Chapter 8

A reflective practice on the transformational ability of the PGDipHE in enabling improved teaching and learning practices

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Introduction

Degree programmes in Engineering are known for poor student performance and throughput attributable to the complex and challenging nature of its subject matter. Consequently, effective teaching practices as part of engineering education is crucial to foster student success. In-depth development in higher education pedagogies by engineering academics can directly contribute to enhancing students' understanding and application of engineering principles to promote student success. The South African Higher Education (SAHE) system has unique challenges, in particular, an impoverished school system together with poor student background in Science, Technology, Engineering and Mathematics (STEM), directly affect student performance when entering higher education. Effective teaching practices provide a means of bridging the knowledge gap and improving student performance.

Most engineering educators are knowledge field experts but lack formal teaching qualifications. This means that teaching and learning practices of many engineering academics may not be effective as they are not informed by current and relevant principles and theories of teaching and learning in higher education. As a result, some engineering educators apply outdated teaching methods in the classroom, often teaching the way that they were taught, which may not align with the diverse learning needs of SAHE students.

The Postgraduate Diploma in Higher Education (PGDipHE) (hereafter, the PGDip) is a possible solution to bridge the gap by equipping engineering lecturers with the pedagogical knowledge and skills necessary for effective teaching practices. The PGDip is a crucial step towards enhancing the overall quality of engineering education, contributing to individual educator growth and

student success. As evident in the accounts reported on in this chapter, the PGDip enables lecturers to transform their teaching practices, fostering a student-centred approach through care and humanism (Rogers & Webb, 1991) and enhancing students' understanding and application of engineering concepts.

In this chapter, five Chemical Engineering lecturers from a university in South Africa offer their views on how their participation in PGDip influenced their practices. . Author 1 is an associate professor and head of the department, who completed the PGDip in 2020, Author 5 is a senior lecturer who completed the PGDip in 2021, Authors 2 and 4 are lecturer and senior lecturer, respectively, who completed the PGDip in 2023 and Author 3 is a lecturer and, at the time of writing, was about to begin the programme's second year in 2024.

Through reflective narratives, five key themes and lessons learnt through the lecturers' participation in the PGDip were identified, which contributed to enhanced teaching practices, namely:

1. The status quo is that tertiary engineering education is cold, clinical, and uncaring to students.
2. Engineering lecturers are not trained as teachers and require the PGDip to establish effective teaching and learning practices.
3. The PGDip encouraged a reflective teaching practice and helped to enable the practice of a pedagogy of care.
4. The PGDip exposed the lecturers to education theories, enabled them to become scholarly teachers and facilitated engagement in the scholarship of teaching and learning (SoTL).
5. The lecturers reported the benefits and offered critiques of the PGDip.

Each lecturer provided a detailed written narrative indicating how they transformed their pedagogical practices during and after completing their PGDip studies. A threefold qualitative approach (coding, categorising and memoing) was applied to these narratives to arrive at the five key themes.

These key lessons taken from the narratives of the lecturers concerning their perspectives on the PGDip comprise the main discussion of the chapter. Statements from the lecturers and literature support the key themes.

The status quo is that tertiary engineering education is cold, clinical, and uncaring to students

Based on the authors' reflections concerning their undergraduate experiences studying chemical engineering across various South African universities and over varying time frames, a common theme that emerged is that their tertiary engineering education experiences were cold, clinical, and uncaring, which led to them taking more responsibility for their learning and personal development. The lack of care from lecturers was a significant hurdle by Author 3 during her transition from high school to university. Author 3 provided a stark contrast between the care, enthusiasm and effectiveness of her high school teachers and her lecturers at university. She attributed this contrast to the fact that her high school teachers were equipped to teach through their education qualifications, while her engineering lecturers were not qualified to teach. Additionally, Author 3 perceived her lecturers as being unapproachable, which created two distinct disadvantages: First, not being able to seek knowledge and clarity on ideas and misunderstandings from the lecturers, and second, the lost opportunity to seek mentorship from the lecturers. Based on these perspectives, it is evident that the perceived unapproachability of lecturers adversely impacts the overall teaching and learning experiences, performance, and holistic development of students (Thompson, 2001; Vogt, 2008). Because of these experiences, Author 3's learning became an individual endeavour which required extensive self-study with minimal assistance or intervention from the lecturers. Coupled with lecturers' perceived unapproachability, a non-caring, non-supportive learning environment was the norm. Author 4 confirmed the experiences of Author 3:

> The imagination of entering a caring and ideal system which looks after my young naïve self was crushed when the first two days resulted in academic wastage as I could

> not find my class venues, and no one bothered to look or check where I could have been (Author 4).

