



Near peer teaching in human anatomy: Perspectives from anatomy demonstrators

Maxine Loganathan¹, Johanna Maria de Winnaar¹, Quenton Wessels², and Janine C. Correia¹

Corresponding author: Janine C. Correia (jcorreia@sun.ac.za)

¹ Division of Clinical Anatomy, Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa.

² Division of Anatomy, School of Medicine, University of Namibia, Windhoek, Namibia.

Abstract

Near-peer teaching (NPT) is as a valuable pedagogical approach in anatomical education, enabling advanced students to facilitate the learning of junior peers. This qualitative exploratory study investigates the experiences of postgraduate students as near-peer demonstrators within the Division of Clinical Anatomy at Stellenbosch University. The aim was to explore how engagement in NPT influences demonstrators' understanding of human anatomy, teaching competencies and professional development. Using convenience sampling, ten current and former demonstrators participated in focus group discussions. Data were transcribed and thematically analysed to identify patterns in reflections and experiences. Four themes were identified: (1) Improved understanding and retention of anatomical knowledge through repetitive teaching; (2) Enhanced professional development, particularly in communication skills and self-confidence; (3) Challenges associated with limited preparation, balancing academic responsibilities and managing student expectations; and (4) Influence of NPT on shaping professional identity and career direction. Participants reported that teaching experiences deepened their anatomical insight and contributed to growth as future health professionals and educators. By assuming teaching responsibilities, demonstrators develop core graduate attributes, including communication, leadership, adaptability and professional identity, which constitute employability capital for various careers. This study highlights the reciprocal value of NPT as a tool to enhance undergraduate learning, and as a catalyst for developing teaching expertise and professional confidence. It recommends structured support frameworks, including targeted pedagogical training for improved communication between faculty and demonstrators. NPT can strengthen programme sustainability, support the alignment of training with curricular goals, and help prepare demonstrators for diverse roles in clinical practice, education and research.

Keywords

near-peer teaching (NPT), anatomy education, postgraduate students, employability, work-integrated learning, professional development, qualitative research

Introduction

Peer-assisted learning (PAL) refers broadly to student-to-student educational interactions that facilitate learning through collaboration and shared experiences (Topping, 1996). Near-peer teaching (NPT), a specific form of PAL, involves more experienced students—typically postgraduate students—

supporting undergraduate learners in mastering complex concepts (Evans & Cuffe, 2009; Sotgiu et al., 2022). Unlike PAL, more generally, NPT is characterised by a deliberate difference in educational experience between tutor and learner, with tutors usually being one or more years academically senior (Khan et al., 2025). Within the Division of Clinical Anatomy at Stellenbosch University, postgraduate anatomy demonstrators facilitate practical teaching sessions involving human dissection, prosections and histology. Their role extends beyond delivering anatomical content to providing hands-on guidance, simplifying complex concepts and fostering an interactive learning environment that encourages discussion and collaboration (Evans & Cuffe, 2009; McGaghie et al., 2009; Pintér et al., 2021). Throughout this paper, *learners* refer to undergraduate students, while *near-peer demonstrators* refer to current and former postgraduate students who have served in this teaching role.

NPT has become an increasingly valued educational strategy within health professions education because it promotes active learning, peer engagement and collaborative knowledge construction (Pintér et al., 2021). Previous research has consistently demonstrated benefits for undergraduate learners, including improved knowledge acquisition, greater engagement, enhanced communication and stronger critical thinking skills (McGaghie et al., 2009; Topping, 2005). In anatomy education specifically, NPT creates a supportive learning environment in which learners often feel more comfortable asking questions and discussing difficult concepts with near peers than with faculty members (Orsini et al., 2022). Such environments reduce learner anxiety, encourage participation and contribute to improved knowledge retention and academic performance while simultaneously fostering interpersonal skills essential for future healthcare professionals (Orsini et al., 2022).

While the positive effects of NPT on undergraduate student outcomes, such as improved understanding and retention of anatomical knowledge, are well documented, much less is known about its impact on postgraduate demonstrators, with existing literature largely focusing on learners' perspectives and leaving a clear gap in understanding the experiences and professional development of near peer demonstrators themselves. (McGaghie et al., 2009). Orsini et al. (2022) examined the benefits of NPT for demonstrators, including improved knowledge retention and the development of transferable skills for future careers. However, their study primarily focused on the educational environment and did not extensively explore how these experiences shape demonstrators' academic and professional trajectories across diverse educational systems.

Scholarship on graduate employability provides an important lens through which to interpret the value of near-peer demonstrating. Yorke (2004) define employability as a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and succeed thereafter. Within this framework, NPT roles offer postgraduate students structured opportunities to develop precisely such attributes: communication, leadership, adaptability and an emerging professional identity. Work-integrated learning (WIL) research similarly demonstrates that students who engage in authentic, practice-based activities during their studies report higher levels of career readiness and professional confidence (Jackson, 2015). Near-peer demonstrating constitutes a form of WIL in which postgraduate students operate as practitioners-in-training, applying and extending their disciplinary knowledge in professional-adjacent contexts. This perspective repositions NPT not merely as a pedagogical support mechanism but as a vehicle for graduate employability development within health professions education.

Building on Orsini et al.'s findings (2022), this study investigated the perceptions and experiences of postgraduate students who have served as near-peer demonstrators in human anatomy at the Division of Clinical Anatomy. It aimed to explore how NPT, as a form of WIL, impacts postgraduates' understanding of anatomy, fosters their professional development and contributes to their development of teaching skills and pedagogical knowledge. Through the development of these disciplinary and transferable competencies, the study also examined how participation in NPT may strengthen graduate employability. By addressing these dynamics, this research seeks to bridge the

existing gap in literature on the impact of NPT on postgraduates while also providing insights that could inform the design and optimisation of NPT programmes (Orsini et al., 2022).

This investigation is essential for tailoring educational strategies that benefit both learners and demonstrators. Understanding the dual impact of NPT can enhance the academic experience for all participants and support the development of demonstrators into well-rounded professionals. Moreover, insights from this study have broader implications, including improving teaching quality, refining curriculum design and fostering a vibrant academic community within medical education.

The primary research question guiding this study was: What are the perceptions and experiences of current and former postgraduate students who have served as near-peer demonstrators in human anatomy programmes? More specifically, the study examined how participation in NPT influenced demonstrators' understanding of anatomy, professional development, teaching experiences and employability through the development of transferable skills, including communication, leadership, adaptability and reflective practice. Ultimately, the findings aim to inform the development of NPT programmes that better support postgraduate students in their dual roles as educators and developing professionals while strengthening NPT as a structured WIL experience within health professions education.

