
Volume 18

Issue 7 *Collaboration in higher education:
Partnering with students, colleagues and
external stakeholders*

Article 04

2021

**Characterising collaboration: Reflecting on a partnership between
academic support staff and lecturers to help university students learn how
to write for the discipline of chemistry**

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Recommended Citation

Makhanya, F., Qwabe, L., & Bryant, K. (2021). Characterising collaboration: Reflecting on a partnership between academic support staff and lecturers to help university students learn how to write for the discipline of chemistry. *Journal of University Teaching & Learning Practice*, 18(7), 41-55. <https://doi.org/10.53761/1.18.7.04>

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Characterising collaboration: Reflecting on a partnership between academic support staff and lecturers to help university students learn how to write for the discipline of chemistry

Abstract

Academic staff often lament their students' abilities to write for academic purposes. To address these writing challenges, faculty members can seek support from their university writing centres. Despite the expertise that can be found in areas of writing pedagogy in this location, these partnerships can often be asymmetrical with the academic staff members' ways of knowing overpowering those belonging to members of the writing centre. Perhaps these issues of inequity and disregard between disciplines are one reason at least half the collaborations that form in universities context fizzle rather than flourish. This article reports on findings from a reflective investigation done by three members of a collaboration that is currently flourishing in its efforts to help first and final year chemistry students learn how to write for academic and research purposes in their discipline at one university of technology in South Africa. Using in-depth interviews, we, two members of the chemistry department and the coordinator of the university writing centre, reflected on our experiences beginning, implementing, and moving the partnership forward. From this reflective process, we have realised that the team members possess particular characteristics (i.e. ways of thinking and being) that have perhaps enabled this enterprise to successful work towards its goal.

Practitioner Notes

1. Article provides insights from an in-depth reflection on a symmetrical collaboration between academic and academic support staff.
2. Collaborators' willingness to learn about others' disciplines and research could be key components in building effective partnerships that can help students learn how to write for their disciplines of study.
3. Teaching and learning centres should not only help develop academic staff's pedagogic capacities but also their willingness to continue to learn from others outside of their disciplines.

Keywords

Epistemic asymmetry, writing for the discipline, chemistry, support staff-lecturer collaboration, higher education

Introduction

At universities across the globe, academics often lament their students' abilities to write for academic purposes. Students' perceived writing challenges often lead academic staff to their university's writing centre to find solutions. From there, various types of collaborations can form between academic departments and writing centres. Yet, these collaborations are often based on relationships of epistemic asymmetry, meaning one or some of the collaborators tend to conceptualise the other collaborator's ways of knowing to be less valuable than their own (Paré, 2010). Typically, the epistemic ways of knowing that are devalued belong to the individual coming from the less 'scientific' discipline. In academia, a location where hierarchy tends to flourish, collaborations between individuals categorised as academic members of staff and those outside of academic departments (e.g., academic support staff) can be fraught with even larger inequities despite those individuals holding doctoral degrees, being research active, and possessing knowledge of the theories and praxis that can help the faculty member be more effective in the realm of teaching, learning, and writing. This devalued perception of the writing centre can be made worse by many in the academy misperceiving the reasons they do not receive the writing they want from their students, particularly those at the undergraduate level. Rather than understand the empirical reasons for students' challenges, academic staff, and senior administrators see these challenges as indicative of a need for student remediation. Thus, the writing centre becomes a place of remediation and academic staff can assume the individuals working in this context are also remedial in nature.

There is much research on collaboration in the higher education context. For instance, a great deal has been written about the importance of research partnerships both internal across a university's different departments and faculties as well as outside of its gate with both national and international partners. Although various types of collaborations are encouraged amongst individuals both inside and outside of their university context, Kezar (2005) reports that more than half of these collaborations fail. Researchers from various disciplines have sought to understand the reasons for this high rate of failure; yet the focus of this work tends to be the structural issues or the things that the organisations themselves can do to facilitate collaboration with little focus on the specific things that occur amongst team members or within them individually that perhaps can lead to effective collaborations. Thus, to understand this issue more deeply, this article reflects on a partnership that formed between three individuals who joined forces to work toward the common goal of helping undergraduate chemistry students at one university of technology (UoT) in South Africa develop their abilities to write for academic and research purposes in their discipline of study. We seek to interrogate this collaboration because this enterprise was not fraught with the typical issues of epistemic asymmetry that can often emerge in partnerships between academic faculty members and academic support staff. Specifically, we will interrogate what has made this collaboration successful by analysing reflections from our own individual experiences of how we came to be involved in this project and our experiences implementing the collaborative support given to the students. In the following section of this article, we provide a background of the UoT where this study took place.