Evidently, the uncaring experiences of Author 4 were not confined to the classroom. This initial experience made Author 4 realise that he had to be responsible for himself to a greater extent than in high school, mirroring the realisation of Author 3, who had to learn independently and take full responsibility for her learning without relying on her lecturers. It can be argued that Authors 3 and 4 possessed the necessary maturity and responsibility level to cope with the drastic transition from secondary to tertiary education, which enabled them to adapt and succeed in their tertiary studies. However, not every first-year student has such maturity and responsibility levels. Coupled with the various "distractions" at university (such as parties, dormitory life, social events, etc.), the previous point may explain the high failure and dropout rates within engineering education (Sittichai, 2012; Kiran & Javaid, 2020).

This theme illustrates the need for engineering lecturers to become more scholarly by applying interventions to promote student engagement, inclusivity, and care to improve and change the status quo. We argue that such a paradigm shift can be achieved through the participation of engineering lecturers in PGDip programmes.

Engineering lecturers are not trained as teachers and require the PGDip to establish effective teaching and learning practices

One of the main drivers contributing to all the authors embarking on the journey of pursuing a PGDip was the lack of training required to be an effective teacher. A common misconception about teaching is that it only necessitates discipline or field expertise (Abela, 2009). Possessing expertise in a particular field does not automatically translate to being an effective teacher. All authors agreed with the view that not being trained as a teacher impacts the teaching and learning effectiveness in their respective classrooms. Author 1 stated that there is an implied expectation that being a content specialist means that one should

automatically be an effective teacher. Author 2 recognised that despite possessing a Doctoral degree in engineering, he had no formal educational background to use as a transformative lens within his pedagogical practices. Both authors acknowledged that the possession of content knowledge and a Doctoral degree does not inherently ensure effective teaching and learning practices.

Through the PGDip, Author 1 was empowered with skills and knowledge to develop innovative strategies and engage with pedagogies to understand how to become an effective teacher. This transformative experience has equipped her with innovative frameworks to foster a conducive learning environment, enabling students to thrive and excel in their academic journeys. Specifically, Author 1 was motivated to utilise the student attendance and participation analysis metrics on the learning management system to track students who were not attending classes and not participating in activities such as discussion forums. Through this intervention, Author 1 was able to boost student performance and create a supportive learning environment. Meanwhile, Author 2 discovered various tools that could be used to improve his teaching methods through PGDip. He also found that the teaching tools could be used to influence or catalyse specific outcomes, such as demonstrating care to the students or improving engagement with the aid of technology. In other words, the PGDip helped him to identify problems in his classes and propose appropriate interventions to solve them.

Author 4 initially believed that effective teaching merely consisted of "*going to class and presenting curriculum content and from time to time checking if that which was presented was understood through various assessments (such as tests, tutorials, exam, etc.).*" Participating in the PGDipHE significantly influenced Author 4's teaching strategies from just being, first and foremost, a subject expert transmitting knowledge to having effective pedagogical skills for student learning outcomes delivery. He realised that the skills and knowledge acquired in his PGDip journey made him a caring teacher. Author 4 highlighted the importance of providing constructive feedback to students as an integral part of teaching, which aims to inspire students to do better next time rather than being harsh and making them feel worthless (Hattie & Timperley,

2007). Author 5 further corroborated the views of Author 4 that she came to the realisation that "teaching / delivering / imparting knowledge is an art and skill on its own." She had the initial belief that students learn best by only listening to a lecturer and students asking questions. Through the PGDip, she learned that students "learn best when exposed to a range of modalities and representations." Effective teaching is accomplished by bridging content and effective learning through teaching and learning practices, which engineering lecturers are not equipped with from merely studying engineering.