Educational Context

Within the Division of Clinical Anatomy, postgraduate anatomy students are appointed on fixed term, part-time contracts and receive remuneration for assisting with practical anatomy teaching across several undergraduate health professions programmes. Medical students attend two three-hour practical sessions per week during the second semester, Bachelor of Science students attend one two-hour practical session per week, and occupational therapy, nursing, dietetics and physiotherapy students generally attend a three-hour practical session every second week.

Demonstrators are allocated to practical sessions on a rotational basis by the demonstrator coordinator. At the beginning of the academic year, learners are introduced to the demonstrators and informed of their role in the practical classes. Demonstrators have access to the relevant practical timetables and guides, allowing them to prepare for the content and activities planned for each session. During practical sessions, demonstrators work alongside lecturers as facilitators of learning. They guide students in identifying anatomical structures, explain anatomical concepts and relationships, answer questions, encourage discussion and support participation in the practical activities.

Materials and Methods

Study design

A qualitative exploratory study within the interpretive/constructivist paradigm was conducted to explore the perceptions and tutoring experiences of postgraduate anatomy students who have served as near-peer demonstrators. This study design is ideal for understanding complex phenomena of demonstrators' perspectives as it allows for in-depth exploration of their experiences, providing rich and detailed data that quantitative methods may overlook (Creswell & Poth, 2018). Its flexibility in data collection methods, such as focus group interviews, enables adaptation to participant responses, fostering authentic insights. Additionally, this design promotes the development of themes directly from the data itself, ensuring that findings are grounded in participants lived experiences (Creswell & Poth, 2018).

To ensure rigour and transparency throughout, the study was conducted and reported in accordance with the Standards for Reporting Qualitative Research (SRQR) (O'Brien et al., 2014), with systematic attention to study design, participant selection, data collection, analysis, and ethical considerations.

This study was approved by the Faculty of Medicine and Health Sciences, Health Research Ethics Committee (Ethics reference number: U24/04/317).

This research took place at the Division of Clinical Anatomy, Department of Biomedical Sciences (BMRI), Faculty of Medicine and Health Sciences (FMHS), Stellenbosch University, during 2024 and focused on both current and past postgraduate students involved in Anatomy Demonstrator roles.

Participant recruitment

The study's participant inclusion criteria required participants to be either current or former postgraduate students who had served as Anatomy Demonstrators, with current demonstrators actively registered in the Division of Clinical Anatomy and past demonstrators having participated within the last ten years. Exclusion criteria stated that undergraduate (including honours) students from the Division of Clinical Anatomy or other divisions were ineligible. The study population consisted of two groups: present demonstrators currently registered in the Division of Clinical Anatomy (2024) and past demonstrators who have served in this capacity within the last ten years (2013-2024). Importantly, participation in this study was entirely voluntary, and participants did not receive any additional financial compensation for participating in the research.

Recruitment was coordinated by the principal investigator (PI), who contacted current anatomy demonstrators via student email and reached former demonstrators through an electronic flyer distributed through the Division of Clinical Anatomy's Facebook Page. Convenience sampling was used to recruit participants willing to share their experiences. Although this approach facilitated efficient recruitment, it may have introduced selection bias, as individuals who volunteered may have had more positive or more negative experiences than those who chose not to participate. Consequently, the findings may not be generalisable to all anatomy demonstrators. Information pamphlets were distributed to potential volunteers to ensure that they understood the study's goal and their role in it. Each participant provided written consent prior to participation, ensuring that they were fully informed about the study's objectives, procedures and potential risks. The consent forms provided assurances to participants about confidentiality and data protection.

Focus Group Interviews

Data collection involved focus group style interview sessions designed to gather comprehensive and measurable insights and allowed for comparative analysis across both sessions. Each focus group session lasted between 60 to 90 minutes. For the current demonstrators, an in-person focus group interview was conducted in a soundproof room and for the previous demonstrators, a virtual focus group interview was held on Microsoft Teams™, with four to six participants present in each focus group session. Participants were asked a series of standardised questions based on research by Orsini et al. (2022). The questions from Orsini et al.'s study served as a foundational framework for discussion; however, each question was adapted to suit the specific focus group – former or current demonstrators. Additionally, follow-up questions emerged organically during the focus group sessions, allowing for a deeper exploration of participants' experiences.

To ensure confidentiality and anonymity, all data collected was handled in accordance with the Protection of Personal Information Act (POPIA) and institutional ethical guidelines. Participants were assigned unique identifiers to protect their identities, and any identifying information was removed from transcripts and reports. Furthermore, data were stored securely with restricted access to maintain privacy.

The focus group schedule is provided in the Additional Information section. Each focus group session consisted of four to six participants, with the PI acting as the interviewer. To ensure unbiased facilitation, a research team member served as the moderator during each session. The moderator was trained to foster equal participation and maintain the flow of the discussion. This training included

techniques for creating an inclusive environment, managing group dynamics, and employing active listening to validate participants' contributions.

To minimise bias, the PI used neutral language and avoided leading questions that could influence participants' responses. The PI was also trained to recognise and manage personal biases, ensuring a neutral stance throughout the discussions. This approach helped create a safe space where participants felt comfortable sharing their thoughts and experiences. During the sessions, the moderator worked closely with the PI to encourage quieter participants to share their opinions, ensuring all voices were heard. The moderator also used strategies like paraphrasing participants' comments to clarify understanding and prompt further discussion without steering the conversation. Focus group data were recorded using voice memos on Microsoft Teams™ and transcribed with Turboscribe™ transcription software.

Data Analysis

Upon completion of both focus groups, thematic analysis was conducted following Creswell's (2014) six-step qualitative data analysis process, which provided a structured and systematic framework appropriate for our qualitative exploratory design. The process began with organising and preparing the data by transcribing the recorded interviews. The PI then read the transcripts thoroughly to become familiar with the content and context of the discussions. The transcripts were then systematically coded using an inductive approach, allowing themes to be identified directly from the data (Creswell, 2014). For example, when multiple participants mentioned challenges related to communication, a code labelled 'communication barriers' was created. Each segment of text was assigned one or more codes that captured its essence. More specifically, coding proceeded in two phases. In the first (open coding) phase, the PI assigned descriptive labels to discrete units of meaning: for example, passages in which participants described explaining concepts repeatedly were coded 'repetitive teaching', while passages describing nervousness before sessions were coded 'initial anxiety'. In the second (focused coding) phase, codes with shared conceptual properties were grouped into provisional categories; for instance, codes such as 'repetitive teaching', 'active revision' and 'knowledge refreshment' were aggregated under the broader category 'knowledge deepening through teaching'. Provisional categories were then compared axially to identify overarching themes and their internal relationships. As a validity check, the full research team independently reviewed a random 20% sample of coded extracts against the identified themes to confirm consistency before the thematic structure was finalised.

