

Part 2

KNOWLEDGE DIFFERENTIATION

Differentiation and progression in the curriculum

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Introduction

This chapter will inquire into the vexed question of curriculum differentiation. It is vexed in a number of ways, but particularly because curriculum differentiation (more precisely, a particular form of curriculum differentiation) was a principal instrument of Bantu Education, so designed to limit the labour market opportunities of racially defined population groups. It was thus inevitable, from the outset of the new South Africa, that curricular differentiation would be regarded with deep suspicion and often seen as the instrument of social injustice. This chapter investigates the broader project of *strong integration*, of curriculum de-differentiation. In order to do this, I shall proceed by locating the original fault line in epistemological thinking which has led to such a great divide in contemporary thought about knowledge; show how such views of knowledge structure entail curriculum structure; show how strong integrationist thinking, or what I shall henceforth call curricular de-differentiation, disguises the need for differentiation and progression in key subjects; and conclude by demonstrating the results in the draft proposals for the then-named Further Education and Training Certificate.¹

Knowledge structure and progression

The foundation of the Cartesian revolution in the 17th century was the axiom that 'true' knowledge was characterised by *progression*, that that 'which had once been established did not need to be proved again, that is to say, in which scientific progress, universally recognised as such by rational thinkers, was possible' (Berlin, 2000a: 28).

There are a number of entailments to this view. First, Descartes believed that only in a bona fide branch of knowledge can we find ‘clear and distinct ideas’ (Berlin 2000a: 28):

The paradigm of true knowledge, according to the Cartesian school, consisted in beginning from truths so clear and distinct that they could be contradicted only on pain of falling into absurdities; and in proceeding thence, by strict deductive rules, to conclusions whose truth was guaranteed by the unbreakable rules of deduction...

This was indeed a lofty aim for knowledge in the 17th century, and it meant that he viewed the knowledge array then available in a particular way. For Descartes, for example, the human sciences might generate edification and improvement, but were otherwise of little enduring social value because they could not produce ‘strict deductive rules’. Here lies the foundation of the distinction between science and all other symbolic ensembles, and it rests on the notion of what may be called *strong progression*.

No one today is a thoroughgoing Cartesian, and thus no one today believes in strong progression. Challenges to Cartesian rationalism have come from both within and outside of science. One challenge to this idea of strong progression from within science has culminated in the generally accepted position in science today of what may be called *weak progression*, probably most parsimoniously stated by Popper’s theorem of *revisability* and *provisionality*. This is a revision that accepts the postulate of progression (and hence of the division of the field of representations into ‘true’ or progressive knowledge and belief or mere narrative), but which recognises at the same time that the ‘true’ in true knowledge does not equal absolute knowledge, and that progress in knowledge, if in the long run ineluctable, can always and in principle be revised – hence, weak progression.

The dominant challenge to strong progression from outside science has sought to overturn the distinction between knowledge that progresses (‘science’) and knowledge that does not. The first brilliantly original formulation can be traced back to Giambattista Vico who, with his 7th inaugural lecture in 1708, and later with the publication of the first edition of *Scienza Nuova/New Science* in 1725, rejected the fundamental premise of Cartesian rationalism, the distinction between the true (*verum*) and the artificial (*factum*). He begins

by arguing their essential unity: 'We demonstrate geometry [not because it is true or progressive but] because we make it' (Berlin, 2000a: 31). What he meant by this was that we can be said to fully know something not only because we know what it is (i.e., through rational reconstruction) but because we know how it came to be (i.e., through historical or genetic reconstruction), which he called *per causas*. By this logic, we only know what we create. If we did not create it, we cannot know it, because it then has no human history. 'The true (*verum*) and the made (*factum*) are convertible' (2000a: 35), or, 'The criterion of truth is to have made it' (2000a: 36). In other words, with this argument, truth becomes a human artefact, and Vico becomes the first constructivist. This form of the argument yields a hierarchy of knowledges, with mathematics at its head (the most artificial of knowledge systems for Vico), leading with arithmetic, algebra and geometry, then mechanics, physics (contra the Cartesians who put this at the head), down to psychology, morality and history (here Vico and Descartes are at one). The hierarchy is one of 'make-ability', with the least made knowledge the most opaque to our minds. Although far from Vico's intent, this reasoning buttresses that of the humanists of the Trivium, who sought to keep the humanities and hermeneutics sovereign, against the claims of physics and the Quadrivium as the paramount font of knowledge (Durkheim, 1977). How things have changed.