Furthermore, Author 3 highlights that her high school exposed her to "*nurturing and caring teachers who went beyond their duty to create a safe and inclusive space for all students.*" These high school teachers employed innovative teaching methods to create a dynamic and stimulating environment. They incorporated multimedia resources, hands-on experiments, group discussions, and interactive projects, particularly in STEM fields. The above-highlighted methods are effective teaching and learning practices enabled through their teacher training. Her experience at university was a stark contrast to high school, as her engineering lecturers were clinical and provided little academic assistance beyond lectures. Unlike high school educators, engineering lecturers do not undergo formal training on education theories and approaches which guide teaching and learning practices. Becoming acquainted with education theories offers the necessary training for subject matter experts to enhance student learning outcomes (Abela, 2009). Education theories address the various kinds of learning taking place in the human brain (Illeris, 2018). Through the PGDip, Author 3 could apply these education theories to improve her teaching practices. She distinctly recalls attending the "Teaching and Learning in Higher Education" module, where the instructor elaborated on the disparities between instructivism and facilitation. As the concepts were presented, she immediately identified with the idea of being a facilitator and not an instructor. Hence, she believes that the role of the educator is to assist students with care to meet their learning goals and not dictating the learning goals to them or how to "learn" (Thomas, 2005).

Overall, this theme indicates that achieving distinctions in an undergraduate degree or obtaining a PhD may equip a lecturer with essential content knowledge. However, the PGDip cultivates the knowledge and skills to teach effectively. Author 5 effectively encapsulated the PGDip journey as the bridge between subject matter and effective teaching practices:

> The decision to enrol in a PGDip was about the desire to become a proficient and passionate educator that can create a conducive, exciting, vibrant and inclusive learning environment for students, to bridge the gap between being a subject-matter expert in chemical engineering and becoming an effective communicator and facilitator of learning that can impart knowledge to students by exposing them to a range of modalities and representations.

PGDip encouraged a reflective teaching practice and helped enable the pedagogy of care

Engineering lecturers, in general, are afraid of the term "reflection" and, by extension, the improvement of teaching practices because they are unaware of how to address the shortcomings of their teaching practices. This is evident in the following comment by Author 1:

> When I started my career as a teacher, I was terrified to go through the comments received through the evaluations from students.

After Author 1's PGDip journey, she was empowered and looked forward to receiving comments from students about her teaching because she subsequently understood the importance of reflecting on these comments, whether negative or positive. She uses the tool of critical reflection to become a better teacher and show up better for her students. Author 4 agreed with the view expressed by Author 1 that he developed fundamental skills acquired in the PGDip programme that encouraged him to deeply interrogate feedback given by students through the teaching and module evaluations. The evaluations assist him in reflecting as a teacher

and bring self-awareness as to how and if what he was teaching students was understood and to evaluate if the module content was easy to follow. He recalled that in one of the modules that he taught, he realised through student evaluations that the speed of his delivery during lectures was too fast for some students. He is generally a fast speaker, so he reflected and then decided that after every slide, he should pause and engage the students to check if anyone had a question and ensure that students were following his pace.

Concerning the importance of reflective teaching practices, the PGDip emphasised the importance of reflective practice as key to the teaching profession for Author 5. Through various reflective exercises and assignments, she developed the habit of critically analysing her own teaching practice. This has enabled her to identify her strengths and areas for improvement, leading to continuous professional development. By embracing reflective practice, she has become more self-aware as an educator and has been able to adapt her teaching methods to better meet her students' needs. We discovered that the continuous reflection and refinement of our teaching practices were established and enhanced through the PGDip. Engaging in reflective practice constitutes an integral aspect of evolving into effective teachers (Zahid & Khanam, 2019).

The premise of humanistic learning theories is that students are at the centre of learning, whilst educators are facilitators of the learning process (Suroso et al., 2023). The three essential concepts supporting a pedagogy of care using the humanistic learning theory are a holistic approach to teaching and learning, student-centredness and self-actualisation (Rogers & Freiberg, 1969). The importance of the ethics of care, specifically empathy, in engineering practice has been emphasised by several scholars. However, caring and humanistic teaching has received less attention in engineering education compared to other fields (Baier et al., 2020). Through the PGDip, we realised the importance of being humanistic engineering educators and instilling care in our classrooms through various teaching practices. Author 3 effectively described her position on embodying the role of a humanistic educator:

> I am firstly a human being and then an educator; hence, I choose to use a student-centred, nurturing and caring approach to every facet of teaching and learning in my classroom.

By undertaking research for a PGDip assignment, Author 3 found that the following quote by Katherine Merseth (in Walsh, 2016) appropriately defined her view on the critical importance and necessity of care in the classroom: "*People don't care how much you know until they know how much you care*."

She believes that if students do not feel cared for or safe in the environment that you create, regardless of what you know, they will not be open to learning. Practices such as an open-door policy, wellness surveys, and recognition and reward of hard work were actions that represented what care meant to Author 3. These practices aimed to foster a sense of care and establish effective channels of communication with students. During her PGDip journey, she realised that these were forms of an informal curriculum that she had naturally embedded within the broader context of engineering education. Additionally, through the PGDip, she understood that care in the form of a student-centred environment could be created for her students through core educational theories or practices such as experiential learning, personalised and constructive feedback, diverse assessment methods, and ensuring alignment between different modules in the curriculum.