Context: South Africa's post-secondary sector and Mangosuthu University of Technology

The discussion for this article is based on a collaboration at a university of technology (UoT), Mangosuthu University of Technology (MUT). This post-secondary institute is situated in the township of uMlazi, which is located just outside one of South Africa's largest cities, Durban.

Universities of technology are one of the country's three types of universities, which emerged in the higher education landscape after it was redesigned at the end of the apartheid regime in 1994. Traditional and comprehensive institutions are the other two types of universities within the national higher education context. The redesign of the higher education landscape began in 2004 with some universities merging and previous technikons becoming universities of technology to attempt to redress the devastation that had happened to the country's post-secondary sector (not to mention all levels of education in the nation) by the apartheid system (Hall, 2015).

MUT is a relatively unique post-secondary institution in South Africa for various reasons. First, it is the only university in the country that is solely based in a township. Second, it is one of the few institutions of higher learning that did not merge with others during the merger process of 2004. One of the main reasons for this lack of merger was to ensure that the institution maintained its original purpose, which was to offer post-secondary training to Black students from historically disadvantaged communities in the South African province of Kwa-Zulu Natal (KZN) - a mandate it continues to fulfil as most students at the institution are Black, *isiZulu* speaking students coming from townships or rural areas in KZN and its neighbouring province, the Eastern Cape.

This particular UoT has approximately 11,000 students enrolled in programmes in its three academic faculties: the Faculty of Engineering, the Faculty of Management Science, and the Faculty of Natural Sciences. The most common type of qualification offered at MUT is a National Diploma in which students spend two years in the classroom and a final year in a workplace context related to their discipline of study, which is called a work-integrated learning (WIL) placement. WIL enables students to gain hands-on work experience to prepare them for their future workplaces. At the time of this study, there was also the option in some programmes to complete a Bachelor of Technology Degree. At the national level, it was decided to phase out this qualification in the higher education sector and replace it with Advanced and Postgraduate diplomas. Thus, while the former credential allowed students to move into a Master's degree upon completion, they now need to complete both an Advanced and Postgraduate diploma to be accepted into a Master's programme after completing their National diploma. This is important to note, because some of the students supported via this collaboration belonged to the last cohort of students finishing their Bachelor of Technology degrees, some students completing their National Diplomas, and those in the new one-year Advanced Diploma programme. In our work, we also began an initiative to support first-year chemistry students in the National Diploma programme. In addition to the national changes, MUT has recently started to offer some Bachelor's degrees with a Bachelor of Environmental Health and a Bachelor of Biomedical Sciences both being offered in the Faculty of Natural Sciences. It is anticipated that given the changes taking place in South Africa's higher education system more departments at MUT will begin offering this level of study as well as Master and Doctoral degrees. In terms of post-graduate studies, at present the Department of Nature Conservation is the only unit offering a Master's degree at MUT, although many departments are offering or about to begin to offer advanced diplomas and post-graduate diplomas.

The collaboration

This collaboration began between two members of the chemistry department at MUT, Mfundo and Lindelani, and Katie, coordinator of MUT's writing centre. Lindelani is a senior lecturer in the department and has worked at MUT since 2002. He teaches a first-year analytical chemistry module (course) – one of the focuses of the writing support interventions that we have designed via this collaboration, as well as supervises students enrolled in the Bachelor of Technology and Advanced Diploma programmes, researching issues of how various bio-wastes can be used to