We may sum this up by saying that, whereas Descartes with his criterion of 'clear and distinct ideas' fundamentally sundered *verum* from *factum*, Vico fundamentally subverts it by reuniting them.

Vico's careful revolt has come to be the mere dress rehearsal for the more thoroughgoing romantic revolt of the 19th century (and the postmodern one, now on its last legs in the 21st). The European romantics took up Vico's insistence on the make-ability of truth and of the world: '...the common assumption of the romantics that runs counter to the *philosophia perennis* is that the answers to the great questions are not to be discovered so much as to be invented. They are not something found, they are something literally made' (Berlin, 2000b: 202, 203). Amongst the romantics and their contemporary successors there are strong and weak traditions of make-ability. Common to all, however, is the following:

Hence that new emphasis on the subjective [the maker] and ideal rather than the objective and the real, on the process of creation

rather than its effects, on motives rather than consequences; and, as a necessary corollary of this, on the quality of the vision, the state of mind or soul of the acting agent – purity of heart, innocence of intention, sincerity of purpose rather than getting the answer right, that is, accurate correspondence to the ‘given.’ (Berlin, 2000b: 203)

There are a great many implications for education of this enduring dispute in the philosophy of knowledge which starts here. For the purposes of this chapter, the following is paramount: If the Enlightenment, following Descartes, thus assimilated all knowledge, including human knowledge, to the Enlightenment paradigm, the counter-Enlightenment did the converse; it assimilated all knowledge to the counter-paradigm. Both traditions of thought have had a vast influence on our stock of human understanding. Both have yielded a model for curricular organisation. We have had our Enlightenment curricula, with rigid progression, sequencing and pacing criteria for all subjects, and our counter-Enlightenment curricula which, by placing exclusive emphasis on skills and activity at the expense of knowledge, dispense with prescription and thereby dispense with progression and hence curricular differentiation altogether. What a dispassionate survey of these must reveal is that such assimilations invariably privilege some knowledge forms as they deform others. To see why this is necessarily so, a brief look at knowledge structure and its link to curriculum structure is useful.

Knowledge structure and curriculum structure

The dichotomous view of knowledge sketched earlier is particularly hard to transcend. The first theoretical priority is to break this dichotomous stalemate. Resources to do so can be found in the late theorising of Basil Bernstein (1996; 1999). He approaches the matter in the following way. First, he distinguishes between horizontal and vertical discourse. For our purposes, horizontal discourse is a form of sense making that is segmental and has no recontextualising principle – that is, it has no principled way to extend the knowledge structure vertically. All forms of vertical discourse have recontextualising principles, and have thus what Bernstein calls knowledge structures. These recontextualising principles differ, though Bernstein did not pursue their difference. He does give us a clue, however: knowledge

structures vary as to whether their verticality is hierarchical or horizontal. At the hierarchical pole, the *locus classicus* is the triangle of physics; at the horizontal pole, we find knowledge structures that proliferate sideways into multiple languages rather than cumulating into type/token trees as with physics. Although Bernstein does not say this directly, we can surmise the following: the hierarchical knowledge structures have long chains of type/token syntheses (that is, relatively higher pyramids of abstraction) than the horizontal knowledge structures, which are prone to extension as much laterally (into alternate languages) as vertically into ever more abstract logical trees.

To conclude this brief theoretical excursus, we may say that knowledge structures vary as to their vertical extensiveness, or progression. If knowledge structures vary across a continuum of progressiveness, it is plausible to assume that the curricular correlates of these knowledge structures do so as well. Let us agree, for the purposes of the present discussion, that school subjects vary commensurately along a continuum of progressiveness. How then may we characterise the way in which this progressiveness, for curriculum purpose, differs?

