As this method of peer feedback was new to the PhD students, we sought to explore their experiences with the triad exercise. Accordingly, our aim was to generate insights on the following research objectives: How do PhD students from IMPACT experience a three role (triad) exercise as a method for peer feedback?

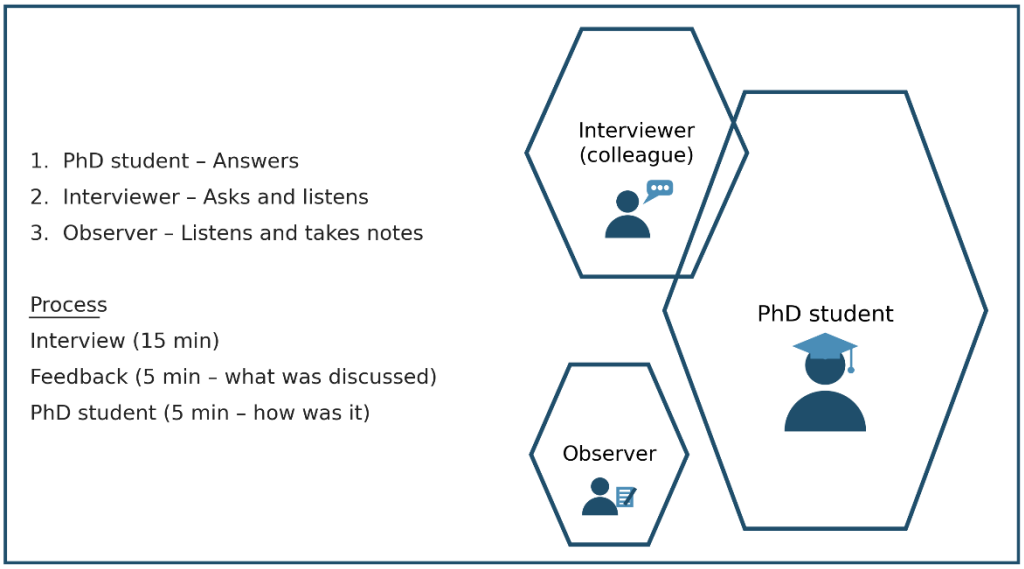


Figure 1: The peer-triad exercise

Evaluation of the peer-triad exercise

The peer-triad exercise was evaluated through a focus group interview involving the three participating PhD students. The interview was conducted at the conclusion of the session and facilitated by the authors. The interview lasted 20 min. The discussion was guided by an interview guide (See table 2).

Table 2: Interview guide, focus group

We have now created a space and jointly tested an academically structured feedback method for reflection and professional discussion in a triad between three colleagues, based on a self-selected research-related issue. To evaluate the session, we will spend the next 10–15 minutes sharing thoughts about the feedback method: • Share your immediate thoughts about the feedback exercise (did you notice anything in particular that you would like to mention). • How did you experience 1) the structure and 2) the learning environment. • What did the feedback session make you reflect on regarding your own presentation. • Can you highlight anything in particular that contributed to 1) self-reflection and 2) a deeper understanding of your chosen issue. • Did you get any ideas about what you should do next (did it challenge your original understanding of the problem). • How did you experience the two other roles (interviewer and observer).

Introduction to key insights: Overall, the empirical data show that PhD students experience peer feedback as a very valuable and fundamentally different approach from what they are used to, since it focuses on what is most pressing for them in the here and now. They emphasize that simply sharing challenges with other PhD students feels like a form of support, as they otherwise often feel quite isolated and lonely. One PhD student explains: *"I feel our conversation reflects a kind of academic loneliness […] where you wrestle with thoughts that you don't get to concretize."*

In this way, the peer triad feedback becomes a safe learning environment where PhD students can reflect collaboratively and experience themselves as part of a shared learning community, and where

it is possible to share vulnerable topics and challenges with confidence. This introduction sets the stage for the following four key insights:

1. **Need for peer feedback among PhD students**

The analysis indicates that PhD students experience a need to share reflections and uncertainties with peers - topics that are not necessarily raised in formal supervision. Several participants describe how they carry thoughts on their own that can be difficult to articulate without a space in which to formulate them. As one participant puts it: *"You struggle with certain thoughts, but you don't get them concretized."* Peer feedback thus becomes a place where these thoughts can be put into words and explored through dialogue with others.