After coding, the PI categorised related codes into broader themes. These identified themes were presented in a coherent narrative format, supported by direct participant quotations to highlight key points. The outcomes were analysed, with the PI reflecting on their implications for medical education practices, aiming to provide actionable insights to enhance NPT programmes in anatomy education.

To minimise bias, the entire research team participated in the coding process, ensuring multiple perspectives in theme identification. Regular meetings and electronic communication were used to resolve disagreements and ensure consensus. The research team recognised that their diverse backgrounds and professional roles may have shaped their interpretations of the findings. The PI, an Honours student in anatomy, conducted most of the data collection and initial analysis, providing a unique perspective as a near-peer demonstrator. The other two authors, lecturers in the Division of Clinical Anatomy, contributed their expertise in anatomy education and NPT, which may have influenced their interpretations. Additionally, an external research team member from the University of Namibia provided an outside perspective, enriching the analysis. This collaborative approach balanced perspectives and enhanced the credibility of the findings.

To ensure reliability, an intercoder agreement was established, with the authors independently coding a subset of the data. Discrepancies were discussed, improving consistency and reliability in theme

identification. Regular team discussions also helped clarify coding criteria and ensured diverse perspectives were considered.

The influence of the researchers' positionality was critically reflected upon during data interpretation through two complementary practices. The PI maintained a reflective journal throughout the research process, documenting personal background, experiences, and potential biases to promote self-awareness and transparency. In addition, all four researchers engaged in regular group debrief discussions, during which interpretations were collectively examined and positionality openly interrogated to minimise undue influence on the findings.

Results

Ten participants volunteered to take part in the study. Seven of the participants were current postgraduate students and the remaining three were graduates. Importantly, all seven current demonstrators in the Division of Clinical Anatomy participated in the study, resulting in a 100% response rate for this group. This full inclusion ensured a comprehensive representation of the experiences and perspectives of active demonstrators. However, only three past demonstrators were successfully recruited, limiting the breadth of insights from this subgroup. Despite this, the data provided by the past demonstrators offered valuable reflections on the longer-term impacts and graduate employability of their NPT experiences. These combined contributions strengthened the study's findings, providing a well-rounded exploration of NPT within the division.

Participants were identified by their participant number and type of focus group they participated in (e.g., P1FG1 for participant one, focus group one). Table 1 categorises the participants based on their focus group, providing information about their occupation and roles in the context of the study.

Table 1: Participant Identifier Codes

Participant	Focus Group	Student or Occupation	Participant identifier
P1	FG1	Postgraduate Anatomy Student	P1FG1
P2	FG1	Postgraduate Anatomy Student	P2FG1
P3	FG1	Postgraduate Anatomy Student	P3FG1
P4	FG1	Postgraduate Anatomy Student	P4FG1
P5	FG1	Postgraduate Anatomy Student	P5FG1
P6	FG1	Postgraduate Anatomy Student	P6FG1
P1	FG2	Involved in marketing, journal editing and business owner	P1FG2
P2	FG2	Medical Education Specialist	P2FG2
P3	FG2	Postgraduate Anatomy Student	P3FG2
P4	FG2	1st year medical student (Former postgraduate student)	P4FG2

The thematic analysis of the transcribed material developed four major themes and nine sub-themes. The data generated across both focus group discussions was considered sufficient to construct a rich and meaningful thematic analysis, with the findings reflecting the depth and complexity of participants' experiences rather than an exhaustive account of all possible perspectives (Braun & Clarke, 2021; Morse, 2015). Table 2 displays the four themes and sub-themes derived from participants' responses. Italicised responses from the participants are included in the results as well.

Table 2: Main themes and subthemes

Themes	Subthemes
1. Enhanced understanding in human anatomy	• Learning through repetition • Knowledge refreshment
2. Professional development and confidence building	• Communication and public speaking • Confidence through responsibility
3. Challenges in NPT	• Preparation and support issues • Balancing responsibilities
4. Impact on professional trajectory	• Impact on career development • Skills transferability • Building professional networks

Theme 1: Enhanced understanding in human anatomy

This theme highlights the impact of serving as a demonstrator on postgraduate students' anatomical knowledge and understanding and is divided into two subthemes: *Learning through repetition* and *Knowledge refreshment*. These subthemes are used to illustrate how the repetitive and active nature of anatomy instruction enhanced the demonstrators' grasp and retention of complex anatomical concepts, enabling them to effectively teach these concepts to their peers.

Learning through repetition

Participants described repeated teaching as a key mechanism for strengthening their anatomical knowledge. Revisiting concepts through teaching reinforced learning, highlighted gaps in understanding and improved confidence in explaining anatomical content. As P2FG2 explained, repeatedly teaching anatomical concepts strengthened their own learning, while P1FG2 reflected on how teaching highlighted forgotten knowledge and reinforced understanding over time. P5FG1 similarly emphasised that repeatedly explaining the same concept to different students further consolidated their own learning.

I think the repetition was really helpful for my own learning. I saw the value in doing that. (P2FG2)

When I became a demonstrator myself, I realised there is so much to still know. And also, knowledge leaves. Knowledge comes back. Repetition helps. Teaching, it helps. (P1FG2)

You have to explain the same thing in three different ways to ten different people. (P5FG1)

These findings suggest that repeated teaching reinforced anatomical knowledge by encouraging continual revision, reflection and deeper understanding.

Knowledge refreshment

Participants described demonstrating as an ongoing process of knowledge revision. Regular preparation for teaching sessions encouraged continual engagement with anatomical content and helped maintain confidence in explaining complex concepts. For example, P3FG1 explained that teaching required regular revision to maintain anatomical knowledge, while P1FG2 described how initial uncertainty gradually gave way to greater confidence as repeated teaching reinforced their understanding.

