



Legitimation Code Theory as a Lens for Students' Academic Support at Mangosuthu University of Technology

N. E. Madondo^(✉), L. Khumalo, and Z. Mbili

Mangosuthu University of Technology, Jacobs 4026, South Africa
madondone@mut.ac.za

Abstract. This paper argues that there is likely confinement of most of us in academia in dominant understandings associated with teaching, learning and language to the extent that the practices, beliefs, and values that underpin those practices, privileged in these discourses become 'normalised' and 'naturalised'. What seems obvious and becomes normalised is the idea that when students fail is because they have an English language problem and so, the students' support programmes are likely to be conceptualised on the basis of 'fixing' students language problem. We argue in this paper that when academic support adepts provide students support should see beyond what seems normal, the idea of 'fixing' students language problems. This could be realized when academic support adepts work collaboratively with disciplinary experts as they provide student academic support. To do this work, we argue for Legitimation Code Theory and Academic Literacies Approach to students' academic support at Mangosuthu University of Technology. The theoretical framework helps us realise that disciplines are structured and specialised differently. When offering students' academic support, it is possible to see that we need to draw on the structural knowledge of the discipline. We refer to data that was generated through email correspondences between academic support staff and disciplinary experts. Data show enablements and constraints in drawing on the structure of knowledge of the discipline when providing student support initiatives, thus, enabling or constraining epistemological access. The current data is related to the disciplines of chemistry and business administration, both in level 1.

Keywords: Academic literacies · Legitimation Code Theory · Academic student support

1 Introduction

What we know is overwhelmingly determined by how it is known [16].

The focus of teaching and learning as well as student support should not only be confined to 'what' to know, that is, content in a narrow sense. But more than this, it should be on the 'how' of teaching and learning by engaging with the construct of how this content is organized, sequenced, expressed, assessed, and valued [3]. This is

one way of making the ways of knowing in the disciplines or put differently, rules of the game explicit and so, the support work could benefit immensely if it was located within the discipline(s) in order to get the 'insider' know how for effective student support. Otherwise, we run the risk of teaching students 'study skills' [13] and thus provide essay writing practices that are only loosely connected to the disciplines in which students need to use them [8]. If support is loosely offered, we put the responsibility of being appropriately literate primarily on the shoulders of students, which is of course, a challenge for most students [6]. When students fail, we are likely to shift the blame to individual students without acknowledging that the university space is in fact social, political, historical, and cultural. The student is thus observed as not motivated enough, not intelligent enough, or not prepared enough for the university, when they fail [4, 6] and this is common sense understanding.

However, a close examination of what happens when people engage with academic texts (and the term 'text' here would include a lecture) by reading, writing, listening and speaking shows that the ways of engaging with those texts are not a set of a-cultural, a-social, a-political 'skills' but rather sets of social practices or ways some social groups have chosen to engage with texts historically [4]. These ways of engaging with texts, which encompass socially derived dispositions have then been privileged over time and can function to exclude those who have not had access to the social groups in which these practices predominate. Developing these socially embedded ways of engaging with and relating to texts often impacts on the very 'being' of individuals who are discomfited as they do not understand the purpose of what is being required of them because the practices themselves are rooted in values and attitudes about what can count as knowledge and how it can be known which themselves are alien [4].

The discourse of teaching and learning, including academic support requires a very different pedagogical approach to traditional instruction in 'study skills'. Even more significantly, it shows how practices differ according to the disciplinary context. Reading and writing in science is different to reading and writing in other areas. This means that we need to locate developmental or support work in the disciplines themselves and engage with adepts in the discipline to identify what it is students actually need to do.

To effectively engage with issue raised above, the first part of this paper engages with the context of students support at Mangosuthu University of Technology (MUT) in the Academic Literacy and Language Unit (ALLU). This context shows that, on paper, student academic support draws on socially embedded ways of engaging with and relating to texts, but in reality, the students' academic support largely draws on the construct of 'study skills'. The second part discusses the philosophical foundations and theoretical framework informing this paper. Philosophically, this paper draws on the tenets of critical realism to help us understand the world we are trying to explore, that is, the world that involves interactions between teaching and learning and students' academic support initiatives at the ALLU. This philosophy acts as an underlabourer to Legitimation Code Theory (LCT). LCT helps us draw on the structure of the knowledge of the discipline being supported by providing us tools of specialization and semantic waves because different disciplines are specialized differently and their mechanism of legitimation as a successful knower in the discipline are specific to each discipline. The third part elaborates on data driving this article. Data demonstrates enablements and/or

constraints regarding students' academic support in the ALLU. This data emanated from email correspondences between the academic support lecturer and the disciplinary experts in the disciplines of chemistry and business administration, in the departments of environmental health and office management and technology.