Curricular subject structures differ as to their requirement for stipulation of knowledge/subject *content*. This is not as trivial as it sounds. Recall Descartes' first requirement for *verum* – namely that conclusions (we may call them content) should rest on piles of deductive rules. From this Descartes concluded that those conclusions/contents, once 'proved', were left behind. What is here 'left behind' is a content trail of proliferating content as the abstraction sequence extends vertically. Modifying Descartes appropriately, we may say that, in the more vertical kinds of curricular subject, content is more important than in the more horizontal kinds of curricular subject, in a number of ways.

First, in the content-rich subjects, let us say in Mathematics, Physics and the other natural sciences, because there is more content in the progression chain, content sequence becomes of paramount pedagogical importance. Midway along the vertical/horizontal continuum (let us take Literature and History as examples), sequence of content is less important, though conceptual progression remains critical. We can note that the more horizontal the subject, the more the same knowledge can be recurrently used: in History, chronology aside, the Second World War is conventionally repeated at different levels

of explanatory abstraction. On the horizontal end of the spectrum, in Life Skills for example, it sometimes seems as if HIV/AIDS is the only discernible content.

In the vertical subjects, then, sequence counts: if learners in content-rich subjects encounter content of a level of abstraction above that which they have already mastered, it will be unlearnable because unrecognisable. Sequence of content (though not necessarily of concept) becomes increasingly less critical as subjects approach the horizontal pole. At the far end of the pole, content is a collection of topic segments that can be traversed in virtually any order. Without pursuing the matter further here, it is plausible to suggest that it was this end of the spectrum that the curriculum planners implicitly had in mind when they conceived the idea to unit standardise the curriculum.

Second, in content-rich subjects, if amount of content – because of the progression–abstraction chain – is more extensive, it is clear that, in curricular and pedagogical terms, *coverage* of the necessary content is all the more crucial than it is in subjects that have a lesser content chain needing coverage. We know from numerous international studies (Smith, Smith & Bryk, 1998, for example) that, of the factors that threaten coverage, the pre-eminent one is *pacing*. Teachers who move too slowly through a content-rich curriculum simply do not cover it. Reasons for too-slow pacing are numerous, but the first place to look is whether there are any pacing guidelines given in the curriculum; that is, whether teachers are given clear enough benchmarks for the pace at which they must proceed to ensure coverage of the requisite content.

Third, in content-rich subjects there is a greater *linkage between content and concept* than there is in content-poor subjects. In the latter, the same content can convey different concepts, leading to a necessary circulation of the same content through the curriculum. In the former, certain content is so tightly identified with its conceptual freight that content and concept are conterminously progressed in the ideal curriculum. In more horizontal knowledge structures – again, in Life Skills, for example – the same content is refracted successively through different explanatory languages, giving perhaps an illusion of progression, but in reality simply multiplying possible explanatory frameworks without providing any way in which the student might grasp any explanatory priority or accumulation in the knowledge store.

To sum up this part of the discussion: at the vertical end of the spectrum, subjects require strong progression; in roughly the middle of the spectrum, there is moderate progression; at the horizontal end of the spectrum, content is segmental and sequence is of lesser importance.

Some tentative generalisations:

- The more vertical the parent knowledge structure of the subject (eg. Physics), the greater is the importance of content and the sequence of content, over cognitive skills. The conceptual syntax is carried by the sequentially transmitted content, not vice versa.
- In such subjects, coverage is thus all important, since the content sequence makes manifest the conceptual path to be covered.
- The weaker the internal grammar of the knowledge structure, the weaker the connection between content and conceptuality. Practically, this means that the same concept can be elucidated by different content and, vice versa, the same content can be used to bring home not only different concepts but different levels of concept. This is a function of weak grammaticality, but it is also a function of plural specialised languages, so that the same content can be differently recontextualised into different language concepts. The learning path here is thus not vertically up a single conceptual ladder, but horizontally across specialised languages with different grammars. It may even be pedagogically appropriate to use the same content.
- At the progression-weakest end of the curricular spectrum, content and concepts are indistinguishable, although sometimes an artificial distinction of 'cognitive skills' is made. Both are segmentally arranged. Sequence and content specification requirements are here at their least specific.

