Chapter 1

Introduction

> Education systems are often like vehicles that have been to the panel beater too many times. After 15 years they need a new fender, the engine needs repairs to keep running, the tyres need changing and woops it's time to replace this sparkplug. But governments have to keep these cars on the road even if sometimes the wheels don't align and the windscreen is broken. And it's a remarkable testament to the fortitude and commitment of teachers that they keep the vehicle on the road even when both the road and the map keep changing.[1]

1.1 This introductory chapter deals broadly with the two issues addressed in the terms of reference: the quality of teaching, and the quality of curriculum. The committee has attempted to deal with both these issues. The most balanced, rigorous and user-friendly curriculum that can be devised still requires skilled and dedicated teachers to implement it. Good teachers will bring to bear their knowledge, skill and experience to manage or improvise with a poorly designed curriculum so as to achieve their objectives.

1.2 Schooling in Australia has traditionally placed emphasis on individual achievement and personal fulfilment. A great deal of evidence to this inquiry has pointed to the declining standards in school mathematics, and its flow-on effects on the viability of university enrolments in engineering and science and, in due course, an industry sector starved of skills. On another level, we see the strong but relatively recent trend toward vocational education in schools, mainly in service industries. It is claimed that one of the most useful aspects of school-based VET courses is the inculcation of a work ethic, as part of a transition to work, as distinct from an expectation that schools will be able to teach immediately marketable skills in technical fields. Yet there is intermittent criticism about the inherent bias in the school curriculum and even among teachers and principals, in favour of an academic emphasis in school education rather than skilling students for entry into the trades.

1.3 It is apparent to the committee that those most worried about declining standards are those who take the long view as to the purpose of education. The committee has an old-fashioned view that knowledge, skills and values are accumulated, practised and assimilated in stages corresponding to an individual's capacity to grow. Thus, every stage of education is crucial from the beginning. There is a time to learn to read, and for children who miss out, the chance of catching up, even despite costly remedial work, is minimal. There is an optimum time to learn the

---

1 Professor Allan Luke quoted in Jacqui Elson-Green, 'Keeping education on the road: gospel according to Luke', *Campus Review*, December 17-23 2003, p. 11.

basics of algebra. Missing out means that calculus, and further scientifically based training, is beyond most students. Concern about standards of school education is in large measure a concern about whether Australia will have sufficient 'critical mass' of appropriately skilled and educated people to run the businesses and the services of the country in years to come.

1.4 An inquiry into the quality standards of schooling is complicated by the fact that in this federal democracy, states and territories have responsibility for staffing and running schools, and where, across the country, an average of 35 per cent of students are enrolled in wide diversity of non-government schools. Added to this is the fact that while on a global level of comparison schools in this country perform at the top levels of achievement, there are worrying signs of Australian educational under-achievement which advanced countries in Europe do not exhibit and which leading Asian nations are overcoming.

1.5 Public commentary about curriculum issues has filled press columns and the airwaves regularly, if intermittently, over the past 15 years or more. But the relative quality of teaching is seldom under the spotlight. The school is at once the most visible and most public of our institutions, but the classroom remains a private place. Fair measurement of the effectiveness of teachers is a challenge that will need to be taken-up, as is the effectiveness of their training and further professional development.

1.6 As for curriculum, the committee notes a general agreement that school curricula should be standards-based, rather than, as in the past, outcomes-based. The constructivist tendencies of the 1990s are being reversed in those states which adopted them, most dramatically perhaps in Western Australia. The changes will be obvious to teachers as new syllabuses are written. The Australian Council for Educational Research (ACER) has submitted that future school curricula should begin with an analysis of the kinds of learning likely to be needed in the future. It should make clear what students are expected to learn and to do, as well as specifying minimum standards.[2]

1.7 The 'back to basics' movement may have led some commentators to believe that the development of basic skills is the main objective of schooling. It is not. They are a means toward learning higher order skills and deeper understandings.

The quality of education debate

1.8 This inquiry was announced at a time when a great deal of commentary was issuing from some elements in the press. The commentary alleged an agenda being pursued by those who aim at radically stripping core cultural traditions from the curriculum.

2 Australian Council for Educational Research, *Submission 38*, p. 3.

1.9 The committee believes that this is a difficult issue because public perceptions of the school system deserve a public airing. What is being alleged is not constructive. What is often remarkable is the generalised nature of much school criticism. Individual schools are rarely criticised. As one academic rhetorically asked the committee when this phenomenon was raised:

> Why are people satisfied with what they experience at their local school with their children but are somewhat dissatisfied, it seems, with the education system at large…[even though]…that is not generally based on any immediate experience? You could postulate a whole set of things, but I would suggest that one of the strong reasons would be the sort of campaign that is being waged in the media, which would tend to influence people, and yet their experience at the local level, quite clearly, is highly satisfactory.[3]

1.10 The committee notes these comments from Professor Alan Reid. He states that a quality educational discussion and debate in a healthy education system will be of a constructive nature, not only within the profession but within the community, and between the community and the profession. Such discussion should be civil and respectful, recognising the complexity of the educational task of preparing young people for life in a contemporary world. He continues:

> Unfortunately, the last five years in Australia have witnessed a debate which bears none of these characteristics. The so-called culture wars have indeed produced the opposite, thus rather than stability and respect. Rather than recognising the complexity of education today, the debate operates in simple binaries. For example, it seems that you cannot study a contemporary cultural phenomenon, such as *Big Brother*, and Shakespeare. It seems to be argued that it has to be one or the other.
>
> Rather than being evidence based, there is a narrow and selective use of evidence to confirm an already established view—for example, critics seem to trawl through curriculum documents looking for examples of things with which they take issue, assuming that because it is written on a page it is translated into action, as though teachers behave like automatons; there is no recognition that the formal curriculum, the official intended curriculum, is only a smart part of curriculum itself—or generalisations are made on the basis of partial evidence.[4]

1.11 It is the responsibility of those elected to parliaments to support the improvement of education standards through whatever influence they have, and to ensure that debate about education needs and reforms is constructive and well-informed. Hence this report. The teaching profession is especially vulnerable to blanket criticism of its work. Yet a sense of vocation that energises and sustains the core of the profession. The committee does not regard schools and school systems as being 'sacred cows', immune from criticism, but because schools survive and thrive on the basis of public trust, that criticism must be constructive.