If I don't demonstrate then I don't remember anything. So, it does force you to actually revise all of your anatomy knowledge. (P3FG1)

So, on the first day of the dissection, you find that you are rusty with the knowledge. But then over time, you become more confident (P1FG2)

These findings suggest that demonstrating promoted continual knowledge revision, reinforcing both participants' anatomical understanding and confidence in teaching the subject.

Theme 2: Professional development and confidence building

This theme highlights the impact of NPT on postgraduate students' professional skills and confidence and is divided into two subthemes: Communication and public speaking and Confidence through responsibility. These subthemes illustrate how teaching their peers enhanced demonstrators' communication skills, public speaking abilities and overall professional confidence.

Communication and public speaking

Participants reported that demonstrating strengthened their communication and public speaking skills. Teaching peers required them to adapt explanations to different learning needs while increasing their confidence in presenting complex anatomical concepts. P1FG2 highlighted the value of communicating with learners from different backgrounds, P3FG2 explained how teaching anatomy strengthened communication within an academic setting, and P1FG2 further reflected on how these experiences improved overall confidence when speaking in front of others.

You learn how to communicate with people of all levels, and that definitely manifests even in daily life. (P1FG2)

I learned how to communicate better, especially in anatomy. It helped me accelerate that process as an aspiring lecturer. (P3FG2)

It helped with your confidence, and I saw how that was beneficial to me overall in terms of public speaking. (P1FG2)

These findings demonstrate that demonstrating fostered communication and public speaking skills that participants perceived as valuable for their future professional practice and graduate employability.

Confidence through responsibility

Participants associated the responsibility of demonstrating with increased professional confidence. Managing teaching sessions and responding to students' questions encouraged greater self-confidence and preparedness for future professional roles. P3FG1 reflected on becoming progressively more comfortable speaking in front of groups, while P1FG2 explained that confidence developed naturally through repeated teaching and growing familiarity with the anatomical content.

It definitely increases your confidence. Just looking at when I first started versus now, if a lecturer would have given me the mic to make an announcement, I'd be like, oh, no, thank you. But now you get used to it and you do build the confidence. (P3FG1)

Teaching it helps. So, on the first day of the dissection, you find that you are rusty with knowledge. But then over time you become more confident. (P1FG2)

Overall, participants perceived the responsibility of demonstrating as an important contributor to their professional confidence and development.

Theme 3: Challenges in NPT

This theme explores the problems and obstacles encountered by postgraduate students working as demonstrators and is separated into two subthemes: *Preparation and support issues* and *Balancing responsibilities*. These subthemes emphasise the difficulties associated with insufficient preparation, a lack of support and juggling academic and teaching commitments.

Preparation and support issues

Participants identified insufficient preparation and communication from lecturers as important challenges. They described feeling underprepared for teaching sessions and emphasised the need for clearer expectations and greater support. For example, P5FG1 explained that inadequate communication often left demonstrators feeling unprepared, while P3FG2 contrasted this experience with demonstrators who had clearer guidance and consequently found preparation easier.

Sometimes lecturers wouldn't communicate with us, and that led to feeling unprepared. (P5FG1)

...I think in terms of preparation, in that regard, maybe it became easier for them to prepare because they knew exactly what they were going to do. Whereas for us coming in, it was a bit more like you're not sure what's going to happen. So, because of that reason, then it made it a little bit more complicated to prepare. (P3FG2)

These findings indicate that participants associated clearer preparation, communication and support with feeling better prepared for their teaching responsibilities.

Balancing responsibilities

Participants described balancing academic responsibilities with demonstrating as challenging. They highlighted the importance of adaptability, teamwork and effective time management to manage competing demands. P6FG1 described the need to continually adapt to changing circumstances during teaching sessions, while P1FG2 highlighted the importance of flexibility when unexpectedly covering additional teaching responsibilities.

Sometimes you must chop and change every two seconds. I think teamwork also comes in with that. (P6FG1)

You have to be adaptable. Sometimes you step into a session not even scheduled for you. (P1FG2)

Together, these findings show that participants relied on adaptability, teamwork and flexibility to manage competing teaching and academic responsibilities.

These subthemes highlight the considerable challenges for near-peer demonstrators. Rather than representing purely logistical barriers, these challenges highlight structural gaps in the design of NPT as a WIL experience. The absence of formal preparation and support may limit the extent to which students can fully benefit from the employability-enhancing potential of the role.

Theme 4: Impact on professional trajectory

This theme explores how serving as near-peer demonstrators played a crucial role in shaping the professional development and graduate employability of the past demonstrators. It opened career opportunities and enhanced essential skills that directly contributed to their career paths, particularly in academia, teaching and healthcare-related fields.

Impact on career development

Former demonstrators described the NPT experience as influential in shaping their career choices by providing teaching experience and opening professional opportunities. P3FG2 explained that the skills developed through teaching contributed directly to subsequent employment opportunities, while P2FG2 reflected that the demonstrator role helped reveal an interest in teaching that ultimately became a central component of their career.

Teaching anatomy gave me relevant skills. It helped me get jobs, and I now focus on teaching as part of my career. (P3FG2)

The Demi (demonstrator) experience really helped me find a teaching role. I didn't realise I liked teaching until I was a demi. Now it's a significant part of my career. (P2FG2)

These findings indicate that participants viewed demonstrating as an important influence on their career development and professional aspirations.

Skills transferability

Participants reported that communication, teaching and leadership skills developed through demonstrating transferred readily to subsequent professional roles and enhanced their employability. Participants further emphasised that the skills acquired through demonstrating extended well beyond anatomy education. P2FG2 explained how prior teaching experience strengthened later job applications, while P3FG2 described how clear communication and teaching skills continued to support their current professional role.

The skills I learned as a demonstrator were invaluable when I applied for a teaching role. I could showcase my experience and confidence in working with students, which really set me apart. (P2FG2)

The ability to teach and explain things clearly has definitely helped me in my current job. I've moved more into a role where teaching is central to my work. (P3FG2)

Participants perceived the skills developed through demonstrating as transferable to a range of professional contexts beyond anatomy education.

Building professional networks

Participants also highlighted the value of the professional networks established through demonstrating, which supported future career opportunities and professional development. P2FG2 described how these networks created opportunities for future employment, while P1FG2 similarly reflected on the importance of building professional contacts that continued to benefit their career development.

I realised that all of the jobs that I got after a postgrad student and while I was a postgrad student was through that network, which was very fortunate. There's a lot of opportunities that comes from building those colleagues and those relationships. And I think that that shouldn't be undervalued. (P2FG2)

I think it definitely helped me as an individual build my contacts and my network. (P1FG2)

Overall, participants viewed the professional relationships established through demonstrating as valuable contributors to their ongoing career development and graduate employability.

