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Reconceptualising curriculum, structuring access

What is curriculum?

In the previous chapter, we looked at the ways in which social understandings of students and of student learning are frequently set aside in favour of decontextualised accounts. If students are often constructed in a-social, a-cultural ways, then what of the curriculum? This chapter engages with a number of issues pertaining to curricula in our universities.

Using the Social Realist framework that underpins this book, we try to show that we do not have complete freedom to do as we like when we design a curriculum. Our curricula are constrained and enabled by multiple structural and cultural mechanisms, which we attempt to outline in this chapter. But the curriculum is not entirely determined by such mechanisms. We are not powerless to bring about change. We do, however, need to have a nuanced understanding of the constraining and enabling mechanisms at play if we want sustainable and sound curriculum development.

Curriculum is a contested concept (Mamdani 2017; Muller 2009; Maton 2014) and is used in multiple ways in the literature. For some, curriculum means the syllabus, a description of course content. For others, curriculum is the structure of the programme, the details of how courses fit together and where credits are attained. In this chapter, we argue for a far broader conception than is offered by these definitions. We argue that the curriculum is the means whereby the 'goods' of the university, both public and private, are distributed.

Understanding the curriculum as a means of distributing 'goods' is particularly important in contexts where a qualification from an institution of higher education is often understood as a means of lifting an entire family, or even community, out of poverty. A curriculum distributes access to the kinds of learning experiences which will lead to the award of the qualification, and the qualification can be key to social mobility. At the same time, in countries with enormous disparities of every kind, the curriculum can distribute access to some kinds of knowing over others. It is perfectly possible for a curriculum to ignore the public good that can accrue from engaging with it by, for example, eliding all engagement with inequality.

Curriculum is 'the process of engagement of students and staff with knowledge, behaviour and identity in different disciplinary contexts' (Lange 2017: 32). It is thus

understood as encompassing the what, the who, the how, and the where of teaching and learning. It includes both the planned curriculum and the enacted one. If we are to interrogate the form and function of the university in a meaningful way, we need to take all of these aspects into account.

In this understanding, curriculum comprises not just the subjects in a qualification, but all the aspects that make up a programme of learning. This includes consideration of what topics are being taught and what texts are being drawn on to tackle these topics. It also includes questions about who does the teaching, who does the learning, how the classroom is set out, who does the speaking in class, what behaviours, including reading and writing practices, are permitted and which are seen as inappropriate, and so on. In addition, it acknowledges that learning can happen outside the formally-planned curriculum, and that conversations in residences and experiences on the sports field also have consequences for student learning. And, as was argued in the previous chapter, this understanding of curriculum entails understanding students not just as a collection of the skills and attributes they bring into the university, but as people with rich histories, languages, norms and values, which may be more or less welcomed into the cultures and structures of our lecture halls, laboratories and libraries.

It is within this broad framing of curriculum that we have come in our own research to draw on the work of Maton (2014) to ask three key questions:

1. What knowledge is legitimated by the curriculum?
2. Which knowers are legitimated by the curriculum?
3. How are these knowledges and knowers legitimated in the curriculum?

These questions draw on an understanding that a curriculum is never neutral. It comprises choices of selection (what to include or exclude, who to include and exclude), choices of sequencing (what is foundational and what is elective, which concepts are prerequisite to others, and so on) and choices of pacing (how much time should be spent on what, in class and in assessment) (Bernstein 1981, 2000). Such choices are not made in a vacuum; they materialise from the histories of our societies, our disciplines, our professions, our universities, and ourselves as curriculum developers. Curriculum design thus emerges from multiple mechanisms, which results in it never looking identical across contexts, even in cases where the content may be relatively uncontentious. Mathematics 101 will be taught differently in Georgia and in Ghana. The style of teaching and the modes of assessment may vary even if there is general agreement as to what foundational mathematical concepts should be included in a first-year curriculum.

South Africa was one of the ‘early starter’ (Allais 2010) or ‘first generation’ (Tuck 2007) countries that worked towards developing a national qualifications framework. As we write, Kenya has developed a national framework, and a number of initiatives are afoot aimed at the development of regional frameworks on the continent. As we have noted in the section on curriculum in Chapter Three, a qualifications framework allows qualifications to be pegged at a number of levels using the constructs of the learning outcome and learning credit. The introduction of a qualifications framework requires

those developing curricula to develop an understanding of the concepts that are used to make it work and the ability to craft outcomes for programmes which stipulate what it is that the successful learner will be able to do on completion and the assessment criteria that will be used to assess this.

However, such developments have the potential to be limited to changes in the structural domain. From national structures such as the CHE, SAQA and the NQF in South Africa, and similar bodies in other countries, through to institutional structures, such as the emergence of deans or deputy vice-chancellors of teaching and learning, teaching and learning centres and committees and so on, a great number of structural developments related to teaching and learning are put in place as a framework is developed. In contrast to this, however, we would argue that ideological deliberations about curriculum (in the domain of culture) have not occurred to any meaningful extent until very recently, most notably as a result of the student protests. Importantly, in South Africa at least, the structural changes experienced did not broadly engender critical engagements about the nature of knowledge itself. As Lange (2017: 33) argues:

After the first decade of democracy, in the context of poor system throughput at undergraduate level, the preoccupation with teaching and learning policy moved to focus on the efficiency of teaching and learning, leaving out once again the engagement with knowledge from the agenda of work.

Key ideological questions have rarely provided the basis for discussions about curriculum, questions such as: How does the knowledge of the academy function as a public good? How is this knowledge made widely accessible? What purpose is this knowledge meant to serve? Whose knowledge is being validated? Whose knowledge is being excluded? It is our contention that we have to engage overtly with such questions in the domain of culture if the structural changes that have been implemented are to achieve their goals.

In this chapter, we reflect on the broader structural and cultural mechanisms conditioning curricula in South Africa, and how these have played out over the last two decades in the context of the introduction of the national qualifications framework. We begin with the issue of knowledge, an issue which we argue is ironically often absent in deliberations about curricula. To bring us back to the framework we have used throughout the book, this means we are asking about what happened during T_2 to T_3 and, more specifically, how the agents who were making changes to curricula were conditioned to make those changes as new policies were enacted.

The curriculum is conditioned by the structure of knowledge

Some disciplines and programmes, particularly those in the natural sciences, work more in the area of objective, empirical knowledge; others, more usually in the social sciences, are concerned with subjective, experiential knowledge. Yet others work with a fluid range of understandings of what can constitute knowledge and how it can be known. What is important, however, is that none are neutral; knowledge practices are

always tied to the particular context of the discipline or programme. And, as discussed in the previous chapter, the literacy practices we expect of our students emerge in part from these contexts.

Across the natural sciences, humanities and social sciences, for example, the researcher is expected to develop an argument by making claims supported by evidence. Often, right across such fields, the evidence for the author's claims will be in the form of references to prior research. But the context of the field is key in determining which references would 'count' as credible forms of evidence for substantiating the author's claims. And the ways in which researchers from different fields draw on such references as evidence may differ fairly considerably too. In some cases, the researcher inserts the names of the authors she is citing – 'According to Mkhize (2017), ...' – whereas in others there might be a footnote numbering system to allow the reader to follow up on the credibility of the proffered evidence. This is more than a distinction of technical formatting. It speaks to the nature of the knowledge being produced and its relationship to the humans producing it. Sadly, generic workshops on referencing typically refer to the evils of plagiarism without making explicit the knowledge-production norms of the discipline (Mphahlele 2019; Mphahlele & McKenna 2019).

In some fields, the role of researchers in building the field and having to manage their subjectivity is hinted at through the inclusion of the names of those who have produced the research in the past. The subjectivity of knowledge produced in such fields is often made even more explicit through the use of the first person, as we discussed in the previous chapter, through sentences such as 'I then interviewed seven people from the Executive Committee'. In contrast to this, the objectivity valued in other fields may be symbolically indicated through the use of passive voice – '5ml were titrated' – or, where an active voice is used, through the anonymising of the researcher's identity – 'The researcher transcribed the surveys'. In this way, the claims are made in an objective manner seemingly untainted by human foibles of gender, class, nationality and so on. There are of course myriad other ways in which the different knowledge structures are manifested through different literacy practices, but what we see here in the example about referencing is that the disciplinary literacy practices are structured in very particular ways in line with the nature of truth and being (ontology), the means of producing knowledge (methodology) and the relationship between knowledge production and the researcher (epistemology).

There are various ways of categorising the kinds of knowledge validated within particular curricula, from the distinction between more objective and more subjective forms of knowledge, indicated above, to Biglan's (1973) concepts of 'hard' versus 'soft' and 'applied' versus 'pure' knowledges, and Kolb's (1981) 'abstract' versus 'concrete' and 'reflective' versus 'active' knowledges, and so on. In trying to make sense of the relationship between the curriculum, the disciplinary literacy practices, and the structure of knowledge, we have found the tools provided by Legitimation Code Theory (Maton 2014) to be especially generative. In particular, these tools address the knowledge blind spot of much of the sociology of education research by demanding that we attend directly to knowledge.

Legitimation Code Theory (LCT), as its name suggests, focuses on questions about what is legitimated in different fields. Having identified what is legitimated, it then becomes possible to ask questions about whose interests this legitimation serves. In order to do this, it draws on a premise that within different fields we use 'codes'. These codes validate specific forms of knowledge and specific types of knowers. It is not difficult to see how the possibility of identifying which different forms of knowledge and which types of knowers are legitimated is significant for widening access to higher education and, thus, to disciplinary knowledge.

LCT builds on both Bourdieu's (1990) argument that education reproduces social inequalities and Bernstein's work on the structure of different kinds of knowledge. In the academic arena, Bernstein (2006) showed that some disciplines can be considered to be hierarchical, that is, new knowledge builds on and subsumes prior knowledge, whereas other academic disciplines can be considered to be horizontal, that is, new theories emerge as new 'languages'⁴ which sit alongside or overthrow prior languages. LCT allows us to look at how knowledge is built in different fields and provides various tools for doing so. By analysing what it is that is legitimated in a field, through LCT tools such as Specialisation, Semantics and Autonomy, we are able to make the processes of legitimation explicit and thereby enhance the likelihood of their acquisition. It is also through providing tools to crack the code of various disciplines, that LCT exposes such codes to critique.

