

## WHO OWNS THE CURRICULA OF AUSTRALIA'S SCHOOLS?

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### The National Curriculum Debacle

#### Background

On July 2, 1993, and again on December 3, 1993, the Australian Education Council (AEC) decided not to endorse a national curriculum framework which it had developed over the period 1989–1993. These decisions effectively meant that the AEC, a body made up of State, Territory and Commonwealth education ministers, reversed far-reaching decisions it had made some five years previously. The AEC decisions of July 2 and December 3, 1993 attracted considerable media coverage across Australia, creating an impression in some quarters that a major education opportunity had been lost purely on political, as opposed to educational, grounds. Regarding the July 2 decision, the Prime Minister of Australia, Paul Keating was reported as saying that the move to abandon work on a national curriculum “was one of the most depressing outcomes ever of Commonwealth State meetings. ... If we can’t even give our kids a national curriculum after five years of work on this by the Commonwealth and States ... then you do wonder if we can get to anywhere cooperatively” (Australian, July 6, 1993, p. 4).

Bill Hannan, who had chaired the AEC’s Curriculum and Assessment Committee (CURASS) in 1992, was another to lament the July 2 decision. In an article in the Weekend Australian of August 7–9, 1993, Hannan described the attempt to develop a national curriculum as “the most ambitious piece of cooperation among states to have been attempted in Australian education.” He went on to say, that right up to the “final destructive meeting of Ministers early in July it had been running like a Rolls. It was on time and it was in very good nick.” Hannan was clearly angered by the July 2 decision, and accused academics who had criticised the national statements and profiles—the main components of the nationally developed curriculum framework—as being “mostly mistaken or lying and only occasionally on the track.”

#### The Ellerton and Clements (1994) Book

In our recent book (Ellerton & Clements, 1994), *The National Curriculum Debacle*, we disagreed with the interpretations which Keating and Hannan placed on the July 2 decision. To support our arguments we provided a fully documented account of events which culminated in the AEC decisions of July 2 and December 3, 1993.

The idea of a nationally developed curriculum was conceived of by the Australian Education Council in the early 1980s, was taken up in earnest by the AEC between 1987 and 1989, and was operationalised by AEC-defined structures between 1989 and December 1993. Despite the July 2 and December 3 (1993) decisions, early in 1994 the Curriculum

Corporation published a set of nationally developed curriculum documents (national Statements and Profiles) for eight Key Learning Areas (KLAs). We claim that these, and other associated curriculum materials which the Curriculum Corporation has published, effectively define a de facto national curriculum (Ellerton & Clements, 1994). Although our book documents fully the processes which generated the national statements and profiles for all eight KLAs, most of their references are to documents related to the development of A National Statement on Mathematics for Australian Schools (Australian Education Council, 1991) and various Curriculum Corporation publications (Curriculum Corporation, 1994a, 1994b; Olssen, Grace, Adams & Anderson, 1994) concerned with the Mathematics Profile. In a paper of this kind, it would be inappropriate to attempt to do more than to summarise the

main arguments that they have presented in their book.

The main purpose of this paper is not to provide a description of the events which culminated in the July 2 and December 3, 1993 decisions—our book does that, and in considerable detail. Rather, the paper seeks to draw attention to eight propositions associated with the question of “Who owns the curricula of Australia’s schools?” Before doing that, however, it will be useful to place the paper in the context of some comments recently made by Richard Bates, President of the Australian Association for Research in Education.

#### “Friendly” Research, and Associated Ethical Considerations

During the nineteenth and twentieth centuries there developed a tradition that curriculum issues were to be left largely in the hands of the colonial or State or Territory Education Departments. After Federation constitutional control of education lay with the States and Territories. A tradition was established whereby discipline experts in the Universities, curriculum experts employed by the States and Territories, and selected experienced teachers were expected to co-operate in defining courses of study and maintaining standards through the development of appropriate examination boards.

The development of a national curriculum framework challenged all these traditions in two main ways. First, the right of a State or Territory to define the curricula for its own schools was called into question. And second, because national subject associations and university academics were virtually excluded from participating in the development of policy which would drive the national curriculum framework, it seemed that the contributions of discipline experts were no longer fully welcome in policy discussions on curriculum.