Discussion

This study explored postgraduate anatomy demonstrators' experiences of NPT within a WIL context. Four interrelated themes were developed, demonstrating that NPT supported disciplinary knowledge, professional development and graduate employability while also highlighting organisational challenges that may limit these benefits. Collectively, the findings suggest that NPT extends beyond a teaching strategy, functioning as an authentic learning experience through which postgraduate students develop transferable skills and professional identity.

Previous studies have demonstrated that NPT promotes active learning, peer collaboration and academic achievement while fostering communication, teamwork and leadership skills (Glynn et al., 2006; Hall et al., 2018; Orsini et al., 2022). The present findings build on this evidence by illustrating how these educational benefits translate into broader graduate employability outcomes within an anatomy WIL programme. At the same time, participants identified organisational challenges related to preparation, support and workload, suggesting that the employability benefits of NPT depend not only on participation but also on effective programme design.

Although NPT falls within the broader PAL literature, the demonstrators in this study occupied a distinct educational role. They were postgraduate students teaching academically junior learners within a formal, remunerated anatomy programme and worked alongside faculty during practical teaching. The findings therefore extend NPT scholarship by showing how the near peer teacher role may contribute not only to reciprocal learning, but also to the professional development, employability and career direction of the demonstrators themselves.

Enhanced understanding of human anatomy

The results gathered after the completion of both focus group interview sessions show that the subject of improved comprehension of human anatomy arose strongly from participants' experiences. Participants noted that repeated teaching sessions enhanced their understanding of anatomical topics. This finding is consistent with previous research done by Roediger and Butler (2011) that emphasises the impact of repetition in solidifying learning. Furthermore, research conducted by Carpenter et al. (2022) has demonstrated that well-established cognitive theories, such as retrieval practice and spaced repetition, emphasises the recalling of information that strengthens memory retention and comprehension. Teaching others has been found to strengthen one's own comprehension, a phenomenon supported by constructivist learning theory, which promotes active participation in the learning process (Glynn et al., 2006). Participants reported that this repeated involvement helped them find inadequacies in their knowledge, motivating more research and study. This ongoing cycle of learning is essential in a complex discipline such as anatomy, where a thorough understanding is essential for future clinical care (Widyahening et al., 2019).

Furthermore, the necessity to retain a current understanding of anatomical structures kept participants interested in the material. The necessity to adequately explain concepts to peers minimises learning stagnation. This active involvement not only strengthened their devotion to the subject, but it also improved their general academic performance (Pintér et al., 2021). According to research done by Glynn et al. (2006), peer-assisted learning environments promote deeper engagement and critical thinking skills, both of which are required to master complicated disciplines such as anatomy. The findings indicate that NPT generates an environment in which demonstrators are not only educators, but also lifelong learners who are constantly upgrading their knowledge base.

Together, these findings suggest that repeated teaching encouraged demonstrators to engage in continual retrieval and revision of anatomical knowledge, reinforcing both conceptual understanding and long-term retention. This supports the view that NPT benefits not only learners but also demonstrators through active engagement with disciplinary knowledge.

Professional development and confidence building

The second theme demonstrated that participants' communication and public speaking skills improved after serving as demonstrators. Participants reported significant gains in their ability to effectively communicate difficult topics and alter their teaching techniques to fit varied learning requirements. This adaptability is especially crucial in medical education, as students frequently come from diverse backgrounds and with varying degrees of understanding (Hall et al., 2018). Additionally, Ramani and Leinster (2008) demonstrated that effective communication is a vital competency for healthcare practitioners; consequently, strengthening these abilities throughout NPT can have long-term benefits beyond academics (Ramani & Leinster, 2008). Interestingly, the experience of adjusting to diverse learners also mirrors clinical settings where healthcare professionals need to adapt their explanations based on the patient's background or condition (Zheng & Wang, 2022).

Moreover, the responsibility that comes with handling instructional tasks helped participants gain confidence in their professional abilities. Participants recounted situations in which they had to take on unexpected roles or face unexpected obstacles during sessions, which helped them gain confidence. This outcome is consistent with earlier research done by Zheng and Wang (2022) and

Commented [KH1]: Is this the Zheng and Wang (2022) that is already in your reference list? If so, please use both author's names ('et al.' is only used for three or more authors). If there is an additional reference, please add it to the reference list.

Commented [D1R2]: Thank you for the comment. The names of both authors have now been used.

Orsini et al. (2022) emphasising the relevance of experience learning in increasing student confidence. In addition to this, Orsini et al. (2022) discovered that demonstrators reported higher self-efficacy and preparation for future responsibilities because of their teaching experiences. By adopting these responsibilities, participants not only improved their public speaking skills, but also gained a sense of control over their learning and teaching processes.

Although participants generally reported increased confidence, these benefits are unlikely to be experienced uniformly. Self-efficacy theory suggests that individuals with lower baseline confidence may require additional support and constructive feedback to fully benefit from challenging teaching experiences (Bandura, 1997). This reinforces the importance of structured supervision within NPT programmes to ensure that demonstrating remains a positive developmental experience.

Challenges in NPT

Despite the benefits of NPT, participants encountered hurdles. A common criticism was a lack of appropriate preparation and assistance from faculty members. This gap further reflects the instructional issues faced with the NPT model design. Participants indicated emotions of unpreparedness because of inadequate communication about teaching materials, which frequently led to concern about delivering the subject properly. This conclusion underscores a significant gap in the execution of NPT programmes and emphasises the fact that effective communication between faculty and demonstrators is required to ensure that demonstrators feel prepared to teach (Durán et al., 2012).

Participants continuously pointed out the need for more specific expectations and resources to properly prepare them for their duties as educators. In addition, Zheng and Wang (2022) underscores that without adequate guidance, even initiative-taking demonstrators may struggle to manage the dual responsibilities of teaching and their own studies, which can lead to decreased teaching quality and an increase in stress levels.

Furthermore, participants struggled to balance academic obligations with teaching responsibilities. This problem was exacerbated by a lack of formal training and assistance, which made it difficult for them to manage both tasks effectively. Many participants reported feeling overwhelmed by the responsibilities of their studies while still teaching. These problems highlight the importance of established support systems within NPT programmes to assist demonstrators in efficiently managing their dual roles. Previous research done by Spies et al. (2021) concurs with the findings of this study and have found that without proper support mechanisms, demonstrators may endure significant levels of stress and perform poorly.

