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## Symposium

# How Long Does It Take for the Professional Preparation of a Teacher? The Australian Experience in Establishing a Standard<sup>1</sup>

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### Abstract

*This paper reviews the policy developments that moved teacher education in Australia from being a two-year course of preparation in dedicated teachers' colleges to fully professional courses conducted in universities where the standard length of preparation is four years. As the paper shows, policy was unable to keep up with practice and despite the reservations of major reports, funding authorities and some practitioners, a four year standard has been established, although all institutions have yet to reach that standard. Developments in Australia are placed in three broader contexts in order to demonstrate the rationale for moving towards a four year standard. The broad international policy context is described to demonstrate that longer periods of professional preparation have now become the norm as nations seek to grapple with the issue of teacher quality. Research outcomes are reviewed to demonstrate the support they give for increased length of preparation. In addition, the nature of teachers' work has become more complex and demanding thus requiring more intensive forms of initial preparation.*

### BACKGROUND

In Australia in the late 1960s and early 1970s, the standard for concurrent (single award) initial teacher education moved from two years to three years for both primary and secondary teachers. There had been for a long time the pattern of a one year graduate Diploma in Education following a relevant first degree from a university for secondary teachers and a very small number of primary teachers but the bulk of teacher education was carried out in single purpose teachers' colleges. In 1972, the former teachers' colleges became multi purpose Colleges of Advanced Education (CAE), a status they would generally maintain until the creation of the "unified national system of higher education" in 1989, when CAEs amalgamated with or were designated as universities.

During the 1970s the fourth year inservice Bachelor of Education (BEd) award was established, and the *ideal* standard became a three year preservice program, followed by a period of teaching experience, then the fourth year course, usually taken on a part time basis over two or more years. This was the "3 + e + 1" model. That model is of four years in total, not three years. *In practice* many teachers did not enroll in the fourth year course until well into their teaching careers, if at all.

Over the past two decades the professional debate in Australia has been between the educational virtues of the 3 + e + 1 model and a four year preservice model. At the Federal government policy level, the matter of cost has often been decisive. A failure to account for the fourth year in the 3 + e + 1 model, combined with misleading statistics on enrollments in teacher education, have often led to gross over-estimations of the cost to the government of moving to a four year preservice standard.

This paper will review the developments that have taken place in Australia since the 1970s to establish four years as the standard for initial teacher education and provide a rationale as to why such a standard is important for the teaching profession.

### REPORTS THAT FELL ON STONY GROUND

In the mid to late 1970s a growing interest in and concern with teacher education led to the establishment of a number of state inquiries into teacher education and the National Inquiry into Teacher Education (NITE) (Auchmuty, 1980). The inquiries were concerned with many and diverse aspects of initial teacher education and the continuing professional education of teachers. Their

recommendations regarding duration were for either four years preservice or the 3 + e + 1 model. While a minority report which supported the 3 + e + 1 model was included in the NITE report, the (majority) recommendation of the NITE report was that all preservice courses should become four years in length (Auchmuty, 1980, p. 139).

The recommendation arose explicitly out of a consideration of "the kinds of knowledge and understanding which beginning teachers require" (p. 137), and the report went on:

The majority of the Committee feels there is a compelling case for four years of initial education and training for *teachers of younger children*, if that period of preparation is required for prospective secondary teachers. The intellectual and other demands on teachers of younger children unquestionably are as great as those laid upon teachers of adolescents. This implies an overall consistency of approach, but not uniformity of practice in course design, provision and teaching (p. 138). (Emphasis in original.)

The recommendations of the State reports were mixed. Those supporting a minimum of four years preservice included the Victorian Asche (1980) report and the report of the South Australian Enquiry into Teacher Education (Gilding 1980).