adsorb heavy metals from contaminated water bodies. Mfundo, the industrial technician in the chemistry lab, has been employed in this full-time position since early 2020. As will be discussed below, Mfundo played a key role in ensuring this collaboration began. In addition to working full-time in the department's laboratory, he is an alumnus of the department, having first completed his National Diploma and then his Bachelor of Technology degree (equivalent to an honours degree in North America) at MUT. He was a former student of Lindelani when studying at MUT. He completed his Master's degree in the same area in which the students are currently being trained and at the time of our study was pursuing his PhD in the same area of research and with the same supervisor with whom Lindelani worked. The third member of this collaboration is Katie. She is the coordinator of the writing centre at MUT, which belongs to the university's Teaching Learning and Development Centre (TLDC). She came to MUT in February 2020 as a visiting scholar from her home university, Carleton University, located in Ottawa, Canada. Her background is in the field of writing studies/pedagogy research. Although Katie has spent many years working in writing centres and helping university students learn how to write for their disciplines of study, a significant component of her research focuses on understanding the rhetorical challenges African academics can experience writing for publication purposes (i.e. publishing their research in international academic journals of their disciplines). It was this latter focus of her work that led her to facilitate a workshop for members of staff (both academic and non-academic) when she first joined MUT in early March 2020. Prior to analysing how this collaboration came to fruition, we first discuss research exploring reasons students at university find chemistry a challenging discipline, as well as research on why university students can struggle when needing to write for academic and research purposes in the same context.

Literature review: Chemistry and its challenges as a subject

Various researchers have discussed reasons that can make chemistry a challenging discipline of study for university students. As Cardellini (2012) has explained, by drawing on various researchers (e.g., Ben-Zvi, Eylon, & Silberstein, 1987; Gabel, 1999; Johnstone, 1982; Johnstone, 1991; Nakhleh, 1992), many students conceptualise chemistry “as a difficult, complex, abstract subject that requires special intellectual talents and ... too much effort to be understood” (p. 2). As outlined below, research has illustrated that there are fundamental factors that can make chemistry a difficult subject for students to learn:

(a) the need to carefully examine the use of everyday language in a scientific context; (b) over-simplification of concepts and the use of unqualified, generalised statements; (c) the use of multiple definitions and models; (d) the rote application of concepts and algorithms; (e) students' preconceptions from prior world experiences; (f) overlapping of similar concepts; (g) endowing objects with human/animal characteristics; (h) inadequate prerequisite knowledge; and (i) students' inability to visualize the particulate/submicroscopic nature of matter. (Treagust et al., 2000, p. 229)

Kozma and Russell (1997) support Treagust et al.'s argument that one of the largest challenges in the learning of chemistry is its nature as a subject in which everyday life is explained by phenomenon that cannot be observed, making chemistry a highly abstract discipline. In fact, these scholars advance the argument that to understand fundamental concepts in chemistry, one must make sense of the “untouchable and the invisible” (Kozma & Russell, 1997, p. 949). The learning of chemistry at university emphasises relationships that are often linked with abstract concepts and mental models. These models are developed by individuals during cognitive functioning and need

not be technically correct but should evolve as students interact more with their scientific reality (Treagust et al., 2000). The major challenge is the difficulty in determining how students learn from these mental models, because they are key to their understanding of the subject.

Johnstone (1991) explained that there are three different levels at which students must construct knowledge in chemistry. The first level of thinking for chemistry students can be relatively concrete. Learners “see and handle materials, and *describe* their properties in terms of density, flammability, colour and so on” (p. 377, emphasis in original). From there, the ways of constructing knowledge can be quite complex, as the next “level is ... *representational* ... in which we try to represent chemical substances by formulae and their changes in equations. This is part of the sophisticated language of the subject” (p. 377, emphasis in original). The knowledge at this level is the backbone of many communication forms in the discipline. Perhaps it is the need for students to think and communicate in these ways that can make the activity of writing challenging. From there, chemists move onto the “third level, which is atomic and molecular.” Here one must “attempt to *explain* why chemical substances behave the way they do” (p. 377, emphasis in original). In addition to university students needing to operate at these complex levels of thinking at the early stages of the post-secondary studies, this challenge can be compounded by students’ late introduction in their schooling to the discipline, previous teachers who may not have had much passion for the subject, inadequate resources at their high schools for in-depth teaching in the subject, and an assumption by the students that they will only need to learn subject content and not write about the knowledge they are obtaining.