Participants also point out that it can feel relieving to say things out loud and to hear others' perspectives: *"It's simply a big relief to say it out loud and talk it through, rather than sitting at my own desk and thinking it through for the twentieth time."* In this way, peer feedback functions not only as academic sparring but also as a way of breaking the individual reflection process and creating shared meaning around challenges in PhD work.

2. **Peer-feedback as reflection and support**

A central finding in the analysis is that the peer-feedback format differs from traditional supervision by focusing more on the PhD student's ongoing process rather than on a specific product. Participants describe how the method opens a space where they can talk about what currently occupies their attention in their work, rather than discussing only a draft text or a clearly defined academic problem. One participant formulates this by saying that the method *"has focused on me and on my process more than on the specific product."*

This form of feedback can function as a mirror for one's own thoughts and experiences, where other PhD students contribute perspectives that can both support, normalize, and legitimate the challenges experienced during the process. At the same time, the sense of safety within the group is highlighted as central to the benefits: *"I think the method works. It opens things up and creates space. And I think it's*

the sense of safety in being able to come here and share something for the first time." The peer-feedback format can therefore be understood as a reflective learning space in which both academic and personal aspects of PhD work can be brought into play.

3. Learning a new questioning technique – the interviewer role as a challenge

The analysis also shows that taking on the role of interviewer in the feedback situation can be challenging for participants. Several highlight that it requires a specific questioning technique to ask open, exploratory questions that support reflection in the feedback recipient. One participant, for example, describes the need to "warm up" in the role: *"It took me a long time to warm up. By the time a quarter of an hour had passed, I was much clearer in my mind and ready to ask questions."*

This indicates that the interviewer role is not just about asking questions, but also about developing a methodological awareness of how questions can open up reflection rather than steer the conversation in a particular direction. Participants also emphasize that the technique requires practice, particularly in asking questions in a curious and non-solution-oriented way: *"It's of course a questioning technique you need to carry with you—how do I ask openly and with curiosity?"* The learning thus involves both understanding the method and gradually building confidence in the role through practice.

4. Is familiarity a prerequisite for safe and meaningful peer feedback?

The analysis suggests that participants' familiarity with one another influences how peer feedback is experienced and used. Several participants highlight the advantage of already knowing each other's projects and where they are in their PhD processes. As one participant notes: *"The fact that we know each other and know where we each stand, that's a huge benefit."* This familiarity contributes to a sense of safety, making it easier to share unfinished ideas and more vulnerable reflections.

Participants also emphasize that their relationship creates a shared understanding. Because they already have insight into each other's projects and ways of working, they have a context for interpreting what is being said. As one participant explains: *"You have more of the context than a stranger would."* This shared background makes it easier to discuss and explore challenges without first establishing basic contextual understanding.

Overall, the analysis suggests that familiarity among participants supports both a sense of safety and the possibility of engaging more openly and exploratively with one's reflections. However, as the participants have not experienced this peer-feedback format with unfamiliar peers, it remains unclear to what extent prior familiarity is a prerequisite for establishing a safe and productive feedback environment.

Reflection on the outcome of the experiment

In this project, we introduced and piloted the peer-triad exercise as a structured approach among PhD students in the research unit, IMPACT at the Heart Centre of Copenhagen University Hospital. Rigshospitalet. Looking at ILOs of the experiment, the peer-triad exercise will be reflected on. Overall, we found that this structured approach gave the participants a formalized room and opportunity to share self-selected thoughts, reflections and challenges during their individual PhD path.