Author 1 supported the position of Author 3 regarding care in the classroom as she realised her journey through a PGDip fundamentally transformed how she engages with students, transcending traditional teaching methods and embracing the pedagogy of care. For the first time, she understood her role as a teacher and the importance of showing up as a teacher who cares for her students after embarking on her PGDip journey. This transformative experience equipped her with innovative frameworks that foster a conducive learning environment, enabling students to thrive and excel in their educational journey while knowing that she cares about their well-being and learning experiences. Implementing the pedagogy of care

became the cornerstone of her teaching approach. This paradigm shift places the holistic well-being of her students at the forefront, acknowledging their diverse backgrounds, challenges, and emotional needs. By cultivating genuine empathy and attentiveness, she has created an environment where students feel valued, understood, and supported. This approach not only enhances their learning experience but also empowers them to navigate academic challenges with confidence. Like Author 3, these tailored frameworks provide a structured pathway for effective communication, collaboration, and meaningful engagement. By integrating learner-centred strategies, Author 1 encouraged students to actively participate in shaping their learning journey. This autonomy and sense of ownership ignite students' intrinsic motivation and curiosity, fostering a deeper level of engagement.

Furthermore, Author 4 substantiated the imperative for care in the classroom, emphasising its significance by pointing out that the skills and knowledge acquired in the PGDip have made him a caring teacher. It was through engagement in the "Teaching and Learning in Higher Education" module that Author 4 learned of the importance of ensuring that students become emotionally involved in whatever they are taught. His consistent effort to employ the most straightforward examples whenever he teaches a new concept supports this.

The PGDip provides theory, holistic teaching and learning practices and tools required for the authors to understand the importance of creating a student-centred environment conducive to learning and promoting care in their classrooms (Rogers & Webb, 1991).

PGDip created exposure to education theories and facilitated engagement with SoTL, thus enabling the lecturers to become scholarly teachers

We believe that understanding education theories provides a platform to become scholarly teachers. Theory provides a lens to understand the behaviour of phenomena and can be used to explain the reasoning supporting specific interventions to yield desired pedagogical outcomes (Neves de Jesus & Lens, 2005).

We believe that the difference between teachers and scholarly teachers is the latter's ability to understand and apply education theories in practice. Action research as a scholarly approach to solve nuanced and specific issues faced by engineering lecturers requires an understanding and application of education theories in context. To facilitate this understanding, the PGDip offers the "Research Methodology" module, which requires lecturers to actively identify key challenges in their classes and propose suitable interventions, grounded in theory, to resolve them. This module helps lecturers to resolve key issues in their classes and provides a relevant problem-solving approach that can be applied to future interventions.

Aligning with the above, Author 1 highlighted that the theories of experiential learning and critical reflection acquired during her PGDip studies shaped how she structured her courses and interactions with students. Through her adoption of these theories, Author 1 believed that she was able to design learning activities that enabled her students to actively participate in their learning journey. The benefits of such active engagement, as reported by Author 1, include "*intrinsic motivation and curiosity, resulting in a deeper level of engagement*." Regarding the application of education theories into practices, Author 1 argued that:

> This approach encourages students to apply theoretical concepts to real-world scenarios, promoting a deeper understanding and the development of practical skills. By incorporating diverse learning experiences, such as group discussions, case studies, and hands-on projects, I provide students with a well-rounded education that prepares them for the challenges of their respective fields.

Similarly, Author 3 wanted to avoid being a "mere clinical instructor" delivering lengthy monologues without engaging in meaningful dialogue and interactive learning experiences with her students. Instead, she incorporated the practice of facilitation and a pedagogy of care, into her teaching even before undertaking the PGDip journey. Author 3 maintained that the PGDip enabled her

to use education theories to provide a rationale for her teaching practices. Author 2 shared a similar view:

> The PGDip provided a platform to participate in SoTL research. Based on the dynamic needs of my students, I began to partner with my colleagues to undertake action research to implement interventions in my classes. I also applied for the Teaching Innovation Fund to improve my teaching. Hence, I can now conduct my teaching in a more theoretically sound manner. Overall, the PGDip has been a paradigm-shifting experience and has enabled me to integrate two of my core functions as an academic (teaching and research) into SoTL, action research, theory-informed pedagogically sound teaching practice.