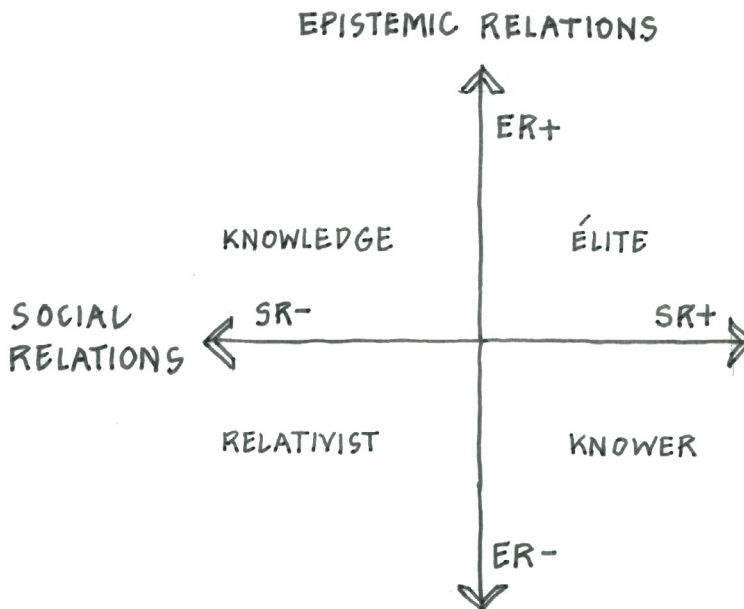
LCT theorises that while every kind of knowledge has a particular structure, it also has a particular relation to the subject of the knowledge, the knower. So, it is not only *what* you know, it is *how* you know that counts. The extent of both the *what* and the *how* of knowing varies across fields. In some fields, legitimacy is achieved primarily through being a particular kind of knower, with a certain disposition and gaze on the world. Learning in such fields is largely about acquiring the appropriate gaze; for example, it may be that the gaze is one of social justice, or scepticism, or criticality, or feminism, or neoliberalism. But in other fields, the kind of knower you are is not particularly pertinent, and it is the relations to knowledge that dominate. Legitimacy in such fields is acquired through the demonstration of the knowledge, skills and practices of the field. Yet other fields may work with various other combinations of ways of relating to knowledge and ways of positioning knowers. Understanding how knowledge and knowers are structured within our curricula, Maton (2014) argues, is key to our being able to ensure access, to challenge dominant ideas and practices, and to transform the ways we teach and learn. We need to make sense of the nature of knowledge and knower if we are to understand the *what* and *how* of legitimation processes in our curricula, because these have significant implications for *who* gets to access the knowledge and be deemed a legitimate knower. A number of studies that we have supervised over the years have brought LCT tools to bear on curricula in various programmes and institutions and have looked at the ways in which particular

4 As we have already explained in Chapter One, one way of conceptualising a theory is that it functions like a pair of spectacles that allow us to see the world in a different way. Once we begin to use a theory, we need to take on its language, that is, we need to begin to use its specialist terms in order to describe what we can now see. This is what Bernstein means when he refers to 'languages' in the context of talking about knowledge structures.

forms of knowledge and particular kinds of knowers are legitimated. We briefly consider a few of these examples below.

Mlamuli Hlatshwayo (2019) looked at how knowledge is recontextualised from the Political Studies field into a curriculum in order to question where decolonisation can and should be undertaken. While much of the decolonisation debate has looked at the content of curricula, Hlatshwayo shows the need to interrogate the structure of the target knowledge and the extent to which it is a particular kind of knower that is legitimated within the curriculum. By explicating his process of undertaking such an interrogation, Hlatshwayo enables academics to construct curricula that are inclusive, open and socially just.

Thandeka Mkhize (2015) looked at the structure of the curriculum of the Certificate in the Theory of Accounting to question why so few black South African students qualify as chartered accountants. She showed that the basis of legitimacy in Accounting is primarily what is termed stronger 'epistemic relations', so the demonstration of legitimate knowledge, skills and practices is paramount, and there are very weak 'social relations', that is, the demonstration of having a particular gaze or way of being in the world is relatively unimportant. In LCT terms this means that Accounting is a 'knowledge code'. Mkhize goes on to argue that, because the structure of the target field is a knowledge code, this has constrained the focus in the classroom on the development of students as particular kinds of knowers. Her study suggests that the focus of legitimation in a heavily loaded, purportedly neutral, skills and knowledge curriculum has allowed an absencing of focus on the student and the development of privileged ways of knowing.



Karen Ellery (2016) looked at a Science access course and, similarly to Mkhize (2015), showed that, in spite of the focus on knowledge itself, being the ‘right’ kind of knower was also important to success. Ellery concluded that academics have to be able to undertake a rigorous analysis of what is being legitimated in our curricula if they are to provide students with access to powerful knowledge. LCT is thus useful not only for research but also as a tool whereby academics, for whom the discipline has often become obvious and familiar, can begin to articulate exactly what it is that is necessary for successful membership in the field.

Gabi de Bie (2017) looked at the merging of two subjects, Anatomy and Physiology, and showed how if curriculum developers do not have a strong understanding of the structure of the target knowledge, then curriculum decisions can be made for pragmatic reasons with troublesome educational consequences. Curriculum expertise is unevenly available across the sector but even in institutions where there has been a rich history of institutional autonomy and academics are steeped in the knowledge-making processes of the discipline, they may not have access to such expertise. Jacobs (2007, 2009) has argued that academic development practitioners may need to be supportive collaborators for academics in this regard.

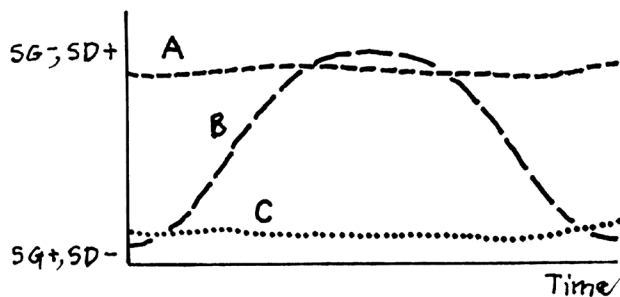
Jacqui Lück (2014) used LCT to interrogate the Public Management degree and the Public Administration diploma. She found that there was an espoused concern with a particular kind of knower; this concern was expressed in the literature, in the workplace, and in her interviews with academics. This knower would be a public servant with a particular disposition and set of attributes, someone who would serve the public with compassion and with a focus on attaining fundamental human rights, someone who would be politically aware and understand the role of power in society. However, in what LCT refers to as a ‘code clash’, the curriculum was not focused on cultivating this kind of knower through developing this gaze; instead it was focused largely on the acquisition of a set of skills and practices unrelated to nurturing the target attributes. Lück found a clash between what was being called for by the public sector, which was a knower code, and what was being legitimated in the curriculum, which was a knowledge code.

Sherran Clarence (2014) used LCT to look at the teaching practices of both Political Science and Law in order to make sense of how students are given access to abstract and condensed knowledge in ways that allow for cumulative learning. She used the LCT concept of Semantic Waves to look at how students acquired the difficult ideas underpinning the fields of Political Science and Law. Semantic Waves entail a movement from knowledge that is context-bound, everyday, and not very dense, up towards concepts that are abstract, principled, and very dense in meaning, and then back down again. Clarence showed that unless connections are explicitly made between students’ everyday experiences and the target abstract knowledge, then students can battle to engage with the knowledge of the discipline. She showed that focusing only on such everyday experiences would not allow access to the target abstracted knowledge – connections had to be made between these domains. Clarence also demonstrated the importance of connections being made between the various segments of the curriculum, which is fundamental to

cumulative learning of the specialised knowledge of the academy. Unless students are shown how the various waves join up, they are unable to make the connections.

Anisa Vahed (2014) analysed the use of educational games and showed that while such activities readily increase student engagement (and student satisfaction), they will not necessarily enhance student learning if they are not aligned to the means of legitimation in the target field. Vahed argued that educational games (and other innovative pedagogies) have to align with and improve access to the particular structure of the target knowledges and knowers if they are to be effective as a means of enhancing learning and not just 'entertainment'. This is important because many pedagogical practices are advocated for implementation across fields as 'best practice' as if the structure of the target field is irrelevant and higher education practices are undifferentiated.

As with Vahed, Amanda Hlengwa (2013) concluded that pedagogical innovations are less likely to succeed if they fail to take the peculiarities of the specific knowledge and knower structures into account. Hlengwa researched service learning, a curriculated form of community engagement, which has been lauded as a means of connecting abstract academic knowledge to social concerns through engagement with communities. But she showed that this call for wide-scale implementation has at times failed to consider how academic knowledge differs considerably across fields (Hlengwa & McKenna 2017). Hlengwa does not argue that only certain fields should have service learning, but she clearly shows how the structure of the target knowledge and knowers can make it more straightforward in some fields than others.



SG = SEMANTIC GRAVITY

SD = SEMANTIC DENSITY

THREE DIFFERENT SEMANTIC PROFILES:

A - A HIGH FLATLINE - COMPLEX, ABSTRACT AND UNRELATED TO CONTEXT

B - A SEMANTIC WAVE - MOVES FROM LESS TO MORE COMPLEX, ABSTRACT AND DECONTEXTUALISED, ADD BACK AGAIN

C - A LOW FLATLINE - EVERYDAY, SIMPLE AND TIED TO CONTEXT

In these very roughly sketched examples of scholarly work using LCT, there is both a rejection of the understanding of knowledge as neutral and objective, separate from human concerns, and a rejection of knowledge as simply a replication of society's interests. In order to make the knowledges of our curricula more inclusive, we need to look directly at what knowledge is being legitimated, and we also need to understand that the specialised knowledge of the academy is itself a structure with its own powers. In these and many other studies, the understanding that our curricula are social and political, and that the literacy practices expected of our students are peculiar and cultural, is thus not left there. If such concerns were left there, it would be possible for academic knowledge to come to be 'perceived as being unable to make an epistemological claim to validity since it can only ever be an ideological device for maintaining positions of dominance' (Naidoo & Ranchod 2018). Combining the understanding that knowledge is social and represents specific interests with theoretical tools that focus on the structure of knowledge and knowers in the curricula has been a powerful means of critiquing the extent to which we enable social justice in our universities. We need to understand that knowledge is structured in part independently of how we acquire it, and knowledge fields differ in their internal coherence, their principles of cohesion, and their procedures for producing new knowledge (Young & Muller 2010: 15).

In all of our research, and that of our students, that looks at the nature of different forms of knowledge in different fields, there is an understanding that knowledge in the academy differs from knowledge outside it. The university, with its many different disciplines, subjects and programmes, attempts to engage with specialised knowledge in systematic ways. We now turn to this idea that academic knowledge in all of its disciplinary forms differs from everyday knowledge.

The curriculum provides access to powerful knowledge

Across all of the distinctions between disciplines and fields in our universities, what they (should) have in common is that they provide access to specialist knowledge. Specialist knowledge provides more than description; it provides explanations and it identifies principles and abstract concepts, and it is thus able to rise above the detailed specifics of context. It is therefore distinct from much everyday knowledge where principled explanations, for example, may simply not be available. We argue that this need to provide access to powerful, specialised knowledge⁵ is an important conditioning mechanism in the design of a curriculum, and one which needs to be rigorously safeguarded. The knowledge offered by the university consists of 'specialised symbolic structures of explicit knowledge' (Bernstein 2000: 160) where meaning is integrated in cumulative ways rather than by its relevance to a specific context. Only through access to these integrated principles of meaning-making can students apply this knowledge to contextually-specific applications (Whelehan 2009).