Writing challenges

Much research has discussed the challenges university students can experience writing for academic and research purposes. This issue is significant given the high rates of attrition at many universities globally and how these rates tend to be attributed to students’ lack of preparedness rather than the university’s practices (Clarence and Dison, 2017). Student writing is one of the areas receiving a majority of complaints with teaching staff often complaining about their students’ inability to write. Interestingly, researchers working in the field of writing and literacy pedagogy at these universities have provided evidence-informed explanation for such challenges, illustrating that students should not necessarily know how to write for academic purposes upon entering the university. Students have rarely been taught (and universities often fail to explicitly acknowledge) that each discipline of study is a specific community of practice (Wenger, 1998) with its own ways of constructing knowledge and using language to shape and convey this knowledge (Paré, 2009). Thus, research from writing studies has clearly illustrated that students’ challenges to write for academic purposes do not stem from their lack of preparedness or limited capacities. Instead, these challenges emerge from the transition students are experiencing as they move from one learning context to another. In this transition, they must learn how to think, learn, and communicate for their new disciplines of study. Yet, most universities fail to integrate such meta-learning in the curriculum to ease this transition.

The collaboration which we reflect on in this article is one that drew from theories and research from the field of writing pedagogy to help chemistry students learn how to write for research purposes in their disciplines of study. Rather than perceive writing as a skill that students should know how to enact prior to entering university, this collaboration was infused with the notion that writing is a social action (see Bryant, 2017 for a further discussion of this difference), and students need to continuously learn how to enact the conventions of the new writing/learning/known situation in which they find themselves – these are situations that, rather than remain constant, are

continuously in flux. It is also accounted for the specificities of chemistry as a subject, its disciplinary history and language as well as its particular pedagogies.

Methodology

Through this research process, both Mfundo and Lindelani also began to appreciate how a qualitative research study could be undertaken. For example, as Mfundo continued to remark throughout this process, “I’m just fascinated by how what we [himself and Lindelani] say can be thought of as evidence. I didn’t know research could be done in this way until now.” In conducting this work, as the guide in the process though, and also as a white, Canadian (i.e. outsider), from what is often conceptualised as a more privileged location than her collaborators, Katie also sought to ensure that working with Lindelani and Mfundo, in learning about their experiences and hearing their stories, she continued to draw on a decolonization approach to research. This was a key component of the partnership, because, as Indigenous methodologist Linda Tuhwai-Smith has explained, “the term “research” is inextricably linked to European imperialism and colonialism. The word itself is probably one of the dirtiest words in the indigenous world’s vocabulary [...]. It is implicated in the worst excess of colonialism” (1999, p. 1). To avoid continuing to move the colonial project forward through her own research work, Katie, drew on a research approach used elsewhere (see Bryant, 2019) that was multifacetedly informed by methodologies of decolonization and Butler-Kisber’s (2010) notion of “the how of the inquiry” (p. 3). This latter approach to research allows qualitative researchers to move away from the pressures of fitting their work into a particular methodology typology and instead lets them see that “inquiry is the method. It is the way of being and doing the work from its inception” (p. 3). Continuously being cognizant of Indigenous and decolonization scholars’ critiques of research and drawing on Butler-Kisber’s how of inquiry, we then made use of in-depth interviews (see Hesse-Biber & Leavy, 2011) to garner an in-depth understanding of how and why all three collaborators came to be involved in this partnership. The interview questions, outlined below, were first developed by Katie but shared with the two colleagues for their feedback and revisions, of which they offered both.

1. *Can you please describe your academic background? (e.g., what degrees have you obtained and where?)*
2. *How did you come to pursue your area(s) of studies?*
3. *How long have you been working at Mangosuthu University of Technology? What is your current role? What role(s), if any, have you previously held?*
4. *What courses do you currently teach at the university?*
5. *How did you come to be part of this collaboration with MUT’s newly formed writing centre/the chemistry department?*
6. *Can you describe this collaboration and your role within it?*
7. *What benefits, if any, do you think this collaboration has (and can have) for the a) students; b) lecturers; c) department, and d) the university community?*
8. *What challenges, if any, have you experienced (or foresee), this collaboration experiencing?*
9. *Going forward, what, if anything, would you like to see change with this collaboration and the intervention offered to students? And what, if anything, would you like to see remain the same?*
10. *Do you have any other insights you would like to share?*