Other reports, such as the earlier Queensland Bassett (1978) and the NSW Correy (1980) reports, supported the 3 + e + 1 model. The support was often argued cogently - for example in the Bassett (1978) report:

The case for requiring the student to gain teaching experience before undertaking the final year of the course we regard as compelling. While we recognize that much can be done during a course of teacher education to encourage students to relate practice and theory, we believe that it is when they come to grips with the practical problems of teaching as teachers that they can gain most from pedagogical theory and the background disciplines on which it rests. From the examination that we have made of existing three-year courses, it is clear that these courses attempt to do too much, and would be even more overloaded if they attempted to cover the broader range of general and professional knowledge that teachers now need, as well as giving them a reasonably comprehensive grasp of basic pedagogical skills.

It is for these reasons that we consider that the fourth year leading to degree level should be a requirement for all as an integral part of a teacher's preparation. We have recommended accordingly.

We stress, however, that we do not wish to see the

diploma course extended by a year before the teacher is employed, since clearly there are diminished returns if a course of teacher education is lengthened without the benefit of professional experience [of at least one year] (p. 29)

These issues of the relationships between "theory and practice" and the "overloading" of the preservice program will be returned to later.

While teacher education institutions took up many of the matters discussed and recommended on in the 1978 - 81 reports, there was little happening at the Federal government policy level. As the Federal government controlled the funding, structure and length of initial teacher education, it was able to ensure that few graduates of three year programs could proceed directly to a fourth year and that new four year programs were very difficult to introduce. Certainly there was no support for movement towards a general four year preservice standard or for other recommendations which required Federal government decision and financial support.

The re-allocation of higher education resources *away* from teacher education was a major aspect of the Federal government's higher education policy in the early 1980s. The October 1979 brief to Councils of the Tertiary Education Commission (TEC) had included the requirement regarding teacher education that funding be reduced by 1984 to "approximately 30% below the provided in 1978" (TEC, 1981, p. 3). Amendments to the States Grants (Tertiary Education Assistance) Amendment Act (No. 2) in 1979 provided the TEC with the discretion to "disapprove" (thus denying Federal funds) to certain "new teaching developments", including "The lengthening of a course leading to a professional/vocational qualification" (TEC, 1981, p. 7-8). The February 1981 *Report for the 1982 - 84 Triennium* of the Tertiary Education Commission (TEC) included as Appendix H "The Commission's Response to the National Inquiry into Teacher Education" (TEC, 1981, p. 102-109). It had been forwarded to the Minister in December 1980 and was unequivocal in rejecting the NITE recommendation for four years of preservice teacher, based largely on cost considerations (TEC, 1981, p. 105).

The tone of the whole eight page TEC response to NITE was of weary dismissiveness. NITE was also an obstacle in the way of the TEC's preferred directions for higher education: in its main report the TEC (1981) commented that:

The Commission is . . . concerned that the [NITE] Report may encourage State authorities and other interested parties to plead for delay in implementing plans for the reallocation of

resources in higher education from teacher education to such fields as commerce, computing, applied science and technology. (p. 24)

The Federal government's Review of Commonwealth Functions (RCF) reported in April 1981. To support the policy of moving resources out of teacher education, it proposed the closure or amalgamation of all 30 CAEs, which were primarily concerned with teacher education. Such a move was given support by a teacher surplus in the early 1980s after the severe shortages of the early and mid 1970s. The surplus was a result of a complex conjunction of factors, many associated with the economic slowdown of the time - in particular a sharp reduction in the rate of improvement in pupil-teacher ratios in schools, and a sharp reduction in teacher resignation rates. The number of commencing students in initial teacher education had already begun reducing by the late 1970s (Preston, 1997, p. 11-12).

The NITE and State reports' positive enthusiasm for improvements and innovation in teacher education fell on the barren ground of Federal policy of retrenchment in teacher education.

## HIATUS AND RECONSIDERATION

In 1983 the Federal Minister for Education requested the Commonwealth Schools Commission and the Commonwealth Tertiary Education Commission to jointly review the Commonwealth's roles and responsibilities in teacher education. The Schools Commission began a substantial, consultative review of inservice. The Tertiary Education Commission did little about preservice. After an interim report early in 1985, a Joint Committee was set up in March 1985 to move the project along with better consultation between the two commissions. The commissions reported in August 1986 in *Improving Teacher Education: Report of the Joint Review of Teacher Education* (Commonwealth Tertiary Education Commission and Commonwealth Schools Commission [CTEC/CSE], 1986).