2 Context of MUT Students' Academic Support

This study was given clearance from MUT. The ethical clearance number is RD1/07/2022 and is valid from 01 April 2022 to 01 April 2024. This study is registered under the project name Academic Literacies Research: Student Academic Support, registration number: TLDC/01/2022. There is thus legitimacy in conducting a study of this nature.

Becoming academically literate is a complex process which cannot be confined to good or excellent English language acquisition as is normally understood in most parts of higher education in South Africa, but it could be made easier through supportive others. Both disciplinary experts and academic support adepts can help students to engage with the questions of what can count as knowledge and knowing in different disciplines and together they can work out how these could be explicitly made available to students. When it comes to meaning making in the disciplines, the nature of truth and knowledge making is understood to be realist or relative. From an Empiricist point of view, common in science disciplinary courses, knowledge is viewed as being objective, de-contextualized and certain. From an interpretivist position, knowledge is perceived as being individually (or socially) constructed in particular contexts (and is potentially reduced to knowing). Opening up these aspects of teaching and learning to students as they engage with their respective courses suggests that traditional approaches to students' support that are based on neutral 'study skills' excludes access to the expectations of different disciplines for the majority of students who are beginning to enter higher education; those known in literature as 'non-traditional students' [14]. Regrettably, there has been an ongoing and persistent presence of what is known as the 'autonomous model of literacy support' at MUT, particularly in the ALLU, even though on paper, for example, in the ALLU's Academic Literacy and Language Unit Students' Support Framework (ALLUSSF), it is stated that:

The philosophy that underpins this particular framework is the New Literacy Studies movement [6, 13], among others). The new literacies model is a move away from a one-dimensional deficit model to the conceptualisation of academic literacy as three overlapping frameworks which include study skills, academic socialisation, and academic literacies (ALLUSSF n.d: 1).

While the above excerpt seems to suggest that the academic students support at the ALLU is underpinned by a move from the 'study skills', in practice the offering of the students support has largely been informed by the Needs Theory captured in Fig. 1.

Based on the ALLU's conceptualization of students' support, the framework based on Fig. 1 describes support framework as:

The framework primarily focuses on students and the best approach to support them for academic success. It starts with the assessment of student needs upon which the academic literacy intervention is developed. Upon the completion of needs assessment, the Academic Literacy and Language Unit meets to debrief on the needs and the way

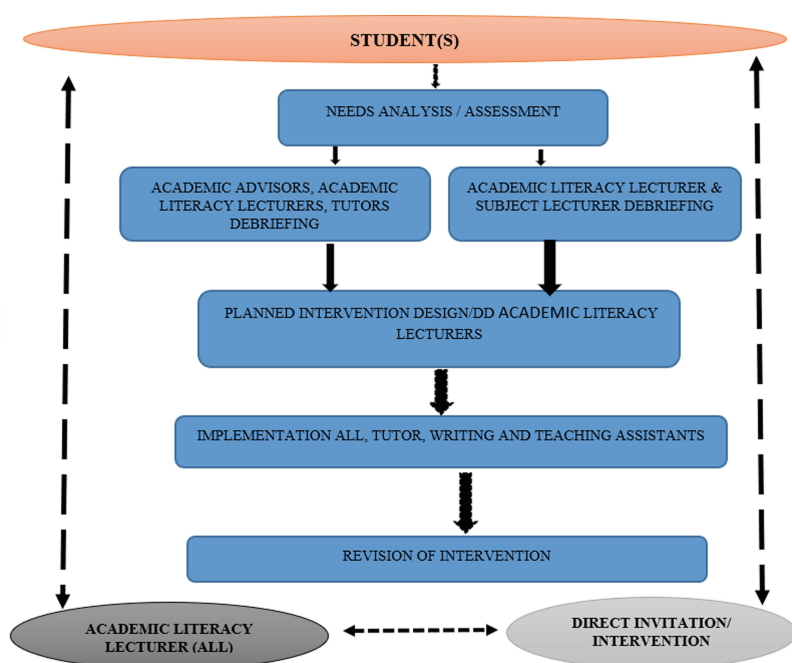


Fig. 1. ALLUSSF

forward. Following this move, the Academic Literacy Lecturers and the Subject Lecturers also meet for debriefing. These debriefing meetings are followed by a planning meeting between the lecturers and the deputy director. The planned intervention is then implemented by the unit comprising of the lecturers, tutors and teaching assistants. Upon the completion of the intervention, a debriefing session is scheduled to evaluate the effectiveness of the intervention (ALLUSSF n.d: 2).