Following confirmation of the interview questions, the three team members met in Lindelani's office to discuss the questions and the collaboration more generally, after which Katie conducted the interviews individually with Lindelani responding first, followed by Mfundo. These interviews were audio-recorded, and Katie transcribed them verbatim. Although we sought to understand various facets of this collaboration, we focus specifically in this article on the factors that enabled an epistemically symmetrical relationship amongst this collaboration's members to develop and function in helping undergraduate students in the chemistry department begin to develop their abilities to learn how to write for research purposes in their discipline. We felt this was an important area of focus for this article because most discussion of collaboration concentrate on what the partnership achieved rather than the myriad of factors that lead to the formation of collaborations, the characteristics of the collaborators that enable the formation of a partnership, and the benefits and challenges of such synergies. In sections that follow, we reflect on all three of these components in the context of our own collaboration.

Findings

Katie has worked in the writing centre world for almost 20 years, working in and eventually coordinating a writing centre at Carleton University, located in Ottawa, Canada's capital city. She completed her undergraduate and Master's degree at this institution, and from 2000 until 2020, worked there on and off in various capacities. It was during the final year of her undergraduate studies, in 2003, that she began working at Carleton's writing centre, which at that time was called the Writing Tutorial Service (WTS). From this experience, she was introduced to research and scholarship on writing pedagogy, writing studies, and writing centre work. In addition, she had the opportunity to be mentored by two of the leading scholars in the field of Canadian writing research, Dr Aviva Freedman, who started Carleton's writing centre and Dr Natasha Artemeva. Eventually Katie came to coordinate this centre from 2008 to 2009 and again from 2018 to 2020. Yet, weaved in between these experiences at Carleton, beginning in 2006, she spent long periods of time living in both South Africa and Botswana where she has worked with different southern African universities, research institutes, and international funding agencies to support both academics and students in developing their abilities to write for research and academic purposes. This work has drawn on findings from her PhD study that examined the research writing experiences of academics at one university in the southern African country of Botswana and how their experiences potentially related to the issue of African scholars' low rates of research visibility in international journals. From this work, she has sought to develop evidence informed writing support programmes for researchers working at different universities in the southern African region. From these experiences, she had the opportunity to form a loose collaboration with MUT's Teaching and Learning Development Centre, which eventually led to an invitation to spend an extended period at MUT to help the institution open a writing centre.

Despite having studied the phenomenon of students' supposed challenges writing for academic purposes and working in the field to support students for many years, her research shift away from this work was intentional. This shift came from spending many frustrating years trying to form symmetrical partnerships with academic staff as well as build institutional (i.e. senior administration) understanding of the evidence-informed reasons for students' supposed challenges with writing at her home institution in Canada. Trying to support students with writing often left her feeling frustrated and dismayed in terms of how resistant academics and, more importantly, senior administrators at her university often were with regard to changing their thinking about why students struggle to write for academic and research purposes in the academy. Ironically, despite the university being a structure that values research, at her institution, the very findings and sites

that could help students become stronger writers were overlooked or closed altogether (see Bryant 2017 for further discussion of this issue). Such frustrations eventually led to Katie's decision to leave Carleton University, although she continues to remain connected to her former department, the School of Linguistics and Applied Language Studies via an adjunct research professor position. The experiences she had at Carleton and the challenges she faced – challenges that have been thoroughly discussed by many working in this field (see, for example, Paré, 2009) – led her to shift her focus to supporting academics with this work. She questioned whether such a shift might eventually have impact on their students' writing by influencing an institution to devise an evidence-informed writing support programme for its students.

Thus, when she took up her position at MUT, she intentionally focused on supporting academic staff, many of whom were beginning to embark on their academic careers, in developing their own capacity to write for research purposes. She did this work to also help them understand both the empirical approach she assumes to writing support as well as the research explaining why their own students might struggle with the activity of writing and how they might implement solutions to address these challenges. As the findings from the interviews with both collaborators below illustrate, this mechanism can have potential for support staff at universities, particularly those in the writing centre, to obtain buy-in and develop symmetrical partnerships with academics in traditional departments at the university.

The collaboration's inception: Personal recommendations vs formal introductions

As mentioned briefly above and explored in greater detail in the reflections from Lindelani below, it was Mfundo's introduction and support for the work that Katie was doing after attending the workshop she facilitated for MUT staff on writing for research publication purposes that encouraged Lindelani to join this partnership.