The appropriate lesson to be drawn here is that different knowledge structures have different curricular specificatory requirements. If this point is grasped, it follows that any sensible curriculum policy will *distinguish and differentiate* between the structural needs of the different curricular knowledge structures. Any policy that favours one or the other side of the knowledge continuum will distort and subvert the needs of the other side. South African curriculum policy has, since 1994, recoiled from differentiation for political rather than pedagogical reasons. The impact on progression and on the learning of learners has become quickly apparent.

Differentiation past and present

All countries in the design of their education system grapple with the tension between contending social goods: between freedom of choice and social prescription, sometimes couched in terms of a trade-off between what is good for democracy and what is good for development, between allowing burgeoning inputs and consequences and managing those inputs and their social impact. In an important recent study, for example, Carnoy, Gove and Marshall (2004) show that the reason Cuba's learners outperform their Latin-American peers, especially in the content-rich subjects and, more importantly, why social class has almost disappeared as a stratifying factor in outcomes, is because Cuba takes a firm line in curtailing choice and managing, but not trying to eliminate, differentiation.

South Africa seems about as far from the Cuban option as it is possible to be, with its stress on choice, but it was not always so. It is instructive to recall the way that the National Education Policy Investigation (NEPI) considered the matter of differentiation. Writing in 1991/92, the Framework Report of NEPI argued that differentiation was one of four systemic features whereby education systems, or subsets of these systems, might vary. As a systemic feature, there are pros and cons attached to either high or low differentiation. The question is which pros were most important, and which cons the least?

The strongest argument *against* education differentiation...is that, by providing different education experiences for various children, we run the risk of offering an education that is better for some (that is, of higher quality) than for others: that is, it runs the risk of producing inequity. In a society such as South Africa, which has gross social inequalities, education differentiation tends to accentuate them.

The strongest argument *for* education differentiation is that specialist skills require differentiation (of curriculum, perhaps of institution, probably of finance). Since such skills are said to be vital for an economy which aims to be competitive in world markets, education differentiation is said to be essential for development. (NEPI, 1993: 21)

Since it was assumed that attention to development was unavoidable, the Framework Report also assumed that some kind of differentiation was inevitable. The question then became how to deal with the tension between the equally desirable but divergent social goods of equity and development:

More than any other aspect of the education system, differentiation highlights the potential tension between the values of equity and development. We assume that most significant policy players will agree that the policy challenge is to find ways of maximising development while improving equity, to *manage differentiation* in such a way that the social programme of education equity is not seriously compromised (1993: 21, emphasis added).

In other words, the way to deal with the potentially undesirable side effects of differentiation is not to avoid them but to regulate them. I shall return to this point in the Conclusion. It would not have occurred to the NEPI writers that decreasing or eliminating differentiation was an option. Yet, as this chapter will argue, this is the strategy adopted by the Ministerial Project Committee in their draft further education and training (FET) proposals. As I will go on to argue, the strategy of de-differentiation will do the opposite of what is intended; that is, de-differentiation itself becomes a threat to equity and social justice.

I can summarise the discussion so far as follows:

- Education systems are designed to pursue various social goals and priorities;
- These goals may be equally desirable, but they may be, and often are, divergent;
- This divergence must be managed in order to ameliorate the impact of potentially undesirable effects;
- Attempting to deal with tensions between social goods by favouring one at the expense of the other is hardly a desirable strategy;
- Where a policy of de-differentiation is pursued, negative unintended consequences are likely to ensue.

It is this last feature that this discussion seeks to elucidate.

We may characterise the draft National Curriculum Statements and the policy document *Qualifications and Assessment Policy Framework Grades 10–12*

(*General*) (DoE, 2003) as a de-differentiating policy proposal with three de-differentiating features: of the grading continuum, of the qualification and learning areas, and of subject content.