Based on this framework, it is possible to see that the intervention for students' support is largely based on planned interventions, not necessarily on academic literacies approach as it has been suggested above or draws on the structure of knowledge of the discipline being supported. But the support is informed by students needs which are not necessarily based on dispositions that students need to develop to access the disciplinarity of supported modules. In effect, the support is largely based on 'study skills' and this view is also captured on the Academic Literacy Support Workbook for student support that had been developed by the ALLU. This document states that:

The workbook has adopted a practical approach through the use of techniques and skills from various disciplines, with particular emphasis on language, reading, writing and thinking skills. The workbook is designed as a self-study and a reference book in basic academic literacy skills. It provides guidance on various aspects that your lecturers would expect you to know but may not teach in class. In order for you to use this book effectively, we advise that you read it always and do all the activities in the different chapters. Apply the skills that you acquire every time you have to do an assignment or

any other form of assessment for the rest of your academic studies (Academic Literacy Workbook n.d: 2).

Clearly, based on the above excerpts, the current student support model mainly teaches students 'study skills' and essay writing practices that are only loosely connected to the actual disciplines in which students need to use them [7].

In addition to the abovementioned documents, there has been attempts to teach in discipline specific ways from the ALLU. Particularly, a pilot study took place in 2019 with the department of Marketing. The piloting continued in 2020 where the ALLU continued with an attempt to embed support to the discipline of Marketing, but the support offered to students was particularly at postgraduate level, like examples above, it appeared not to be located within the discipline in terms of how the knowledge structure of the discipline of marketing shaped the kind of support that was offered. The focus was mainly on helping students with their research project on proposal writing, to produce academically sound proposals, without necessarily engaging collaboratively with the disciplinarity of marketing as a field. While there were occasional meetings between disciplinary experts from the department of Marketing, the focus of these meetings was mainly on assisting students engage with journal articles to respond to their research questions.

It is evident from these examples that the responsibility of being academically literate, whether at first year level or postgraduate level was placed on the shoulders of students [7]. It is for the reasons described above that the student support at the ALLU is being reconceptualized through the academic literacies approach as it allows academic literacies adepts to draw on the actual structure of the knowledge being produced as they work collaboratively with disciplinary experts. By so doing, it is possible to realize how the structure of the knowledge legitimated in the disciplines shapes the norms, values, and literacy practices that students need to develop. It is through the tenets of Legitimation Code Theory that we can begin to grapple with the structure of disciplinary knowledge if academics from across departments and the ALLU came together to enhance student success.

3 Philosophical Underpinnings

Research is about constructing new knowledge. In so doing, we are making claims to the 'truth' based on our understanding of reality (ontology), as well as of how we gain knowledge of what exists (epistemology). Our ontological and epistemological assumptions will have a direct effect on how research is conducted and the claims we can make as a result [10]. The research in this study is thus shaped by critical realist ontology which understands reality as being stratified into three layers [1, 2].

The first layer being 'Empirical' which involves experiences and observations. As human beings we experience and observe the world differently and so, this layer is understood to be relative and transitive. The second layer involves events which maybe experienced in multiple ways or not at all or indirectly and this layer is called, the 'Actual'. Both events, at the 'Actual' level, and participants' experiences of them, at the 'Empirical' level, are understood to emerge as a result of the interplay of structures and mechanisms, located at a deeper layer of reality, termed the 'Real' [1, 5]. The emergence

of experiences and observations is, however, not a matter of cause and effect but there is a tendency of these to emerge because of the interplay mentioned above. The work of a critical realist researcher is to excavate this deeper layer of reality in order to identify the structures and mechanisms, understood to have relatively enduring causal powers and properties and some status as enduring 'truth'. Bhaskar's critical realism is 'critical' in the sense that it encompasses a concern for social justice. Excavation of structures and mechanisms at the level of the 'Real' allows us to understand the way in which they work together to produce events and experiences and, through that understanding, to foster change.