Lindelani was first encouraged to utilise Katie's expertise in his work with his own students through formal encouragement from his Dean. Ironically this more 'top-down' push actually acted as a barrier to engagement and cooperation rather than an inducement or a persuasion:

There was some encouragement [to work with Katie], I would say from the Dean's office. But I didn't know that much about Katie. I saw her when she was introduced in the faculty meeting, but until she was introduced to me by one of my former students, Mfundo, who said "no, look, there's a lady here who has interesting ideas." Because we were frustrated about the development of students from the writing side of things. Then I heard that she is one of the people that can come and assist. And we ended up meeting and I realised that there is something we can do for the benefit of the students and for our own growth as well as academics.

From Lindelani's discussion regarding the partnership's formation, he mentions knowing that undergraduate students in his department were struggling to write for academic and research purposes. Although Katie was introduced in what he describes as a more formal channel at the university, a Natural Science's faculty board meeting, he did not reach out to her to assist with this challenge. Instead, it was only after Katie was again mentioned to him through a personal recommendation from a trusted colleague (e.g., a former student now working in the department's labs as a lab technician, assisting students with their 'practicals') that he pursued the partnership. In the following section, we explore how Mfundo came to meet Katie to facilitate this introduction.

Characteristics of multidimensional: Limitation awareness and a desire for lifelong learning

It was through Mfundo's attendance at a writing workshop that Katie offered for MUT faculty members on writing for research publication purposes that this collaboration was born. Upon arriving to assume her post as a visiting scholar at MUT, Katie believed a key mechanism to help academics understand why their students 'struggled' to write would be via developing their understanding of why they 'struggled' to write for research purposes. This focus was particularly important at MUT, because many of the academic staff were still students themselves, completing their post-graduate work (i.e. Master or PhD programmes) and beginning to embark on their academic careers by writing some of their first journal articles or research grants. It was at the first session that Katie offered via the university's research office, that Mfundo and Katie met. As Mfundo explains it was his own challenges with writing for research purposes that brought him to this session. Yet, in addition, it was also his willingness to acknowledge these challenges and want to address them that enabled this collaboration to become possible.

During my time away from Mangosuthu, I had undergone a Master's programme in which my major challenge was writing. Not lab work. I had no problem with lab work. In fact, when I reflect, I finished my lab work quite early. So, one could attribute my time spent at the university doing my Master's being delayed by maybe my writing. So, writing was something that had haunted me for a long time. So, when I saw a three-day workshop that focused on writing, it was immediate for me to just try and hop on to whatever that could be benefited from that. I had no idea what it was going to be about. But even if I picked up three minutes' worth of information, for me, that would have been worth my while.

From attending the workshop though, Mfundo realised that the session not only could help him with his own development as an academic, but it could also help his students. In addition, he also learned that he was perhaps not the ideal person to be assisting his students or others in the lab with their writing work.

There were concepts that were brought to my attention, even though I was at such an advanced level, in my opinion, in my field, I realised how much I did not know about writing, about how to go about writing for yourself. So, I realised at that stage [during the workshop] that in terms of teaching someone at the lab, whether it was my students that I was tutoring or whether it was other members in the lab that were writing for different purposes, I wasn't, even at my level, equipped to even start engaging people in helping their writing move forward. So that was what would make me initially gravitate towards the writing centre because here was a person that was exactly what so many of us needed. So, I realised that there was someone that all of us needed, and I felt initially that I could have been that person to some degree. But here I was put in a position where I realised who should be doing some of the stuff I'm helping others trying to do. And if that person could help me, why not bring that person into helping everybody else, at the same level we could help the students better. We could help other people who were in similar positions at a more heightened level. So, that encouraged me, during the workshop, to see if anything was possible for everybody else to benefit from, because I had never been exposed to anything like this. It was the first of its kind for me. I didn't even know that such was possible. And especially internally. In the university. I wasn't aware, in the beginning, of being a full-time faculty member, so I wasn't aware that something like this existed. So, coming across somebody that was efficient in what we

were trying to accomplish, I was, you know, leaning towards wanting more. I engaged the facilitator of the workshop. And it was to my amazement that the facilitator was more than willing to actually help others in my department. I engaged my former supervisor, who is a faculty member as well, and a senior lecturer in the department. So, I then spoke to that individual, which is Dr Qwabe.