De-differentiation of the grading continuum

The Framework proposes that the eight bands which served to grade and signal achievement level in the old Senior Certificate be shrunk to six (see Table 4.1).²

Table 4.1 Proposed codifications for Senior Certificate grading bands

Band	New code	Old code
80–100%	6	A
60–79%	5	B/C
50–59%	4	D
40–49%	3	E
30–39%	2	F
0–29%	1	FF/G

It should be plain that the main difference here is a collapse of the previous B and C categories into one, and the lopping off of the old bottom G category. On the face of it, this seems inimical to higher education purposes, for it is usually exactly in the B and C range that higher education institutions would like to be able to discriminate competence in key content-rich subjects such as Mathematics. With this system, they will be unable to use code 5 as a selector if, for instance, entrance was to be restricted to what would previously have been a B. To put that another way, the grade bands, bands 1 and 5 in particular, are now so broad that their usefulness for benchmarking has been reduced. At a time when international literacy and numeracy competency comparisons are on the increase (for example, the Third International Maths and Science Study, the Monitoring Learner Assessment Study, and the Southern African Consortium for Monitoring Educational Quality study), de-differentiation of the grading continuum seems to avoid rather than to grasp the problem.

There are two further features of the new grading policy worth commenting on. First, the awarding of marks that can be aggregated (norm-referenced assessments) has been scrapped and replaced by relevant assessment standards (criterion-referenced attainment standards). As a consequence, it is now unclear whether and how attainment levels on a series of assessment standards can be aggregated to give an overall assessment that is sufficiently discriminating for personnel managers and higher education admissions officers to make fair judgements in a crowded field. Second, subject assessments will no longer be aggregated together to form a single overall assessment for the school-leaving certificate. The award of the certificate will now depend upon a number of different attainment combination rules:

- Scores 4 or better in four subjects at National Qualifications Framework (NQF) Level 4;
- Scores 4 or better in three subjects at NQF Level 3, where a pass at Level 3 is achieved through a process of ‘condoning’.

What this means will be far from clear to many company personnel officers, and it seems a fair guess that many of them, in practice, will simply take attainment in one or two subjects (say Mathematics or Language) as a proxy for employment potential. Over time, this may come to mean a downgrading of the other learning areas (such as History, for example) in the mind of corporate commerce, the public sector, the tertiary sector, and perhaps even in the mind of the public.

De-differentiation of the qualification and of learning areas (Mathematics as an example)

The new proposals collapse the distinction between a higher grade (matriculation endorsement) and a standard grade (Senior Certificate). There will from now on be only a single level FET qualification.³ It is plain that the intention here will be to eliminate the social hierarchy between the two old qualifications, a hierarchy, moreover, obdurately marked by race. Once again, though, the strategy to eliminate the difference, by making the differentiation invisible, masks but does not solve the larger problem. The problem is this: the two distributions for the current two qualifications (matriculation and Senior Certificate) overlap hardly at all (think of the two partly interlocked circles of the MasterCard logo). The South African Universities Vice-Chancellors’

Association (SAUVCA)/Council of Technikon Principals (CTP) memo to the minister on 11 June 2003 puts the point as follows:

...against the standard grade syllabus an achievement at 90% would translate into outstanding achievement; but the same attainment measured against the complexities of the higher-grade syllabus/subject would probably score between 40 and 49% and translate into adequate achievement. (SAUVCA, June 2003)

Imagine now that all students will come under the same assessment umbrella. The first question, which remains to be answered, is 'Where will the benchmark (normative reference) be set?' Let us say it is set at the matriculation level. As the example implies, this will mean that the very best students on standard grade will get a barely passing mark (now, a Level 3 grade). And, if the majority of learners doing standard grade were black, the majority of learners at the bottom end of the distribution, all other things being equal, will be black. Presumably, to make this sleight properly invisible, the minister will have to decree that race not be a reporting category for results. But we will still know which schools get what results, and we will still know which serve the poor and which the middle class. Those results will still tell the same story. Assume, however, that the department sets the norm for the FET certificate at the old standard grade level. This will push all the learners for whom higher education might have an interest into the top two bands, if not into the top band alone, further exacerbating the problem of discrimination discussed earlier. In other words, for the strategy of qualification elision to work, there has to be a far more articulated grading procedure. In short, grading and qualification de-differentiation, together, further compound the problem.