5 In this section, powerful academic knowledge is variously described as 'systematic', 'specialised', 'principled', 'theoretical', 'abstract' and 'conceptual'.

An example of one way of knowing which is not generally valued in the university is what we will call ‘craft knowledge’. Woodworkers, for example, literally have the knowledge of how to work a particular piece of wood in their hands. They handle the wood, feel it, and examine its knots and whorls before they lift a tool to shape it. As they shape the wood, they continue to work with the wood in ways that are often not possible for them to articulate (Gamble 2001, 2014). Similarly, a football player may have expertise in kicking a ball in an arc into the goal. Being able to ‘bend it like Beckham’ might rely on a number of key laws of physics, but the footballer is unlikely to be able to articulate such laws, and is quite possibly unaware of them. While being a world-class craftsman or footballer and knowing how to perform these practices with sophistication is highly valued in the world, ‘knowing’ in this way is not seen to be academic knowing.

Academic knowledge is produced using rules about what can count as research and is evidence based. The process of producing academic knowledge is often discipline specific. Chemists, for example, draw on experimentation and anthropologists use ethnography involving close-up observation of people or groups of people. As we have shown, many of our students have used LCT to explicate exactly how different academic fields produce different forms of academic knowledge, but what the forms of academic knowledge have in common is that they are all specialised and underpinned by principles. While some forms of academic knowledge may have close ties to the ‘real world’ in which the knowledge will be used, and others will be more abstracted from that ‘real world’, all have in common that they are based on specialised principles and not simply context-based skills.

Arguments against the specialised nature of knowledge in the academy have come from many sources – from those with a strong skills discourse who expect the university to act as a training centre, to some decolonial scholars who see the removal of specialisation as the means to open the academy to other ways of knowing, to some postmodernists who argue that all knowledges are equally valid and who fail to distinguish between knowledge and reality.

This focus on the ways in which academic knowledge is specialised is not to say that knowledges outside of the academy should be ignored. Specialisation should never be a basis for denying respect or value to the non-specialist knowledge that people draw on.

Specialist knowledge is ‘powerless’ in enabling someone to find their way about a house or city with which they are unfamiliar or helping a friend who has lost a child. The difference between specialised and non-specialised knowledge is a difference of purpose and ... a difference of structure; it is not a difference of value, except in relation to those purposes. (Young & Muller 2013b: 231)

We need to attend to the community and family capital that our students bring with them if they are to feel recognised in our universities and if the goods of the university are to be widely distributed and our students are to achieve full parity of participation (Fraser 1999, 2007). Indeed, we have repeatedly argued that key to access to the powerful knowledges of the academy is that connections are made between students’ everyday knowledges

and the specialised knowledge of the academy (Boughey 2002, 2007, 2012b; McKenna 2004a, 2004b, 2010, 2012b).

Recognising the specialist nature of knowledge of the academy is thus not a dismissal of other forms of knowledge, and nor is the awareness of the powerful nature of university knowledge a claim that the university is the only site of powerful knowledge. Specialised knowledge, which is able to transcend contexts and provide principled explanatory value, has been found in other places since the dawn of time. But our focus on the specialised, powerful knowledge in the academy is crucial, because any attempts at making higher education success more widely attainable that fail to take the abstract nature of such knowledge into account can have serious consequences for the students involved. Access to powerful knowledge is a matter of distributive social justice. Knowledge has to remain absolutely central to higher education (Ellery 2017; Shay et al. 2011; Wheelahan 2010; Young & Muller 2013a, 2013b), and we need to be cautious of limiting access to powerful theoretical knowledge out of a desire to broaden access.

The idea that the university serves to provide access to and steward 'powerful knowledge' is sometimes rejected because the idea of 'powerful knowledge' is conflated with the 'knowledge of the powerful' or the elite (Muller & Young 2014; Young 2007; Young & Muller 2013a, 2013b). Given our histories, it is unsurprising that many of the knowledges in the academy represent the concerns of the powerful and disregard those who have been marginalised. There is no doubt that the curriculum has been used 'as an ideological device for protecting privilege' (Naidoo & Ranchod 2018: 18). This has to change, as we will argue in more detail later, but critique of the 'knowledge of the powerful' should not be twisted into a call for the rejection of 'powerful knowledge', as complicated and contentious as the distinction may be.

There are a number of examples of attempts at making curricula more egalitarian that, to a greater or lesser extent, have served merely to reinforce social divides by undermining access to powerful knowledge. The focus on Competency-Based Education, and its cousin Outcomes-Based Education, across Africa and other parts of the Global South has largely been with a view to ensuring that access to higher education is made available to all and that graduates are given work-ready skills that enhance employability. These educational approaches look at the specific skills and processes that the graduate will need in the workplace and design the curriculum towards these (Millar 2014).

However, as Wheelahan (2010) and Jansen (Jansen 1998; Jansen & Christie 1999) argue, the focus on competencies and outcomes often denies access to more abstract, theoretical knowledge which is considered overly complex. In this way, well-meaning curriculum experiments focused on broadening access to 'useful' knowledge have served to reinforce social divides. They have reinforced divides between the Global North and Global South, because taking on these curriculum approaches is often a requirement for acquiring funding from agencies such as the World Bank. The thinking is that providing more 'practical' curricula focused on immediate context will be more accessible to learners, and will be more likely to address immediate social ills. Access to more abstract, principled knowledge is thus a desirable part of education in the Global North, but it

is access to context-dependent knowledge that is the key focus of many curriculum experiments in the Global South.

Such experiments that carve away the powerful knowledge also reinforce social divides within a particular society. Middle-class students will, by virtue of their prior experiences, be more likely to access powerful theoretical and abstracted knowledge outside of any formal curriculum which is limited to immediate competencies in a specific context (McKenna & Quinn 2020; Wheelahan 2010). Thus, a curriculum that fails to provide access to powerful knowledge is likely to exclude working-class students from such knowledge more effectively than it will exclude middle-class students who will be able to access it through their home and other social contexts.

Ironically, the lack of access to more abstract theoretical knowledge limits the potential in places and amongst people where change and innovation is called for fervently. This is because theoretical knowledge allows us to imagine worlds that do not yet exist and to move beyond the contexts we know to those that the powerful knowledge allows us to imagine. Rata (2012, 2017) argues that access to such powerful knowledge is a precondition to education playing a role in building a democratic society.

Problem-Based Learning (PBL) is another example of a curriculum experiment that has in some places had the opposite effect from what was intended (Case 2011; Reddy 2011). The PBL curriculum is developed around specific problems that require students to draw from multiple disciplines to find solutions. It increases student engagement and enhances students' ability to move across disciplinary boundaries, and it makes clear the practical application of knowledge to real-world problems, all of which are clearly significant strengths.

However, in cases where a more radical version of PBL has been implemented whereby students are not first given access to a firm grounding in foundational theoretical knowledge, students can be seen to develop strong practical expertise in relation to specific problems without having access to the specialist principles underpinning such expertise. This then constrains their ability to tackle future problems.

All this means that we need to be vigilant about the ways in which seemingly progressive curriculum experiments intended to be more inclusive have sometimes disempowered the very students they were designed to serve. Wheelahan (2009, 2010, 2015) argues that theoretical, disciplinary knowledge must be placed at the centre of the curriculum, and that curriculum reforms that fail to do this will continue to exclude working-class students from access to powerful knowledge. Universities need to ensure that students gain access to the powerful specialised knowledges that are the 'goods' of the institution, and not just access to a set of outcomes deemed appropriate for the current workplace or to knowledge that is familiar and reinforces students' worldviews.

Arguing for the primacy of powerful knowledge in the curriculum is not to deny the ways in which social histories are implicated in determining whose knowledge is deemed powerful. As we will now move on to argue, looking at the role of social context in enabling or constraining curricula is central to social justice, but we urge curriculum developers addressing concerns about education replicating social privilege to do so in ways that firmly steward the right to powerful, specialised, principled knowledge.

The curriculum is conditioned by social context

Unlike teachers in schools with a national curriculum, university academics have fairly extensive agency to design their curricula, albeit conditioned by various mechanisms. One significant mechanism that conditions such agency is the location of universities in society. All through history, the structure and nature of the university has reflected the concerns of the society within which it has existed, and for most of its history this has been about serving the interests of the elite within that society.

Early universities were fairly explicitly tasked with reinforcing social divides (Graham 2013; Nussbaum 1998). They ensured that only an elite had access to the powerful, specialised knowledge offered within them. The early universities were deeply entwined with religious or state structures and functioned as important mechanisms of social control. From the Bayt al-Hikma in Iraq, to Al-Azhar University in Egypt, to the University of Karueein in Morocco, to the University of Bologna in Italy, early academies had deep ties to religious and state bodies in their form, function and funding, an observation that can sometimes be seen in their physical architecture as well as in the subjects they taught.

In the 16th and 17th centuries, universities became more secular, slowly separating from their religious agendas. At about the same time, new programmes more directly facing the material world began to be included in universities. The disdain for physical labour amongst the elite had previously meant that any subjects pertaining to practical work were seen to be distinctly beyond the role of the university, but as technological knowledge advanced and became more central to society, so it began to be seen as something worthy of serious study. Thus, it was that, by the 18th century, some forms of practical knowledge were introduced in universities. Gradually since then some practical fields, such as Architecture, Medicine, Engineering, and Law, have moved from just being tolerated in the academy to being accorded high status, and others such as Economics and Psychology have made a similar, though far more recent, move from the outskirts of the academy to the centre. Across this extensive time period, schisms began to appear between the Natural Sciences and Humanities (and their recent cousin the Social Sciences). The jostling for status between fields of study continues to this day.

Far more recent shifts to a so-called 'knowledge economy' have again brought major changes in the university. As we showed in Chapter Three, economic growth is increasingly premised on the notion of the reinvention of goods. Goods that may in the past have been sold primarily for their utility purposes, shoes for protection and warmth of the feet for example, are increasingly sold as personal branding, shoes as representing identity and lifestyle. This requires a constant reinvention of goods to ensure the consumer desires more and more of them. It has become abstract knowledge – in the case of our shoe example, knowledge of the anatomy and physiology of the foot and knowledge of psychology, marketing and sales, rather than the practical skill needed to sew a sole to an upper – that is in greatest demand in an era of hypercapitalism. Alongside this move, the Fourth Industrial Revolution has now brought with it a number of new fields of study as the lines between humans and technology blur and knowledge is seen to be a commodity that can drive such advances.