---

3 Professor Alan Reid, *Committee Hansard*, Melbourne, 25 July 2007, p. 3.

4 Ibid, pp 2- 3.

Quality teaching

1.12 'Quality' is a relatively new descriptive concept in its application to schooling. It embraces notions of a sense of enjoyment in learning a rich mixture of content and ideas which are stimulating and appropriate and which therefore add to intellectual growth, as recognised by the examiners or assessors, leading to a further stage of learning post-school. The 'quality inputs' are the curriculum or syllabus, the teaching materials, and most importantly the skill and knowledge of the teacher. The 'output quality' depends on the degree to which the student is motivated and able to respond to this stimulus.

1.13 In considering the issue of quality, the committee has focussed on four main areas: the quality of teaching; the quality of curriculum and resources; the quality of teaching and learning outcomes; and the quality of assessment instruments by which achievement is measured. In this introductory chapter, the committee sets out a synopsis of its findings and its views on the key matters, which will be elaborated on in following chapters.

1.14 There is a considerable range of opinion among educators as to the determinants of quality teaching. Some witnesses, as well as academics, researchers and commentators writing in sources which the committee has drawn on, place a great deal of emphasis on the need for innovative teaching methods, and relevant, accessible curriculum and materials. On the face of it, these would appear desirable and even essential requirements. For instance, in the recent ACER publication, *Re-imagining Science Education*, Professor Russell Tytler reviews the nature of what he describes as the 'current crisis in science education'. Professor Tytler urges a re-thinking about the nature of science knowledge dealt with in schools, moving away from authoritarian knowledge structures to more flexible, challenging conceptions of classroom activity, and more varied ways of thinking about knowledge.[5] Yet the committee is also impressed with findings that show successful science teaching based on more conventional characteristics of quality teaching, namely clear and high expectations, essential knowledge, a fair degree of teacher direction and security, teacher knowledge, and a structured teaching and learning regime. These are findings from very recent research, undertaken as part of the University of New England's AESOP project, which put a different perspective on the view expressed above.[6] Although they may bear out the observation of Professor Tytler that traditional school science is 'resilient', there may also be less conflict between these perspectives than may first appear.

1.15 The committee is reluctant to engage in the arguments that rage about curriculum philosophy, but notes that the evidence it received, or consulted, indicates

---

5 Russell Tytler, *Re-imagining Science Education: Engaging students in science for Australia's future*, ACER, 2007, p. 67.

6 Debra Panizzon, Geoff Barnes, John Pegg, *Exceptional Outcomes in Science Education*, AESOP, 2007.

that among educators, those at the chalk-face favour pragmatism and practicality over vision-based theory any day. There also appears to be a divide between those like Professor Tytler and representatives of the Australian Association of Mathematics Teachers who are concerned or conscious about student attitudes and the effects of social change, and those who tend to hold on to concepts which emphasise knowledge and rigour, and who are sceptical about the need to adjust to what is perceived to be in the interest of students.

1.16 The views expressed in testimony, in submissions, and in the selection of research and commentary the committee has consulted, have provided the committee with a great deal of empirical evidence and an even larger number of perceptions and opinions. The latter should not be underrated. Public debate is informed by facts and their interpretation. Education is highly contested ground, and provokes sharp differences of opinion about how education is best delivered and for what purpose. No-one the committee spoke to was indifferent to the need for quality schooling, and everyone was able to relate it to personal fulfilment and the common good.

The importance of teaching quality

1.17 Most education authorities appearing before the committee rated teaching quality as the most important determinant of successful schooling outcomes. There is good evidence for this.

1.18 The committee notes the research carried out in New Zealand by Professor John Hattie on the major source of variance in student achievement. Over several years Professor Hattie has looked at factors which influence academic success and his conclusions are as follows:

- The ability and application of students accounts for 50 per cent of the variance of achievement. Bright students will have steeper trajectories of learning than those who are less bright.
- Home influences account only for about 5-10 per cent of the variance, in part because parental influence does not bear on the management of the classroom.
- Schools and school principals account for 5-10 per cent of variance.
- Peer pressure can be positive or unfavourable to performance but is less influential than generally believed, and accounts for 5-10 per cent of variance.
- Teachers account for about 30 per cent of variance. It is what teachers know, do, and care about which is very powerful in the learning process.[7]

7 John Hattie,*Teachers Make a Difference: What is the research evidence?*, Australian Council for Education Research Annual Conference on Building Teacher Quality, October 2003, pp 1-2.