A particular feature of qualification de-differentiation is learning area de-differentiation, in particular, the elision between standard grade and higher grade Mathematics. SAUVCA has been particularly vocal about this feature (SAUVCA, September 2003). One sees the problem that the department is trying to solve by this de-differentiating feature: as the stakes are increased, so school principals have tended to counsel struggling learners into standard grade Mathematics in order to minimise the higher grade failure rate and maximise the overall pass rate to accede to exhortation from the various departmental head offices in the provinces. The concern is real, but the flaw in the logic lies in regarding this as necessarily a bad thing. The department takes the view that this is not fair to the learners so treated. There are three

comments to make. First, to allow learners to write the more arduous exam and to fail is not necessarily more fair, since a pass at the standard grade level has more exchange value in the marketplace than a fail at higher grade. If the learner is soundly judged to have a minimal chance to pass at the higher grade, it is simply irresponsible to leave her at the top level to fail. Second, the principals' practice is arguably more efficient than wholesale higher grade registration and failure. Third, it is plain that the de-differentiating strategy, in seeking to render the problem less visible, leaves untouched the root of the problem, which lies with the dearth of trained teachers in Mathematics, and with the under-specification of the curriculum, discussed later. In any case, far from dealing with the issue, the creation of Mathematical Literacy as a subject offers learners the opportunity to register for a subject that offers them no access to higher education in Science, Engineering, Health Sciences and Commerce. At least learners who had standard grade Mathematics were afforded access to some courses in the technikons. Now, arguably a larger pool will either write Mathematics and fail (since all agree that the bar in the Mathematics curriculum statement is now raised even higher than it was in the old higher grade syllabus) or write Mathematical Literacy and find access to higher education further curtailed. Fairness, in other words, is not served by this de-differentiating strategy either.

De-differentiation of subject content

The matter of content in the proposed curriculum, indeed in an outcomes-stipulated curriculum, is a contested one. Popular wisdom has it that, in the original apartheid curriculum, content was prescribed and children learnt by rote, thus stunting their problem-solving capacities and capabilities. Consequently, with the new Curriculum 2005, an outcomes-based curriculum, the stipulations were stated in skill terms and the content left by and large to the discretion of the teachers. As the President's Educational Initiative research so plainly showed (Taylor & Vinjevold, 1999), the majority of teachers simply do not have the requisite content knowledge of the subjects they teach in order to exercise this discretion effectively. The result is that learners are learning less and less, and consequently falling behind their age cohort benchmarks. The evidence we have shows that Grade 3 readers are a full year behind where they should be, and Grade 6 learners a full two years (Taylor, Muller & Vinjevold,

2003). With the review of Curriculum 2005 (DoE, 2000), it was argued that this learning shortfall was not the fault of the teachers, but rather a design flaw of the curriculum. This is how they made the case:

The Report argued that subjects in the curriculum differed as to their curricular coherence requirements, and they differed as to the optimal way in which content and skills should be stipulated. Some subjects, like Mathematics and Science, were content/concept-rich, with content and concepts building upon one another. In such subjects, not just any content will do, nor can any content be paired with the desired skills. Here, there is a defined body of content that must be covered in a specific sequence in a specified time period. If the content is not specified, and the sequencing and pacing requirements not clearly marked, teachers with a shaky content knowledge would not necessarily choose the right content, in the right order, at the right pace. The inevitable consequence would be learners with knowledge gaps. When these learners progressed to later grades, especially in subjects that required a strict sequence of development, they would lack the requisite foundation to progress in that subject. The result would be learners who were structurally stunted in their learning progress in these subjects, by a curriculum that came close to denying would-be citizens the right to knowledge safeguarded in the Constitution.