Out of the marketing, production and distribution of mass goods emerge major social and environmental ills. The ability to conceptualise and implement technology that pushes the boundaries of what we believe possible also brings social and environmental ills. These ills then need knowledgeable citizens to tackle them. As we develop the knowledge needed to produce more ‘stuff’ and to amplify the demand for it, so we create more and more problems of social inequality, unsustainability and pollution. Ironically, the university is tasked with attending to both.

The move to a knowledge economy has also led to demands for universities to accommodate a far bigger student body. As previously discussed, changes in the social order have driven demands for access by students from far more diverse social groupings. Whereas the university of the past primarily served the elite, in the second half of the 20th century, demands for equity around the world led to the university being conceptualised very differently. Obstructed by colonialism, such demands came later across Africa, with the issue of equity of access only really coming to the fore in the early 1990s in, for example, South Africa.

In Trow’s classic 1973 article, which we drew on in Chapter One, he distinguishes between elite, mass and universal higher education. He argues that once participation reaches 15%, the system has shifted from elite to mass education. It is impossible to retain systems designed for a largely homogenous elite at this point and, most importantly, he argues that having a diverse student body requires fundamental shifts in the curriculum. As indicated in Chapter Three, participation in post-secondary education across Africa is less than 3% of the age cohort, by far the lowest participation rate in the world (Teferra & Altbach 2004).

In South Africa this figure is now about 22% (CHE 2020), with student numbers in public higher education rising from under half a million to a million in just over 20 years (with about a further 115 000 in private higher education institutions). South Africa has thus moved from a system deeply invested in furthering the interests of the elite, under apartheid, to a mass system which has to address the needs of a very diverse student body, and an increasingly diverse staff body. This shift happened faster in South Africa than elsewhere as the crumbling of apartheid brought particular moral imperatives to the broadening of access. It would, however, be a mistake of exceptionalism to think that the recent changes experienced in South African higher education are entirely peculiar to this context.

Massification is often understood to be about student numbers. Of course, increases in numbers have significant resource and other implications. The doubling of student numbers in our T_2 to T_3 period has placed enormous pressures on the South African higher education system. But, as Trow (1973) points out, the shift from elite to mass higher education is about far more than the need for bigger venues and more staff. Questions around what and who the university is for and how it should function are re-opened by these shifts.

Across Africa, as elsewhere, there has emerged a tension between conceptions of the university as a driver of economic growth and a provider of high skills for employability on the one hand, to the university as a socialising space for the development of critical

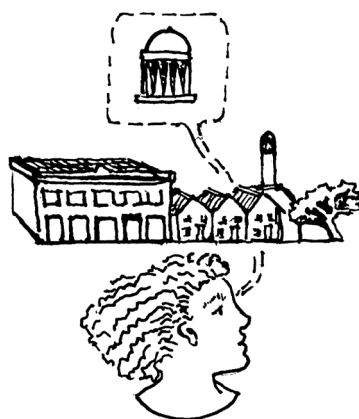
citizens who can contribute to a sustainable and inclusive society on the other. Actually, such a crude dichotomy of conceptions of the university fails to illustrate the full spectrum of expectations placed on a massified university system or the various tensions between such conceptions. Understanding the multiple ways in which universities are conceptualised by society is necessary to understanding the constraints on curricula re-structuring.

A number of moves have been made towards ensuring wider access to the knowledges of our universities in response to the ways in which our curricula emerge from our (racist, sexist, classist, xenophobic) exclusionary histories. In this process of widening access, critical questions have been asked about how our curricula continue to privilege content that arises from the Global North and our reading lists reflect the power held by Western/white/male academics. This decoloniality lens has led not only to a critique of content; such deliberations are also opening discussions around the colonial vestiges of our pedagogical approaches, curriculum structures and forms of knowledge (Mignolo 2000; Ndlovu-Gatssheni 2013).

Organising a socially just curriculum has to begin with the 'present, existential, concrete situation reflecting the aspirations of the people' (Freire 1970: 95). Freire argued that as long as our education systems have no connection to our surroundings, they remain closed off from critique and change. Systems that are imported without regard to the knowledge and values of the context constitute 'cultural invasion, good intentions notwithstanding' (1970: 84). Nyerere (1967) argued that the education project across Africa was decidedly without good intentions; it had a deliberate agenda to replace traditional knowledge so that the population would accept their roles in a colonial society. This 'epistemic violence' (Spivak 1988) was central to the colonial project. Colonialism entailed more than ownership of physical resources and human labour; owning the occupied at the level of knowledge was fundamental to the project (Said 1978).

Moving from colonialism and apartheid to a just society has required us to look directly at issues of knowledge and power in the curriculum. We argue, though, that the focus on structural issues which has dominated much of the curriculum change so far (as discussed in Chapter Three) has not always brought with it a concern for such ideological deliberations in the realm of culture, though there have been repeated calls for this. In South Africa, for example, the 'Soudien Report' of 2008 stated that 'at the centre of epistemological transformation is curriculum reform – a reorientation away from the apartheid knowledge system, in which curriculum was used as a tool of exclusion, to a democratic curriculum that is inclusive of all human thought' (Soudien et al. 2008: 89).

Certain states, bodies, companies, organisations and institutions wield disproportionate power. The power struggles and the specific interests that always characterise codified



knowledge led, in South Africa, to a curriculum that functioned as ‘an ideological device for protecting privilege’ (Naidoo & Ranchod 2018: 17). Recognising this means understanding that the curriculum must be ‘transformed to reflect the lived experiences of African people, including recognition of their scholarly work which is often on the periphery’ (Lange 2017: 10). There is much debate about how the knowledges in our universities can now be transformed in ways that address Western imperialism and the ‘dissonance between a changing student population and universities stuck in a colonial frame both intellectually and aesthetically’ (Lange 2017: 32). There have been calls to de-centre such knowledge and replace it with African indigenous knowledges, and there have been arguments that doing so will simply ‘re-colonise’ such knowledges, which will remain at the margins and be associated with localised thinking.

While some insist that the only way to truly validate indigenous knowledge and indigenous ways of knowing is to replace what came before, others are clear that what is needed is to broaden our knowledge base by seeing the ways in which Western imperialism has limited our access to powerful knowledge from other sources. Challenging the dominance of Western knowledge in the curriculum is not just about introducing other knowledges, it is also about challenging ‘the perception that legitimate knowledge can only be produced by the West, that Africans are incapable of knowledge production’ (Shay & Mkhize 2018: 317).

But how can a plurality of worldviews get reconciled in our curricula? How do we overcome ‘abyssal thinking’, which normalises and privileges some forms of knowledge while rendering others invisible (De Sousa Santos 2007)? How do we challenge the ‘knowledge of the powerful’ such that we can make spaces for other ways of knowing – but in so doing still steward and safeguard ‘powerful knowledge’? As we have argued thus far, powerful knowledge allows our students the means of making their way in the world and the means to imagine and contribute towards a better world, and this requires a move beyond everyday knowledge to abstract, principled knowledge. We have also cautioned that some curriculum experiments around the world designed to make a curriculum widely accessible have carved the powerful knowledge out of the curriculum, leaving the student only with highly context-dependent ways of knowing.

So how do we address head-on the ways in which the historical privileging of particular knowledges, thanks to the ways those with the power to contribute to curriculum change have been conditioned, has rendered other potentially powerful knowledges invisible? And how do we avoid, in the process, falling into a romanticism where knowledges from particular sources are, simply by virtue of that source, deemed valid? Or into a relativism where any form of knowledge is deemed equally legitimate in the academy? Our argument is that the academy has a social justice responsibility to give access to powerful, specialised knowledge that *differs* from the everyday knowledge available outside of it. But we have to acknowledge that our colonial histories have meant that there is a wealth of knowledge that has never been scrutinised for potential specialisation, or, to put it in other words, the academy’s powerful knowledges have by and large been built only from the knowledge of the powerful.

Some of the current calls to decolonise the curriculum teeter on the edge of suggesting that everything of the past must go, as if the distinct disciplinary forms are simply political tools of oppression rather than emerging, at least in part, from epistemological differences related to powerful modes of thinking. Young (2013) cautions that the social justice agenda of entitlement to knowledge for all is being undermined by ‘attacks on knowledge’. These attacks have led us into a ‘post-truth era’ where any form of knowledge is deemed equally legitimate and valuable regardless of the purpose to which the knowledge is being called, and where expertise and specialised powerful knowledge are dismissed as elitist.

Young (2013) argues that such attacks on powerful knowledge sometimes come from within the academy, and asks ‘how do we explain that it is educationalists, mostly on the Left, those who support a more equal society in all spheres of life, who are so opposed to the idea of all ... being entitled to powerful knowledge?’ (Young 2013: 112). He goes on to argue that achieving access to emancipatory knowledge is often challenging and alienating at first, and that attempts to ensure broad, critical access should not be thought to be a means of eliminating such complex challenges. In the interests of critiquing the blind spots of the powerful knowledge of the academy, we need to be careful that we do not deny access to powerful knowledge for many of our students.

We were recently told, for example, at a symposium that what is needed to broaden access is to ‘remove the jargon’ from our disciplines. While we would be the first to agree that there can be a pomposity to some academic endeavours, which needs to be firmly critiqued, the idea that the semantically-dense use of language in our fields can simply be rooted out is to misunderstand the ways in which the knowledge of the academy is powerful.

Specialised knowledge is produced within social contexts and this can leave its mark and can limit its scope, but the value of specialised knowledge has to be independent of such originating contexts. Without access to such powerful knowledge, our students will remain dependent on those who have it and will therefore not experience the freedom ‘to think the unthinkable and the not yet thought’ (Bernstein 2000: 187). ‘Is this curriculum meaningful to my students?’ must be balanced with the question, ‘What meanings in the world does this curriculum give my students access to?’ We need our curricula to provide access to meaning that is valued by our students, but we also need to ensure this allows them to make meaning in the world (Grant et al. 2018; Young 2013).

This focus on the need for specialised knowledge is therefore not to deny the ‘masculinist, colonial bias of much knowledge production [which] leads to bad (social) science’ (Clegg 2011: 100). But the critiques of such bias that could move us forward are often sunk under the myopic lens of particularly acute forms of standpoint theory, or vexatious forms of ‘knower code’ (Maton 2014), whereby it is argued that only members of a particular social group can ever access some knowledges, and indeed only those members have the right to do so. In this particular conception, truth becomes ‘relativised to social group and made context dependent’ (Clegg 2011: 100) and, as we have argued earlier, knowledge that is relative and tied down to a particular context neither is particularly powerful nor meets the criteria of specialised knowledge offered by the academy (though it may for a time enjoy some political currency).