1.19 A wealth of other research supports these conclusions. A four year longitudinal study carried out by ACER in 1993-96 called the Victorian Quality Schools Project confirmed evidence from other counties that teachers have the most significant influence on educational quality. The Victorian study sampled nearly 14 000 students drawn from 90 public, Catholic and independent primary and secondary schools. One of the ACER researchers on the project, Dr Ken Rowe noted:

> Of particular interest was the finding that whereas students' inattentive behaviours had significant negative effects on their progress in literacy and numeracy, achievement mediated by quality teaching had notably stronger effects on decreasing their early and subsequent inattentive behaviours in the classroom (or increasing both their early and subsequent attentive behaviours). Above all the findings underscored the importance of teacher quality by highlighting the crucial role that teachers have in meeting the cognitive, affective and behavioural needs of all students, as well as providing normative classroom environment conditions that are conducive to learning.[8]

1.20 The committee also notes research published in 2007 by Andrew Leigh of the Research School of Social Sciences at the Australian National University, which was a mathematically-based assessment of teacher performance against literacy test results. The sampling was very large, with 10 000 primary teachers included in the research field. Dr Leigh's research showed a wide variation in teacher performance, which is a result consistent with other ways of measuring performance.[9]

The training of quality teachers

1.21 Teacher quality is linked to the quality of teacher training, but there appears to be no settled opinion on how strong this link is or how it can be measured. A recent report on teacher education accreditation states that its implementation is not yet well established. University courses are approved by academic boards, having first been developed by faculty members, usually with some limited contribution from references groups, or course advisory committees outside the university. There is no national system of accreditation, although a variety of state processes exist since registration bodies have been established in all states, mostly at the endorsement or approval level.[10] The emphasis is on 'collaboration' and 'liaison' rather than formal accreditation. In theory, employing authorities, that is, state education departments, diocesan Catholic education offices and independent schools, have some influence on

8 Dr Ken Rowe, *The Importance of Teacher Quality as a Key Determinant of Student's Experiences and Outcomes of Schooling*, Paper given to the ACER Research Council, 2003, p. 21.

9 Andrew Leigh, *Estimating Teacher Effectiveness From Two-year Changes in Students' Test Scores*, Research School of Social Sciences, ANU, 2007.

10 Dr Lawrence Ingvarson et al, *Teacher Education Accreditation: A review of national and international trends and practices*, Teaching Australia, August 2006, pp10-11.

the content of teacher training courses, but there is no formal way in which this is exercised.

1.22 Deans of education have expressed support for national accreditation. They argue that current arrangements result in unnecessary duplication of work, especially for universities preparing students to work in different states. This will not be a straight-forward task. National accreditation will need agreement on professional principles as well as subject specialisations, content and pedagogical knowledge. However, MCEETYA already has a national framework for professional standards for teaching as a basic document. The committee believes that national accreditation is a worthwhile goal in building the professional profile of teaching and facilitating improvements to professional standards.

1.23 It appears to the committee that state and territory education ministers have retained considerable powers, as in the instance of the NSW Minister recently instructing teacher training institutions to ensure that teachers in training are taught the formalities of English grammar. This has occurred since the establishment of the NSW Institute of Teaching in July 2006, which has taken over from the Department of Education and Training (DET) in the accreditation of teachers.

1.24 In this report the committee has expressed concerns about perceived weaknesses in teacher training. Some of these may be the consequence of factors outside the control of universities, namely the academic quality of school-leavers wanting to become teachers, although it might be argued that entry levels should be raised to keep out those whose literacy and numeracy are of doubtful standard, and who barely managed to achieve a minimum TER score. But this relates to the main complaint; that teacher training neglects subject or discipline content. This is especially true with mathematics and language and literacy study. Evidence was almost overwhelming that without a safe level of subject content teachers lack confidence in their ability to teach, and this is obvious to school students.

1.25 The committee noted also that there appeared to be a divide between educationists in universities and academics who are in a position to advise and contribute to subject or discipline specific content. Compared to this, other issues which have received attention in other inquiries, like inadequate practicum time, can usually be attributed to financial constraints or administrative problems. The infusion of more rigorous content would, however, appear easier to achieve.

Professional entry levels and training standards

1.26 Teaching has long ceased to attract its fair share of the best and brightest intellects entering universities around the country each year. Some of the biggest teaching schools are accepting entry-level students with TER scores so low as to be equivalent to failure in other states.[11] The House of Representatives committee inquiry

11 Professor Bill Louden, *Submission 73*, p. 3.

into teacher education, which reported in February 2007, received submissions showing various indicators of declining academic entry standards for students entering education faculties. For instance, only four out of 31 universities required Year 12 mathematics at any level, with another eight being content with Year 11 mathematics levels. The University of Melbourne claimed in its submission to the House inquiry that an insistence on Year 12 mathematics would have resulted in half of the currently accepted applicants being rejected. Many universities appear to place a great deal of confidence in their ability to instil an adequate component of academic rigour over the four years of the B.Ed degree, sufficient, that is, to cover the gap between poor or mediocre school results, and what is expected at graduation.[12] The committee doubts whether the community can be reassured that this confidence is not misplaced.

1.27 The committee heard a great deal of adverse comment on the performance of teacher training faculties in universities. It was said that in many institutions, discipline content was minimal, and that subject method was largely concerned with the interpretation of curriculum documents and with course planning. It was also claimed that language teaching did not, in many institutions, include any systematic instruction in phonemic awareness as part of teaching children to read. There was an implication that constructivist philosophy of learning was deeply embedded in the education faculties, which inhibited the study of phonemic awareness, and appeared to affect attitudes to the teaching of mathematics as well. The committee acknowledges that much of this evidence is anecdotal, and off-the-record. There is reluctance by academics to engage in open discussions of their issues.

1.28 Another major issue concerns the superficiality in which subject content is dealt with in education faculties. In the case of mathematics and science this is well-documented. It is a problem recognised in some education faculties, as Professor Michael O'Neill from the University of Notre Dame told the committee in Western Australia:

> We do our level best, but we are faced with that perennial tension: we have an absolute obligation not only to give to our students sound content knowledge in the disciplines in which they will teach but also to give them the pedagogical skills that enable them to teach well. So we have to try to get that mix right. Where we cannot go is to deny them content, to give less content, in favour of more pedagogy. That is an absolute anathema, in my view. I think a deep knowledge of your discipline is utterly vital to be a good practitioner, and you can then perfect the 'how to teach' once you are mentored properly in the school system after graduation. But we have to get that balance right in the preservice degrees.[13]

12 House of Representatives Standing Committee on Education and Vocational Training, *Top of the Class: report on the inquiry into teacher education*, February 2007, p. 59.