Furthermore, once the curriculum frameworks and the associated curriculum profiles had been developed, there was no fully independent evaluation of the documents or of their effectiveness in the schools. Rather, the evaluation of the technical adequacy of the documents, and of the design and analysis of the results of trials in which the new approaches were used in schools, were carefully kept within the control of the State and Territory governments.

This is a dangerous path to take. As Bates (1994) has pointed out:  
... it seems to be increasingly the case that much government-sponsored research is allocated to “friendly” research consultants without advertisement, publicity or tender. Indeed, in some cases the development of policy, the articulation of policy and research into the results of policy are allocated to a single agency, if not to the same group of people. The integrity, let alone the validity of such a process, is clearly open to question, and it is disappointing to see some universities participating in such inappropriate arrangements. (p. 1)

We agree with Bates that the practice of governments commissioning “friendly researchers”—with the stated or unstated expectation being that basically “friendly” findings will be reported—represents a serious departure from normal university research morality. And, we believe that many of the evaluations of the national curriculum documents, and the trialling of the national and subsequent State and Territory documents, have been carried out by researchers (“evaluators”) who were commissioned in this manner. Furthermore, we believe the matter becomes even more serious if any reports (or “evaluations”) which are produced are deliberately withheld from interested “outsiders.” When we were in the process of writing *The National Curriculum Debacle* we were often forced to rely on key documents “falling off the back of trucks.” Curriculum has become highly politicised and, try as we may, there was no other way of getting the documents. This raises the question of who owns the curricula of Australia’s

schools? Do the State curriculum authorities, for example, have the legal and moral right to exclude highly qualified persons and national subject associations from being directly involved in policy decisions on curriculum issues? And do they have the right to withhold documents generated by public funds from highly qualified outsiders who have a legitimate interest in the documents?

This leads us to our eight propositions.

#### Eight Propositions On the Nationally Developed Curriculum Documents

1. At no stage has the research base for the outcomes-based education (OBE) policy—from which the nationally developed documents derived—been adequately formulated and evaluated. In fact, some of the key players in the national curriculum exercise, such as the late Garth Boomer, admitted that the national Profiles did not have a strong research base.
2. The OBE position from which the subject profiles were developed was strongly behaviourist—the Mathematics Profile, for example, contains over 1100 “pointers” which are nothing more than behavioural objectives—and as such was out of line with the mathematics education research literature. There is considerable evidence that behaviourism

does not produce quality mathematics learning (on this, see, for example, Davis, 1994; Erlwanger, 1975; Freudenthal, 1978, 1979). Ellerton and Clements (1994) are sceptical of claims that OBE represents a major innovation in education, believing that these should be accorded the same status as claims about "the emperor's new clothes."

3. Claims by leading mathematicians and mathematics educators that the Mathematics Profile are flawed mathematically and educationally were justified. For example, the Mathematics Profile is almost totally silent on the fundamental concept of prime number.

4. Despite strident claims to the contrary by Australian education bureaucrats, the structures of the nationally developed curriculum framework and the national curriculum in the United Kingdom are similar. There can be no doubt that during the period 1987–1990 most of the Australian education bureaucrats who pushed for a national curriculum in Australia were strongly influenced by events in the United Kingdom. This was particularly the case when they made policy decisions which affected the structure of A National Statement on Mathematics for Australian Schools and the Mathematics Profile.

5. Consultative processes used by Federal, State and Territory politicians and education bureaucrats throughout the development of the curriculum documents were woefully inadequate. For example, it is a matter of concern that requests by the Australian Mathematical Society (AMS), the Statistical Society of Australia (SSA), the Australian Mathematical Sciences Council (AMSC), and the Mathematics Education Research Group of Australasia (MERGA) to be allowed to be involved at the policy formation stage in the development of the national mathematics curriculum documents, were refused point blank. Politicians and education bureaucrats seemed to believe that they "owned" the curricula of Australia's schools.

6. Decisions made by the AEC at meetings in July 1993 and December 1993 served to establish a de facto national curriculum which can provide a solid basis for statewide and national testing.