In the context of this paper, our aim was to identify the structures and mechanisms from which emerged events and experiences related to how student academic support was understood by disciplinary experts, an understanding which could be located in the data produced through email correspondences and students support documents. As a result of identifying these structures and mechanisms along with the way they worked together to produce events and experiences, our aim was to use data produced from the email correspondence and documents to identify ways in which teaching and learning, particularly student academic support could be improved in order to provide better quality provision (conceptualized in critical realist terms as better experiences and events) for students who had not received students' academic support that was discipline specific under the context discussed in the above sections.

The structures in critical realist philosophical underpinnings are understood to be race, class, gender, geographical area, education system, curriculum, etc. and cultures are understood to be beliefs, ideas, ideologies, etc. that people have about a phenomenon, and these are located in the 'Real' layer of reality and these shape or condition, not deterministically, the emergence of events and experiences at the level of the 'Empirical' and the 'Actual'. This philosophical understanding was important for us as it was going to help us understand why disciplinary experts understood what they understood the way they did regarding student's academic support and whether such understanding constrain or enable student support. However, as a philosophical understanding, it could not help us understand the structure of the knowledge of the disciplines being supported and for this we turned into Legitimation Code Theory [15].

4 Legitimation Code Theory (LCT): A Lens for Student Academic Support at MUT

LCT with its tools of specialization provides a way of understanding the extent to which different disciplines and fields are specialized in different ways. Accordingly, the knowledge code is the field in which it is the acquisition of knowledge, skills and practices that is the core mechanism for legitimation, implying that being a particular kind of knower with a particular set of attributes, a particular way of being in the world is less important in some discipline, such as science. But this does not necessarily mean that being a particular knower ... is completely unimportant in science. LCT therefore allows for the fact that there is always knowledge and there are always knowers, but the knowledge code, in some fields or courses, is one in which the core basis of legitimation or recognition and validation in the discipline is the ability to demonstrate knowledge, skills and

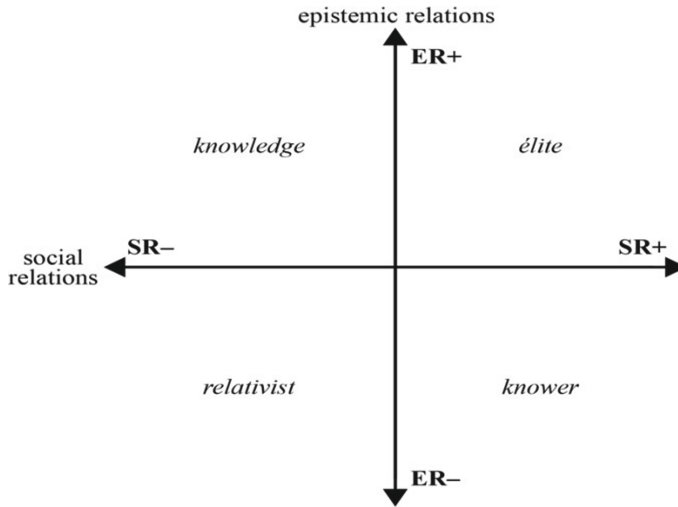


Fig. 2. The specialisation plane [15]

practices, and in others, being a particular kind knower is the basis of legitimation. A detailed brief is provided below.

LCT provides us with a set of tools that are useful in analyzing the organizing principles from which knowledge practices emerge. In other words, the knowledge structure of the discipline shapes the practices that students need to develop as mechanisms of legitimation to be valid knowers – to be successful. The focus on the structure of knowledge is crucial in that it enables an identification of the ‘rules of the game’ (cf. Bourdieu) on any field of practice like chemistry or business administration.

‘Specialization’, as one of the useful tools of LCT, understands knowledge practices as knowledge–knower structures. In other words, in all teaching and learning interactions there is always knowledge and there are always knowers, but some disciplines or fields specialize more on knowledge than they do on knowers vice-versa and so, these structures are defined by their relations to knowledge itself (epistemic relations) and relations to knowers and ways of knowing (social relations). These concepts are mapped onto a plane to identify a number of codes as shown in Fig. 2.

Knowledge codes (ER+) emphasizes the ‘what’ of knowing. Knower codes (SR+) privileges the ‘who’ of the knower. Practices drawing on knowledge codes (ER+/SR–) are therefore potentially open to anyone, as the ‘who’ of the knower is downplayed in favour of knowledge itself. Modules in the natural science are mainly located in the knowledge code as it is the demonstration of knowledge that counts as a mechanism of legitimation in these fields. So, science would assume an (ER+/SR–) codes. In practices drawing on knower codes (ER–/SR+), the ‘who’ of the knower is what counts. Elite codes (ER+/SR–) emphasize specialist knowledge and the ‘right’ kind of knower, while relativist codes (ER–/SR–) allow for a wide range of knowledge and different types of knowers.

