

EDITORIAL

Why curriculum matters to me

Andy Begg

Curriculum Matters is, for me, a long overdue publication. Its genesis is due to the thinking of our colleagues in the Ministry of Education who wanted to encourage debate about curriculum, in particular with the current review of curriculum, and those at the New Zealand Council for Educational Research who recognised the need for such a publication. Both groups knew that many papers were being prepared for the Ministry and that these could be modified for more general circulation. The Ministry agreed to contribute to some of the production costs in the initial years while the publication was being established. It was with pleasure that I accepted the invitation to edit *Curriculum Matters*, as I also felt there was a need for more debate on curriculum, and my pleasure has continued as I found many contributors very willing to share their ideas. While each of us has our own ideas about curriculum, I am confident this journal will raise issues we have not all considered, that will stimulate further thinking about curriculum in schools, early childhood services, and other areas of education, and will become a resource for the further study of curriculum theory and practice. However, curriculum matters are not merely subjects for academic study; they are central to the making of educational policy at government, institutional, and classroom levels. The curriculum determines what is taught and emphasised, and sometimes how it is taught. Indeed, one matter of interest to me is how a curriculum document might best serve these dual and sometimes competing purposes—representing government policy and guiding teachers.

My aim in this editorial is to raise two matters—the purposes of education that underpin curriculum, and the related development processes. This is intended to complement the work of other contributors who are considering more specific aspects of curriculum. Before starting on these two foci, it is germane to consider what is meant by the word curriculum.

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Most of my work has been in mathematics education, and from that perspective my first inclination is to define terms—however, defining curriculum is difficult. Different people working in different contexts construct different meanings for the word, and many think of a particular form of curriculum as the total curriculum (for example, national curriculum, textbooks, school scheme, lesson plans, taught curriculum, learnt curriculum, or assessed curriculum). One definition that covers most of these forms is *all planning for the classroom*, though this leads to a discussion about whether the curriculum should focus only on what is to be taught, or also on how such topics are to be taught. In using the word planning in my definition, I am reminded of what Davis (1996, p. 273) wrote:

... an enacted curriculum is one that should be planned, but not predetermined. It involves a complex weaving of intended and chance happenings, of deliberate and accidental actions. At times the teaching is based on careful analysis and thoughtful decision; more often it is simply a consequence of the way the teacher stands in the world.

Curriculum exists in both educational and societal environments, but the aspirations within such environments are not always well summarised by the aims of education; sometimes a broader paradigmatic statement can better serve this purpose. Beeby (1986) described these statements as “educational myths”. He said:

... educational myths, if they are deep-rooted in the community from which they spring, are the very means by which an educational system matures. A myth is far more than a temporary view of ‘reality’. It embodies ideals and aspirations ... And, if myths stimulate us to alter ‘reality’, the consequent practical changes then lead us to adopt new myths. (p. xvi)

Within New Zealand education Beeby described the pre-1920 myth as “survival of the fittest”, the period 1920–1935 as representing the movement from the survival of the fittest to “progressive” education, and the myth for the 1935–1965 era as being “equality of opportunity”. He described the 1965–1981 period as a time of movement towards “equality of outcomes”, and said:

Renwick is convinced that a statement of educational policy that is

concerned only with the rights of the individual within the educational system will not suffice for the 1980s. Any new myth must now give equal place to the relation of the system to the country and communities it serves.

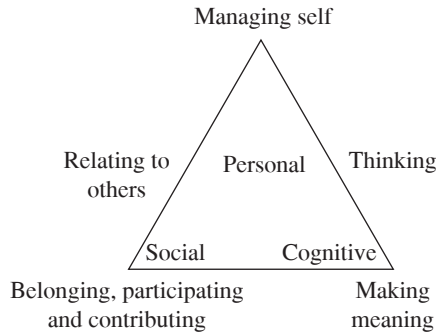
(Beeby, 1986, p. xii)

This leaves us with the question: what is the educational paradigm or myth that might underpin educational policy (including curriculum) at this stage of the 21st century? Notions such as empowerment, a futures focus, a learning society, and coping with complexity could underlie the paradigm. Taking cognizance of Renwick's perspective, and ignoring the libertarianism of the 1990s that impacted on education, *interrelatedness* is a theme that summarises these notions for me. I am not suggesting that "interrelatedness" should be the focus of a current paradigmatic statement, but rather that there is a need to debate such possibilities and to identify the educational myth that embodies societal aspirations, because when developing curriculum a vision is required, it needs to be made explicit, and such a vision can then be used as a criterion throughout the development stages.