7. Claims that the subject profiles have been "validated" by the Australian Council for Educational Research are exaggerated. For example, with the Mathematics Profile there is considerable doubt whether teachers will be able to assign levels reliably to students on the basis of the Profiles documents. In fact, it is not yet clear whether the national Profiles have a sound psychometric basis.

8. It is likely that the imposition on teachers of the State- and Territory-amended versions of the nationally developed curriculum Statements and Profiles will add considerably to teachers' workloads.

Yet, because the centre-to-periphery model of curriculum development was used throughout the curriculum development phase, teachers who are expected to implement the new curriculum framework will not feel any degree of ownership over what they do.

Comments on each of these eight propositions are now provided. Detailed discussion and documentation of the arguments presented can be found in Ellerton and Clements (1994).

## The Inadequate Research Base of the Nationally Developed Curriculum Documents

According to Boomer (1992), in the 1980s Australian school students were adversely affected by the absence of explicit information on what they were expected to learn. However, Boomer (1992) acknowledged that his views on this matter were derived from nothing more than student anecdotes. By his own admission, there was no well-defined research base from which the AEC moved when it decided to develop the national Profiles—there was merely a gut feeling that something needed to be done in the domain of assessment and reporting if the proposed national curriculum package was to have teeth. Boomer (1992) claimed that the proposed Profiles packages were intended to capture the wisdom of best practice in education. He provided no evidence, however, to support his claim that the package would, in fact, be based on best practice. Supporters of the national curriculum concept often point out that Australia, with a population less than that of California, has eight different curricula. We have also found many disparaging references to the “railway gauge” mentality of anyone who dares to oppose the idea of a national curriculum. Yet, we have not found any rebuttal of the conclusions drawn from the large study into educational “turbulence” by Monash University researchers, which found that children from highly mobile families tend to perform better (not worse) in schools than children from similar but less mobile families (Mackay & Spicer, 1975). Nor have we found any reference to the data on the performance of urban and rural Aboriginal students, summarised by Bourke and Parkin (1977), which must present a massive challenge to those supporting, unequivocally, a national curriculum concept. In fact, supporters of the nationally developed curriculum documents have rarely, if ever, attempted to provide an education research basis for the Profiles. Thus, for example, three recent booklets published by the Curriculum Corporation, CURASS Guidelines Papers (Curriculum Corporation, 1994c), Introducing Statements and Profiles (Curriculum Corporation, 1994d), and Using the Mathematics Profile (Olssen, Adams, Grace, & Anderson, 1994), contain no reference to any research base which influenced those who, in 1989 and 1990, made decisions about the structure of the planned Profiles.

### OBE Represents a Behaviourist Form of Education

Those who would contend that OBE is not a form of behaviourist education are referred to the article by King and Evans (1991), which clearly shows that the origins of OBE are to be associated with behaviourism and with mastery learning approaches to education. As Marsh (1994) has stated in his review of Spady’s (1993) influential paper on OBE:

The principles developed by Spady are based to a large extent upon earlier work by Carroll (1963) and Bloom (1968). Mastery learning

principles are clearly evident in terms of the priorities he establishes for the focus of OBE and the expectations and design for students. (Marsh, 1994, p. 59)

According to Marsh (1994), Spady provided insufficient evidence to

support his claims that "OBE really does work in practice" (p. 60). OBE proponents often contend that outcomes are "bigger" or "wider" than objectives. They also emphasise the importance of curriculum outcomes as opposed to content inputs. However, one only has to consult the notion of outcomes in behaviourist textbooks on education (see, for example, Bushnell and Rappaport, 1971, pp. 48-49) to come to realise that however OBE and "outcomes" are defined, ultimately the theory and practice of OBE are based on behaviourist principles of learning. Mr John Lambert, until recently Chair of the NSW Board of Studies, was one senior education administrator who was courageous enough to say, explicitly, that, so far as he is concerned, "aims, purposes, functions, objectives, outcomes, and pointers are all the same thing"—Lambert said this openly, despite the fact that this view was clearly not in accord with the official thinking of the NSW Department of School Education.