The use of specialization as a tool to analyze knowledge practices can reveal ‘code clashes’ between, for example, the dispositions of learners and pedagogy and curriculum

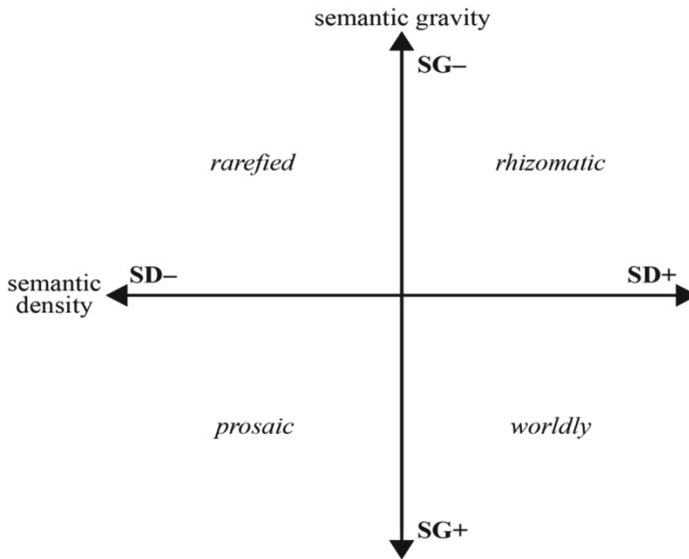


Fig. 3. The semantic plane [15]

and pedagogy. It is this understanding that our student academic support seeks to engage with as opposed to generic ‘study-skills’ support. In the South African context, it has been used to explore courses where the dispositions of black working-class students clash with knowledge and pedagogic practices that assume a different kind of knower [7, 11, 12].

The dimension of specialization also develops the concept of ‘gazes’ within knower codes (SR+/ER–). But these are not the focus of this article.

Semantics explores the context dependency and complexity of knowledge practices by using the concepts of ‘*semantic gravity*’ (context-dependence) and ‘*semantic density*’ (complexity). These concepts can be drawn upon independently or jointly to identify semantic codes represented on a plane in Fig. 3.

Key to work using semantics is the identification of ‘semantic waves’ that can be used to build knowledge over time, depicted in Fig. 4.

Figure 4 could be used to illustrate pedagogic practice, where a teacher begins by using an example of a phenomenon from the world with which students are familiar, described in ordinary, everyday language, and then moves into a more theoretical explication of that phenomenon, which removes it from the everyday world and which, at the same time, ‘condenses’ meanings into more complex terminology.

This concept could be applied to identify strategies that could be used to support students as they develop mastery of the complex concepts necessary to move through the levels of the programme. The curriculum of the field of science, for example, is characterized by changing relationships between semantic gravity and semantic density. Reduced semantic gravity allows for increases in semantic density. It is. However, important to note that examples used from everyday contexts are sometimes not useful as they serve to oversimplify semantic density. For this reason, a more complex and balanced

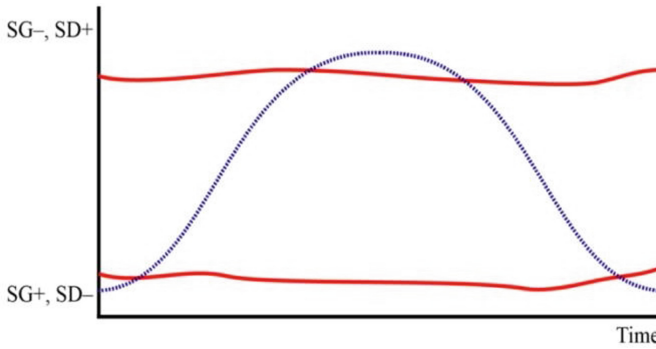


Fig. 4. Semantic waves [15]

application of contexts is required to ensure that an appropriate level of semantic density is achieved. This would help in identifying the need for a ‘semantic gravity wave [that] travels across transitions, and reduce contextual complexity to enable a focus on ‘high level’ abstractions and increasing the complexity and level of cognitive challenge.

The concepts identified from LCT are thus seen as crucial and useful in reconceptualizing student academic support at MUT as opposed to what is currently experienced by students. In relation to this point, a recent evaluation of the ALLU’s Academic Literacy Programme identified the gaps in terms of situating student support within the disciplines.