13 Professor Michael O'Neill, *Committee Hansard*, Perth, 2 July 2007, p. 41.

1.29 The committee did not take this to infer that Notre Dame was failing to maintain this balance, only that it is a matter of concern, as it is at Edith Cowan University. As Professor Greg Robson explained:

> Our challenge is a flow-on from the general curriculum challenge that we face. We have to prepare our primary school teachers for the curriculum as intended, and getting the time available to get people really well versed in eight learning areas is a heck of a challenge. Instead of having curriculum that, as people have often said, is a mile wide and an inch deep, I think we would do better if we focused on depth. I think that would serve our interests and the interests of the youngsters far better.[14]

1.30 Finally, the committee refers to the findings of the DEST-appointed Committee for the Review of Teaching and Teacher Education, chaired by Professor Kwong Lee Dow, and which reported in 2003. This inquiry made a comprehensive study of the needs of teacher education, with particular reference to science and mathematics teachers. This committee notes with interest that two of its conclusions were that attention was required in regard to: first, changes in program content and course requirements [in teacher training] to ensure that all future primary school teachers have a trained capacity to teach the science, mathematics and technology components of the primary school curriculum and that there is a sufficient number of teachers with expert knowledge to provide school leadership roles in these areas of the curriculum; and second, that there should be more collaboration between education, science and mathematics faculties to enhance quality through maximising use of resources and to increase the numbers of students specialising to become science, technology and mathematics teachers.[15] The committee believes this may be an acknowledgement that relations between academics in education faculties and these in the relevant subject disciplines have become estranged in recent years, though it is hard to elicit comment 'on the record'.

1.31 The committee takes the conventional view that both subject content and method are important, but understands that classroom management and teaching method may preoccupy the minds of trainees and beginning teachers. The committee takes most seriously the comments that are made elsewhere in the report of subordination of content to method, to the extent where a great deal of essential knowledge is not covered at all in a four year long degree course. The committee believes that Professor Robson's view on specialisation has much to commend it.

1.32 Over 100 separate inquiries have been conducted into teacher training over the past several years. One of the most recent comprehensive inquiries was done by the Education and Training Committee of the Victorian Parliament, which reported in February 2005. It found that in Victoria there were significant gaps in the current content of education courses, including classroom management skills, student

---

14 Professor Greg Robson, *Committee Hansard*, Perth, 2 July 2007, p. 41.

15 Committee for the Review of Teaching and Teacher Education, *Australia's Teachers: Australia's Future, Main Report*, DEST 2003, p. 145.

assessment and reporting methods, time management and organisational skills, and methods of dealing with students who have learning disabilities.[16] It is unlikely that deficiencies identified in Victoria would be confined to that state.

1.33 There were also a number of criticisms made of practicum arrangements for B.Ed and Dip.Ed. students obtaining experience in schools. It was stated by the Victorian parliamentary committee that the teaching practicum was a key area of contention because of the inadequate time given over to practise teaching. There were also complaints about lack of adequate supervision from university faculty staff. The House of Representatives report on teacher training gives considerable detail of similar findings. The main problem has been clearly identified as one of inadequate funding, which has seen a dramatic decline in the number of academics employed in education faculties at a time of greatly increased enrolments. The committee notes that the Government has responded in some measure to this deficiency with additional appropriations for teacher training in the 2007-08 budget.[17]

Investment in teacher quality

1.34 As noted in the previous section, concern about teacher quality has resulted in the establishment in all states and territories of accrediting agencies to ensure that training institutions and universities produce teachers who are competent to practise soon after their graduation. The committee notes that it will take some time to develop agreed models for professional teaching standards. It strongly commends the likely support to come from such bodies to the professional knowledge content of teaching courses, and **recommends** that agencies take the lead in co-ordinating an effective program for professional development and continuing education for the profession.

Becoming serious about professional development

1.35 The committee does not believe that professional development has ever been established, in any jurisdiction, on a properly professional level. The anecdotal evidence suggests that courses are mandated only when important new curriculum or assessment initiatives are being introduced, or when identified school or system-wide problems need to be addressed in areas such as legal responsibilities of teachers.

1.36 Following its inquiry into the status of the teaching profession, this committee reported in 1998 that much of the evidence it received referred to the *ad hoc* and piecemeal nature of professional development, and to its poor intellectual quality and

16 Parliament of Victoria: Education and Training Committee, *Step Up, Step In, Step Out: Report on the Inquiry into the Suitability of Pre-Service Teacher Training in Victoria*, February 2005, p. xx1.

17 An additional $77 million was appropriated for the 2007-11 triennium to be spent on teacher practicums. *Portfolio Budget Statements 2007-08, DEST*, Paper No. 1.5, p. 43.

lack of conceptual framework. It was often crammed into busy times of the year, had no official accreditation and no official recognition.[18]

1.37 While the committee received little evidence on the current state of professional development for this inquiry, it received a strong impression that nothing much has changed over the past nine years.