Much of the critique of Western knowledge focuses on the humanities and social sciences, and is aimed at the ways in which the curriculum is designed to produce a 'rational' neoliberal individual cut off from the student's sense of self and the community capital they possess and value (Clegg 2011). The development of agency, which we have argued is so central to success in higher education, is constrained if the assumed goal is at odds with the ways of being which a student imagines as possible. Higher education has to develop students' capabilities as agents to 're-examine their valued ends ... and reflect on what is of more or less ethical significance in the narrative investigation of other lives' (Walker 2008: 272). It is this point that the protests of 2015 and 2016 in South Africa brought home most forcibly, particularly given the personal testimonies provided by many protesters detailing their experiences of a loss of self-worth in their time at university.

This position requires an understanding of colonialism not as some historical project but rather as one implicated in the current world order. While the displacement of knowledges of the 'other' was absolutely central to the colonial project, the displacement processes continue to hold sway to this day (Kumalo 2021). Mbembe (2016: 30–31) shows the ties between colonialism and the current neoliberal agenda in our universities. He argues that the decolonising project needs to face directly the ways in which our universities are subject to a particular economic project in the so-called 'knowledge economy':

universities today are large systems of authoritative control, standardization, gradation, accountancy, classification, credits and penalties. We need to decolonize the systems of access and management insofar as they have turned higher education into a marketable product, rated, bought and sold by standard units, measured, counted and reduced to staple equivalence by impersonal, mechanical tests and therefore readily subject to statistical consistency, with numerical standards and units. We have to decolonize this because it is deterring students and teachers from a free pursuit of knowledge. It is substituting this goal of free pursuit of knowledge for another, the pursuit of credits. It is replacing scientific capacity and addiction to study and inquiry by salesman-like proficiency.

To decolonize means to reverse this tide of bureaucratization. Unfortunately, this is not what is happening ... administrative staff carry greater pay and prestige than the rank of some senior lecturers ... to decolonize implies breaking the cycle that tends to turn students into customers and consumers. These tendencies are inherent in an institution run in accordance with business principles: the students have become interested less and less in study and knowledge for its own sake and more and more in the material payoff, or utility, which their studies and degree have on the open market. In this system, the student becomes the consumer of vendible educational commodities, primarily courses credits, certifications and degrees. The task of the university from then on is to make them happy as customers.

Understanding coloniality as an ongoing project, revived in the form of neoliberalism, raises questions about the knowledge-production project of the academy, for the

curriculum emerges largely from that project. For example, there is enormous profit in academic publishing, and many universities in the Global South cannot afford the subscription fees to various databases whereby academic knowledge is accessible at the cost of millions of rands per university every year. To see just how perverse this system is, one needs to understand that much of the research done on the Global South is via data collected here and then transposed to the Global North for analysis and publication in the same way in which gold and diamonds are taken in their raw form for turning into profitable final products in the North. Even where the data is analysed and written up in the Global South, we need to consider that the costs of the research process are then borne in the South, and the peer-review processes are undertaken without charge, but then after those in the Global South have ‘completed all these stages of intellectual and other labour, the final products are sold back to us by the Global North in the form of books and journals’ (McKenna 2017) which universities battle to afford. Access to powerful knowledge, so crucial to the curriculum, is thus constrained by the current world order in a number of ways. Academic publishing is but one example of hypercapitalism in the higher education sector.

Thus far in this chapter we have been arguing for the foregrounding of powerful knowledge in the academy while raising concerns about how colonialism (and its current embodiment, neoliberalism) have relegated certain forms of knowledge to the sidelines. There is undoubtedly a tension between re-centring knowledge and simultaneously asking questions about whose knowledge is legitimated (Shay & Mkhize 2018). There are no easy answers here, but there is a need for careful engagement with such tensions as we make decisions about the forms of curricula to implement.

Those working in universities are, of course, not entirely free to decide for themselves what kind of curricula to implement. As we have indicated, various mechanisms play a role in who teaches, who gets taught, what gets taught, when and how, and so on. The structure of our programmes is increasingly being conditioned by national accreditation and funding requirements as discussed in Chapter Three, and also, as discussed earlier in this chapter, the structure of the knowledge acts as a mechanism as to what needs to be taught, in what order, and how, and, furthermore, as has been discussed in this section, the curriculum is conditioned by the history of the society in which the university exists. Another significant mechanism is the university itself. We now turn to look at how institutional cultures and histories act as mechanisms that enable and constrain curriculum possibilities.

The curriculum is conditioned by institutional histories

There is a general consensus that having a range of institutional types in a higher education system is a national strength as this allows for various post-school educational trajectories. Furthermore, only a differentiated sector can meet the varied development needs of a nation and the many demands on higher education (Singh 2008).

In many ways the complexity of South Africa’s history makes it a useful case to consider in conversations about differentiation. As discussed earlier in this book, there

are two main forms of differentiation in the South African higher education landscape: differentiation of *type* and differentiation of *history*. Having a sector differentiated by type is common around the world but is almost always contentious because of hierarchies of status and funding that can emerge.

Under apartheid, the differentiation of type was that of technikon and university. Technikons, known elsewhere as ‘polytechnics’, focused on vocational education and training. This was considered to be a problematic binary divide that failed to allow student articulation between institutions and prevented collaboration between academics across the two types. There was thus a need for a reworking of South Africa’s institutional differentiation by type once apartheid came to an end, in ways that would get rid of the binary divide and allow for a unified sector that could offer a broad range of qualification types, with a focus on different forms of knowledge, and which could allow broad access while enhancing opportunities for articulation across the sector. Around the world, similar shifts have happened to soften such boundary divides. For example, in the United Kingdom polytechnics assumed university status in 1992.

However, the process of re-imagining institutional differentiation of type was significantly complicated in South Africa by the other form of institutional differentiation that had bedevilled the higher education landscape, that of differentiation of history. As discussed in Chapter Three, this differentiation emerged from the apartheid logic of dividing racial groups and providing very different life chances for each group. The spectre of apartheid thinking permeated the structures of South African higher education so explicitly that the merger process outlined in Chapter Three was necessary after the move to democracy.

The discussion of institutional differentiation of type and history in a chapter on curriculum is necessary because the history and culture of a university are key mechanisms conditioning curricula; from who gets access to the university, to who teaches in it, to whether research is central to its endeavours, to what knowledge is legitimated, to how success is determined: all of these curriculum issues and more are enabled and constrained by the institution’s identity. As indicated in Chapter Three, the very nature of the academic project is impacted by institutional differentiation.

Any mass higher education system has differences of resources and differences of mission, but it is important to consider the extent to which different kinds of ‘dispositions to knowledge and knowing are cultivated in these different sites’ (Clegg 2011: 98) if we are to understand how differentiation plays out across the sector and what the social justice implications might be. In the sections that follow, we look at how the forms of institutional differentiation, historical and present, have had an impact on curricula in South Africa.

Curricula in universities of technology

Curricula at universities of technology are, in many ways, constrained by their histories as technikons. Part of this history includes the offering of national programmes, rather than institutional ones. Under the apartheid government, technikons could only offer

programmes that had been nationally developed through a convenorship system and approved by the state. This system saw a particular institution being appointed as the convenor of a qualification and taking the lead in developing it in discussion with those other technikons that were permitted to offer that qualification. The consistency of the technikon offerings was assured by the quality body, the Certification Council for Technikon Education (SERTEC). The change to becoming universities of technology was thus a complicated affair whereby these institutions began to enjoy some of the autonomy that traditional universities had had for many years. As a result of the convenorship system, technikons had generally failed to nurture curriculum development capacity and, significantly, the system had fostered a particular conceptualisation of curriculum as a fixed, pre-determined and neutral structure to be implemented from the top down (White et al. 2011).

The technikon's conceptualisation of knowledge was generally as a set of vocational skills that graduates needed for employment in a very specific workplace. The coherence across the content of the programme was largely achieved by what Muller (2009), drawing on the work of Chisholm et al. (2000), calls 'contextual coherence'. Contextual coherence indicates that the knowledge is selected and sequenced into a diploma curriculum in ways that make direct reference to the utility of the knowledge in the 'real world', which in the case of technikons was the world of work. In a curriculum in which contextual coherence dominates, it is the context in which the knowledge will be used that is the basis for the selection, sequencing and pacing of that content.

In contrast to this there is also 'conceptual coherence', which has abstraction and conceptual difficulty and a concern for the epistemological core of the discipline as the means by which coherence is achieved across the programme (Muller 2009). While all curricula will have aspects of both forms of coherence evident within them, one will always dominate. This is inevitable given that different curricula are designed to enable access to different forms of knowledge for different ends.

The dominance of contextual coherence in the diploma programme is thus no doubt appropriate. However, Muller (2009: 219) argues that generalisable innovation relies on conceptual knowledge, and so some conceptual knowledge needs to be 'a component of all forms of occupational knowledge, for epistemological, economic and social justice reasons'.

If the entire focus of the curriculum is on the acquisition of immediate workplace skills at the expense of access to the underpinning principled knowledge, then this does not allow for the development of capacity to address contexts and problems that cannot yet be imagined in the current world (Gamble 2001; Wheelahan 2010), that is, it denies access to the powerful knowledge discussed earlier. Maton (2009) and Ashwin (2020) argue that a core purpose of all higher education is to make spaces for young people to develop the capacity to engage with context-*independent* knowledge. For example, in a design programme, learning how to design for a specific space using a specific computer program is only useful for as long as that computer program is the one deemed best in the workplace or for as long as the space for which it is being designed retains its current form and function. But learning how to design spaces using a computer program where

there is a strong focus on the principles underpinning the target, the space to be designed, and the tool, the computer program, can allow that knowledge to then be translated into new worlds.

If the shift from *technikon* to university of technology was to signify more than a name change, then the very relationship of the institution to knowledge had to be re-imagined (Du Pré 2009; Powell & McKenna 2009). What was needed was a careful balance between access to knowledge construction and the training of skills (McKenna & Sutherland 2006). There has been some careful research undertaken to consider what forms of curricula would foster the provision of conceptually rich applied knowledge that both includes and moves beyond simple workplace skills application (Shay et al. 2011; Winberg 2005; Winberg et al. 2013; Wolff & Luckett 2013), but there has perhaps not been sufficient uptake of this research, so that many university of technology programmes remain focused on immediate workplace skills, without necessarily foregrounding access to the powerful principles underpinning such skills. This then brings into question the longevity of relevance of what is being taught. We have argued that until this transition is accomplished, it will be difficult to position universities of technology as the destination of choice in the ways that such universities are in many other countries (Boughey 2010b).

This has social justice implications because research shows that, around the world, it is students from poorer backgrounds who are more likely to be provided with ‘an externally focussed curriculum’ (Clegg 2011: 93), and if such curricula have particularly weak conceptual coherence, such students will have limited access to powerful knowledge. This often occurs in the name of ‘employability’, whereby context-independent knowledge and access to underpinning principles is undervalued through a call for immediate workplace relevance (Nudelman 2018). This reinforces social divisions as students from middle-class families are less likely to be exposed to such curricula and when they are, they are often able to draw on their cultural capital to access the forms of powerful knowledge that the curriculum evades.

