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Enhancing Graduate Attributes through students providing Peer-assisted Learning at a South African University

Sandra Williams, Desiree Scholtz

Faculty of Business and Management Sciences, Cape Peninsula University of Technology, Cape Town, South Africa

Corresponding author, email: williamsse@cput.ac.za

Abstract

Given the need for peer-assisted learning (PAL) to enhance the student learning experience, this study is located within the PAL programme in a faculty at the Cape Peninsula University of Technology. Peer assistants, referred to as Peer Support Champions (PSCs), provide PAL, such as academic and social support, in addition to formal tuition. These PSCs were senior students offering peer support as tutors, teaching assistants, mentors and retention officers. A PAL evaluation aimed to gain insights, perspectives and experiences of PSCs on providing PAL, using qualitative surveys and focus group sessions. Thirty-eight PSCs completed a qualitative survey, and thirty-nine PSCs attended four focus group sessions. The findings of this qualitative interpretative study revealed that PSCs not only provided much-needed peer support, but that PSCs demonstrated the development of institutional graduate attributes in their PAL engagements. The PSCs portrayed institutional GAs such as Technological Capability, Resilience and Problem-Solving Capability, Relational Capability and Ethical Capability. The widely used approach in higher education is to situate the mapping and acquisition of graduate attributes in the formal curriculum. However, this study shows that co-curricular support programmes such as PAL provide fertile ground for those providing student support to nurture and actualise graduate attributes. It is, therefore, expedient to utilise this strategy to embed graduate attributes overtly in PAL programmes to prepare peer assistants for prospective sustainable futures.

Keywords: Graduate attributes, higher education, peer-assisted learning, peer support champions

Introduction

The purpose of higher education is to provide holistic education and development to equip students with knowledge, skills and attributes for sustainable futures. While disciplinary knowledge and skills will always remain paramount for professional endeavours, the values, dispositions, and attributes that students cultivate at university provide the wherewithal to manage themselves and situations for lifelong learning. To this end, most universities globally have institutional graduate attributes (GAs) that students should acquire during their course of study, which could be considered markers of institutional culture. Definitions of GAs abound (Barrie, 2006; Barrie, Hughes, & Smith, 2009; Bosanquet, Winchester-Seeto & Rowe, 2012; Bowden, Hart, King, Trigwell, & Watts, 2000; Gamage, Jeyachandran, Dehideniya, Lambert, & Rennie, 2023), with each definition being a nuanced variation on a theme of institutional skills, values and attributes that graduates should acquire during a course of study. However, a widely quoted GA definition emanates from Bowden et al. (2000), which extends the purpose of GAs towards education for an unknown future and the public good. They contend that:

> Graduate attributes are the qualities, skills and understandings a university community agrees its students should develop during their time with the institution and, consequently, shape the contribution they are able to make to their profession and society … They are qualities that also prepare graduates as agents of social good in an unknown future (Bowden et al., 2000, p. 1).

All programmes produce graduates with attributes, but attaining desired GAs depends on thoughtful and systemic programme inputs (Winberg, Staak, Bester, Sabata, Scholtz, Monnapula-Mapesela, Sebolao, Ronald, Makua, Snyman & Machika, 2018). The South Africa Council on Higher Education (CHE) notes that graduate attributes are oriented towards different disciplines and fields "but also encompass values, attitudes, critical thinking, ethical and professional behaviour, and the capacity of a graduate to take what has been learnt beyond the site of learning" (2013, p. 19). These qualities are beyond disciplinary and content knowledge and are regarded as sustainable components of a graduate's future in the world of work and society (Gamage et al., 2023).

It is commonplace for universities globally and certainly in South Africa to include GAs in the formal curriculum. However, studies suggest that GAs are elusive in most instances of formal curriculum engagement (Barrie, 2006; Barrie et al., 2009; Bosanquet et al., 2012; Kensington-Miller, Knewstubb, Longley & Gilbert, 2018), reinforcing the need to explore co-curricular ways of developing GAs. While the broader study set out to evaluate the peer-assisted learning (PAL) programme, this article focuses on one of the findings, namely that GAs were actualised by Peer Support Champions (PSCs) in their engagement with students. The objective of this article is to propose PAL as a strategy for students, acting as peer assistants, to acquire and action GAs. Of consequence here is that PAL offers a vehicle for GAs in action and adds to the debate that GAs may be inculcated beyond learning and teaching in the formal curriculum.