1.38 One particular issue closely related to professional development is that of incentive. Quite simply, the committee has been told of poor incentives for teachers to raise their level of knowledge, and broaden their skills via professional development. There is neither a strong market for highly accomplished practitioners, nor is there a profession-wide system by which teachers can gain a respected and portable certification of their accomplishments. The issue of teacher pay, which is addressed in Chapter 6, does not assist in this regard and could be construed by some people as a disincentive.[19]

> Teachers need constant motivation to stay abreast of the changing and growing scope of science knowledge and professional opportunities, yet the reward for this is sometimes obscure and the means of achieving this unclear (who pays, who replaces staff on study leave, secondment or placements).[20]

1.39 Some witnesses told the committee that the Commonwealth could assist teachers in obtaining further formal post-graduate qualifications and removal of the Fringe Benefits Tax (FBT) requirements for teacher training scholarships. Extending the FBT concessions that apply to health employees to education employees would make teacher employment packages significantly more attractive and comparative to those of other professions.[21]

1.40 However, the committee notes that possession of a post-graduate degree may not necessarily improve a teacher's performance. Recent research has not identified any improvement in learning outcomes of students as a result of teachers having post-graduate degrees,[22] although there is clearly a need to have additionally-qualified teachers in special-needs education. Whether obtaining higher degrees for the purposes of promotion or professional satisfaction should attract a tax-payer subsidy is another matter. As the Australian Education Union submission pointed out, there has been criticism that some of the post-graduate courses are not directly—or even indirectly in some cases—applicable to the classroom. The committee accepts the

---

18 Senate EET References Committee. *A Class Act: Inquiry into the Status of the Teaching Profession*, March 2008, p. 217 *passim*.

19 Australian Council for Educational Research, *Submission 38*, p. 6.

20 Professor Margaret Britz et al, *Submission 61*, p. 2.

21 Queensland Department of Education, Training and the Arts, *Submission 54*, p. 21.

22 Andrew Leigh, *Estimating Teacher Effectiveness From Two-Year Changes in Students' Test Scores*, 2007, p. 19 at http://econrsss.anu.edu.au/-aleigh/

Union's view that some of the best professional learning for teachers is actually collective and school-based, and that what teachers particularly like in their professional learning is to deal with the problems they are encountering in the classroom every day.[23] It would be a bonus, according to the Union if teachers could get a university credit for school-based professional learning in collective ways.

Remuneration and reward

1.41 A number of submissions, and not only those from teacher unions, noted that while pay scales for beginning teachers were as good, or even better, than in comparable occupations, the progression to the top increment was rapid: teachers reached their salary peak in their mid-thirties. The salary structure did not place much value on teacher quality, but rather encouraged promotion out of the classroom in graduated stages to administrative positions. The committee believes that the current incremental scale may be one reason for the poor retention rate.

1.42 The committee was interested in the views of teachers and employing authorities on the matter of performance pay for teachers. However, performance pay is not the only way of recognising and rewarding the dedication of teachers. The committee was told of practices used in independent schools in Western Australia to recognise outstanding service. This can be done by organising exchange postings at other schools, including interstate and overseas schools, professional development through paid leave to work in industry, or assistance with HECS/HELP fees for a higher degree. The committee believes these reward mechanisms should become more general, and should be afforded by schools and school systems.

> That of course costs schools. It costs money to send a teacher to wherever you are going to send them and also to replace that teacher in your school, if you do not have an exchange. But that one works very well. We have other schools that have actually said to teachers: 'If you can find a placement in industry, we will pay you while you do four to six weeks in industry, working in SFIA and IT. You can go and work for a computing company for four to six weeks to get some industry experience and we will cover you.' Again, that is a really valuable way of doing it. It is really the schools and the teachers in the schools who know best who the good teachers are and who perhaps should get rewarded—rather than an outside person saying, 'If you can tick all these boxes, we will give it to you'.[24]

1.43 Ticking the boxes is a reference to reward schemes which exist in a number of jurisdictions whereby teachers apply for a special classification carrying a salary bonus which recognises their higher level of teaching skill. It is inevitably a highly bureaucratic process, with successful attainment often dependent on the weight of

---

23 Mr Roy Martin, Australian Education Union, *Committee Hansard,* Melbourne, 25 June 2007, p. 6.

24 Mrs Valerie Gould, Association of Independent Schools of Western Australia, *Committee Hansard,* Perth, 2 July 2007, p. 8.

supporting documentation. Nor does the outcome always carry much benefit for the school. Finding an appropriate role for teachers with a higher teaching classification is often difficult.

1.44 The committee formed a view that a system of performance based remuneration for teachers is both desirable and inevitable. The committee also formed the view that the system of performance based remuneration that is introduced needs to ensure that individual classroom teachers have the necessary incentives to improve all areas of their teaching practise, including student academic achievement, and also a system which gives school principals the greatest ability to attract and retain the best teachers.

The curriculum debate

1.45 At the time the committee commenced this inquiry, it was under the impression that quality standards in school education hinged on curriculum settings. The current debate on standards drew much of its heat from interpretations of curriculum documents, and the statements of educators and others on course content. As well as concern expressed about content and rigour, there was much talk of the need to ensure some nationally uniform pattern of core subjects, assessed in a way which would give assurance of uniform standards of learning achievement across the country.

1.46 Following consideration of submissions and other evidence, the prevailing opinion is that it is teachers, and not curriculum structures or frameworks, which truly make a difference. What drives improvement in schooling are good teachers. Good schools are the schools with lots of good teachers.[25] It was clear that the value of even the best curriculum that could be devised and agreed to can only be realised through quality teaching. But it was also clear that aspects of the current curriculum make the task of effective teaching more difficult. Decisions about an effective curriculum for the 21st century are yet to be made, and there is as yet no consensus about how we should negotiate a curriculum which addresses the task of national development for the decades to come. So while the committee has agreed that teaching quality is its main topic in this report, it believes that quality curriculum development is also essential in setting and maintaining standards. The two requirements are linked throughout the report.

1.47 The literature defining the limits and scope of the term 'curriculum' is voluminous. Some educationists have variously taken the term 'curriculum' to refer only to setting the objectives of learning and measuring the outcomes. There is evidence of this thinking in the curriculum frameworks that were argued over in the 1990s. For others, the curriculum embraces the process of learning inside the classroom, as well as extraneous experience which influences classroom learning. As

25 Professor Bill Louden, *Submission 73*, p. 3.

in so many perspectives on schooling, the temptation to adhere to only one side of a binary divide is ever present, and the committee is mindful of this.