The Report contrasted this cluster of subjects with those at the other end of the spectrum, like Life Skills and Technology, which were defined in a far more skills-based way, and where the knowledge to be paired with the skills was not as obligatorily laid down by the sequencing requirements of the subject. Here, a skills-based curricular stipulation would suffice for both strong and weak teachers, though once again we could expect the weaker teachers to expose their learners to a more impoverished array of knowledge. In the middle of the spectrum were content-rich subjects, like History, where the content to be covered needed to be signalled, but the order was not as crucial, since the conceptual ladder of the subject was not as steep. Here, the knowledge to be paired with the skills was more optional, and a curriculum could safely suggest content and leave a degree of discretion open to the teachers.

A curriculum like the original Curriculum 2005, which was skills-stipulated but which was under-stipulated in terms of content and where the progression requirements were under-signalled, was thus clearly undesirable in general,

because it disguised from both teachers and learners the progression route or road map. The better trained teachers sometimes found a way to cope; with lesser prepared teachers this was far less likely. The consequence could only be that those already disadvantaged would be further disadvantaged by the state's curriculum, a social injustice of major proportions. The Report thus strongly urged government to stipulate content, sequencing and pacing requirements for the content/concept-rich subjects. The Revised Curriculum Statements show that this has been adequately done in some cases, like Mathematics, but not in others, like Natural Sciences. Here are the progression paths analysed for four subjects in the new Curriculum Statements:

Table 4.2 Progression paths in the draft National Curriculum Statements for General Education and Training Mathematics

	Content stipulation	Skill stipulation	Content/skill links
Progression within grades	YES	NO	YES
Progression across grades	YES	NO	YES
Progression across phases	YES	NO	YES

Mathematics progression is strong, explicit and content led; there is no strong skill progression stipulated, but skills and content are coupled.

Table 4.3 Progression paths for Natural Sciences

	Content stipulation	Skill stipulation	Content/skill links
Progression within grades	NO	NO	NO
Progression across grades	NO	YES	NO
Progression across phases	YES	YES	NO

Science progression is weak, poorly stipulated, and skills led only; there is weak content progression; skills and content are not coupled.

Table 4.4 Progression paths for Social Sciences

	Content stipulation	Skill stipulation	Content/skill links
Progression within grades	NO	NO	NO/weakly in Geography
Progression across grades	Chronological progression	YES	NO/weakly in Geography
Progression across phases	Ditto	YES	NO/weakly in Geography

Social Sciences progression is by chronological content, and is largely skills led; skills and content are not, or only weakly, coupled.

Table 4.5 Progression paths for Languages

	Content stipulation	Skill stipulation	Content/skill links
Progression within grades	NO	NO	NO
Progression across grades	More complex texts, but by teacher discretion	YES	NO
Progression across phases	Ditto	YES	NO

Languages progression is skills led; content stipulation is by genre and text suggestion only; skills are not genre linked. This means that a teacher following the skill progression stipulation only is able to omit entire genres she dislikes or in which she does not feel confident (eg. poetry, drama, novels, etc.).

The tables show that Mathematics has exemplarily followed the route denoted by the Report, that Social Sciences has partly followed the route, that Languages has not and, most disturbingly, that Natural Sciences have not. The latter is probably the most worrisome.

The draft National Curriculum Statements show that in key content-rich subjects like Natural Sciences, there is a level of under-specification which

is worryingly similar to that of the original Curriculum 2005. The higher education institutions are clearly concerned mainly about the knowledge gaps with which learners may come into higher education. Not only are learners likely to have knowledge gaps, they are likely to have conceptual gaps as well. These are unlikely to be usefully pinpointed either by the highly individualised assessment procedures prescribed or by the de-differentiated signalling capacity of the six-band grading system. The learners won't know what they don't know, their teachers won't know what they don't know, and the higher education institutions are unlikely to know what they don't know until it is too late. It is quite clear why the higher education institutions have a sectoral concern about the de-differentiating matrix of the proposed curriculum.