*Improving Teacher Education* discussed the length and structure of initial teacher education. It recommended the continuation of the 3 + e + 1 model for primary teacher education. The reasons given were contradictory. On the one hand, it was argued that the model was educationally superior to a four year course, while, on the other hand, it was argued that the model was cheaper for the Commonwealth than a four year course. Yet, they were adamant that the fourth year should be completed "without undue delay" (CTEC/CSC, 1986, p. 31).

The recommended 3 + e + 1 is only cheaper to any significant extent if a high proportion of graduates of the initial three year course never enroll in the fourth year. If that is the case, the claimed educational advantage cannot be realized. This failure to account for the fourth year BEd when considering the cost implications of options for length and structure of initial teacher education has been common in the policy debate.

The Board of Teacher Education in Queensland drew on the Bassett report and *Improving Teacher Education* in its consideration of length and structure of initial teacher education in its report, *Project 21: Teachers for the Twenty-first Century* (Queensland Board of Teacher Education, 1987). The Board noted that it "holds firmly the view that the minimum period of tertiary study included in the initial professional preparation of teachers should be at least four years" but it did not support a fourth year of preservice education. (Queensland Board of Teacher Education, 1987, p. 108).

In the late 1980s, length of programs had become a sensitive matter at the Federal level as the government maintained its policy position of no increase in length on the ground of cost - grounds, which were to over-ride other considerations.

The 1988/89 Discipline Review of Teacher Education in Mathematics and Science (Speedy 1989) worked within the three year limit for early childhood and primary preservice teacher education. However, the recommendations for minimum allocations of time to mathematics and science in early childhood and primary teacher education programs (Speedy, 1989, p. 19, 22-23, 38-39) were difficult to meet within a three year program unless other important aspects of courses are eliminated.

The Schools Council (1989) was carrying out at the same time a consultative study into "teacher quality". The report of the early stages of that study, *Teacher Quality: An Issues Paper* indicated that "the Schools Council believed that sooner or later four-year training must be a necessary minimum for the great majority of teachers" (p. 21). However, in the preceding paragraph the cost of moving to a four year standard for all initial teacher education had been over-estimated by a factor of about ten. The estimated cost was about \$105 million, compared with the \$14 million indicated by the Working Party of the Australian Education Council chaired by Fred Ebbeck (National Board of Employment, Education and Training [NBEET], 1990a, p. 47), and a similar estimate made independently at about the same time by the Australian Teachers (now Education) Union (Australian Teachers Union 1990). It appears that the

Schools Council counted as three year Diploma in Teaching (or equivalent) commencing students all students commencing diploma or bachelor courses in Education (including four year concurrent courses and the inservice fourth year BEd), and did not take into account the cost of the fourth year of the 3 + e + 1 model. The Council suggested that "more data be gathered on [the costs of moving to four year training for all teachers] and on a scaled implementation related to the supply and demand situation" (NBEET, 1990a, p. x). There was discussion in the paper of the issues of improvement of the school-based aspects of initial teacher education through internships, and the importance of collaboration between stakeholders in teacher education.

The Australian Education Council working party on teacher education, chaired by Dr Fred Ebbeck, took up a very broad brief of initial and inservice teacher education and national recognition of teacher qualifications in its consultations and deliberations in late 1989 and early 1990. The working party developed a preferred model for initial teacher education which involved a three year course followed by a two year part time course during which the student/beginning teacher would be on a 0.5 teaching load (NBEET, 1990a). The model was controversial and received little support. Those who did support it generally recognized its practical difficulties, but emphasized the value of its principles of partnerships between the stakeholders in initial teacher education and substantial school-based teacher education.