These findings suggest that structured preparation, mentorship and regular feedback are essential to maximise the educational value of NPT. Similar recommendations have been reported in previous NPT studies (Orsini et al., 2022; Pintér et al., 2021).

The difficulties faced by demonstrators in managing multiple roles, dealing with insufficient preparation, or facing lack of support can undermine their self-efficacy, especially if they perceive these challenges as overwhelming. According to Self-Efficacy Theory (Bandura, 1997), individuals who encounter challenges without proper support may feel their capabilities are limited, which can result in lower motivation or increased stress. However, providing structured support and mentorship can improve their confidence in their ability to overcome these challenges, leading to higher self-efficacy (Bandura, 1997).

Impact on professional trajectory

This theme emphasises the role that NPT played in shaping participants' career prospects for the former demonstrators enrolled in the study. The NPT experience not only opened doors to new career opportunities but also allowed participants to develop skills that were crucial in their professional

development and graduate employability. Whether by enhancing communication abilities, fostering professional relationships or guiding participants toward new career directions, the NPT role played a part in helping them secure positions and navigate their career paths (Evans & Cuffe, 2009). The ability to convey complex information to diverse audiences is consistently identified as a priority graduate attribute by health professions employers (Yorke, 2004). The demonstrator role, by placing postgraduate students in a position of instructional responsibility, creates an authentic context in which this attribute is developed through practice rather than simulation. This is consistent with Jackson's (2015) finding that students in work-integrated roles report stronger growth in communication self-efficacy than peers in lecture-based programmes alone.

Two participants found that teaching anatomy refined their career aspirations, particularly in academia and medical education, with some finding jobs directly because of their demonstrator experience. The current findings align with Orsini et al. (2022), who highlighted that peer-assisted teaching enhances both content mastery and an affinity for educational roles. Beyond career direction, NPT strengthened essential skills such as communication, leadership and adaptability, which are vital in diverse professional settings. Bandura's self-efficacy theory further supports this, emphasising that teaching roles boost confidence, making individuals more prepared for professional responsibilities. Additionally, research by Glynn et al. (2006) and McGaghie et al. (2009) underscores that peer-assisted learning enhances problem-solving and critical thinking, competencies essential in healthcare and research careers. Consistent with previous peer assisted teaching research, participants reported improved anatomical knowledge, communication skills and confidence (Glynn et al., 2006; Hall et al., 2018; Orsini et al., 2022). However, the present study also identified longer term outcomes, including professional networking, clearer career direction and employment opportunities, which were less prominent in the studies cited above.

Moreover, NPT provided demonstrators with networking opportunities that facilitated job placements and collaborations, facilitating career progression. This supports findings by Durán et al. (2012), who noted that NPT fosters mentorship and professional engagement, creating pathways for career advancement. However, challenges such as inadequate preparation and institutional support were identified, highlighting the need for structured mentorship programmes and formalised teaching certifications to maximise NPT's benefits (Kruskie et al., 2023; Pintér et al., 2021). Even though these experiences contributed to professional growth and identity, further research, particularly longitudinal studies, could improve knowledge of the long-term career effects of NPT. By integrating career development initiatives and improving faculty engagement, institutions can ensure that NPT not only enhances student learning but also serves as a valuable steppingstone in professional advancement (Khapre et al., 2021).

Taken together, the four themes suggest a developmental cycle that is consistent with both self-efficacy theory and graduate employability frameworks. As demonstrators gain repeated mastery experiences through teaching (Theme 1), their self-efficacy increases (Bandura, 1997), which in turn supports the development of communication competence and professional confidence (Theme 2). These transferable attributes constitute employability capital in the sense described by Yorke (2004): achievements that make graduates more likely to succeed in competitive professional environments. Theme 4 extends this further by showing that the NPT role also provides networking opportunities and professional identity formation experiences that are characteristic of high-quality WIL (Jackson, 2015).

The challenges identified in Theme 3 — insufficient preparation, competing academic demands and limited faculty support — are therefore not merely logistical concerns; they represent structural gaps in the WIL design that, if unaddressed, may diminish the employability-enhancing potential of NPT. Institutions seeking to maximise this potential should treat near-peer demonstrating not as an informal support mechanism but as a formally recognised WIL component, with corresponding support structures, training frameworks and acknowledgement in graduate profiles.

The organisational challenges identified in this study also have implications for programme sustainability. Previous work has shown that NPT programmes frequently rely on the intrinsic motivation of demonstrators while offering limited formal institutional support (van de Mortel et al., 2016; Zhu & Brennan, 2024). Although financial remuneration may contribute to programme sustainability, evidence suggests that remuneration alone is insufficient. Clearly defined roles, structured preparation, academic oversight and ongoing mentorship appear to be more important determinants of successful NPT implementation (Leong et al., 2012).

Overall, the findings demonstrate that NPT represents considerably more than a teaching strategy within anatomy education. When intentionally designed as a structured WIL experience, it provides postgraduate students with opportunities to consolidate disciplinary knowledge, develop transferable professional competencies and establish professional identities that extend beyond graduation. Institutions wishing to maximise these benefits should therefore recognise NPT as an educational strategy that simultaneously enhances student learning and graduate employability through appropriate preparation, mentorship and institutional support.

Future implications

The findings of this study have important implications for the design and implementation of NPT programmes in anatomy education. Institutions should establish clear communication channels between faculty members and demonstrators, ensuring that expectations, responsibilities and teaching materials are communicated well in advance to promote preparedness and confidence (O'Shaughnessy, 2018). In addition, structured training in pedagogical principles, communication and classroom management should be incorporated into demonstrator preparation to equip students with the skills required for effective teaching (Frearson & Gale, 2017). In response to these findings, compulsory peer training has since been introduced for all new and current demonstrators within the Division. This self-paced online course requires approximately 16 notional hours and focuses on general facilitation skills and techniques. The course complements discipline specific guidance, practical teaching resources and regular consultation with lecturers.

The findings further support the implementation of formal mentorship programmes in which experienced educators or senior demonstrators guide novice demonstrators throughout their teaching experience. Such programmes could include mentorship in teaching practice, development of teaching portfolios, maintenance of disciplinary knowledge and opportunities for professional networking. Regular feedback, ongoing support and clearly defined learning objectives would further strengthen demonstrators' teaching effectiveness, professional development and graduate employability. Collectively, these initiatives have the potential to strengthen NPT as a structured WIL experience that benefits both student learning and postgraduate professional development. Institutions should therefore consider recognising near-peer demonstrating as a formal WIL opportunity within postgraduate programmes, with clearly defined learning outcomes, structured supervision and appropriate recognition of the professional competencies developed through the role.