It should not be imagined that OBE forms of education have not been subjected to severe criticism in the international literature. For example, Maurice Holt (1993), the American educator, has stated of OBE:

This approach may do something for crude measures of accountability, but behind the high-stepping OBE jargon of transformational outcomes, learning paradigms, and empowerment lurk behaviorist methods that are totally at odds with the ... quest for quality. (p. 384)

According to Holt (1993), OBE is a "warmed-over mismatch of the Tyler rationale, Benjamin's Bloom's mastery learning, and competency-based education," and "quite explicitly puts the natural learning processes into reverse, working ... from exit outcomes to specific lesson outcomes for every student" (p. 384). In fact, OBE's emphasis on final outcomes would appear to be at odds with the emerging pictures of quality schools and quality classrooms (Bonstingl, 1992; Schmoker & Wilson, 1993).

**At Least One of the Subject Profiles—The Mathematics Profile—Is Flawed Both Educationally and Mathematically**

In our book (Ellerton & Clements, 1994) we provide evidence for the often-repeated claim that the Mathematics Profile (Curriculum Corporation, 1994a, 1994b), has serious weaknesses, from both mathematics and mathematics education perspectives. As has already been stated in this paper, the behaviourist basis of the Profile is not supported by mathematics education research. Many other important findings in the mathematics education research literatures seem not to



have been heeded—for example, so far as the influence of language factors on mathematics learning is concerned, there is no evidence in the text of the Profile that any account has been taken of the important recent research findings of the effects of semantic structure on comprehension (see Riley, Greeno, & Heller, 1983; Lean, Clements, & Del Campo, 1990).

From the mathematics perspective, there are also fundamental weaknesses and omissions in the Mathematics Profile. For example, one has to look very carefully throughout the main Mathematics Profile document (Curriculum Corporation, 1994b) before one will find any mention of the concept of prime number, a key idea in mathematics. The prime number concept has fascinated mathematicians throughout history, and there would be few teachers of mathematics who would not want to include it in the mathematics curricula for upper primary and junior secondary students. However, there is no mention of prime number in the “Number” Strand of the Mathematics Profile, and the only reference to the concept is in a pointer for Level 7 in the “Working Mathematically” Strand.

#### The Nationally Developed Curriculum Documents in Australia Strongly Resemble National Curriculum Documents in the United Kingdom

Despite Francis’ (1993) contention that it is difficult to compare the national curriculum in the United Kingdom with the AEC’s collaborative nationally developed curriculum framework in Australia, there can be no doubt that national curriculum ideas from the United Kingdom were borrowed by Australian educators. For example, the Bands and Strands of A National Statement for Mathematics in Australian Schools, and the Levels in the Mathematics Profile bear striking resemblances to elements of the United Kingdom mathematics curriculum.

In the late 1980s Australian education bureaucrats and politicians were attracted to the idea of a national curriculum, and experiences in the United Kingdom seemed to indicate that, despite likely opposition from certain quarters within academia, and from trendy constructivist and neo-Marxist educationists in particular, they might expect support from most Australian teachers if they moved to introduce a national curriculum.

Towards the end of the 1980s teachers in the United Kingdom were reported as having been supportive of their Government’s national curriculum push. It was claimed that they appreciated the structure of the national curriculum, and felt free to work within it. But, in the 1990s, teachers in England and Wales, weighed down by the incredible amount of paperwork associated with their national curriculum’s 10-point assessment and reporting system, began not only to protest but to refuse to cooperate. Predictions made by educationists that teachers would not be able to cope with the new system (see Kelly, 1990) were vindicated.

Furthermore, promises made by psychometricians that they would develop valid and reliable student profiles across the curriculum have simply

not been kept (William, 1993). In the late 1980s some educationists had predicted that the psychometricians would not keep their promises and had warned politicians that it was foolish to proceed in blind faith (Kelly, 1990).

The Dearing Report, released towards the end of 1993, revealed that the national curriculum in schools in the United Kingdom had been an unmitigated disaster. Nationwide boycotts on national testing were taking place, and decisions on whether testing could go ahead were being decided in the courts. The Dearing Report recommended that the amount of work for teachers arising from the national testing program should be halved, but this did not impress the National Union of Teachers which pressed on with the boycott. The Report advocated that the 10-level scale be simplified and applied to Key Stages 1-3 only, that all national curriculum subjects should be revised immediately, and that teachers should be given more release time for professional development, and for coping with the demands of administration.