A broad myth or paradigm can be envisioned as mainly affecting policy, while practice is sometimes thought of as lagging somewhat behind. However, the aims of education in curriculum documents represent a distillation from the myth that should serve as a partial statement of ideals and aspirations to guide the development process. For me, the aims put forward by the NZPPTA Curriculum Review Group (Munro, 1969, p. 1) expressed the ideals well. They were: "The highest value is placed on: the urge to enquire; concern for others; the desire for self-respect."

Over the years I have often returned to these aims, reinterpreting them at increasingly deeper levels and shifting my emphasis between them. For me, they emphasise the three main foci of education—the cognitive, social, and personal domains. Indeed, the "key competencies" (Ministry of Education, 2005) under consideration for the current curriculum review—thinking; relating to others; belonging, participating, contributing; managing self; and making meaning—"map" onto the three domains from the 1969 aims (see Figure 1).

Figure 1. Five competencies, three domains



Within the cognitive domain one can think of knowledge in a number of ways. Hart (2001) has provided an interesting approach that focuses on what matters in education and in life. He sees knowing and learning as unfolding through six interrelated layers: information, knowledge, intelligence, understanding, wisdom, and transformation. He believes that schools too often skim the surface of information at the expense of knowledge, intelligence, understanding, and wisdom. For Hart, information involves discrete facts and basic skills; knowledge involves the development of systems of information rather than discrete pieces of data; and understanding moves beyond the rational and sensory and is cultivated through empathy, appreciation, openness, service, listening, and loving presence. Wisdom involves a degree of awareness and an ethical dimension that enables discrimination. Hart's layers may sound theoretical, but I agree with him that wisdom rather than information is the aim of education.

In my subject area, mathematics education, I have seen evidence of a shift from providing students with information as curricula have changed (and continue to change) from emphasising content (knowledge and procedures) to content and processes (reasoning, problem solving, communicating, and making connections) and now towards content, process, and mathematical thinking. That is not to say that knowing, doing, and thinking are separate elements that can be taught—they are inextricably intertwined, but the changes do represent a different emphasis

in the teaching–learning situation. These changes move knowing from knowing *of* and *about*, to knowing *when* and *how*, *why* (and why not), and *if*. For such a change to occur there is a need for debate on what constitutes content, processes, and thinking within each subject. These new emphases need to be considered and embraced—by teachers if the curriculum is to be adopted rather than adapted, by resource developers if they are to be reflected in textbooks and resources (the commercial curriculum), and by assessment developers who plan the assessed curriculum.

Within the social domain, at the person-to-person level, establishing and maintaining positive relationships with others is important within families and both in school and out of school. This involves clarifying one’s own values and beliefs and appreciating the different values, beliefs, and customs of others (and, as society becomes more multicultural, these differences are growing). At the community level these differences include different social, religious, economic, and political ideals. At the national and international levels, interrelatedness is concerned with seeing ourselves not as isolated beings, but as interconnected with all living things and the environment. Relevant learning might include citizenship, enterprise, critical literacy and numeracy, peace education, sustainability, and tolerance—not merely learning about these things, but walking the talk. Perhaps the slogan “think globally, act locally” is an appropriate guiding principle. These topics raise a number of curriculum matters, including questions such as:

- Should education aim to preserve or transform society?
- Where and when should these curriculum aspects be taught (or are they merely part of the “ancillary” learning of students)?
- Are these topics the responsibility of all teachers, or of certain subject teachers only?

Within the personal domain students need self-management and work skills, but they also need to develop their awareness of and sensitivity to their bodies, their identities, and their immediate environments. This might be regarded as moving towards a spiritual dimension, but it is one that seems to be ignored by many in education. Another aspect within the personal domain relates to the natural capabilities of young children. Most of us are

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amazed how very young children learn so much so quickly—they make connections, they make and test conjectures, and they generalise—yet too often we assume that as they grow older this capability diminishes. We do not appreciate the power children have to learn; instead, we sometimes seem to teach them that they are not able to learn. We present them with trivial tasks that follow an imposed curriculum rather than build on their interests and respect their autonomy, and we “tell” them rather than assume that they, as learners, must do the learning. I would suggest that, although curriculum implementation in the past has resulted in some students’ learning being successful, many learnt that they could not do things; and this is evidenced by statements such as: *I could never sing; I could never draw; and I could never do mathematics.*