Our key insights were that this particular learning method appears to support the PhD students' ability to provide structured and constructive peer feedback on academic work to peers, as all participants actively engaged in giving feedback on a peer's research challenge. Additionally, the requirement to formulate a specific issue within own research beforehand encouraged reflection on one's own research process. Lastly, we found that the triad format created a supportive with high level of trust and sense of belonging where research challenges could be discussed openly. These findings echoes Nicol & Macfarlane-Dick (2006) argument that feedback can help students take control of their own learning and become self-regulated learners. Although we only piloted this structured approach within one triad, we believe that there is a high need for establishing this kind of microculture within HE and in our case,

within the PhD journey. As Roxå and Mårtensson (2015) describe, microcultures can function as important spaces for learning in HE, and activities such as the triad feedback exercise may contribute to the development of these small, trust-based networks. These networks enable dialogue about academic practice, where shared concerns can be discussed and negotiated, fostering a sense of collective engagement and responsibility. Engaging with peers in this experiment revealed this dynamic. In that sense, the peer-triad exercise may contribute to creating a small microculture within the social context of the IMPACT research unit, where participants can openly discuss research challenges and support one another, thereby fostering deeper learning. Beyond the development of academic competencies, such bottom-up, trust-based spaces may also help counteract feelings of academic isolation and loneliness (Bandholm et al., 2024).

Discussion of the experiment at the IMPACT research meeting

We discussed our experiment at a meeting within the research group, which was attended by one senior researcher and three postdoctoral researchers. The discussion gave rise to a range of reflections and questions, of which we will address a selected number in the following.

One central theme concerned the relationship between discussions taking place in peer supervision and those occurring within the formal supervisory setting. We considered whether, and in what ways, insights from the triad exercise should be integrated into supervisory meetings. In particular, when discussions in the triad focus on core academic aspects of the project—such as methodology, theoretical frameworks, or other disciplinary issues—it may be relevant to bring these perspectives into dialogue with supervisors. More broadly, this raised the question of how to delineate what belongs within the "supervisory space" and what may be more appropriately addressed within the triad format.

Another topic concerned whether this type of structured exercise offers something beyond informal conversations, for example, those taking place in a shared PhD office. This led to reflections on how to strengthen the sense of community among PhD students and whether such outcomes necessarily require a formalized structure. The reflections

suggested that, while informal interactions are important for building a sense of community, structured peer feedback may provide a more intentional space for students to share experiences, discuss challenges, and support one another. Going forward, we will therefore discuss how structured peer feedback can be incorporated into the PhD environment in a way that complements existing informal interactions and contributes to strengthening the sense of community among PhD students.

A third theme related to the working conditions of PhD students in clinical settings. These students are often employed part-time and may prioritize their clinical responsibilities over engagement in the research community. This is an important condition to consider when working with PhD students, as it highlights the need to ensure that they are provided with a supportive and meaningful learning environment.

Perspectives

Taken together, these reflections point to the importance of critically examining how different spaces for feedback and reflection are structured and valued within doctoral education. Notably, our findings indicate that the PhD students explicitly requested this form of feedback and expressed a desire for it to be more structured. This is particularly interesting in light of a possible tendency within the research group to assume that such feedback processes can be adequately accommodated within formal supervision.

Our results suggest that this assumption may overlook the distinct qualities of structured peer-based formats, such as the triad exercise, which can offer a different kind of reflective space and collegial engagement. This highlights the need to consider not only the content of feedback, but also the form and setting in which it is provided. From a pedagogical perspective, this points towards the value of intentionally designing complementary learning spaces that support both academic development and a sense of community among PhD students.

Looking ahead, we plan to implement a period in which PhD students will be invited to participate in this type of structured exercise on a more regular basis. In parallel, we aim to work more systematically with the feedback culture within our research unit. Initial steps have

already been taken, for instance, through piloting structured feedback sessions in which applicants received organized and focused feedback on grant proposals. These experiences, combined with our current findings, have made us aware that feedback holds an underutilized potential. Moving forward, we therefore intend to give greater attention to feedback practices and to develop more structured approaches that can support both individual learning and collective academic development.

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