5 An Evaluative Report of the Academic Literacy Programme at MUT

Research that was based on evaluating the academic literacy programme of MUT was conducted in 2020. The evaluation was conducted by scholars from Carleton University in Canada. Apparently, these colleagues and Carleton University have a working collaboration with MUT in terms of establishing research focused interventions on academic support.

Some of the findings of the evaluation on academic support at MUT revealed that there are diverging, even contradictory pedagogical approaches and understandings of Academic Literacy (AL) program; and that there are contradictions regarding theory on academic support that is co-existing among AL staff, departmental faculty, and students, an understanding which contributes to inefficiencies in terms of support offered to students [9]. These cross-cutting findings showed that, on the one hand there is an understanding of student support that is generic, and, on another hand, there is another which is discipline specific [9]. It should be noted that academic support, in this evaluative report document, includes both academic staff support, as they engage with their academic work, and student support offered by the ALLU under the auspices of the Teaching and learning Development Centre (TLDC).

The evaluation further noted that the ALLU’s philosophical underpinning appears to consider academic literacy as a generic, neutral study skill such as time management,

increased reading activity and improved grasp of the English language. In other words, while there seems to be an understanding of discipline specific academic literacy support among some academic staff, both disciplinary experts and academic literacy adepts, AL is not necessarily discipline specific, and is delivered in an add-on fashion, both in terms of the context of the student but also in terms of the context of the discipline [9]. This aspect of academic literacy support was also evidenced from the pilot study that was conducted with the department of Marketing from 2019 until 2021, as it has been alluded in the sections above.

Being vested in the disciplinarity of the field when offering support cannot be overemphasized. We know this from the tenets of LCT discussed above. This is because the structure of the discipline could enable academic literacy lecturers to be intimately acquainted with the practices of the field so that they are able to draw on the actual structure of knowledge being produced when offering students [7].

6 Methodology

Ethical considerations regarding the nature of the study reported in this paper have been provided in the context section above and so, this section reports on methodological considerations. This paper draws on qualitative data drawn from email correspondences and academic student support documents that were produced by the ALLU lecturers to offer student academic support. It should be noted that this data emerged out of planning meetings that the ALLU lecturers had with various disciplinary experts in persuading them to offer students' academic support. These engagements took place because the student academic support is currently not a structured or credit bearing initiative at MUT. In that way, students can come as they see fit and disciplinary experts can send students as they see fit. The students can either attend the programme or not and that is not expected to affect their semester or annual formative or assessment marks. Offering support under these circumstances is not conducive, particularly when intending to do it in discipline specific ways as this takes time and effort, for example, in designing materials that are specific to a particular discipline, such as Chemistry or Business Administration. So, as the ALLU lecturers we did not, in the first instance, thought that some data would emerge from email correspondences. But our knowledge of critical realist orientation to research and LCT understandings, enabled us to see beyond what we observed and what was presented from these emails, into mechanisms shaping disciplinary experts' interpretations of their understanding of students' academic support that is being offered by the ALLU. Such understandings are presented in the following findings section.

7 Findings and Discussion

7.1 Email Correspondences Between Disciplinary Experts and the ALLU Lecturers

The findings below were analyzed through the tenets of LCT and philosophical underpinnings of critical realism, details of which are provided below.

The following data emerged from email correspondence between the ALLU lecturers and Chemistry lecturer in the department of Environmental Health at MUT. The lecturer in question did not have concerns with anonymity issues and was made aware of the ethical clearance of this study.

In our attempt to enable teaching and learning support initiatives that draw from the structure of knowledge of the discipline being supported, we produced support material that was discipline specific to science modules in general and chemistry in particular. In so doing we tried to structure our pedagogic practice in ways that were more inclined to epistemic relations as the nature of the field of science and chemistry dictates. However, realizing that disciplines have both knowledge and knowers, our design of the chemistry support document was not only confined to ‘what to know’ but more importantly to ‘how to know’. It consisted of both the knowledge code and the knower code [7, 10, 15], as shown in Fig. 2.

This way of offering support was appreciated by one of the disciplinary experts, from email correspondence and comments from the support document we have developed at the ALLU. We are currently working collaboratively with this lecturer from the environmental health and below is what she had to say:

Firstly, well done to the whole team! I am highly impressed with how you have accurately captured issues that students struggle with and in honesty, issues I also struggle teaching them (you have made me realise that). I am excited about this and are looking forward to see how this shapes the students to be good scientists (Comments from Email correspondence).