Background

Bitzer and Withering (2020), Kensington-Miller et al. (2018), Brits (2018), Hill, Walkington & France (2016), Griesel and Parker (2009), Barrie (2006) and Barrie et al. (2009) note that the initial focus of GAs in higher education was increased employability prospects and to prepare graduates for economic activity. This suggests a reductionist approach that views the role of higher education as "producing employable graduates to feed national prosperity" (Hill et al., 2016, p. 155). By implication, governments and employers determine the kinds of values, attributes and dispositions that graduates should engender to facilitate the transition from student to employee (Brits, 2018; Griesel and Parker, 2009; Kensington-Miller et al., 2018). However, higher education should strive towards promoting increased employability prospects by preparing graduates for the world of work, as well as developing agency for social upliftment in various contexts. The shift in focus should be on GAs for employability and lifelong learning for future professional and social scenarios, to apply GAs in all circumstances and all communities where graduates may add value to the lives of others. One of the premises of GAs at the university under study is that education should extend "beyond the university and influences how graduates work with community groups or in local government and relates to caring as well as effectiveness" (Cape Peninsula University of Technology, 2017, p. 4).

The default understanding is that the attainment of GAs resides in mapping GAs in units of learning, i.e., GAs are taught, learnt and assessed in the formal curriculum of academic programmes (Kensington-Miller et al., 2018; Mashiyi, 2015; Winberg et al., 2018). Yet, this has not found traction in practice in all instances. A study conducted by Barrie et al. (2009) found that while most universities in Australia have GAs, "in policy, few can provide convincing evidence of curricula that comprehensively and systematically develop these abilities" (p. 1). Similarly, GAs are often aspirational and invisible, and strategies should be devised to "enable staff to identify and incorporate these 'invisible' [and aspirational] graduate attributes into course design" (Kensington-Miller et al., 2018, p. 1440). One such strategy, as this study shows, is to be cognisant of PAL as a platform to actualise GAs. The next section provides a theoretical position of GAs, the institutional and professional GAs at this study's site and this university's PAL structure.

Conceptual Framework

Graduate Attributes

The huge demand for access to higher education in South Africa bears testament to education for improved economic, professional

and social advancement. However, while cognitive knowledge and skills are key, the affective dimensions are equally important and should ideally be developed in tandem with disciplinary cognitive development. Curriculum design should incorporate "epistemological (knowing), praxis (action) and ontological (self-identity) elements" to navigate a supercomplex world "in which we are conceptually challenged, and continually so" (Barnett, 2000, p. 258). To this end, institutions acknowledged the need to include ontological elements by incorporating GAs that resonate with "the particular institution's values and beliefs, as well as the political and social climate in which they exist" (Barrie, 2006, p. 216). As noted above, GAs were considered instrumental for employability (Mahon, 2022; Maxwell & Armellini, 2019; Yorke & Knight, 2006). Employability here refers to "a set of achievements – skills, understandings and personal attributes – that make individuals more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy" (Yorke & Knight, 2006, p. 3).

To this end, GAs such as communication skills, problem-solving, critical thinking, ability to work in a team and understand the differences between people and lifelong learning, amongst others, seem to be common to most institutions (Gamage et al., 2023; Greisel & Parker, 2009; Kember, Hong, Yau & Ho, 2016; Maxwell & Armellini, 2019; Wong, Chui, Copsey-Blake & Nikolopoulou, 2022). While employability might have been the initial intention of GAs in HE, over the years the importance of GAs assumed greater significance as pivotal to developing skills, attributes and values on reflexivity, self-management, preparing for an uncertain future in a supercomplex world (Barnett, 2004), and developing a culture of stewardship for public good (Bosanquet et al., 2012; Maxwell & Armellini, 2019). The focus of learning, teaching and assessment of propositional GA knowledge shifted to procedural praxis, where GAs were enacted in academic projects through service-learning and community engagement, for students to champion the institutional GA culture when crossing boundaries from academic projects to the 'world of work'. If taught and enacted appropriately, the knowledge, skills, values and attributes that constitute GAs, promote academic progression, integrity, self-management, and include inherent characteristics for students to be "successful in their chosen occupations" (Yorke & Knight, 2006, p. 3). At issue is how GAs are taught, assessed and actioned for sustained implementation in employability and life-long learning contexts.