Limitations

This study was conducted within the Division of Clinical Anatomy at Stellenbosch University, which may limit the transferability of the findings to other institutions, educational settings or disciplines. In addition, the use of focus group interviews may have influenced participants' responses through group dynamics, with some individuals potentially feeling reluctant to express views that differed from those of their peers. Another limitation was the relatively small sample size of 10 participants. Although all current near-peer demonstrators participated, only three former demonstrators were recruited, limiting the diversity of perspectives regarding the longer-term influence of NPT on graduate employability and career development. As with all qualitative research, the findings are subject to potential researcher bias. To enhance trustworthiness, multiple members of the research team with

qualitative research experience participated in the coding and thematic analysis, promoting critical discussion and ensuring that interpretations remained grounded in the participants' accounts. Researcher reflexivity was also maintained throughout the analytical process. One researcher (JMDW) had previously participated in the WIL programme (2022–2024), providing valuable contextual understanding while also requiring ongoing reflection on potential assumptions and preconceptions during data analysis. Finally, the findings are based on participants' self-reported experiences and perceptions and therefore do not provide an objective measure of the impact of NPT on postgraduate students. Future research should include larger and more diverse samples and consider mixed methods approaches incorporating objective outcome measures, such as teaching performance, academic achievement and graduate employment outcomes, alongside participants' experiences.

Conclusion

This study demonstrates that NPT extends beyond supporting undergraduate anatomy learning by providing postgraduate demonstrators with an authentic WIL experience that fosters disciplinary knowledge, communication, confidence and professional development. The findings suggest that participation in NPT contributes to the development of transferable attributes associated with graduate employability, while also shaping professional identity and career aspirations. To maximise these benefits, NPT programmes should incorporate structured preparation, ongoing mentorship and clear faculty support. Further research should explore the long-term impact of near-peer teaching on graduate employability across different health professions education contexts.

Conflict of interest

All authors declare that they have no conflicts of interest.

Funding

Undergraduate and Honors Research Project Fund, Stellenbosch University.

Statement on the use of Artificial Intelligence

Microsoft Copilot in Outlook (GPT-based, accessed June 2025) was used solely for minor language editing (grammar and clarity). All content and revisions were reviewed and approved by the authors.

Contributions against CReDIT

Conceptualisation: JC. Data Curation: ML, QW. Formal Analysis: ML, QW, JC. Funding Acquisition: ML, JC. Investigation: JMDW, JC. Methodology: JMDW. Project Administration: JC. Supervision: JMDW, QW, JC. Validation: JC. Visualisation: JC. Writing - Original Draft: ML, JMDW, QW, JC. Writing - Review Editing: JMDW, QW, JC.

Ethical Approval

This study was approved by the Faculty of Medicine and Health Sciences, Health Research Ethics Committee (Ethics reference number: U24/04/317).

Participant Consent

Informed consent was provided by all participants before commencing with the study

Data Availability

Data supporting the findings of the research are not publicly available due to participant confidentiality but can be obtained from the corresponding author upon reasonable request.

References

- Bandura, A. (1997). Self-efficacy: The exercise of control. WH Freeman and Company.
- Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 201–216. <https://doi.org/10.1080/2159676X.2019.1704846>
- Carpenter, S. K., Pan, S. C., & Butler, A. C. (2022). The science of effective learning with spacing and retrieval practice. *Nature Reviews Psychology*, 1, 496–511. <https://doi.org/10.1038/s44159-022-00089-1>
- Creswell, J. W. (2014). Research design: Qualitative, quantitative and mixed methods approaches (4th ed.). SAGE.
- Creswell, J.W. and Poth, C.N. (2018) Qualitative inquiry and research design: Choosing among five approaches. (4th ed.). SAGE.
- Durán, C. E. P., Bahena, E. N., Rodríguez, M. de los Á. G., Baca, G. J., Uresti, A. S., Elizondo-Omaña, R. E., & López, S. G. (2012). Near-peer teaching in an anatomy course with a low faculty-to-student ratio. *Anatomical Sciences Education*, 5(3), 171–176. <https://doi.org/10.1002/ase.1269>
- Evans, D. J. R., & Cuffe, T. (2009). Near-peer teaching in anatomy: an approach for deeper learning. *Anatomical Sciences Education*, 2(5), 227–233. <https://doi.org/10.1002/ASE.110>
- Frearson, S., & Gale, S. (2017). Educational opportunities on a ward round; Utilising near-peer teaching. *Future Hospital Journal*, 4(1), 19–22. <https://doi.org/10.7861/FUTUREHOSP.4-1-19>
- Glynn, L. G., MacFarlane, A., Kelly, M., Cantillon, P., & Murphy, A. W. (2006). Helping each other to learn - A process evaluation of peer assisted learning. *BMC Medical Education*, 6, 18. <https://doi.org/10.1186/1472-6920-6-18>
- Hall, S., Harrison, C. H., Stephens, J., Andrade, M. G., Seaby, E. G., Parton, W., McElligott, S., Myers, M. A., Elmansouri, A., Ahn, M., Parrott, R., Smith, C. F., & Border, S. (2018). The benefits of being a near-peer teacher. *Clinical Teacher*, 15(5), 403–407. <https://doi.org/10.1111/tct.12784>
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40(2), 350–367. <https://doi.org/10.1080/03075079.2013.842221>
- Khan, A. A., Tufail, S., Khan, M. A., & Raza, A. (2025). The impact of same-level or near peer assisted learning program (NPAP) on academic performance of students in CMH Lahore, Pakistan. *Pakistan Journal of Medical Sciences*, 41(3), 740–746. <https://doi.org/10.12669/pjms.41.3.10968>
- Khapre, M., Deol, R., Sharma, A., & Badyal, D. (2021). Near-peer tutor: A solution for quality medical education in faculty constraint setting. *Cureus* 13(7). <https://doi.org/10.7759/cureus.16416>
- Kruskie, M. E., Byram, J. N., & Mussell, J. C. (2023). Near-peer teaching opportunities influence professional identity formation as educators in future clinicians. *Medical Science Educator*, 33, 1515–1524. <https://doi.org/10.1007/S40670-023-01951-4>
- Leong, C., Battistella, M., & Austin, Z. (2012). Implementation of a near-peer teaching model in pharmacy education: Experiences and challenges. *The Canadian Journal of Hospital Pharmacy*, 65(5), 394–398. <https://doi.org/10.4212/cjhp.v65i5.1178>
- McGaghie, W. C., Siddall, V. J., Mazmanian, P. E., & Myer, J. (2009). Lessons for continuing medical education from simulation research in undergraduate and graduate medical education: Effectiveness of continuing medical education: American College of Chest Physicians Evidence-Based Educational Guidelines. *Chest*, 135(3), 62S–68S. <https://doi.org/10.1378/CHEST.08-2521>
- Morse, J.M. (2015). "Data were saturated..." *Qualitative Health Research*, 25(5), 587–588. <https://doi.org/10.1177/1049732315576699>
- O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine*, 89(9), 1245–1251. <https://doi.org/10.1097/ACM.0000000000000388>
- Orsini, E., Quaranta, M., Mariani, G. A., Mongiorgi, S., Cocco, L., Billi, A. M., Manzoli, L., & Ratti, S. (2022). Near-peer teaching in human anatomy from a tutors' perspective: An eighteen-year-old experience at the university of Bologna. *International Journal of Environmental Research and Public Health*, 19(1). <https://doi.org/10.3390/ijerph19010398>