The utterance from this lecturer that our design of the support material is likely to enable students into becoming good scientists was an indication of not confining student support to ‘what’ to know but also to ‘how to know’. The following findings are also an evidence of this understanding.

I like this Tutorial (Scientific use of language), a lot. It accurately covers what I find students struggle with and as much as I tell them time and again, I think my method of trying to teach them was not effective. Thank you. I think this covers very important aspects of scientific writing. I fully support it (Comments from Chemistry support document, 2022/05/07).

Again, I am very happy about this (Academic writing and knowledge claims). I am also learning from how you structure these tutorials. Can I use some questions, paraphrased but same concept, in my other modules? I think this might be quite useful in the Research module I teach. Well done to the team! (Comments from Chemistry support document).

Thank you for including this one (paraphrasing). One of the most challenging aspect of their (students) writing. You have taken a big problem and made it easier for them to grasp. I will request to use this for levels 3 and 4 if possible. Even if not for this year, if you want to test it first, from next year. Well done to the team. Thank you (Comments from Chemistry support document).

Drawing from the philosophical orientations of critical realism, it is possible to see, from the data above, that what disciplinary expert is saying here emerges from the

'Real' layer in terms of curriculum and pedagogic practices that situates teaching and learning in epistemic plane (ER+) and less focus on social relations (SR-). This is because science modules legitimize the knowledge code and downplays the social or the knower code [10, 11, 15]. But as I have pointed out above, our design of the support material for chemistry was not only confined to the knowledge code but it also had some aspects of the knower code.

We designed our support material in that way because it is the knower code that is crucial for students to effectively access the knowledge code and so, without the social or the knower code, accessing the knowledge code of science is difficult. Hence the disciplinary expert from chemistry state that *"I am highly impressed with how you have accurately captured issues that students struggle with and in honesty, issues I also struggle teaching them (you have made me realise that"* – these issues are the ways of being, behaving, dispositions that students need to develop for ease of access to the disciplinarity of science and chemistry, situated in the social relations or the knower code in Figs. 2 and 3.

If we are not aware of these codes, whether we are disciplinary experts or academic support adepts, students are likely to experience code clashes at the level of the 'Actual' as they experience curriculum events that are only connected to the knowledge code of their discipline. The kind of support that we offer is then likely not to produce the desired results of students in becoming effective members in the discipline of chemistry, for example. Clearly what we tried to do was not to offer generic or study skills support as this is not assisting students, but we tried to offer discipline specific aspects of support, such as the scientific use of language as shown from above excerpts. In that way we saw the use of LCT as useful in offering the kind of support that we are envisaging.

Below is the correspondence between ALLU lecturers and Business Administration (BA) disciplinary expert. The BA lecturer requested the ALLU lecturers to focus on the following areas when offering student academic support.

Below are the areas in which I think our students require assistance with:

1. *Academic writing;*
2. *Essays structure (i.e. some students don't know how to write an introduction, etc.);*
3. *Paying attention to assignments instructions;*
4. *Reading reaction;*
5. *Referencing (in-text referencing and list of references); and*
6. *Paraphrasing.*

Clearly, from the above excerpt, and drawing from the tenets of LCT and critical realism, it is possible to realize that the support that was sought by the disciplinary expert did not want the ALLU lecturers to draw on the discipline of BA to offer support, but on generic study skills understanding of support. This is true when we look at aspects like point number 2 above. The likelihood in this situation was to teach students essay structures that are not directly connected to the discipline of BA, as students needed to know how to write introductions, etc. If this is the idea of student academic support, students would most likely be experiencing, from the 'Empirical' layer, support as not

helping them engage with the disciplinarity of BA as a field, for example, principles and norms underpinning the discipline from which particular ways of being and dispositions emerge. The support offered by the ALLU would be observed as not doing what it should, that is to enable students' success and becoming effective members in their fields of study.

Crucially, such students experiences potentially emerge from the 'Real' layer in terms of curriculum design and pedagogic practices shaping what ought to happen in support classrooms, that is, the focus on writing essays and academic writing that are loosely connected to BA as a field of study. From the realm of culture in critical realist understandings, we can also observe that the disciplinary experts is drawing from an understanding or ideas about what it means to offer student support, that is, the idea of support that is informed by 'study skills'. This could be understood as a constraint in enabling effective student academic support.