Institutional and Professional Graduate Attributes

The faculty where the study was conducted offers the PAL programme to mainly first-year students in different departments and across business and management related disciplines. Due to the nature of Universities of Technology, the CPUT qualifications have a strong vocational and professional bias with work-integrated components in the curricula.

The GAs at this institution consist of four capabilities for academic and social agency, namely Technological Capability and Foresight, Resilience and Problem-Solving Capability, Relational Capability and Ethical Capability. These GAs are included in the institutional Vision 2030 (Cape Peninsula University of Technology, 2021). For example, Objective 2.3, "Student readiness for the world of work", requires "Integrating CPUT graduate attributes in all programmes and teaching that will support graduate employability in the future world of work" (Cape Peninsula University of Technology, 2021, p.15). To this end, the faculty sought to include GAs from two perspectives, i.e. professional and institutional GAs. Since many students at university have limited conceptions of being a professional in practice, each programme in the faculty incorporated GAs for respective professions relevant to specific programmes of study. Professional GAs were identified in terms of qualities, values and dispositions that students should cultivate for their professional roles. There are, however, several intersections between professional and institutional GAs and the approach at the university is to map and embed the composite array of GAs via the formal curriculum. This approach is encouraged across the institution.

This article, however, focuses primarily on how the four institutional GA capabilities, namely (1) Technological Capability and Foresight; (2) Resilience and Problem-solving Capability; (3) Relational Capability, and (4) Ethical Capability, as noted in Figure 1 below, were made overt in PAL engagement.



Figure 1: Institutional Graduate Attributes (adapted from Cape Peninsula University of Technology, 2017, pp. 2-5)

Peer-assisted learning in context

Many first-year students find the transition from high school to university daunting as they navigate an academic and social environment that is vastly unfamiliar and different from their previous experience. Thompson, Pawson, and Evans (2021) argue that the inability to adapt to higher education environments negatively impacts student success, which may contribute to student failure and dropout rates. The PAL programme for first-year students is one intervention aimed at addressing this challenge. Senior students offer peer support as tutors, teaching assistants (TAs), mentors and retention officers (ROs), and are collectively known as peer support champions (PSCs). Tutors provide peer-to-peer academic support in small groups or to individual students, while TAs support lecturers in class and assist with materials development, amongst other support tasks. Mentors offer social support to help students transition to university life, and ROs monitor and track absentees and academically underperforming students. The roles of the four student support types are collaborative, providing holistic academic and social support. At the heart of PAL, therefore, are the PSCs. This study set out to evaluate PAL in the faculty by gaining PSCs' perspectives as they drew on embedded knowledge and skill sets to effectively and meaningfully support and engage with students whom they support. It is generally agreed that students need rich and diverse learning opportunities to develop the GAs valued by their universities in support of academic achievement and success beyond the university (Barnett, 2000). While this study initially intended to evaluate PAL, what emerged from the data from PSCs, however, was a learning opportunity to actualise GAs beyond the formal curriculum.

Methodology

This qualitative study used an interpretivist paradigm to garner the views and insights of PSCs who offered PAL in one faculty

at the university. This allowed researchers to hear the voices of PSCs, gaining a rich understanding from the perspective of the participants (Alharahsheh & Pius, 2020). Lim (2024) states that qualitative research enables "researchers to connect with the subjective experiences of their subjects", it "emphasizes the depth and richness of context and voice in understanding social phenomena" (p. 200), and "ensures that the resultant findings offer a tapestry of rich, contextually grounded insights, while also being firmly tethered to empirical evidence" (p. 201). The use of interpretivism as the underpinning paradigm for data analysis resides in the need to understand the subjective meanings of participants, given that "the core idea of interpretivism is to work with these subjective meanings … to reconstruct them, to understand them, to avoid distorting them, to use them as building blocks in theorizing" (Goldkuhl, 2012, p. 140). The iterative phases of data analysis to understand and interpret the subjective meanings to identify themes are evident in the discussion.

The faculty in which the study was conducted gave ethics approval and all data were accessible to the researchers only. All ethical requirements were adhered to. The study and its objectives were explained to the participants; they were informed that their responses were anonymous and confidential; participation was voluntary, and participants could withdraw from the study at any time without prejudice. Although both researchers were in the faculty and had insider positionality, consistent reflexivity regarding biases and interpretations with data collection, data analysis and reporting supported the mitigation of subjective impositions on the process and findings of this study.