1.48 Between these two approaches is the mainstream view of curriculum as a document or set of documents which set out learning objectives, indicating, to a greater or lesser extent, the content and subject matter of learning, with some indications of appropriate treatment of the material in the classroom, and suggested teaching methods. Accordingly, for the purposes of this report, the committee has taken curriculum to refer broadly to what is being taught, and learned, and how this knowledge or experience is conveyed to the student. The committee believes that is what most people would understand a curriculum to be, and how it would work.

Recovering from the 1990s

1.49 The proponents of major curriculum development changes in the early 1990s did not quite manage to achieve their goal of establishing a national curriculum. Those efforts did, however, leave a legacy of eight key learning areas (KLAs): English, mathematics, science, languages other than English (LOTE), studies of society and its environment (SOSE), technology, and health and physical education. Each of the key learning areas had a 'statement' which defined the learning area and provided the framework for what would be taught. In addition, each KLA had a 'profile' which set out what skills and knowledge students were expected to learn. These had been developed co-operatively by the state education agencies and attendant educationists. By July 1993 the spirit of co-operation between the states had eroded, and they went their separate ways, although carrying a great deal of shared experience with them. The terminology and philosophical approach to curriculum developed in those years hangs on in some states.

1.50 In retrospect, political influences had less to do with rejection of a national curriculum than differences in educational philosophy. New South Wales appears to have had deep-seated suspicions of the constructivist foundations of KLA statements and profiles, and preferred a standards-based curriculum supported by detailed syllabuses. Victoria appears to have shared these views in large measure. Both states have a traditional outlook on matters of curriculum and assessment, which is largely impervious to political influence, and, essentially, the view they held in the early 1990's they hold today. Mathematics teachers were also unhappy with the foundational underpinnings of their KLA documents. A contemporary researcher, Professor Ken Eltis, who chaired a committee appointed by the NSW Minister for Education to look at outcomes and profiles, found that there were serious doubts among maths teachers about the validity of what was being proposed at the national level. One head of a mathematics department submitted to the Eltis committee that 'while knowledge, argument, proof and understanding should be fundamental to the

teaching of mathematics, in conformity to the national profiles, every attempt was made to remove the words 'prove' and 'know' entirely from the advanced syllabus.'[26]

1.51 Overall, there was barely-suppressed fury and frustration felt by teachers all over the country at decisions being made without their input or consent, but which they would be responsible for implementing.

1.52 The committee notes that the experience of the 1990s has illustrated the importance of process in the quest for greater national consistency in curricula. Greater national consistency should be achieved by establishing core standards that all education systems must meet.

1.53 Comprehensive negotiation of the curriculum means enlisting the direct participation of teachers and principals' councils, in a painstaking and lengthy process of discussion about rationales, objectives, resources, and other practicalities. All this must be accompanied by public debate. In essence, the leaders of any future debate on a national curriculum will need to take charge of an inclusive *modus operandi* if success is to be achieved.

The crowded curriculum

1.54 One of the legacies of the 1990's has been the conscientious attempt to cover the key learning aims in primary education.

1.55 The committee heard much about the problems teachers and students have in fitting the curriculum into the limited class time available. As is described in a later chapter, there is often only a perfunctory attempt to do justice to the eight KLAs in the primary schools, and specialisation in secondary school means that few students will cover this field. Outside the core 'learnings' in primary school, English, mathematics and SOSE, are optional 'learnings' and skills which, although desirable, may not be taught at a satisfactory level of depth. Some senators thought that SOSE, an amalgam of history, geography and economics, to name a few, fails to provide a proper basis for later studies in these disciplines. The core curriculum is relatively easy to agree on, except when it comes to the 'trimmings' to the core, and that point of argument is usually reached quickly.

1.56 The committee canvassed the views of teachers and teacher educators about decisions about what to teach and in what depth. Professor Robson of Edith Cowan University in Perth told the committee that:

> The first problem is the level of mandate that has now been in place for some little while that has basically said that each of these learning areas is of equal importance. That bumps up against the reality in primary schools, in particular, where the bulk of the time that is actually spent, and should be spent, is in literacy and numeracy. So you have teachers beavering away,

---

26 Professor Ken Eltis, *Focussing on Learning: Report of the Review of Outcomes and Profiles in New South Wales Schooling*, DET, August 1995, p. 41.

> trying to do their best, and the pressures that are coming down on them are around those other things that they somehow have to fit in. I think the first thing we have to do is pull back from that mandate, which says that these eight areas are all equally important. They are not, in the context of primary schooling, in my view. Some things are more important than others, and that is what we should recognise and make clear. That also applies to, if you like, the content within learning areas. In getting these developments in place, you have had these 'curriculum experts' who invest in each of their learning areas—again, more stuff, more things to be covered than most teachers could think of in a career. Again, take the English learning area. My view is that reading and writing is actually more important than the viewing strand. If youngsters do not get those through their formal schooling, they will not progress.[27]

1.57 The committee would agree with Professor Robson that schools pressed for time need to concentrate on the essentials necessary for students' further intellectual growth. After consideration of the needs profile of local students and the resources available, this is a decision for a school community.

Outcomes-based education

1.58 The committee became familiar with controversy over the teaching theory described as 'outcomes-based teaching and learning'. Some comments on outcomes-based education are necessary in the light of the submissions which the committee received.

1.59 Outcomes-based education was given its opportunity in the early 1990s when it became the basis for national curriculum statements and profiles developed at that time. As will be discussed, outcomes-based education has been blamed for falling standards across all subject areas. Most academics when asked about outcomes-based learning appeared reluctant to commit their views to Hansard, except to point out that both the learning theory in question and the debate over its effectiveness should now be regarded as *passé.* This is especially the case in New South Wales and Victoria where the adoption of outcomes-based learning was never taken seriously, beyond the adoption of some useful classroom teaching methods. The syllabuses in New South Wales were never driven by outcomes-based theory, although there was some genuflection to it in key competency statements. It is noteworthy that the approach in New South Wales was to use the syllabus as a starting point for the development of outcome statements, rather than the other way round as in the national statements and profiles.[28]

---

27 Professor Gregory Robson, Edith Cowan University, *Committee Hansard*, Perth, 2 July 2007, p. 45.

28 Professor Ken Eltis, *Focussing on Learning: Report of the Review of Outcomes and Profiles in New South Wales Schooling*, DET, August 1995, p. 79.