Despite some initial optimism, teachers in the United Kingdom quickly found themselves straitjacketed so far as curriculum content was concerned (Moon, 1992; Truran, 1993). According to Groundwater-Smith (1993), in 1990 only about one-quarter of the teachers surveyed in a large study conducted in the United Kingdom saw themselves facing more constraints and loss of autonomy. In 1992, however, almost 80% of teachers constructed such a scenario. In 1990, 55% of teachers felt that the national curriculum matched the needs of pupils "very well" or "well," but by 1992, this percentage had dropped to 24%. And, although in 1990 only 17% of teachers felt that the national curriculum restricted their capacity to adapt their teaching to children's needs, by 1992, the corresponding figure was 51%.

Significantly, teachers in schools in low SES "disadvantaged" were the ones who had lost most faith in the claims made that a national curriculum would work towards achieving greater equity of educational outcomes. Furthermore, evidence collected by inspectors during more

than 7000 lessons in the United Kingdom in 1991 and 1992 indicated that the introduction of the National Curriculum in the United Kingdom had not resulted in improved classroom practice in mathematics. Truran (1993) reported that:

F Less than five per cent of lessons were considered by inspectors to be very good, a lot of work at Year 7 was pitched far too low.

F The use of assessment was not well-developed in mathematics. There was also little success in the cross-curricular use of mathematics and not enough attention was paid to mental and calculator skills.

F The poor quality of senior staff responsible for implementing the mathematics curriculum was blamed for unsatisfactory results. (p. 137)

In recent times, as the United Kingdom's national curriculum experiment has turned sour, supporters of the AEC's nationally developed curriculum documents (e.g. Francis, 1993) have claimed that there are differences between the situations in the United Kingdom and Australia. While there is obviously some truth in such claims, the common features



of the two major curriculum development exercises should not be masked—we shall draw attention to just four:

1. Although, the Federal constitution for Australia does not permit the imposition of a single, “official” national curriculum, the nationally developed Statements and Profiles, together with other associated Curriculum Corporation publications (for example, Curriculum Corporation, 1994d; Olssen et al., 1994), and the Federally supported national professional development programs for teachers, define a de facto national curriculum. Most State and Territory Ministers of Education are insisting that State syllabuses must be in line with the nationally developed documents.

2. Both the UK national curriculum and the Australian profiles are constructed around an assessment framework based on “Levels.” From that perspective, it should be noted that research carried out in the United Kingdom has shown that there are serious and unresolved issues concerning the reliability and validity of teachers’ ratings of student Levels of achievement (for a summary of this research, see, for example, Wiliam, 1993). Thus, it is difficult to share Masters’ (1992) confidence that an adequate measurement system can be developed for the Australian profiles. That is still the case even if we accept Masters’ (1994) argument that although “profile levels are fuzzy,” this does not really matter because “holistic, on-balance judgments of students’ broad levels of achievements are likely to be good enough for many everyday purposes” (p. 50).

3. Although, as yet, there is no national pencil-and-paper testing program in place for Australian schools, an increasing number of State and Territory government systems have adopted statewide testing programs. The outcomes and pointers specified in the Profiles documents provide an obvious basis for the construction of pencil-and-paper statewide tests—a de facto form of national testing is being implemented. New South Wales, Tasmania, Western Australia and the Northern Territory have already introduced large-scale testing programs at selected Year levels, and the Australian Capital Territory, Queensland, South Australia and Victoria are making moves in that direction.

Many stakeholders in Australian education systems are unaware that the cumulative effect of the different statewide testing programs means that there is little difference between the national tests in the United Kingdom and what is already in place in Australia.

4. Given that the adoption by teachers of the nationally developed curriculum framework is now enshrined in a Federal Government-inspired enterprise bargaining agreement, schools and teachers are committed to some measure of support for the national documents. Again, there is not much difference between this and what occurred in the United Kingdom in the late 1980s.