Data were collected using a qualitative survey (Braun, Clarke, Boulton, Davey & McEvoy, 2021), consisting of open-ended questions, as well as four focus group interviews, one for each PSC type, respectively. The survey questions focused on the positive aspects of providing PAL, the challenges they experienced, the nature of the support provided, and finally, recommendations to improve PAL in the faculty. All survey questions required qualitative responses and qualitative interpretive analysis. The survey was emailed to participants via the supervising lecturers and thirty-eight PSCs across the faculty completed it.

The researchers triangulated this data with four focus group sessions where PSCs were purposively selected given their different PAL roles (Campbell, Greenwood, Prior, Shearer, Walkem, Young, Bywaters & Walker, 2020). While the survey garnered anonymous written responses, the focus group sessions allowed for in-person conversations. The advantage of using focus groups for data generation is that "the interplay of conversation in focus groups can unearth a tapestry of insights, as individuals respond to and build upon the perspectives of others", and "the group setting can encourage participants to explore and articulate thoughts that might remain underdeveloped in solitary reflection" (Lim, 2024, p. 216). These advantages were evident in the four focus groups, which were attended by thirty-nine PSCs i.e., 20 tutors, 6 TAs, 5 mentors and 2 ROs. The researchers probed and illuminated discussion points, gathering insights into the PSCs' experiences in online and face-to-face PAL engagements.

The focus group sessions were recorded and transcribed, using the four institutional GAs as codes to extrapolate themes from each data set. The data were coded according to the descriptions of the four GA capabilities and the underpinning abilities referred to in Figure 1. The phases of data analysis included open coding and selective coding (Lim, 2024; Nowell, Norris, White & Moule, 2017). For open coding, the data were subjected to content analysis by each of the two researchers individually, after which a discussion ensued to compare and consolidate the codes developed from raw data into four respective GA themes based on data similarities and relationships (Busetto, Wick & Gumbinger, 2020). Selective coding allowed for revisiting and refining the data into themes, to finalise selected data excerpts and themes for analysis and discussion. In keeping with the characteristics of qualitative research, the findings are not generalisable to other faculties and institutions. However, the thesis of PAL as a vehicle for acquiring and enacting GAs, remains relevant.

Findings and Discussion

PAL is an essential component of acculturation to university life and student learning and is more easily navigated with the support of a more knowledgeable other who has walked this road before. While research on PAL mainly focuses on the impact of student learning and improving PAL programmes (Hargreaves, Ketnorb, Marshall & Russen, 2022; McKay, 2016; Noroozi & De Wever, 2023; Okoro, Takawira & Baur, 2021), the benefits accrued to PSCs in terms of personal development and GAs are equally profound. The data analysis and discussion include verbatim excerpts from the focus groups and survey and are presented according to the four institutional GAs as illustrated in Figure 1. The institutional GA descriptions are expansive and include several underpinning abilities that often overlap with other GAs and are not viewed as independent entities. For example, ethics of care and attending to the well-being of others straddle both ethical capability and relational capability (Cape Peninsula University of Technology, 2017). Moreover, all four GAs require graduates to relate to society, which implies the broader society in which graduates participate, as well as their immediate circles of engagement. In this study, "society" refers to the student groups engaged in PAL (Cape Peninsula University of Technology, 2017). The following sections present an analysis and discussion of the findings with verbatim responses as provided by the PSCs.

GA 1: Technological Capability and Foresight

Briefly stated, this GA relates to the ability to "recognise that society, technology and science are intertwined, so that technology and science have the capacity to effect changes in society" that technology needs to be "transformed/adapted to complex and changing circumstances" and that "graduates would thus need to take a critical and reflective stance on how technology is used and for what ends" (Cape Peninsula University of Technology, 2017, p. 2). Concerning this capability PSCs used their initiative to draw on Blackboard, the Learning Management System (LMS), create WhatsApp groups and use Microsoft Teams to communicate and support students, as noted below:

Mentor Excerpt 1: I would create a WhatsApp group. I'm trying to solve the issue … I would even create a Teams call and then we could discuss things on there and go about it like that.

TA Excerpt 1: I know a lot of things on BlackBoard. I'm able to like just build a test on my own, build a content on my own and then actually like a lecturer, like I can do a lot of things on BlackBoard on my own. I also go to YouTube most of the time and then just find out from YouTube how to do a lot of things so that it can be much easier for me.