Mfundo's in-depth description of his recognition of how and what he was learning in the workshop for staff could be translated to his students must be further analysed to better understand the characteristics of this interaction that allowed this partnership to form. First, he describes knowing that writing was a challenge for him and wanting to address this challenge, which illustrates that he, himself, was willing to acknowledge his own limitations and to engage in an activity, like a workshop, that could help him address these limitations. Second, in attending the workshop, he realises his own limitations in helping others with their writing work. In other words, there is something about the content of the session that enabled him to understand the complexity of what makes it difficult for his students to learn how to write for their discipline and that a few simple lessons on grammar will not address these challenges. The question arises as to what specific things the facilitator did during this session to help him realise that he can help his students learn the disciplinary knowledge but not the rhetorical knowledge in developing in the discipline? From there, he also had the knowledge of the system in which he existed and its politics to help institute this collaboration in the department by then introducing the workshop facilitator to a more senior and long-term member of the department. Having discussed the individual characteristics of one of this collaboration's members, in the following section, we reflect on the characteristics another member of the collaboration brought to this partnership.

In describing the challenges Lindelani was seeing in his students' writing and his frustrations with these challenges, he also illustrates that like Mfundo, he had a willingness to continue to learn and understand other disciplines.

It's [students'] report writing [that made him frustrated]. I think it's the frustration for every academic. The way students write their reports. But I do feel maybe we are not doing enough, because when students have to write these reports, they need to understand the way of thinking in our community of practice. So, we have a certain way of thinking. But also, before I started this post-graduate diploma in higher education with Rhodes, I didn't really think that the problem could be with us as academics. I, you know, I viewed it from the student point of view. The students who had problems. But I began to realise that it's not so much the students. It's rather us as academics who are not doing enough to actually train them, because these things don't come naturally. There's got to be a level of training with academic literacies and it spills over to how they write their reports. That was my frustration. For the most part, I will shoulder the blame as an academic because I just don't think, knowing what I know now, that I was doing enough to help them understand what they needed to do.

Similar to Mfundo, Lindelani's insights above demonstrate a willingness to learn as illustrated by deciding to enrol in a post-graduate programme in higher education, despite having worked in academia for close to 20 years. In addition, once enrolled in this programme, he is willing to listen to the insights provided by experts in other disciplines about why students in his own department might be struggling to write for academic purposes and take up the insights from this field once Katie is introduced to him by his colleague – a colleague whose actions display similar characteristics to his own. Although this is only one instance of a collaboration, it raises interesting insights about the characteristics that individual collaborators possess to enable

epistemically symmetrical partnerships to form between academic staff and support staff at universities – partnerships that can then work toward improving the teaching and learning experiences of our students.

Discussion

Looking back and reflecting at how our collaboration has emerged, we can see that there are a few indicators that our collaboration could have failed yet we managed to successfully come together and work together. We are a diverse team, with diverse backgrounds and experiences. What brought us together was a mixture of demands and necessities as well as personal interest and commitment to our students to help them successfully move forward in their academic careers as undergraduate students (and potentially beyond). Ironically, the formal processes and procedures were not the mechanisms that led to this engagement – whereas it was the ‘authentic self’ in each member of the collaboration that brought something rich and positive into being. Getting to know each other, asking each other questions, about who we are and what we want to achieve, for ourselves and for our students, opened that door for a successful partnership.

Further, we were open to work beyond common academic perceptions of students (e.g., they can’t write) and cross disciplinary boundaries to learn from each other. Writing can be challenging for students taught in particular ways and accustomed to particular disciplinary customs. Yet, academic and research writing can also be challenging for academics themselves. This activity is further complicated when having to ‘teach’ writing to these students. Ironically it is very rare for discipline academics to transfer their understanding of their own issues with research writing to a tolerance for their students’ issues with writing. As participants in this collaboration, we made that leap and committed to reflect with each other on how we might work together. We also created time and space in the curriculum for students to ‘write to learn’ their subject. This work was not something ‘over there,’ meaning it was the responsibility of the writing centre and its coordinator. Instead, it was an activity that all three of us participated in during the course of the partnership. This is the essence of authentic pedagogy – and thus the responsibility of all academics – even science lecturers and tutors. It is our responsibility. But this responsibility can be shared with colleagues with the appropriate epistemic and pedagogical knowledge who are able to break down our barriers and work with us.