Teachers’ unions, including the Australian Education Union, failed to

recognise that the nationally developed Profiles provided a solid base for statewide, and eventually national, testing. It is ironic that at

the same time as the unions were threatening to boycott statewide testing schemes they were supporting the introduction of the nationally developed Profiles.

Some teachers and school principals also do not seem to recognise that in the future statewide and national testing schemes are likely to be linked with outcome students in the nationally developed Profiles.

Thus, for example, in May 1994 the Federation Teachers' Union of Victoria (FTUV) Principal Class Association President, Barry Schmidt, was reported in the FTUV's Federation News as opposing standardised testing but supporting curriculum profiles.

#### Inadequate Consultative Processes Were Employed by the AEC in the Development of the National Statements and Profiles

Ellerton and Clements evaluated the consultative processes employed by the AEC in its development of the national Statements and Profiles using criteria stipulated by the National Education Forum (NEF), a peak organisation of national educational associations founded in Australia in 1992. Soon after its formation the NEF defined the concept of "consultation" and developed and endorsed the principles for consultation which are set out below (see chapters 5 and 14 of Ellerton and Clements (1994), for further details relating to the NEF criteria).

#### NEF's Definition of Consultation

Consultation is a process whereby the views of those likely to be affected by a change or innovation are genuinely solicited so that they can inform the development of the change or innovation.

#### NEF Principles for Consultation

F All those likely to be affected should be included in the consultation process, and the schedule of consultation should be publicly available. [Inclusion]

F Consultation processes should be genuine in intent and directed towards the incorporation of informed and expert advice into the policy formation process. [Intent]

F Consultation should be formal, systematic and documented, and be part of the formation stages of the proposed change or innovation, continuing through its implementation and evaluation. [Properties]

F Sufficient time should be provided for organisations to consult their members and give considered responses. [Time]

F The findings of consultations should be publicly reported. [Reporting]

F Reporting should be fair, accurate and relevant. For example, the publication of a list of those consulted should not be presented in a way which necessarily implies support. [Accuracy]

Evaluating the AEC's Consultative Processes for the Development of the National Mathematics Statement and the Mathematics Profile.

In The National Curriculum Debacle (Ellerton & Clements, 1994) we used

the six NEF criteria to evaluate the consultative processes used by the AEC in its development of the national Mathematics Statement and the Mathematics Profile. For each criterion a score out of 10 was allocated for the consultative processes employed in the development of A National Statements on Mathematics for Australian Schools, and similarly a score out of 10 was allocated for the consultative processes employed in the development of the Mathematics Profile. Using these criteria a total score of 23 out a possible 120 (or 19%) was obtained.

Throughout our book we documented our contention that grossly

inadequate consultative processes were adopted by the AEC in its development of the national mathematics curriculum documents (Ellerton & Clements, 1994). The AEC simply refused to allow national mathematics and mathematics education research professional associations to be involved in policy decisions or to have representatives on project teams.

We believe that attempts to defend the consultative processes used by maintaining that it would have been too expensive to have representatives of national mathematics and mathematics education research professional associations on the project teams are simply wrong. Since the Mathematics Statement and Profile were to be part of a national mathematics curriculum framework, any decision not to spend the money needed to develop the best framework possible can only be regarded as irresponsible. Certainly, the AEC seemed to be able to find large amounts of money to support a CURASS secretariat, so it is reasonable to assert that if it had had the will it surely would have been possible to readjust priorities so that less money was spent on support staff and more on securing the services of discipline experts.

#### The Establishment of a De Facto National Curriculum

Since July 1993 “the statements and profiles have been steadily taken up by schools and school systems around Australia, by professional associations, and by the statutory boards for analysis, trialling, adoption, and tentative implementation” (Willmott, 1994, p. 42). This is hardly surprising, given the financial and professional inducements which have been offered to those prepared to accept the official line (Ellerton & Clements, 1994; Guttman, 1994).

It is still not clear, though, whether practising teachers across the nation will be persuaded to support the nationally developed curriculum framework. It is one thing for teacher unions to say that their members will support the framework and another for this support to be evident in schools—especially at the chalkface.