It was partly for this reason that as the ALLU we shifted our focus to LCT as it provides us with tools to understand the intricacies of the modules or disciplines that we are offering support to. For this reason, student academic support cannot be effective if we do it in isolation, without genuinely collaborating with disciplinary experts, in the true sense of collaborating, not just meetings about requesting students to be sent to the ALLU, but by discussing the values and principles underpinning those disciplines and practices that emerges thereof, including dispositions to be developed, for epistemological access. We perceive collaborating with disciplinary experts as necessary and important because we are outsiders from the discipline as we provide academic student support. We need disciplinary experts 'know how' to enable a discipline specific support.

8 Concluding Remarks

This paper has shown the need and the relevance for LCT in offering student academic support at MUT. It also showed why this need is imminent, given the seemingly limited realization of what it means to provide student academic support. This limitation was evidenced from the documents that have been produced by the ALLU lecturers. These documents demonstrate clearly that the support that had been offered to students by the ALLU was more generic than it was discipline specific. The evaluative report that was conducted by colleagues from Carlton University in Canada also showed this limitation.

Because of these limitations, we have tried to propose a new approach to students' academic support that is informed by LCT and we have shown how critical realism philosophical orientation was useful as an underlabourer to LCT, to help us understand the reality and the world we are trying to explore, the world of students' academic support at MUT.

Comments made by one disciplinary expert were encouraging in that the support we are envisaging is likely to provide desired educational outcomes. But some comments also show that there is work that needs to be done with disciplinary experts to really engage with the idea of student academic support, in the process, show why and how the idea of discipline specific literacies is vital for student academic support in enabling students becoming effective participants within their fields or programmes of study.

Clearly, from the ethical clearance we have shown that this is an ongoing initiative, and we hope to involve all stakeholders involved in interactions involving teaching and

learning at MUT. The idea is to have a fully-fledged student academic support that is credit bearing and is offered to all first-year students. We believe this is not just a matter of providing academic support but is also a matter of moral and ethical obligation in a context like South Africa, which is informed by the history of inequality to access material resources including quality education for many South Africans, those who come from marginalized backgrounds, thanks to the legacy of apartheid.

References

1. Bhaskar, R.: A Realist theory of science. Harvester Press, Brighton (1978).
2. Bhaskar, R.: The possibility of naturalism: A philosophical critique of the contemporary human sciences. Routledge, New York (1979).
3. Bernstein, B.: Pedagogy, symbolic control, and identity: Theory, research, critique. Rowman and Littlefield, Lanham (2000).
4. Boughey, C.: Student support and the transformation of Rhodes University2: Internal report. Rhodes University, Grahamstown (2017).
5. Boughey, C., McKenna, S.: Analysing an audit cycle: A critical realist account. *Studies in Higher Education* 1–13 (2015).
6. Boughey, C., McKenna, S.: Academic literacy and the decontextualised learner. *Critical Studies in Teaching and Learning* 4(2), 1–9 (2016).
7. Clarence, S.: Surfing the waves of learning: Enacting a semantics analysis of teaching in a first-year law course. *Higher Education Research and Development* 36(5), 920–933 (2016).
8. Clarence, S., McKenna, S.: Developing academic literacies through understanding the nature of disciplinary knowledge. *London review of education* 15(1), 38–49 (2017).
9. El-Baba, E.L., Emdon, H., McVeigh, M., Sow, T.: Evaluation report on academic literacies program of the Mangosuthu University of Technology (2021).
10. Ellery, K.: Epistemological access in a science foundation course: A social realist perspective. Unpublished PhD diss. Rhodes University, Grahamstown (2016).
11. Ellery, K.: Framing of transitional pedagogic practices in the sciences: Enabling access. *Teaching in Higher Education* 22(8), 908–924 (2017).
12. Ellery, K.: Legitimation of knowers for access in science. *Journal of Education* 71, 25–38 (2018).
13. Lea, M.R., Street, B.V.: Student writing in higher education: An academic literacies approach. *Studies in higher education* 23(2), 157–172 (1998).
14. Madondo, N. E.: On locating the experiences of second year science students from rural areas in higher education in the field of science: Teaching science by drawing on students' lived rural experiences. Unpublished PhD diss. Rhodes University, Grahamstown (2020).
15. Maton, K.: Knowledge and knowers: Towards a realist sociology of education. Routledge, New York (2014).
16. Said, E.W.: *Orientalism*. Pantheon Books, New York (1978).

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