- O'Shaughnessy, S. M. (2018). Peer teaching as a means of enhancing communication skills in anaesthesia training: trainee perspectives. *Irish Journal of Medical Science*, 187, 207–213. <https://doi.org/10.1007/S11845-017-1637-5>
- Pintér, Z., Kardos, D., Varga, P., Kopjár, E., Kovács, A., Than, P., Rendeki, S., Czopf, L., Füzesi, Z., & Schlégl, Á. T. (2021). Effectivity of near-peer teaching in training of basic surgical skills – a randomized controlled trial. *BMC Medical Education*, 21(1), 1–8. <https://doi.org/10.1186/s12909-021-02590-2>
- Ramani, S., & Leinster, S. (2008). AMEE Guide no. 34: Teaching in the clinical environment. *Medical Teacher*, 30(4), 347–364. <https://doi.org/10.1080/01421590802061613>
- Roediger, H. L., & Butler, A. C. (2011). The critical role of retrieval practice in long-term retention. *Trends in Cognitive Sciences*, 15(1), 20–27. <https://doi.org/10.1016/J.TICS.2010.09.003>
- Sotgiu, M. A., Bandiera, P., Mazzarello, V., Saderi, L., Montella, A., & Moxham, B. J. (2022). Medical student perceptions of near peer teaching within an histology course at the University of Sassari, Italy. *Education Sciences*, 12(8). <https://doi.org/10.3390/educsci12080527>
- Spies, R., Lee, H., Esack, I., Hollamby, R., & Viljoen, C. (2021). Learn-teach-learn: Evaluating a South African near-peer teaching programme. *African Journal of Health Professions Education*, 13(4), 215–217. <https://doi.org/10.7196/AJHPE.2021.V13i4.1442>
- Topping, K. J. (1996). The effectiveness of peer tutoring in further and higher education: A typology and review of the literature. *Higher Education*, 32, 321–345. <https://doi.org/10.1007/BF00138870>
- Topping, K. J. (2005). Trends in peer learning. *Educational Psychology*, 25(6), 631–645. <https://doi.org/10.1080/01443410500345172>
- van de Mortel, T. F., Silberberg, P. L., Ahern, C. M., & Pit, S. W. (2016). Supporting near-peer teaching in general practice: a national survey. *BMC Medical Education*, 16, 143. <https://doi.org/10.1186/s12909-016-0662-9>
- Widyahehening, I. S., Findyartini, A., Ranakusuma, R. W., Dewiasty, E., & Harimurti, K. (2019). Evaluation of the role of near-peer teaching in critical appraisal skills learning: A randomized crossover trial. *International Journal of Medical Education*, 10, 9–15. <https://doi.org/10.5116/ijme.5c39.b55b>
- Yorke, M. (2006). Employability in higher education: What it is-what it is not. The Higher Education Academy, York. <https://www.qualityresearchinternational.com/esecttools/esectpubs/Employability%20in%20HE.pdf>
- Zheng, B., & Wang, Z. (2022). Near-peer teaching in problem-based learning: Perspectives from tutors and tutees. *PLOS One*, 17(12). <https://doi.org/10.1371/JOURNAL.PONE.0278256>
- Zhu, M. M., & Brennan, M. T. (2024). Near-peer perspectives on a voluntary peer teaching program: Challenges and solutions. *Medical Science Educator*, 35, 63–90. <https://doi.org/10.1007/s40670-024-02148-z>

Appendix 1: Data collection tools – facilitated focus groups interview schedule

The focus group questions were adapted from Orsini et al. (2022):

- Welcome and thanks for participating.
- An overview of the topic.
- Statement of the ground rules of the focus group, and assurance of confidentiality. Start recorder and transcription.

Interview Schedule: Current Anatomy Demonstrators:

- Why did you decide to become a near-peer demonstrator?
- Can you elaborate on the differences in attitudes and preparation you observed among colleagues who were not enrolled as near-peer demonstrators?
- What aspects of the near-peer teaching model in human anatomy education did you appreciate/enjoy as a demonstrator before becoming one yourself?
- How do you view the near-peer teaching experience in the preclinical education pathway for early years medical and undergraduate students?
- What strengths did you identify in the near-peer teaching model?

- How did the near-peer teaching experience contribute (positive or negative) to the development of your team- working, organizational, communication, problem-solving, planning, and technical skills?
- In what ways did the opportunity to constantly revise anatomy through near-peer teaching help improve your academic performance?
- How did the near-peer teaching experience contribute to your self-confidence?
- How did the near-peer teaching experience shape your approach to your degree course?
- How do you perceive cadaver dissection as a learning tool in both undergraduate and postgraduate medical education?
- In what ways does cadaver dissection serve as a tool in shaping professional and ethical values?
- Can you share how near-peer teaching experience influenced your perception towards body donation for medical education and scientific purposes?

Former Anatomy Demonstrators, extra questions:

- All former anatomy demonstrators will be asked the same questions as the current anatomy demonstrators, with the addition of the following questions:
- What is your current occupation?
- Could you describe the role that the near-peer tutoring experience (positive or negative) has played in your professional career?