Mentor Excerpt 2: I set up PowerPoints with Harvard referencing that most students have struggles with, and I set up a PowerPoint, I put it on the Google Drive and then I would put all my mentees in there ... whoever needs it.

These three excerpts reveal the underpinning abilities of "the ability to optimally communicate and follow through technological and other solutions" and "Autonomous decision-making based on the transfer and application of practical knowledge". Mentor 1 utilised technology to simultaneously reach all students, allowing them to problem-solve and discuss issues via Microsoft Teams calls. The reference to "I'm trying to solve …" demonstrates ownership of the mentor role to address student challenges. This excerpt also speaks to Relational Capability as the mentor sought to engage in group work to address and solve problems (Cape Peninsula University of Technology, 2017). Based on TA roles and responsibilities, TA 1 made every effort to learn how to use the LMS to build tests and subject content to support student learning. Using YouTube for self-development shows recognition of and addressing shortcomings, enacting both Technological Capability and Relational Capability, i.e., "Recognising one's own shortcomings (including in technology/practical knowledge)" (Cape Peninsula University of Technology, 2017, p. 4). Mentor 2 noted that students struggled with referencing conventions and developed PowerPoint resources on Harvard Referencing, assisting students at their point of need, even though mentors were not trained to provide academic support.

Similarly, tutors reported that:

Tutor Excerpt 1: My first class, the lecturer had to show me how to upload the slide and then that is all I knew. I taught myself the other things on Blackboard Collaborate.

Tutor Excerpt 2: I had to come online, having to share content, that was a problem. I think I was with a team, we spent I think a whole hour just trying to sort the whole thing out, Blackboard.

These tutors acquired and enhanced their technological skills in response to specific needs and this new acquired ability was strengthened as they adopted the underpinning ability of "Critical and reflective stances to the use of technology" (Cape Peninsula University of Technology, 2017, p. 2) "trying to sort the whole thing out, Blackboard" and "I taught myself the other things on Blackboard Collaborate". They further developed competency in the various functions of the LMS. They demonstrated an "awareness of social priorities, responsibilities and associated problems which may have technological solutions" (Cape Peninsula University of Technology, 2017, p. 2) and sharpened their technological capacity to support students effectively.

Retention officers (ROs) track and monitor students who might be at risk of academic underperformance, develop a database of this information and communicate with students under the supervision of the relevant departments. ROs reported that:

RO Excerpt 1: I compiled a spreadsheet for every module, for all students that I've contacted. I write the reasons why I contacted them and their response and my assistance.

RO Excerpt 2: I know the Excel spread sheet and where the columns should be and how to pair it with Word…and email students.

These ROs understood the importance of their roles to support students who might be at risk of failure. As part of their roles, they consult and report to the respective lecturers and departments and refer students to relevant support structures. ROs understood the magnitude of the task and used their technological capability to perform their responsibilities effectively. They honed their administrative and organisational skills using technology to perform their respective roles. These PSCs enacted the underpinning ability to optimally communicate and follow through technological and other solutions (Cape Peninsula University of Technology, 2017, p. 2).

GA 2: Resilience and Problem-Solving Capability

The vicissitudes of life are often revelations that there are "no simple solutions to problems in society and that there are many twists and turns, dead ends and necessary restarts, and that they [graduates] will need to act with resilience to succeed in these journeys" (Cape Peninsula University of Technology, 2017, p. 3). This volatility and fluidity of situations that arise necessitate skills to reflect, evaluate each situation, and apply appropriate problem-solving skills in order "to recover from setbacks and try again" (Cape Peninsula University of Technology, 2017, p. 3). The excerpts below all emanate from reflection to find solutions to support students and student learning.

TA Excerpt 3: … I am busy with a manual whereby I am going to focus on like what's needed like especially when you're applying, when you want to be appointed as a tutor or as a TA.

TA 3 was eager to recruit students in her department as PSCs but realised that students were not fully conversant with the different roles and responsibilities of PSCs. She took it upon herself to develop a manual to clarify which student support type applicants would be most suited for. She identified a situation that needed a solution, reflected on how to solve the problem and used administrative, organisational skills to develop a manual for future reference.

TA Excerpt 4: I will have a vision board and say okay like I want to achieve this mark. So I will continuously like update my vision…and it's what I'm also implementing now to students … you must have your vision board, you must reflect, each and every test when you write a test you must have a graph where you reflect…it can assist them.