Because universities of technology qualifications very rarely have academic disciplines as such in their programmes, but rather have subjects based on ‘regions’ (Bernstein 2006), strengthening the conceptual coherence is a challenge. While traditional disciplines generally take the form of ‘singulars’, which have clear boundaries between what is included as knowledge in the discipline and what is excluded, ‘regions’ have very weak boundaries and draw from multiple disciplines. Regions also face the world of work and are concerned with real-world application of knowledge.

While regions are also found in traditional universities, they are typically what Muller calls ‘stronger regions’. They generally have a stronger conceptual base and more stable ways of determining what ‘counts’ and how knowledge should be built in the field (Muller 2009). These regions often have professional bodies, such as the Law Society, the Engineering Council of South Africa (ECSA), the Health Professions Council of South Africa (HPCSA), and the South African Institute of Chartered Accountants (SAICA). In contrast to this, many of the regions that are the basis of programmes in universities of technology are what Muller refers to as ‘weaker regions’. They generally do not have a

strong conceptual basis, and there is often a sense that the boundaries of what can be included as content in the programme are not clearly drawn. Such regions often have very limited connection to the original singular disciplines from which they draw their knowledge, and thus it is that Marketing, Business Studies or Public Administration might draw from fields such as Mathematics, Sociology, Philosophy, Economics or Psychology, but they do so in a way that does not necessarily give students a firm grounding in the principles of powerful knowledge of such constitutive fields. While we have argued that developing conceptual coherence in such programmes is a fundamental social justice issue, this is made difficult by their lack of grounding in a particular discipline or strong region (Muller 2009).

The call for enhanced conceptual coherence is not a call for a shift away from a vocational focus (Garraway & Winberg 2019). There is a real need for a strong vocational-education sector which offers high-quality diplomas, and there have been regular expressions of concern about the inverted pyramid in South Africa in which more students register for formative and professional degrees than for vocational diplomas. The primacy of contextual coherence, however, should not be at the cost of sufficient conceptual coherence. And the two characteristics of being a region, that is, drawing from multiple disciplines and facing the world of work, are crucial aspects of what such institutions offer. Sadly, three recent occurrences in the sector have possibly reduced the differentiated identity of the university of technology. These are the demise of the advisory board, the reduction (or, in some cases, elimination) of work-integrated learning and the conversion of many diplomas into degrees. We turn to each of these now.

In the technikon era, the advisory boards of programmes were made up of various members of industry who provided feedback on the curriculum. This emerged from the valuing of close ties to industry. Contextual coherence in the curriculum requires a clear understanding of context, which was to some extent provided by the advisory boards in the past. As the criteria for staff appointment in universities of technology have changed, so there is no guarantee that the academic staff would have workplace experience or networks of industry experts (see Chapter Seven on staffing for more discussion on this). This has meant that in some cases the detailed understanding of procedural knowledge of the workplace has been reduced, making it difficult to ensure that the contexts being referred to in the university are indeed those of the current workplace. The now largely defunct advisory boards are thus arguably more important than ever.

Alongside the dismantling of the advisory boards in many university of technology programmes, came the reduction or elimination of workplace experience from the curriculum. When the institutions were technikons, most diplomas included up to a year of workplace experience in what was then known as 'cooperative learning'. There were a number of concerns about the quality of these modules, and it seems that often students were made to undertake very menial tasks in the workplace unrelated to their studies and that there was in some cases very little follow-up, besides the keeping of a logbook with minimal information, on the extent to which their learning in the workplace built on the knowledge being taught in the on-campus part of the curriculum. Significantly, the cooperative learning portion often became a bottleneck as many students were

unable to find placements for such modules unless they had family connections in the relevant industry.

These concerns led to a tightening up in regard to what then became known as work-integrated learning (WIL). As a result of the introduction of quality assurance to South African higher education in the early 2000s, the Higher Education Quality Committee, the body responsible for this area, developed audit criteria and programme accreditation criteria (HEQC 2004). Institutions that wanted to include funded workplace learning in their programmes had to demonstrate the ways in which these aspects were curriculated, that is, how they were monitored, assessed and evaluated, and universities had to take full responsibility for the placement of students and the training of the workplace mentors. Sadly, such requirements, which would strengthen the quality of WIL, frequently meant that universities of technology elected either to greatly reduce workplace experience or to scrap it from the curriculum entirely. These shifts had a profound effect on the nature of knowledge being legitimated in the curricula at universities of technology.

The third development relating to the diminution of institutional differentiation in South Africa has emerged from the need to re-register qualifications on the Higher Education Qualifications Sub-Framework (HEQSF) developed in 2012 (CHE 2012). The HEQSF pegs the diploma at a level lower than the bachelor's degree and eliminates an old 'top-up' qualification, the one-year Bachelor of Technology, in favour of the introduction of an advanced diploma, also intended to last one year. The combination of the new qualifications framework with the formula used to provide subsidy to South African universities favouring the degree over the diploma led many institutions to redevelop degree programmes from those previously leading to diplomas.

Another curriculum issue that plays out in particular ways in the university of technology sector is the process of student selection and admission. The entrance requirements in the school leaving certificate are lower for a diploma than for a degree, though institutions can set their own requirements. Given the limited number of places available in the higher education sector, and the extent to which a university qualification is a major mechanism for social mobility, it is unsurprising that there can be fierce competition for spaces in programmes. But the desire to achieve a qualification, any qualification, can have some difficult consequences. While universities of technology have managed, in recent years, to reduce the number of 'walk in' registrations where students simply queue for hours (or days) for a particular programme and, when that course is declared full, move along to another queue, there is still not much evidence that incoming students are fully aware of the specific focus of the course for which they are registering. This varies greatly and some programmes undertake extensive information sessions and detailed application processes to ensure there is a good fit between the skills and goals of the prospective student and the focus of the programme.

Many academics report that the selection process for many students is purely on the basis of matric points and which programme has spaces available (Bass 2008; Gumbi 2017). Students often apply for a programme using fairly scant knowledge about the course but with a clear understanding that accessing higher education and acquiring a qualification is the key driver of social mobility (Case et al. 2018; CHE 2016). Such matters

of career choice and a lack of academic advising impact on working-class students more than on others.

Diploma curricula are very explicitly focused on specific industries, industries about which incoming students may be only vaguely aware, and the programmes associated with them are highly structured. There is almost no space for students to discover what the course is really about as they progress and then to adapt their curriculum to suit their needs and developing passions. Once students have registered in a diploma programme, they are constrained by the rigid curriculum and their choices are to continue with their cohort in the predetermined subjects or to drop out.

The fixed-programme model with its prescribed course structures means that students are expected to move through the years as a cohort, and while individuals are sometimes able to 'carry' a subject which they have failed along the way, this is sometimes impossible because of very strict prerequisite rules. Given how limited the flexibility within a university of technology programme is and how central the development of the requisite professional identity is to success within such programmes, this partly explains the much higher drop-out and throughput rate experienced by universities of technology in South Africa (CHE 2020).

The focus of the diploma on a particular workplace might justify aspects of the very rigid diploma curriculum structure, with little space for electives or for moving between courses, because the knowledge needed for that workplace may be fairly prescribed. But we believe it is worthwhile thinking through the extent to which this rigid structure is also an inheritance from the old national convenorship system. Although some work has been done with regard to claiming particular knowledge spaces and pedagogical approaches in the university of technology sector, it is clear that much still needs to be done if we are to truly have the kinds of differentiation in higher education that can address the multiple needs for education at this level.

While curriculum changes have certainly occurred alongside the shift from technikon to university of technology, these have often been in directions somewhat at odds with how they were conceived in the national policy environment. The blunt instrument of the national funding formula used in South Africa drives all public higher education institutions in the same direction: towards the offering of degrees (not diplomas) and towards the offering of postgraduate qualifications. That we have academic drift (Kraak 2009) in our university of technology sector is therefore unsurprising. This is highly problematic if we are to achieve a differentiated higher education sector that collectively offers qualifications across the range of knowledges needed by an emerging economy, and which offers a range of options that fulfil the interests of a massified student body.

The plans institutions are required to submit to the Ministry of Higher Education and Training are meant to be the key mechanism whereby the sector as a whole is driven towards differentiation. However, a lack of political will to address the contentious issue of institutional differentiation, the blunt nature of the funding formula, and the individual qualification accreditation processes have meant a blurring of institutional differentiation has occurred rather than the anticipated broadening of differentiated options for school leavers.

Having looked at some of the ways in which the type of institution affects curriculum development in the university of technologies, we now turn this lens to the traditional universities.

Curricula in traditional universities

Traditional universities always enjoyed far more freedom in curriculum development in South Africa. They could select disciplines, departments, approaches to teaching and modes of assessment, though they varied in the extent to which such freedoms could be exercised. Historically black traditional universities were constrained by extensive control by the state, as was discussed in Chapter Three and will be returned to later. In the institutions that enjoyed such freedoms, there was a discourse of knowledge as negotiated and often contentious, as opposed to the idea that it was neutral, as was so prevalent in the technikon sector.

Traditional universities are engaged in all three fields of Bernstein's pedagogic device (2003b); these are the field of production, where knowledge is created; the field of recontextualisation, where knowledge is selected from the field of production and recontextualised into a curriculum; and the field of reproduction, where recontextualised knowledge is taught in an educational programme. Inhabiting all three fields has various implications for the nature of the institution. For a start, it means that academics are often greatly committed to their disciplines and the ways in which knowledge is made, alongside holding strong views about the implications of the nature of the discipline for what gets taught and how. Changes imposed from outside the discipline onto curriculum and pedagogy can be fiercely resisted by these academics, and those outside the discipline may struggle to identify the basis of such resistance. There is also the reality that a hierarchy of status is evident between the three fields, resulting in research, undertaken in the field of production, being valued at the cost of teaching, in the field of reproduction.

Having all three fields strongly evident in the traditional universities and embedded into their structures also brings a number of advantages. For example, students are often taught by research-active academics who are contributing to the boundaries of the fields in which the student is seeking induction. This is important not only for aspirational reasons but because it can allow for cutting-edge research to be integrated into the teaching and

FIELD OF PRACTICE	KEY STRUCTURE (THOUGH NOT ONLY STRUCTURAL MECHANISM)	TYPICAL SITES
PRODUCTION	KNOWLEDGE (AND KNOWER STRUCTURES)	PUBLICATIONS, CONFERENCES, LABORATORIES
RECONTEXTUALISATION	CURRICULUM	TEXT BOOKS, CURRICULUM POLICIES, COURSE GUIDES
REPRODUCTION	PEDAGOGY	CLASSROOM PRACTICES, ASSESSMENT

assessment processes. Furthermore, where there is good-quality teaching by research-active academics, students not only get access to the knowledge content but they are enabled to make sense of how knowledge is built, what counts as legitimate claims and evidence, and how such knowledge is communicated in the discipline (Boughey 2012b).