There can be no doubt however, however, that there has been a strong push in most States and Territories towards the adoption of modified forms of the nationally developed curriculum documents. In New South Wales, for example, the Sydney Morning Herald of March 22, 1994, dedicated an editorial to attacking the “folly” of the nationally

developed curriculum guidelines. The editorial revealed that Australian mathematicians believed that the December 1993 decision of the AEC effectively meant that a de facto national curriculum had been put in place. Three mathematicians—the President of the Australian Mathematical Sciences Council, Professor Richard Jarrett, Professor Garth Gaudry, of the University of New South Wales, and Associate Professor Terry Gagen, of the University of Sydney—were reported as saying that the States and Territories were in the process of instituting a de facto national mathematics curriculum. The editorial supported the views of the mathematicians, arguing that they were correct in criticising the NSW Education Minister, Virginia Chadwick, for insisting that the NSW mathematics syllabuses be based on the nationally developed mathematics documents.

Professor Tony Guttman, although based in Melbourne, was quick to support the Sydney Morning Herald editorial, suggesting that New South Wales would be foolish “to pander to the educationally bankrupt ideology of the profiles pushers.” Terry Gagen was reported, in another Sydney Morning Herald article, as saying that he believed that Mrs Chadwick firmly supported the national guidelines, and “continued to insist that the national profile outcomes be incorporated into all NSW syllabuses.”

Maralyn Parker, the Daily Telegraph Mirror education columnist, claimed, on May 30, 1994, that Mrs Chadwick had set about “imposing” national Profiles on the NSW syllabuses, and that “outcomes” were about

to become the new “catchword” in school education. The Daily Telegraph Mirror contrasted the new levels-based Profiles with the traditional age-based grade promotion and organisational policies of schools, and predicted that the Profiles would be used by the NSW Department of School Education as a justification for increasing the number of composite classes in NSW government schools.

A February 1994 NSW Department of School Education (DSE) draft document suggested that the Department was not particularly interested in the complaints about the Profiles that some university academics were making. A DSE document, entitled “Mathematics early learning profiles,” could hardly have been more explicit: “1994 will be a year in which we explore the implications of a profiles/outcomes approach for classrooms everywhere.” The document set out “early learning” outcome statements, commenting that they were being provided “for further trialling throughout 1994 as part of the DSE strategy to implement a Profiles/outcomes approach to teaching and learning.”

#### To What Extent Has the Mathematics Profile Been Validated?

In view of repeated statements by supporters of the nationally developed curriculum documents that the Statements and Profiles had been “validated” by the Australian Council for Educational Research, we examined carefully a December 1992 evaluation, by Barley, Adams, and Wu (1992) of the Mathematics Profile (as the Profile then existed).

It would be inappropriate to reproduce here our detailed critique of the Barley et al. (1992) "validation" (see Ellerton & Clements, 1994). Although the "validation" report was produced under very difficult conditions—arising from constraints associated with lack of time and money—these constraints hardly provide the AEC with an excuse for the inadequate form of "validation" which was produced. We maintain that given the potential of the Mathematics Profile document to shape the direction of school mathematics in Australia, it was reasonable to expect that the AEC should have allocated the validation exercise more funding and time.

In view of the fact that it is intended that (a) over the next few years the Mathematics Profile would be only one of up to eight Profiles being used simultaneously in Australian schools, and (b) the 1992 ACER "validation" exercise was conducted in schools where at most two KLA Profiles were being used (and, in most of the schools, probably only one), it is clear that the 1992 ACER validation was carried out under totally artificial circumstances. This, together with the poor sampling procedures used in the study, and the lack of control over the conditions under which teachers responded to tasks which generated the "validation" data, raise the question of whether any valid generalisations can be made from the "validation" exercise.

Far more evidence than was provided in the 1992 ACER "validation" of the Mathematics Profile would be needed before educators should accept the claim, made in the "Forewords" of the 1994 Mathematics Profile documents (Curriculum Corporation 1994a, 1994b), that "the Australian Council for Educational Research (ACER) has validated the levels." Other criticisms of the 1992 ACER "validation" exercise were expressed in the report of the Stacey Committee on the Mathematics Profile. This report, which was released in Victoria in July 1993, is summarised in Chapter 11 of Ellerton and Clements (1994).