Upon embarking on his PGDip journey, Author 2 realised that his teaching lacked theoretical grounding and did not meet the diverse needs of his students. Although there are many learning theories, he realised that it is not possible to engage with and apply all of them to practice. However, his practices aligned with constructivist theory (Hein, 1991) and Feuerstein's theory of mediated learning (Tan, 2003), which is based on Feuerstein's earlier theory of structural cognitive modification. The mediated learning theory fascinated him, as it provided a means to adjust the cognitive ability of his students. The theory also refuted the notion that some students are inherently more intelligent than others. Therefore, Author 2 incorporated the theory in his pedagogy through the following practices:

> I related concepts being taught to practices that students will encounter in their careers as engineers, thus using the mediation of meaning. Meaning also comes across through videos and hosting guest talks with speakers from the industry. I share my intentions behind every class, assessment, or assignment to help students understand and appreciate why we are doing certain things and how it will develop them. By doing this, I find that students are more attentive and receptive to the activities in class. Hence, this creates intentionality and reciprocity. Finally,

> I help students understand how the principles they learn in my classes will help them in different career paths-regardless of whether they decide to pursue postgraduate studies or work in industry. Thus, I embody the tool of transcendence.

Concerning the theories adopted from their PGDip journeys, Author 3 realised that humanistic theory promoted holistic learning such that students could "self-actualise" and determine their own learning goals, which closely aligned with facilitation theory (Johnson, 2014). Additionally, Author 3 believed that students do not learn by listening to hours of theory but rather by learning skills and performing practical problem-solving-based examples (Kolb & Kolb, 2017). In this case, experiential learning is a non-traditional educational approach based on "learning by doing" and learning to apply theory to problem-solve practical scenarios encountered in industry (Kolb & Kolb, 2017). In addition, through her PGDip studies, Author 3 incorporated authentic assessments such as design projects to expose students to real-life problem-solving methods (Lombardi & Oblinger, 2007). She saw value in combining formative and summative assessments and found that individualised feedback is imperative for students to reflect on their skills and help them identify areas of weakness.

On the other hand, Author 4 drew on the work of Hénard and Roseveare (2012), who describe quality teaching as a multi-level endeavour that produces student learning outcomes or graduate attributes using appropriate pedagogical techniques. Quality teaching occurs when the three interdependent levels of support are present: institutional, programme-level and individual support for quality teaching (Hénard & Roseveare, 2012). Building on this point, Author 4 emphasised that Walker and Gleaves (2016) define caring teachers as those who respect and listen to their students, take interest in student voices, deliver prompt feedback, and maintain an encouraging, positive approach to assessment even when learning objectives are not fully achieved. This made Author 4 realise the importance of giving constructive feedback to his students to inspire improved performance without being harsh and making them feel worthless (Hattie & Timperley,

2007). Author 4 also advocated that emotions influence attention, memory, and focus (Goralnik et al., 2012). Hence, he believes that "a strong connection to students, emotional engagement and an ethic of care is what a caring teacher ought to practice."

In the same vein, Author 5 highlighted that the PGDip helped her to understand the importance of constructivism and Kolb's theory of experiential learning in chemical engineering. Kolb's experiential learning theory suggests that learning occurs through a cycle of concrete experience, reflective observation, abstract conceptualisation, and active experimentation (Kolb et al., 2014). Author 5 believed that this theory emphasises the significance of practical, hands-on experiences in facilitating students' learning and retention of knowledge. By incorporating this theory into her teaching, she provides opportunities for students to apply their theoretical knowledge in real-world scenarios, encouraging them to reflect on their experiences and actively experiment to deepen their understanding.

Benefits and critique of the PGDip as reported by the lecturers

The authors reported significant advantages of the PGDip. Author 3 highlighted that participating in the PGDip had several advantages for her as a young academic. It provided a deeper understanding of education theories, assessment, curriculum, technology, and how to incorporate all these facets into her teaching. Furthermore, she has become actively involved in the SoTL - specifically within the field of engineering education, as the PGDip has provided her with a platform to showcase the new teaching and learning methods established through the knowledge gained through PGDip. Aligning with these advantages, Author 2 added that learning to write a comprehensive teaching portfolio and having it reviewed was a strong reason that led him to pursue the PGDip. Author 4 outlined that the PGDip led to him becoming a caring teacher. Specifically, he used the learning management system's retention centre to identify students struggling with the course content, engage with these "at-risk" students, and provide guidance to help them to improve their performance. Author 1 agreed with the notion that the PGDip

offers a transformative journey, nurturing educators to deeply connect with the human aspect of teaching. Beyond mastering the technicalities and subject content, it cultivates a profound understanding of students, their diverse needs, and individual journeys. This realisation empowers educators to thoughtfully design inclusive content, ensuring that no student is left behind on their path to academic excellence.