The concern propelling this chapter, however, is less with the difficulties that higher education institutions will have than it is with social justice. The argument made is that equitable knowledge and hence equitable learning opportunities for disadvantaged learners are seriously threatened in the new proposed curriculum by de-differentiating features that will do the opposite of what they appear intended to do. Just because differentiation was associated in the apartheid curriculum with inequalities, it does not follow that differentiation per se is a policy evil to be avoided at all costs. As we have known since NEPI, managing differentiation, not doing away with it, is the appropriate strategy for dealing with the tension between equity and development. Yet the department seems intent on differentiation avoidance at all costs. The only possible policy advantage to be gained is a symbolic one (Jansen, 2001; see also Muller, Maassen & Cloete, 2004), and it is sad that we are not yet out of this phase of political policy-making, at least as far as schooling goes. The cost will be high, and the price paid will be a breach of social justice for already disadvantaged learners.

Conclusion

I have endeavoured to show that, ever since Vico in the 18th century and the romantics in the 19th, a nostalgia for a creative, active and practice-centred account of social life has periodically welled up to oppose the more propositional, knowledge-centred account of the mainstream *philosophia perennis* (see also Muller, 2000). The merits of the respective cases aside, I have argued that the romantic current in curricular thinking, as exemplified

in South Africa by Curriculum 2005, the skills-based emphasis in outcomes-based education (OBE), and the FET curriculum and assessment proposals, has always come with a cost: the avoidance of differentiation, the suppression of progression, and the consequent dumbing-down of the content/concept-rich subjects.

It is disquieting to note further that the valorisation of activity central to the romantic impulse has found a fortuitous bedfellow in the ideology of choice that accompanies the marketisation of social life globally today, including education. Steven Ball (2003) has recently made evident the staggeringly expanded arena of choice that has infused especially middle-class schooling. In so far as romanticism infuses progressivism – the middle-class curriculum and pedagogy of choice as it were – choice looms large in Curriculum 2005 and the further education proposals. Teachers are given discretion over choice of content, choice of progression, and choice of pace. Without exploring this strand any further here, two comments are apposite. The first is that here, as elsewhere where the market penetrates social forms of life where it does not belong, the result is invariably *inappropriateness*. This is the lesson that Cuba has so exemplarily learnt (Carnoy et al., 2004). Extension of choice to areas of social life that have social destinations decided upon by social values not made in the market – here, the necessary progression path of content/concept-rich subjects – is not so much freedom as irresponsibility; in Hegel's ominous term, 'negative infinity'. The second is that extending choice to a teacher corps that is differentially capacitated to exercise it can only lead to inappropriate, that is to say inadequate, choice. It is depressing, but that is just what we find confirmed in recent research (Reeves, 2004; Hoadley, 2003).

Curricular differentiation cannot be avoided or suppressed, nor can it be abandoned to the vicissitudes of choice. It must be managed and regulated. The first step here would be to acknowledge structural differences between curricular subjects – between their content stipulatory requirements, their content/concept linkage requirements, their pacing stipulatory requirements, and their progression requirements. This cannot be done without relaxing the 'one-size-fits-all' dead hand of OBE and progressive pedagogy that so infuses official curriculum documents, and which favours one side of the curriculum continuum at the expense of the other. Once we have got this far, the professional knowledge communities must be pulled in to find appropriate stipulatory levels and progression paths for each subject. Only then will we be

able to see exactly what it is we expect our teachers to teach and learners to learn; and only then can we delineate a realistic reform for redress and equity of outcomes. Everything else puts the cart before the horse.

Notes

- 1 This commentary was written in 2003, on the basis of the draft proposals put out for comment in 2003 (DoE, 2003). The National Senior Certificate and the National Curriculum Statement published in 2005 (DoE, 2005) have substantially revised the rules of combination and the assessment requirements commented on in this chapter.
- 2 Much of the public comment has focused on the band descriptions, as if these would replace categorical grading altogether, or as if this were the main difference from the previous grading practice of As to FFs.
- 3 Again, it is worth pointing out that this comment applies to the draft proposals (DoE, 2003), not the ones adopted (DoE, 2005).

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