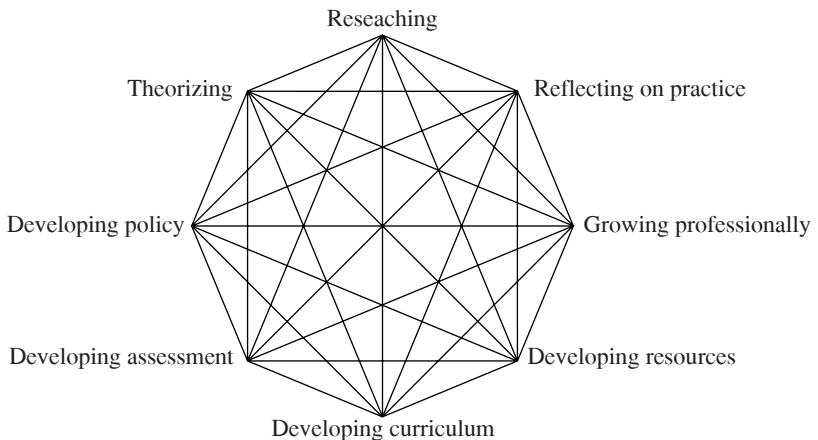
Having defined curriculum as “all planning for the classroom”, we need to place the notion of curriculum as a product (a set of documents and regulations) by the notion of curriculum as a process. Inherent in this is the idea that curriculum changes from year to year, as the teacher becomes more confident and as adjustments are made to suit particular contexts and learners. In addition, any 10-yearly review of a national curriculum is part of such a process. From this perspective, curriculum and curriculum development are inseparable, but the idea of curriculum as process seems inadequate to explain the dynamics of curriculum development.

In New Zealand, as in many other countries, curriculum development has been based on a RDD model—research, development, and dissemination. Even at the level of the individual teacher, this model seems to explain what occurs if one replaces the notion of research with teachers’ reflections on their experiences. In cynical moments I have referred to this process as “rDd” and “rdd”, to indicate that minimal resources are put into the different stages of this linear model. Occasionally I have suggested “PHUT” as a more suitable acronym—politics, hunches, under-funding, and totalitarianism; and I have written (Begg, Davis & Bramald, 2003) of the problems related to each sequential step being assumed to contribute to the next, but being managed by different people, who have little in common with those involved in the previous steps. In addition, the RDD model means that, nationally, teacher involvement in development is minimal, so there is little opportunity for empowerment or for them to develop ownership (Robinson,

1989). The RDD model may suit production lines for replicas produced to strict specifications, but it is not relevant in terms of the uniqueness of learners and teachers. These concerns have led me to conceptualise an alternative model for development within the educational system.

My model is based on the notion of a *complex living/learning system*. In such a system we have many interacting parts, but interactions within it are complex or chaotic rather than causal or mechanical. The resulting changes are evolutionary, in as much as the system evolves to “fit” within the environment and does not necessarily progress in any desired direction or even lead to improvement. With such a model no part can be considered in isolation, as the system is affected by the combined influences of many inputs. The resulting development, like growth or learning, involves ongoing change. This raises significant matters: Do we want to fit within the current educational and sociopolitical environment? How might we want to change it, and how might work with curriculum possibly assist in achieving this? When using this model it is not enough to talk of curriculum development—the focus is on development as a whole, with curriculum development being merely one activity that influences educational development (see Figure 2).

Figure 2. Eight co-emerging activities in the educational change process



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I have identified eight co-emerging and interacting activities that influence development: researching, reflecting on practice, growing professionally, developing resources, developing curriculum, developing assessment, developing policy, and theorising. When these eight activities are represented by the nodes of the graph in Figure 2, the sides and diagonals represent 28 two-way lines of interaction between the nodes, and the complexity of the model is apparent (Begg, in press; Begg, Davis & Bramald, 2003). The node labels are “fuzzy” and we can change the number of nodes without fundamentally changing the model. The relationships between nodes are more important than the nodes themselves. Further levels of complexity emerge when we consider three such octagons—one for the past, one for the present, and one for the possible activities in the future—and when we think of these activities as occurring at three levels: that of the individual teacher, that of the school, and that of the education system.