#### The Nationally Developed Curriculum Framework and Teachers' Workloads

It is almost certain that, as was the case in the United Kingdom, the advent of profiling in Australian schools will increase teachers' workloads dramatically and, enterprise bargaining agreements notwithstanding, teachers will simply not be able to cope. Practising teachers present at a Summer School, funded by the

Commonwealth Department of Employment, Education and Training (DEET) and held in Tasmania in January 1994, were concerned about the likelihood that the introduction of the Profiles would increase the workload of teachers dramatically. Steve Cooper (1994), a teacher from Maitland Grossman High School who attended the Summer School, reported that Profile teaching, learning, assessing, and reporting had been imposed on the teaching profession "through the adoption of the National Profiles by the [NSW] State government and subsequently the Department of School Education and the Board of Studies." Cooper stated that the description of Profiles, by a speaker at the Summer School who

had been involved in the development of the Profiles, as a “hump of extra work” probably did not give a true image of just how much extra work would be required of teachers. “The visual image I perceive looks less the size of camel hump,” he added, “and more the size of a barrow, one of the pre-historic grave-mounds” (p. 13). “I am not suggesting that profiles will drive teachers to an early grave, but they do represent a large increase in teacher workload.” (For Steven Cooper’s detailed report on the Summer School, see his article titled “National agenda in Australian schools” in the April 4, 1994 issue of Education (pp. 12–13).)

During 1994 teachers and teachers’ unions have gradually become aware of what might be involved in the concept of profiling and have begun to feel threatened by the scope of the demands being placed on teachers. In the Daily Telegraph Mirror of June 1, 1994 the President of the NSW Teachers’ Federation, Phil Cross, was reported as saying that primary and secondary schools were in a “total state of confusion” over the introduction of new-style syllabuses and student Profiles. According to the report, Cross commented:

For most teachers the process is a bewildering array of new terminology and jargon which is difficult to comprehend and whose impact could range from the benign to the horrendous ... The vast majority of teachers across the State [New South Wales] do not fundamentally understand an outcomes syllabus (what children know) or a profile (a learning plan).

Clearly, the collaborative processes which NSW education bureaucrats claim had been such a strong feature of the way in which the nationally developed curriculum documents had been generated, had failed to involve or inform the large majority of teachers in Australia’s most populous State.

#### In Conclusion: Legal, Moral and Educational Rights With Respect to Curriculum

State and Territory governments have the legal right to prescribe syllabuses for government schools, and to expect school communities to use these syllabuses. But does that imply that a State or Territory government has the moral and educational right to require schools to adopt a “nationally developed” Statement and a Profiles packages about which serious educational and mathematical doubts have been expressed by authoritative organisations. In the case of the Mathematics Statement and Profile, this set of organisations includes the Australian Mathematics Association, the Statistical Association of Australia, the Mathematics Education Research Group of Australasia, the Mathematics Education Lecturers Association, and the Australian Mathematical Sciences Council? Who owns the curricula of Australian schools?

The AEC and the State and Territory Directors of Curriculum do not have a mandate to change curricula in Australian schools. Such a bald



statement does not carry the implication that the AEC and Directors of Curriculum should not be regarded as stakeholders with a right to be

involved in curriculum decisions. But they do not own the curricula of Australian schools, and they do not have a right to make non-negotiable policy decisions which have implications for the structure of curricula in Australian schools.

There are other stakeholders—such as the national subject and national teacher associations—with greater expertise in education than they. But even these other, more expert, stakeholders do not have the right to make unilateral decisions about the curricula of Australian schools.

Should a school be required to follow, for example, a nationally developed Mathematics Profiles in which the expression “prime number” does not appear in the “Number” strand outcomes, and in which over 1100 behavioural objectives (officially called “pointers”) are listed—despite the fact that mathematics education research in the 1970s and 1980s has indicated that behaviourist approaches to school mathematics tend to generate undesirable atomistic approaches to teaching and learning?

Our answer to this last question is an unequivocal “No.” And, from what we from other discipline, and from “discipline education” experts who know the literatures associated with the teaching and learning of their disciplines, a similar kind of statement is also true for other curriculum Key Learning Areas.

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