Conclusions and recommendations

Findings in this article stem from in-depth reflections on a particular collaboration at one university in one department amongst one writing support staff and two academic staff. Thus, they are far from generalizable. Yet, they do begin to offer those of us interested in forming effective and equitable collaborations some intriguing insights that can lead to possible recommendations for building collaborations in the future and areas for further research – both are outlined in the paragraphs that follow.

A first recommendation is related to how to build such partnerships. In this case, the formal mechanisms that might be assumed effective in building partnerships were less impactful than informal ones. As illustrated in the formation of this collaboration, Katie’s introduction from the Dean to the academic staff of his faculty’s various departments did little to gain buy-in from lecturers requesting support from the writing centre to help their students with writing. Rather, through Mfundo’s attendance at a workshop for academic staff to help the staff with their own research writing work – a mechanism that concretely introduced academics at the institution to

research and theory from the field of writing studies as well as the practical tools to help them develop their writing capacities – that this partnership formed. This finding leads to a key recommendation for other practitioners working in the field of writing support across the globe as well as an area for further research. For example, how do effective partnerships typically form? Do they emerge from top-down or more informal introductions? Then building on this question, can Katie's approach be a mechanism to shift normative thinking about why students struggle to write for their disciplines of study at university? Can helping academics, often junior members of staff, develop their capacities to write, shift common and often non-theoretically informed thinking, as well as influence the thinking of more senior faculty members and even senior administration?

A second recommendation for support staff is to form partnerships with academic staff who display similar characteristics to those of Mfundo and Lindelani. Obviously support staff cannot always choose with whom they collaborate. But individuals belonging to this category of staff at universities can be conscious of which collaborations they choose to put significant effort into versus those in which they invest less time and energy. From reflecting on our own individual partnership, it becomes evident that it might be valuable for support staff to collaborate with academic staff who display characteristics similar to those of Mfundo and Lindelani – an openness to further learning, an interest to understand the empirical reasons for students' challenges writing, and a willingness to invest a significant amount of time in developing and implementing the collaboration. In other words, support staff should concentrate on building collaborations with academic staff who do not assume that someone from the writing centre will come into their classroom and give a quick workshop on writing or cover a lecture because they have a doctor's appointment or are away from campus attending a conference. In addition, both Mfundo and Lindelani, through their stories, illustrated a characteristic of humbleness – both indicated that they did not know what to do to support their students and, thus, were willing to learn from someone who did know. They acknowledged their limitations and were willing to look for and listen to solutions to address them. Finally, they were willing to work in-depth with Katie and find time in their students' regular schedules to implement this support programme as well as attend many of the sessions to support Katie in her efforts to help their students. Building from this recommendation, an area of future research could be to examine characteristics of other symmetrical partnerships at other universities across the globe to understand what leads to such partnerships and to examine if and how these partnership can then potentially lead to larger institutional changes in terms of developing departmental, faculty, or even university-wide initiatives or more formalized programmes that can better help students (and even faculty members) develop their abilities to write for academic and research purposes in their disciplines of study.

A third and final recommendation emerging from an in-depth glimpse into this symmetrical partnership, is for individuals working in teaching and learning centres, to contemplate how to develop characteristics that Lindelani and Mfundo display in early career faculty members and even post-graduate students. Is it possible to use modalities, such as workshops and even post-graduate programmes in higher education, like the programme Lindelani described completing, to help academics become aware of the importance of possessing these characteristics and develop mechanisms to support them? All three collaborators had characteristics that, we would argue, allowed this partnership to work. In addition to Lindelani and Mfundo admitting they did not know what to do, Katie also acknowledged how little she knew about the discipline of Chemistry and how to write in this field. Yet, she possessed a willingness to learn how rhetorical conventions worked in this discipline to construct an argument, establish a problem, use data to support claims, and so on. For those of us tasked with educating the next generation of academics, or currently

trying to build the pedagogic capacity of current academics, we must not only focus on helping them learn how to teach, but also how to foster the characteristics of the collaborators described in this article. Such focus can potentially enable more legitimate (i.e. symmetrical and respectful) partnerships across disciplines and with academic support staff to ultimately help our students become more successful in their academic studies.

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