While the historically white sector of the traditional universities in South Africa had freedoms to undertake research and to develop curricula, which could be seen to be an enormous strength in fostering a strong academic project where the curriculum is imbued with conceptual coherence, there are a number of problems that emerge from its history. It would be a mistake to assume that the awareness of the socially constructed nature of knowledge and the autonomy to design curricula translated into these institutions using these powers to challenge the apartheid state. While challenges to the ideology and structures of apartheid did indeed come from universities, these were neither consistent nor always very effective (Maylam 2017), and in many cases, traditional universities played a significant part in maintaining the status quo.



The more research-intensive universities have what we call the discourse of the 'trustworthy and argumentative academic' (McKenna & Boughey 2014). These academics are trusted by the universities in which they work to 'do the right thing', with the result that their institutions tended to employ a very light touch with regard to, for example, quality assurance. Their sense of identity as academics also meant that they could, and did, resist any efforts to control them. Quality assurance processes designed towards strengthening curricula, for example, were often rejected on the basis that they constituted constraints on academic freedom (McKenna & Quinn 2016; Quinn & Boughey 2009). Often such rejection took the form of academic departments simply ignoring requests to engage in processes such as curriculum reviews.

While academics in research-intensive universities enjoy a far higher degree of autonomy in what gets taught and assessed in the curriculum than their counterparts in more hierarchical institutions, they have often spent 20 or 30 years becoming experts in a particular canon with specific literacy practices, and may well fiercely resist changes being called for from both the decolonisation advocates and the managerialist regime. In these institutions, then, and returning to our framework, it is possible to see academics

drawing on a particular set of cultural and structural conditions in order to maintain the status quo.

Curricula in comprehensive universities

As part of the mergers and incorporations in the South African higher education sector, there emerged another new institutional type alongside the restructuring of technikons into universities of technology. This took the form of the comprehensive university, which, as we discussed in Chapter Three, is meant to offer the full range of qualifications. In some cases, the comprehensive university was formed through the merger of a technikon and a traditional university. Given the structural and cultural differences between these institutional types, outlined above, it is unsurprising that bringing them together to form a coherent university was a significant challenge. Perhaps the challenge faced by traditional universities expected to change into comprehensive universities without any history of offering vocational programmes was even greater.

The goals set for comprehensive universities were to increase access, to enhance articulation between career-focused and general academic programmes in order to promote student mobility, to strengthen applied research and to enhance responsiveness to human resource skills and knowledge needs (DoE 2004). One important observation to be made here in the context of other similar points we have made in this book is that there exists a misunderstanding that curricula content, approaches to teaching and learning, and forms of assessment are sufficiently generic across diplomas and degrees that academic staff can simply move between them. The success of the comprehensive universities in achieving the goals set for them is dependent upon the development of an appropriate academic and organisational model which can allow for its position as a hybrid institution. We take up this point in more detail in Chapter Six but for now will note that, following the finalisation of the Higher Education Qualifications Sub-Framework, there has been academic drift towards degree programmes, with the result that there is little evidence of the development of diploma programmes meant to make up the majority of the qualifications offered in comprehensive universities.

Historical differentiation by race

The terms ‘historically black’ and ‘historically disadvantaged’ have both long been used interchangeably in South Africa to denote institutions established for black social groups in the apartheid era, but neither is particularly precise. While the use of the term ‘historically’ in relation to ‘disadvantaged’ suggests that the lack of resourcing is a feature of the past, this is far from the case. Not only are such institutions generally located in less-accessible locations (Soudien et al. 2008), they also find it difficult to attract and retain staff (CHE 2016) and often suffer from poor management and leadership, seen in, for example, the number that have been placed under administration and consistently evidenced in a general inability to manage resources (Moyo 2018). The use of the term ‘historically’ in relation to ‘black’ is also a misconception as these institutions’ current

demographics show. During the advent of democracy, black students moved into the historically white institutions in droves because of the advantages they were perceived to offer (Cooper & Subotzky 2001). Very few white students chose to move into historically black universities to study at these institutions at undergraduate level, although a few opted to take up places in high-prestige courses offering entrance into the professions at postgraduate level, such as Clinical Psychology.

Even more important, in the context of the arguments we have been making in this book, is the fact that while the student bodies of these institutions retained their racial composition, they changed in relation to social class (Cooper 2015). As we argued elsewhere, children of the middle classes enjoy considerable advantages which mean they are generally able to perform better at school-leaving levels and are thus able to achieve the more demanding entrance requirements of the historically white institutions. Those black students who were able to do so quickly moved into the well-resourced institutions previously designated for white students only (Cooper & Subotzky 2001). This meant that the historically black universities now had very few middle-class students in their student body. This had enormous financial implications as the students that remained in this sector could rarely afford to pay fees, which as a result had to remain relatively low, but it also meant that very few members of the student body brought with them middle-class literacy practices (O'Shea et al. 2019).

As we argued in Chapter Four, the literacy practices of the university are no one's by birth but they are, nonetheless, more accessible to those who have been inducted into practices akin to those of the academy by virtue of their previous life experiences. Around the world, access to and success in higher education is closely tied to socio-economic background (Bathmaker et al. 2016; Guinier 2007; Reay & Vincent 2016; Walpole 2003). Logically, this observation would mean that the demographics of a student body should have implications for pedagogy and curriculum structure. The insistence on non-differentiation in many dominant discourses means, however, that what could have constituted fruitful opportunities for positive change in relation to the curriculum have been turned down.

The most obvious of these was the attempt to introduce curriculum change in a proposal made by the CHE in 2013 (Scott et al. 2013). This proposal argued for the need for four years to complete the 360 credits of the undergraduate qualification to be the norm. The learning required for the qualification would then be bolstered and supported by the addition of up to 120 additional credits worth of 'developmental' tuition. The proposal did not aim to lock all students into four years of study but rather offered opportunities for anyone to 'fast track' through the undergraduate programme in three years.

Objections to what quickly became known as the 'four-year degree' emerged in all sectors, including the unions, who saw the proposal as discriminating against black working-class students who would no doubt be amongst those 'required' to undertake an additional year of study. The benefits of being provided with the development and support needed to ensure a 'clean run' through a programme of study, without the false starts and changes of direction experienced by many students as they fail courses and find other ways to gain the credits needed for a qualification, were ignored and the proposal failed

to find traction. These objections also failed to acknowledge the fact consistently revealed in cohort studies that the majority of students, even those in some of the allegedly best-performing universities, take four years to complete a three-year qualification.

More recent attempts to enhance teaching and learning, generally prompted by a concern about the overall performance of the system as a whole, in the form of the CHE's Quality Enhancement Project noted earlier, also failed to acknowledge that pedagogy needs to be tailored to context and that 'good' teaching is not generic but is rather related to who is being taught and who teaches as well as to the 'what' of content (Boughey 2011). Instead, the tendency within curriculum design is to understand 'teaching as teaching as teaching' or, as discourses culled from popular websites on teaching and learning in higher education might have it, 'learning facilitation is learning facilitation is learning facilitation'. Such a position completely misses the point that different students' previous experiences in respect of learning and different forms of knowledge will require different approaches.

The construct of 'historical disadvantage', as we pointed out earlier in this section, derives from the intentional lack of resources awarded to institutions identified for black social groups under apartheid (Bozalek & Boughey 2012, 2020). Arguably, events of recent years mean that historically white universities (HWUs) are now beginning to encounter some of the financial challenges faced by their sister institutions for decades given the decrease in state funding and student protests about the concomitant increase in tuition fees and the effects of the Covid-19 pandemic. In addition, the student populations in HWUs have changed in the last 25 years or so with the result that professors teaching in these universities now stand in front of students who are no longer the same as those they sat beside as undergraduates. They have different life experiences, more knowledge of technology and so on. As many academics have nothing on which to draw except their own experiences as learners to inform their own teaching, much of the teaching that takes place in these universities does not accommodate changes in the student body and especially students' learning histories.

Private higher education

An increase in the number of private 'for profit' institutions of higher education is noted in Chapter Three of this book as a feature of the global landscape. Such institutions are now a common feature of higher education systems across the continent and may include public institutions in other countries operating offshore as limited companies. Following the first democratic election in South Africa in 1994, attempts were made to control the growth of private higher education in the country. In many respects, these attempts were rooted in the perceived need to protect public higher education institutions in one of Africa's most advanced economies as it moved to the provision of quality higher education for all. Attempts to control the growth of private higher education can also be related to the need to manage the proliferation of institutions set up by 'fly by night' companies that failed to provide the education for which students had paid.

Private institutions were prohibited from using the term 'university'. Thus, Monash University, a public institution based in Melbourne in Australia, could only be known

as 'Monash South Africa'.⁶ The establishment of private institutions was controlled by regulations requiring approval and registration as a private provider of higher education with the Department of Higher Education and Training (DHET) and accreditation of all programmes in a rigorous process controlled by the Council on Higher Education (CHE).

Private higher education has proliferated across the African continent with more than 120 such institutions operating in Ethiopia alone. There were 102 fully registered private institutions of higher education and a further 34 with provisional registration in South Africa in March 2020 (DHET 2020). Kenya is identified as the first country in the East African regional to establish private institutions, and was followed by Benin, Senegal, Tanzania, Uganda, Ghana, Mozambique and Cameroon. While increasing numbers of institutions are 'for profit', most private higher education institutions on the continent beyond South Africa are owned by religious bodies (Tamrat 2018). The link between universities and religion in the private sector echoes early universities established around the world previously noted in this chapter.

Most private institutions are heavily focused on low-cost, high-profit, vocational qualifications in business and commerce, since programmes in areas such as engineering and medicine typically result in higher running costs associated with offering laboratory work. Curricula are often developed centrally by a unit of some sort, which also applies for the accreditation of programmes. The development of learning materials and assessment can also be centrally controlled, with the result that lecturers, many of whom are employed on short-term contracts, are typically involved in programme delivery and not in its design. Programmes in the humanities, the natural sciences and even the social sciences are not common. Where subjects such as English or Sociology are offered, they are usually conceptualised as 'service' courses supporting the achievement of learning outcomes that are heavily focused on workplaces. Much of what we said about the context-bound nature of curricula in the universities of technology therefore also applies to the private institutions.

There is no doubt, however, that in a system which does not have sufficient places to meet demand from students, private institutions have an important role to play. Efforts to control their growth and oversee their operations by bodies responsible for quality assurance therefore need to achieve a delicate balance between allowing for innovation and demand and ensuring that the learning experiences offered to students are of at least the same standard as those in the public universities.