1.60 Nonetheless, the committee is aware that support for constructivist theory is strongly entrenched in some university faculties of education. There is evidence of constructivist thinking in some submissions, and as recently as 2004, DEST commissioned the Catholic Education Office in South Australia to undertake an investigation into effective constructivist teaching methods in the teaching of numeracy. The committee notes also that some criticisms of outcomes-based learning have little to do with the theory itself. The committee received evidence on recent controversies surrounding outcomes-based education in Western Australia and of the imminent reintroduction of syllabuses that provide curriculum support for teachers.

1.61 The committee is reluctant to take sides in a technical debate. It accepts, however, the evidence that outcomes-based education has been difficult for teachers to come to grips with, and has been especially stressful for teachers who have to cope without a solid content-based syllabus. It notes that many teachers lack sufficient content knowledge to make their own way through unhelpful outcomes-based curriculum documents which may list a bewildering number of learning outcomes but not much else. While noting that some teaching methods based on constructivist theory, like discovery-based inquiry methods of learning, have solid and lasting value, the committee is generally convinced that a return to standards-based curricula, supported by user-friendly syllabuses, is essential. As ACER advised in its submission:

> Standards-based school curricula should make clear what teachers are expected to teach and what students are expected to learn and do as a result of schooling, as well as specifying minimally acceptable standards for skills in areas such as literacy, numeracy and science. This focus on the desired outcomes of schooling is in welcome contrast to an earlier preoccupation with inputs and processes.[29]

1.62 The committee concurs that this is likely to be more conducive to improved achievement standards.

A national curriculum: how far do we go?

1.63 In 2007, a consensus appears to have developed that the national curriculum, still-born in the 1990s, has in principle approval for further development, with the added encouragement that progress toward uniformity and harmonisation should proceed where there is agreement. The committee found a general readiness by stakeholders to agree to an 'edging-forward'. Some of the old wounds have healed, and as MCEETYA has recognised, there is work to be done. For some stakeholders in education, there is already enough common ground in what is taught in schools to suggest that we may already have a national curriculum. For MCEETYA and the Commonwealth, there are areas of advancement which contain the seeds of dispute.

29 Australian Council for Educational Research, *Submission 38*, p. 3.

1.64 As noted earlier in this chapter, any serious attempt to develop and implement a national curriculum will be a task requiring a great deal of political finesse, particularly at the Commonwealth level. The committee agrees that there are several matters in relation to a national curriculum which have to be agreed to before significant progress can be made.

Creating a process for negotiation

1.65 The first is an agreed national curriculum rationale. There must be agreement on why it is needed. The reason will have to go further than matters of technical consistency and practical convenience, such as that it is easier for children who belong to mobile families to transition to different education systems.[30] The committee believes that raising academic standards nationwide is a sufficient rationale and agrees with Professor Reid, who has done much thinking on this issue, that this rationale will need to include consideration of the kind of knowledge and the set of skills that will be needed to deal with national challenges.[31] Associated with this is agreement on national principles and values we need to preserve. A national curriculum must serve the nation and promote its identity and prosperity. Its nationalist rationale becomes even more necessary in an era of globalisation, when the country is in most need of an educational benchmark to protect its standards, and to underpin its democratic credentials.

1.66 Second, if a rationale is agreed to, there must be robust commitment to define the scope of what a curriculum might mean and what it will cover. To proceed to a negotiation stage will require agreement in principle to place on the table for debate such currently contentious issues as commonality of achievement assessment scales, defined by a common set of descriptors. It may be necessary for states and territories to agree on a standard proportion of external assessment.

1.67 Third, agreement on the rationale for a national curriculum and its scope will also contain the seeds of agreement on how the process is to proceed. In all likelihood a conservative consensus will emerge when issues are debated. If unacceptably radical or impractical views are to be marginalised or discarded—as they will be—this can only be done through a transparent public process. MCEETYA will need to ensure that a climate of trust is maintained in order that technical and theoretical pedagogical contributions are given their due weight, and that the agenda is not threatened by populist dissention. Agreement can only be confidently accepted following an ample period of informed debate, in which professional advice is given due regard.

---

30 A reason often cited for the adoption of a national schools curriculum is remove disadvantage from families which move regularly between states on job postings. Only about 3 per cent of students are affected by this, and the extent of their disadvantage is not known. Advice to the committee suggests that interstate movements are no more problematic than transfers within states, and that there is no significant disadvantage.

31 Professor Alan Reid, Australian Curriculum Studies Association, *Committee Hansard*, Melbourne, 25 July 2007, pp 3-5.

Current policies

1.68 The Commonwealth has announced measures in the current budget that will require states and territories to comply with certain matters relating to standardisation of curriculum-related decrees. Non-compliance will presumably result in states and territories foregoing certain Commonwealth direct grants.

1.69 The committee agrees with the policy thrust of measures on which the Commonwealth is insisting. These include decisions about compulsory Australian history, a Year 10 core curriculum, requirements for schools to hang values posters, benchmarking for numeracy and literacy, and the imposition of A-E reporting. The committee found that most of these measures receive general support among educators, but recognises that these should be part of a more systematic and strategic approach.

1.70 The committee's earlier comments about the need for respectful debate are apposite in this context. Governments, too, are participants in the perpetual debate on schooling and they should be careful that their long-term reformist goals are not compromised by bluster and confusion about where and how the effects of reform will be felt.