This excerpt demonstrates Relational Capability, where the TA understands the need for visualisation and reflection, and implements the vision board as a strategy "to understand, learn

with, and so be able to engage with others for the best possible solutions to work" (Cape Peninsula University of Technology, 2017, p. 4). The use of the vision board to reflect on progress and develop graphs to track progress speaks to Resilience and Problem-Solving Capability, by using "administrative [and] organisational skills … to reflect on and evaluate progress" (Cape Peninsula University of Technology, 2017, p. 3). This is an example of how certain actions and activities may straddle two GAs, i.e., Relational Capability and Resilience and Problem-Solving Capability.

The following TA focus group comments reveal personal growth and development to reflect on progress, evaluate situations and aim for improvement. The PSCs identified specific improvements and growth in specific areas of self-development. The need to acknowledge shortcomings and the concomitant growth and development to continuously improve is evident in Resilience and Problem-Solving Capability.

TA Excerpt 5: So in the training they help us with the basics but at the end of the day you need to do your self-development to evaluate yourself, how better you can do it.

TA Excerpt 6: When I reflect back, when I started as a TA because I knew that one day I will like to become a lecturer and in terms of communication, like there was growth there, interpersonal skills in terms of how to work smart, whereby I'm given a task and then like I'm very efficient …

The excerpts reveal incremental application of GAs accompanied by strategies for improvement. The findings show that GAs are realised in reflection in action, on action and about action, with follow-up problem-solving actions that respond to specific reflections. Hence, learning to be flexible and patient with students who experienced connectivity challenges led a TA to be considerate and adjust the pace of lesson delivery; TA 3 identified the need to clarify the different PSC roles for recruits, and developed a manual, and TA 4 identified the need for students to take ownership of learning and shared the vision-board strategy for evaluation and progress tracking. GA acquisition and enactment do not necessarily need to represent major events and major shifts but could be smaller incremental problem-solving initiatives that lead to more sustainable GA consolidation and enactment in different situations and circumstances, which is the essence of sustainable GA development.

Tutors referenced the tension between tutoring, academic demands and other responsibilities.

Tutor Excerpt 3: …afterwards I must watch a 2-hour video, then there is a quiz I must do, then I must study for that, and then family issues, then someone texting "Please help me".

Tutor Excerpt 4: It was quite challenging – tutoring is just one of them. I study, I work, and I also do community work…

These tutors dealt with "many twists and turns" (Cape Peninsula University of Technology, 2017, p. 3) as they juggled tutoring, their academic programmes and personal lives. They realised that changes and solutions were needed to effectively manage their workloads. They reflected on, evaluated their situations, and problem-solved their respective circumstances. Tutor 4's strategy was to be objective in performing her task, to reflect, "calm down and structure my life. It teaches you to organise… choose and learn from those situations how you can balance them because in life they will come really like this". The tutor introspected as she sought to cope with "my personal life as well, there is also other things happening", seeking ways to better deal with several demands. She noted that

I discovered [what] works for me is first investing in myself and in self-care basically, because the more you take care of yourself, the more you can take care of others as well. If you are feeling drained and imbalanced, it makes it so much more difficult to assist other people and students…

She manifested the underpinning abilities of evaluation of her circumstances and realised and practised self-healing to continue supporting her peers. Tutor 4 displayed the capability of resilience and problem-solving. These tutors recognised that "there are no simple solutions to problems in society and … that they will need to act with

resilience to succeed in these journeys" (Cape Peninsula University of Technology, 2017, p. 3).

Retention officers in the focus group discussion shared similar personal growth as they devised ways to effectively manage their personal responsibilities and PAL duties.

RO Excerpt 3: I was forced into issues where I had to manage time better…I've put effort into it, splitting between them. Whereas before, I would just be a bit nonchalant. I needed to manage time better, splitting between them…work on the retention and then fill in some of the studies here.

RO Excerpt 4: You grow… time management, patience, you can't get upset, just have to overcome it.

These comments show that PSCs developed coping strategies, such as time management, to deal with the challenges of the demands of the PAL responsibilities and their academic programmes. They enacted the underpinning abilities of evaluating their circumstances and strengthened their organisational skills accordingly to handle the different tasks at hand. On reflection, they identified their needs and changed their behaviour and with the acquired abilities, set themselves up to deal with the demands of the future world of work and society.