In this section, and staying true to the framework we have used throughout the book, our argument is that social and cultural conditioning in place at all types of institutions in South Africa meant that the opportunities for curriculum change presented in the last 20 or so years have not been taken up as meaningfully as they could have been. Even more significantly, needs for change have often been 'set aside' because of the assumptions of those who have the power to act to bring about change. What we have seen is an overwhelming focus on structural change, on calculating credit values and assigning

6 Monash South Africa was later sold to private provider the Independent Institute of Education (IIE), a subsidiary of the ADvTECH group, and now has no links with the public university in Australia.

NQF levels and so on, at the expense of the critical engagement with the ‘what, who, how and where’ necessary for meaningful curriculum development.

The focus on programmes and modules

The focus on structure in relation to curriculum change is also evident in processes related to the development of programmes and modules. As we have already pointed out, the introduction of the NQF in South Africa resulted in a distinction being made between qualifications and learning programmes, defined as the set of experiences made available to students to enable them to achieve the learning outcomes for those qualifications. As these programmes were developed, the focus was very much on compliance with the formal requirements for registration in the form of credits and NQF levels.

Some institutions went a step further at this time by ‘modularising’ their curricula. This involved breaking down teaching and learning into smaller units (often as small as two or three credits) and then building these modules up into a larger programme. The problem with this approach relates to the lack of coherence that often resulted. We have experience of reviewing processes of modularisation at one university where academics were encouraged to develop modules independently. They then went about ‘selling’ these modules to programmes in order to ensure that their own jobs were secure. As this process unfolded, sufficient attention was not paid to the coherence or sequencing of knowledge in the programme. In this case, we can see the impact of market forces on the choices made by academics as they exercised their personal powers and properties in relation to curriculum development.

One of the biggest problems with the development of programmes and modules, however, relates to the lack of flexibility. In some cases, units of the programme are tightly locked together in sequential order, with the result that students who fail a module or course can be blocked from making further progress. As we have indicated, this is particularly common in the case of the diploma. If students fail repeatedly, they may then have to resort to starting a completely different programme (Case et al. 2018). This phenomenon can partly explain the low throughput and attrition rates in programmes repeatedly identified as problematic by cohort studies (see, e.g. CHE 2016) although programme structure is but one mechanism at play in accounting for the whole picture.

Extended curricula

As we indicated in the previous chapter, one response to the issue of poor retention and throughput in the South African system was the introduction of what are known as ‘Extended Programmes with an Integrated Foundation Phase’ but variously called ‘Foundation Programmes’ and ‘Extended Curriculum Programmes’. In many cases these have been used as the means of broadening access to students who had not attained the scores on the school leaving examination required for entry to mainstream programmes. Extended programmes are thus in some institutions understood within the single notion

of access, whereby access entails physical access to the university structures rather than epistemological access (Morrow 2009) to the discipline or programme culture. Or to put it another way, as has been pointed out by the CHE (2004), student equity can be understood from two perspectives: equity of access and equity of outcomes. Many universities describe their extended curricula from the first understanding only – enabling more students to enter the academy.

The use of the term ‘Extended Programmes with an Integrated Foundation Phase’, as the nomenclature suggests, was an attempt to drive institutions to understand such programmes as integrally embedded within ‘mainstream’ programmes. Indeed, without a focus on discipline-specific practices, it is clear that foundation provision would be simply an additional year of generic skills courses developed on the basis of the Decontextualised Learner discourse, and our research over the years has found this is sadly often the case (Boughey 2010a; McKenna 2012b).

In spite of the moves to make funding for these initiatives more secure, many staff teaching the developmental courses in extended programmes continue to be employed on short-term contracts. This often meant the appointment of people with very little experience in the field or discipline being taught. Such people were then tasked with enhancing epistemological access to a discipline in which they themselves may have limited expertise (Boughey 2005a, 2012a; McKenna 2012b). And because such contract staff are often seen as being ‘outside’ of the concerns of the mainstream discipline, it is unlikely that any lessons they might have to share from teaching on such courses would be fed back to disciplinary experts. Not only do these contract lecturers rarely attend staff meetings where issues of curriculum are discussed, but their lack of qualifications and research production in the relevant discipline may mean that they do not carry the credibility which would allow them to have a voice in such spaces.

A condition of the DHET funding is that extended curriculum students are admitted to programmes leading to an accredited qualification. However, in many cases, the entire extra year of tuition occurs at the beginning of the curriculum and is divorced from the learning that takes place in the rest of it. Add-on programmes of this nature are typically low on knowledge content and high on generic skills, which makes the acquisition of disciplinary norms especially difficult. In some cases, extended programmes are even offered on different campuses from their mainstream counterpart. As long as the programmes are geographically separate, taught by different staff and even managed entirely externally from the faculty, these programmes cannot draw on the disciplines to which students are seeking access.

An additional concern with the Extended Curriculum initiative is that it addresses a small percentage of students. The percentage of students entering higher education through such programmes has increased year on year but still sits at just 12% (Draft DHET Policy Framework for Extended Curriculum Programmes May 2017). As we have indicated, the programmes that exist are often targeted at students who would not normally gain admission to a university while, at the same time, those who have been accepted directly into ‘mainstream’ programmes having met regular admission requirements continue to fail in droves.

Over the T_2 to T_3 period, a number of different course types emerged to accommodate the 120 additional credits made available through this funding: (i) fully foundational courses; (ii) extended courses; and (iii) augmented/augmenting courses. These three different course types suit different purposes and meet different needs.

Foundational courses are just that. They aim to provide a foundation for students to move forward at tertiary level by developing conceptual knowledge and knowledge-making skills (e.g. laboratory-related skills in science). Fully foundational courses fit well in knowledge areas with a hierarchical knowledge structure, that is, in areas where lower-level observations and principles are subsumed into ever more overarching theories and accounts. Typically, these are characteristics of the natural sciences. In a hierarchical knowledge structure, a gap at the lower levels can mean that students become 'stuck' and cannot proceed any further with their learning until the gap is filled. However, the addition of an add-on foundation year at the front end of the programme is popular across many extended-curriculum programmes regardless of the nature of the knowledge, as this model is far easier to implement logistically and requires the least disruption to the mainstream curriculum structures. As is to be expected, there are difficulties in ensuring sustained success through the degree among students who have completed the additional year. Having made it through the 'foundation year', many students then fail in the mainstream curriculum. The fundamental flaw in the institutional construction of foundation provision within a student-deficit discourse had not been recognised; instead, problems that arise with success rates amongst these students were once again seen in the data for the research underpinning this book to be explained as the institution 'not having stringent enough admission criteria'.

Extended courses are courses where the length of time taken to complete the course is extended. This means, for example, that a semester-long course could be offered over a full academic year. Extended courses mean that teaching and learning simply proceed at a slower pace giving students more time to consolidate and develop what they know. Assessment is in step with the pace of learning so that, for example, by mid-year, only half of the work of the course would be assessed.

Finally, augmented/augmenting courses are courses into which additional tuition is inserted by offering extra contact sessions. If a course is offered through four contact periods per week, it could be augmented by offering up to eight contact periods per week. These additional sessions are offered either by the academic responsible for teaching the course (as in 'augmented courses') or, more usually, by staff members specially appointed to run them (as in 'augmenting courses'). Students enrolled in an augmented/augmenting course need to keep up with the work of the regular course. This means that if an assignment is due in the second week of the regular course, students doing the augmenting/augmented portion also need to do this assignment. In theory at least, augmented/augmenting courses require greater mastery of the literacy practices than extended courses because of the pace of assessment.

An extended programme could encompass all or any of three different course types discussed as developmental provision. This offered a significant opportunity for curriculum change. The kinds of social and cultural conditioning we have outlined

earlier in this chapter have meant, however, that those academics with the power to effect change have often eschewed it and have, instead, delegated responsibility for advancing students' learning to others employed to teach the developmental credits which are not particularly well integrated conceptually into the programme. As this has happened, an entire industry of 'academic support professionals' has come into being, a point to which we will return in Chapter Six.

Academic advising

We have become aware, in our research on student learning over the years, of the extent to which students battle to manage their own progression through their programmes; missing assignment deadlines, losing certificates of due performance (DPs), and then failing courses. Students in big courses can often feel adrift and uncertain, and expectations by lecturers that these students will know what is expected of them because it is all 'in the study guide' are problematic. With the possible exception of high-status courses such as medicine, law and accounting, many students enter their programme without having a clear sense of what they have signed up for. This is perhaps of less concern in formative courses such as the BA or BCom, where there is a high degree of flexibility within the programme structure and students can negotiate their pathway in any number of ways (though even here there is much variation between institutions, see Case et al. 2018; Marshall 2018). However, in the university of technology system, we have seen that this can be a very problematic matter as students register for very specific vocation-focused qualifications without understanding what it is that a clothing technologist or dental technologist actually does (Boughey 2010b).

It is clear that academic advising is fairly ad hoc in South Africa and that often students are able to 'slip through the cracks' of a massified system (Case et al. 2018). While we will never be in the position of many North American universities, where the system of academic advising is integral to the structure of the university with every student allocated an advisor from the point of admission, we believe there is a gap in the South African higher education sector in this regard. Many universities do not have a very clear early-warning system where students are informed of forthcoming problems in their progress, though some universities are now implementing these. The First-Year Experience programmes at some universities pay careful attention to supporting students as they become aware of institutional expectations and structures, although, following the arguments we have made in Chapter Four, some efforts to do this can be problematised from the discourse of the Decontextualised Learner.

Conclusion

In this chapter, we have shown how curriculum, if broadly conceptualised as access to the goods of the university, is conditioned by a number of macro and more micro structures and cultures. In particular, we have emphasised that the structure of the target knowledge needs to be taken carefully into account in curriculum development processes. The

academy is not simply a training centre providing workplace skills; it is a public-good institution developing and disseminating powerful knowledge which enables us to work across contexts and to address challenging problems. In our consideration of what constitutes powerful knowledge, we need to steadfastly and explicitly interrogate whose interests are being served and how 'knowledge of the powerful' might be allowed to masquerade as 'powerful knowledge'. We also reviewed the ways in which these complex issues intersect with institutional differentiation of both type and history in South Africa, with implications for higher education systems across the continent. The mechanisms enabling and constraining curriculum development that have been identified in this chapter are far from exhaustive, but we argue that many stubbornly persistent discourses in the cultural domain do not serve us very well.

Archer (1995, 1996, 1998, 2000) indicates that change in the domain of culture often takes far longer to achieve than change in the domain of structure. Furthermore, if discourses in the domain of culture do not complement the structural change, unintended consequences may result. Understanding the ways in which structural and cultural mechanisms condition curricula is fundamental to transformation; however, this does not mean that academic staff are unable to bring about change. In the next chapter, we look at academics, as the main agents of curriculum transformation, and we look at the ways in which they have exercised agency over the T_2 to T_3 period.