Measuring the quality of learning and certifying the outcomes

1.71 Broad agreement on common curriculum frameworks and content has been relatively easy to achieve. Negotiation and drafting processes involve a range of skilled and experienced educators across sectors and jurisdictions, most of them well-known to one another. The results of continued work will certainly be shown in the production of more common-use teaching materials, and less time spent by officials in different agencies all engaged in doing the same work. A matter which is far more contentious, even though directly related to the curriculum, is the measurement and recording of student achievement in meeting curriculum objectives.

1.72 There has so far been no agreement on standardised terminology for describing or classifying achievement levels at the end of Year 12, enabling valid comparison of students across states and territories. In this regard, DEST has commissioned ACER to do some work developing a common assessment framework. The committee covers these issues in two of the chapters that follow.

1.73 The committee believes that negotiations and arrangements for comparable assessment instruments across states and territories will be difficult. Final year assessment decisions are difficult enough to negotiate within states—to note the recent experiences in Western Australia as an instance of this—and to have Queensland and the ACT include an external examination component will require them to act in ways which will be very unpopular within those jurisdictions. But as the committee reports, a common assessment framework will go far toward ensuring compliance with any standards-based national curriculum which finally emerges. On balance, the committee believes that an external examination component to a final Year 12 assessment is the only way to guarantee comparability of standards and ensure the

integrity of a national Year 12 certificate, as well as ensuring rigorous academic standards.

1.74 The committee has heard views about the standardisation of Year 12 certificates. Despite the availability of published research commissioned by DEST, the issue appears to be remote from the consciousness of most school-based educators. There are some large hurdles to jump before such a certificate could have any credibility, and these have to do with the assessment arrangements previously discussed.

The long tail of underachievement

1.75 A third issue or theme which arises from this inquiry is evident in the research data reporting the relative performance of Australian schools against international benchmarks. That is, the presence of a long tail of under-achievement shows the difference in performance quality across the country.

1.76 A number of references are made to the problem in submissions and testimony. First, there are some difficult political issues to note. The most significant issue is the declining status of local high schools in lower middle class localities which have seen the establishment of more systemic and independent schools. A baby-boomer generation of people who were sufficiently well-educated at local high schools to attend university have chosen to send their own children to independent schools, thus reducing the aspirational middle-class cohort in local high schools. Professor Louden made some pertinent remarks in his submission about the effects of what he terms 'residualisation', where local public high schools are left with a residue of students after many local parents have opted to send their students to independent schools:

> In working class neighbourhoods, where we used to have strong government schools that gave working class kids a terrific opportunity to get into tertiary education, many of those schools now struggle with an academic program because the kids who live in the neighbourhood do not go to the government school, they go to the local low fee Anglican school. Fees are only a couple of thousand dollars, but they have all the advantages of private schools, that is, the selection for caring about education.
>
> I am sure that is an unintended consequence of federal policy but it is a serious one. More and more I worry about whether government schools such as Mt Druitt or Koondoola can manage to provide a decent program, because the able kids, the ambitious kids from working class neighbourhoods, have just gone next door, often on the same block of land, but when they get there they are wearing uniforms and doing home work. That makes it harder and harder to maintain high standards in the other school. So residualisation is a real problem and has the seeds of very serious social unrest over time. In Australia, traditionally, we have not had the dreadful sink schools that there are in the Midlands of Britain or in inner cities in the United States. We have not had schools where nobody is

> successful. The impact of residualisation is a matter of time. I am very gloomy about that.[32]

1.77 The committee recognises the danger of standards in a school declining as a consequence of it losing a critical mass of students with high aspirations. There were no suggestions made as to how this social movement can be reversed. In the committee's view it is too simplistic to attribute this problem to the significant increase in the number of non-government schools. It may well be the case that parents make their choices on the basis of finding a suitable peer group for their children; one which can support their own and their children's educational aspirations.

1.78 There are countervailing initiatives and influences at work. Efforts are being made in some states to improve the academic performance of government schools. The continued success of the selective schools in New South Wales is significant enough to have an effect on real estate values. The gloom that the committee may share with Professor Louden would be the knowledge that good teachers are not in plentiful supply, even if there is funding to attract them to under-performing schools. The real equity challenge over the long-term will be to attract high-achievers into the teaching profession and to keep them there.

Education is local - A final note

1.79 It is remarkable that most submissions to this inquiry, and most representations from teachers' professional and industrial organisations, system agencies and individual schools as well as a high proportion of academics, had little to say about the need for nationally consistent curriculum and assessment arrangements. No one opposed these ideas: it was simply that they were not very high on the priority list of education needs. For all the continued interest on the part of successive Commonwealth ministers, and initiatives and directives signalled through DEST programs, those at the sharp end of education continue to look at problems and solutions from a state and local perspective. The committee believes that with six state governments the national perspective must not be forgotten.

1.80 In one of its past inquiries into indigenous education funding the committee found that government school principals in the Northern Territory and Queensland, accustomed to dealing with their own district and head office managers, objected to the application of lengthy and complicated processes, and unfamiliar protocols.[33] For all its use of funding power to drive initiatives, states and territories remain preoccupied with their own policies and agendas, and afford them a high priority. As state and territory governments run the schools and employ the teachers, this is scarcely surprising.

---

32 Professor Bill Louden, *Submission 73*, p. 2.

33 Senate EWRE Committee, *Indigenous Education Funding Arrangements*, June 2005.

1.81 There are lessons here for the Commonwealth about the level at which it works best, but there are also encouraging signs that in several respects the involvement of the Commonwealth is having a desirable effect. There has always been a view that it is a Commonwealth responsibility to keep other jurisdictions up to the mark. As further chapters of this report indicate, some of the most crucial decisions involving quality outcomes will require much more negotiation than direction.