In summary, the Resilience and Problem-Solving Capability evident in the excerpts above relate to reflection for improvement and problem-solving as realised within the context of these PSCs' experiences. The expansive description of each capability does not always allow for all features of each capability to be realised or enacted in one project or activity. This is the nature of GA acquisition and development for sustainability in lifelong practice and continuous development.

GA 3: Relational Capability

A tenet of existentialism is that humans are socialised into learning, working and living with others. This rings true for educational contexts, working environments and communities. The ability "to stand in the shoes of others to understand their needs, values and cultures … to act with understanding of others different from themselves … and so be able to engage with others for the best possible solutions to work and societal problems" (Cape Peninsula University of Technology, 2017, p. 4), is central to the Relational Capability graduate attribute. This includes embracing diversity, promoting effective communication, and respecting all contributions in groupthink contexts. PSCs across the spectrum displayed this GA as they engaged with students in their different support roles. The PAL programme's purpose is to retain first-year students by showing empathy and providing requisite support to keep students interested, engaged and focused on their studies. A common strategy employed by PSCs was to share their own experiences and the coping strategies they employed to succeed.

Mentor Excerpt 3: …a variety of...presentations I built for them was healthy living, how to eat healthy, how to manage your time properly in terms of when you are struggling with your work how you're going to fix it, like you to need to…learn to relax, there's stress management…and relaxation techniques.

TA Excerpt 7: … we've been in the situations that these students have been in. So we've been at first year, we know how the struggles, we know where we can assist them. So we need to go above and beyond for the students because we've been in the situation to get to where we are now.

Tutor Excerpt 5: I learnt that by helping others, it's not just about you helping them but it's something that needs to come from within your heart, it's something that you love to do and I happen to be that person who loves helping others because I also get to learn something new every day from the students even though I'm their tutor.

Mentor 3 developed presentations of healthy living, time management and stress management, showing self-reflection, to "stand in the shoes of others" to understand the stressors that impact student life and to develop coping strategies to mitigate these stressors. The excerpt of TA 7 acknowledges having been a first-year student, i.e., "we know…the struggles, we know where we can assist them". These excerpts show

concern, empathy and interaction from a position of care and relationship-building on an affective level. The nature of "helping others" and the emotional attachment that develops from "within your heart" to do "something that you love to do", relates to caring and empathy. The recognition and acknowledgement of learning "something new every day from the students" speaks to learning "with, and so be able to engage with others for the best possible solutions" (Cape Peninsula University of Technology, 2017, p. 4).

Similarly, ROs had to provide support in a manner that was understanding and reassuring.

RO Excerpt 5: I used my experiences as a student to have empathy for the students and understand their situations. I had to be sensitive when I sent them emails and corresponded with them.

RO Excerpt 6: You're not trying to make the students like feel bad that they are at risk. We still want to give them hope…we are trying to help (them) get through this because it's not always that the student didn't study enough, sometimes they really have problems…

They could "act with understanding of others different from themselves, at …interpersonal level…understand, learn with, and so be able to engage with others for the best possible solutions to work" (Cape Peninsula University of Technology, 2017, p. 3). As PSCs are students, they could relate to and apply their insights to understand and better support their peers. They used these 'insider' experiences to benefit their peers, engaged with empathy and supported them more effectively as they struggled with the demands of academia. The ROs enacted the relational capacity "to stand in the shoes of others to understand their needs…so that what is being worked on can have optimal effects and/or the best chances of success …to act with understanding of others different from themselves" (Cape Peninsula University of Technology, 2017, p. 3).

Tutors who provide academic support in smaller group environments equally developed and enacted the Relational Capability.

Tutor Excerpt 6: It really has developed me in understanding other people as well and knowing how to interact with them respectfully and also getting that respect from them as well.

Tutor Excerpt 7: It forced me basically to explore other ways of learning …and see whether this is going to help to understand the work better…And then I would share that with the students. But also other things which didn't necessarily work for me, I would share with them because it might work for them as well.

These excerpts capture the underpinning ability of understanding and respect for others' knowledge and the relational capability (Cape Peninsula University of Technology, 2017). The tutors appreciated the influence that they might have on their peers and wanted to give them the best opportunity to succeed. They drew on and shared their student insights and experiences, respecting their peers and harnessed these qualities to support.

GA 4: Ethical Capability

Being ethical is a core value that defines us as human beings. CPUT envisioned this capability in its graduates "to be orientated towards the well-being and improvement of society rather than just ensuring the well-being and advancement of themselves" (Cape Peninsula University of Technology, 2017, p. 4). The excerpts below denote this GA.