In the same vein, Author 5 highlighted that through her PGDip journey, she discovered several valuable insights and gained a deeper understanding of the teaching profession. She sums up by stating:

> This transformative experience has greatly influenced my practice as a teacher and enhanced my ability to effectively engage with students.

Regarding the negative aspects of the PGDip offering, Author 2 believes that despite being a part-time course, the workload can be demanding on lecturers, especially with competing academic priorities throughout the year. Although the PGDip instructors are flexible in shifting deadlines when required, sometimes the additional time granted to submit assessments still falls short of what is needed. Author 3 indicated an agreement with these points, whereas Author 4 expressed concerns about the readability of the course materials, particularly for individuals whose first language is not English. Some students also found using the predominant learning management system for lectures and assessment submissions difficult. Hence, Author 4 advised that diverse learning platforms should be considered.

Furthermore, Author 3 observed that students from external institutions encountered difficulties with specific concepts, such as learner guides (not implemented in their institutions), module maps, and module or unit outcomes, especially prevalent amongst lecturers from TVET (Technical and Vocational Education and Training) colleges. To address this issue, a brief introduction to these concepts before more in-depth assessments is necessary to bridge knowledge gaps.

On the other hand, Author 1 identified that for educators outside the education discipline, it may not be clear that the methods taught, and tasks assigned reflect how one should embody the role of a teacher and engage with students. Some individuals might overlook this crucial aspect, perceiving the programme merely as a series of tasks to complete to attain the qualification. The PGDip should explicitly outline how educators can integrate the course material into their daily teaching, assessment, and curriculum design.

Overall, the advantages of the PGDip outweigh the drawbacks, as the programme opened various avenues for the authors to enhance their teaching practices and become effective engineering lecturers.

Conclusion

The themes identified from the narratives of the authors who are currently studying or have completed the PGDip highlight its transformative effects. As we reflect on the main themes, ranging from the need for a paradigm shift in tertiary engineering education to the significance of the PGDip in developing effective teaching practices, cultivating reflective teaching, embracing the pedagogy of care, and becoming scholarly teachers, the following overarching conclusions can be drawn.

The narratives provided by the authors identify a substantial need for a transformative shift in tertiary engineering education. The status quo, characterised by a perceived lack of care, clinical teaching, and unapproachability of lecturers, comprises a systemic issue that requires attention. The personal experiences shared by the authors illustrate the challenges faced by students entering higher education and the vital role played by their lecturers in influencing their learning experiences. The substantial role of the PGDip in addressing these challenges becomes evident through the shared experiences of the authors. The themes consistently emphasise the inadequacy of traditional content expertise in engineering education and the need for a more comprehensive pedagogical skill set. The PGDip catalysed change, providing a platform for engineering lecturers to

bridge the gap between subject matter expertise and effective teaching practices.

Furthermore, the PGDip is a practical transformative journey that equips lecturers with the tools needed for reflective teaching practices and encourages the pedagogy of care. The focus on empathy, responsiveness, and fostering a student-centred learning environment demonstrates the programme's impact on developing effective lecturers who have transitioned to be compassionate mentors committed to their students' holistic development. The exposure to education theories and the engagement in SoTL activities were key outcomes of the PGDip. The emphasis on scholarly engagement is transformative, elevating lecturers from mere teachers to scholarly practitioners who understand, apply, and contribute to the theoretical foundations of effective teaching. Despite several reported advantages of the PGDip, the critiques provided by the lecturers offer insights for improvement. The workload challenges, language barriers, and the need for clarity in applying the learned methods in daily teaching are areas that can be optimised to enhance the overall effectiveness of the programme.

Overall, the authors' narratives demonstrate the transformative journey facilitated by the PGDip. From reforming teaching philosophies to fostering caring and reflective practices, the programme is viewed as a beacon for change in higher education. Moving forward, these narratives call for a joint commitment to redefine the engineering education landscape, where the PGDip serves as a trusted platform to cultivate engineering educators who excel in their disciplines, harnessing the transformative power of teaching and learning.

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