The labels on the nodes of the figure need to be interpreted broadly, although as far as curriculum development is concerned it is the connections between these nodes and the curriculum node that are important.

Researching is intended to imply not only academic research and comparative studies, but also teacher research—exploratory studies, informal research, reflection on practice, trialling hunches, and evaluating creative initiatives related to practice.

Reflecting on practice is listed separately, as teachers see linking experience and practice as less threatening than researching; they may also think of it as part of their development as teachers. It can be considered from a range of perspectives, including: “reflection” (Schön, 1983), the “discipline of noticing” (Mason, 2002) or, from a different perspective, “becoming aware” (Depraz, Varela & Vermersch, 2003).

Growing professionally includes pre- and in-service education. It is summarised for me by “to live is to know” (Maturana & Varela, 1987); it is ongoing and implies empowerment, ownership, and the development of a “culture of change” (Robinson, 1989).

Developing resources includes information technology and textbooks. Both have their place; however, commercial priorities sometimes

outweigh educational ones. Resource development by teachers is time consuming. Teachers often say they do not want to reinvent the wheel, but reinvention or adaptation is essential for the development of ownership and understanding.

Developing curriculum involves Ministry of Education policy makers and subject teachers, but the views of others such as academics, other subject teachers, educators, employers, parents, and learners also need to be considered. One challenge is to take note of these voices and to work towards a curriculum that satisfies all interested parties.

Developing assessment, for me, means developing summative or final assessment; that is, school-based or national assessment intended for evaluative purposes (I assume diagnostic and formative, or initial and ongoing, assessment is an integral part of teaching). There is much to do in this area, as summative assessment is currently based on behaviourism, with its notions of linear progression and levels, while with constructivism (and enactivism) complex learning schemas rather than linear progressions are more appropriate. It also stresses extrinsic rewards rather than intrinsic motivation; and it does not reflect the balance between content and processes (and thinking) that curriculum documents discuss.

Developing policy, including curriculum (which is a form of policy), is often thought of as only happening at political and bureaucratic levels. In fact, school schemes and school rules are part of school-level policy; and lesson plans and classroom rules are part of teacher-level policy. Rules, in particular, relate to an important part of planning—the hidden curriculum—and this involves consideration of values and the respect due to learners.

Theorising involves considering alternatives and making theories explicit. In developing curriculum we theorise about the nature of a subject, and about learning, teaching, and assessment. In terms of learning, when behaviourism dominated education it was appropriate to structure a mathematics curriculum with a sequence of specific objectives. Now, the accepted theories are versions of constructivism and learning is seen as building schemas; rather messily picking up concepts, procedures, and skills, and making sense of them by making links between them over time. With these theories, we are concerned with holistic rather than discrete

learning and with enabling students to construct meaningful schemas that fit with accepted understandings of the concepts.

If it is agreed that the RDD model is not appropriate for educational development, and that a model that acknowledges the complexity of the development process is more suitable, then there is a need to think about people's roles in the development process. A subject curriculum group cannot initiate all of these things, yet they all matter as they are interrelated within the educational development process.

I have raised two issues, namely: the purpose of education as expressed through myths and aims; and educational development; because for me these two notions underpin curriculum. Teachers are more likely to think of curriculum in terms of their planning for the classroom, while curriculum specialists may focus on missing aspects of curriculum, influences on curriculum, and so on. The contributors to this journal reflect these different interests. The first five papers are subject focused and cover aspects of early childhood education, literacy, citizenship, health, and statistics, although each of these includes aspects that need to be considered in other subject curricula as well. The next four relate to particular curriculum issues: ethics, values, spirituality, and curriculum integration. The final two are more concerned with the development of school-based curricula and competencies. I would expect a similar pattern of papers to continue in future issues and hope that future articles, like the ones in this volume, will raise more questions than they answer, and stimulate further debate on curriculum.

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The author

Andy Begg is an honorary researcher in mathematics education at the University of Auckland. He has taught and worked in four secondary schools in Auckland, written textbooks, as a curriculum officer, and as a mathematics educator in a graduate centre at the University of Waikato. Since “retiring” he has worked at universities in Auckland, Melbourne, Karachi, and Milton Keynes, and as a consultant. His current research is on the emerging curriculum.

Email: begg@math.auckland.ac.nz