RO Excerpt 7: I was unsure as to whether or not, should I now reply to this student's email who's talking about they need orientation. … that's where the confusion came in to me. I always replied at work, what's different here? You still have to conduct yourself in a professional manner wherever you are…

RO Excerpt 8: This was beyond what I was supposed to do because normally the mentor would have to take care of …a very emergency situation…I didn't think just sending her off…I had to just help.

Likewise, tutors displayed this capability.

Tutor Excerpt 8: We were not prepared for that in particular – on how to deal with that.

And as a person who is actually getting paid for the next month, this is my job, I'm going to do it.

Tutor Excerpt 9: I lent one of the students my laptop because hers had a problem, so I decided to lend her mine so that she could write her exam.

These PSCs faced students' requests for assistance that was beyond the scope of their roles. They demonstrated ethical capability by assisting students as noted in their reflections below. They were torn between overstepping their specific roles as 'normally the mentor would have to take care of' and "whether or not, should I now reply to this student's email who's talking about they need orientation". Tutor 9 enacted this GA through unselfish behaviour when a peer needed a device and portrayed the underpinning relational ability. He saw the student's challenges and his actions were "orientated towards the well-being" (Cape Peninsula University of Technology, 2017, p. 4) of the student. These PSCs discerned the urgency of the requests for assistance and acted in the best interests of students, despite it being beyond the scope of their responsibilities, illustrating the orientation to the broader good, i.e., the students' well-being. They enacted ethical behaviour towards the "well-being and improvement of [students] rather than just ensuring the well-being and advancement of themselves" (Cape Peninsula University of Technology, 2017, p. 4). PSCs demonstrated that they recognised their behaviour had consequences, took responsibility for their roles and made decisions that could positively influence the lives of others. They enacted ethical behaviour as they were 'hearing and acknowledging the concerns of others' (Cape Peninsula University of Technology, 2017, p. 4).

In summary, the different GAs are interrelated and overlap due to the nature of the peer support provided. These PSCs displayed the GA underpinning abilities (refer to Figure 1 above), including their orientation to the students' needs and making decisions and choices to not only benefit themselves but also the students they supported. Ethical Capability cuts across the different institutional GAs, and PSCs demonstrated this capability across the kinds of support provided, as noted in the above exposition of Technological Capability and Foresight, Resilience and Problem-solving Capability and Relational Capability.

Conclusion

This study foregrounds the need to explore and adopt learning spaces other than the formal curriculum to enact GAs. The conventional avenue to pursue embedding GAs through the formal curriculum has not always been successful and the role of co-curricular activities, specifically PAL, should be intentionally embraced as a learning space to realise GAs. Although the actualisation of GAs by PSCs was not an intended aim of the PAL programme, across the data sets, the data showed that the institutional GAs were inadvertently enacted as PSCs engaged with their peers. PSCs demonstrated across the spectrum of different peer support types, i.e., tutors, ROs, TAs and mentors, to have developed and strengthened institutional GAs, namely Technological Capability and Foresight, Resilience and Problem-solving Capability, Relational Capability and Ethical Capability. This study demonstrates that co-curricular activities such as PAL programmes should be intentionally designed as a meaningful platform for those students providing peer support to enact abilities and skills aligned to institutional GAs. It is recommended that PAL programmes should be used as a strategy to foster and attain GAs for those providing peer assistance and should be included in institutional GA strategies. These co-curricular activities should be a systemic strategy, where the training and implementation foreground GAs in practice. Higher education institutions should explore these learning spaces and consider formalising the focus of GAs in PAL programmes. The next steps for a holistic strategy would be to evaluate the inclusion of GAs in PSC training and development, and to track and monitor the sustained effect of co-curricular activities on both GA development and students-as-peers growth. This study demonstrated that as universities strive to empower graduates with GAs to develop social agency and secure meaningful employment for sustainable futures, all avenues of GA acquisition, including co-curricular learning spaces such as PAL, should be utilised to achieve this objective.

Disclosure of Interest

The authors declare that to the best of our knowledge, we do not have any conflict of interest, financial or otherwise. Artificial Intelligence was not used to write this article. All authors approved the final version of this article.

ORCID

Williams S: https://orcid.org/0009-0005-5521-1299
Scholtz D: https://orcid.rg/0000-0002-8711-1568

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