In 1990 the National Board of Employment Education and Training (NBEET) prepared an analysis and synthesis of the Schools Council's *Teacher Quality*, the report of the Discipline Review of Teacher Education in Mathematics and Science and the report of the AEC working party on teacher education. That report, *The Shape of Teacher Education: Some Proposals* (NBEET, 1990b), considered the issues of the quality of preservice education and its relation to length and content, the structure of preservice education, financing practicum supervision, induction, a national professional body for teachers, inservice education, and co-operative arrangements. The report outlined some positions in relation to length, including the claim that

There is little, if any, demonstrable benefit to be gained from four years of preservice training, especially if it is more of the same; an appropriate range of diversity exists at present to cater for different needs; and present arrangements are proving to be reasonably cost effective. (NBEET, 1990b, p. 5)

The "proposals" relating to length were as follows:

1. Minimum length of basic preparation be at least a three-year degree meeting the agreed national criteria for such awards.
2. That a degree or other qualification acceptable to any State or Territory . . . be acceptable in any other State or Territory.
3. Extensions of basic preparation be undertaken on the basis of an agreement between the higher education institution, the employing authority/ies, the Commonwealth and other appropriate parties, such as the teachers professional body or union.
4. These extensions should be through integrated programs of employment, study and structured training designed jointly by higher education institutions and the employing authority/ies.
5. Higher education institutions and employers should improve the quality of teacher education courses in the areas of content, prerequisites, course standards and employer involvement in course delivery.
6. Employers to indicate to higher education institutions any perceived difficulties to their courses of teacher training. (NBEET, 1990b, p. 6-7)

In the late 1980s the Higher Education Council of the National Board of Employment, Education and Training was investigating course length and nomenclature in higher education courses. One of the controversial areas was course length of preservice teacher education. The Council suggested in its discussion paper, *Course Length and Nomenclature* (Higher Education Council, 1989), that a three year degree (not diploma) be the standard award for primary and early childhood education, rejecting any move to a four year program as too expensive (p. 7-8). The Council apparently did not consider the fourth year of the 3 + e + 1 model as part of the "standard" or as a factor in the estimation of cost. "For the sake of consistency", the Council suggested that the four year BEd for preparing secondary teachers be replaced by a three year BTeach followed by a diploma in a subject area (p. 8). The Council, reflecting the Government's view, was concerned that an increase in length on one professional field may "flow-on" to other fields. In response, the Australian Teachers Union and others pointed out that for teachers the standard was a four year program - either four years preservice or the 3 + e + 1 model - and thus there would not be a logic of "flow-on" if the final year of the latter model was brought forward to preservice.

## THE END OF TIGHT FEDERAL GOVERNMENT CONTROL

The Higher Education Council's final report on the

issues of course length and nomenclature (and incorporating investigations into graduate studies), *Higher Education Courses and Graduate Studies* (Higher Education Council, 1990), was less specific on most matters than the discussion paper. There was a general statement of reluctance to support any lengthening of professional courses on the grounds of cost and "flow-on" (p. 12), suggesting that any lengthening should only occur with the agreement of all stakeholders (Higher Education Council, 1990, p. 14).

The change between the discussion paper and the final report in part reflected a change in the administration of Federal funding of universities. In 1989 single line operating grants for universities were introduced, and the Federal government no longer had a direct input regarding matters such as length of preservice professional programs. Such matters were now to be broadly discussed during the annual "profiles rounds" negotiations between universities government officers and the Higher Education Council. This general regime of Federal funding of universities has continued in operation, allowing changes in course length and structure to be negotiated (within institutions, as well as between institutions and the government). Lengthening of preservice teacher education courses has often occurred with a reduction in intakes, so that the total student load of the four year program would approximate that of the three year program. The fourth year BEd has often not entered the equation and has continued as an inservice program. Lengthening of courses has not involved paid "employment" or "professional work" as recommended in *The Shape of Teacher Education* and *Higher Education Courses and Graduate Studies* respectively (see above). However, the longer courses often allow time for more extended field experience, and in some cases this has been associated with formal agreements between universities, school authorities and teacher unions covering matters such as supervision and the responsibilities of student teachers.

In the early 1990s around two third of students commencing initial primary and early childhood teacher education throughout Australia were enrolled in three year programs, though many would continue on to a fourth year BEd program on completion of the three year program.

By the mid 1990s it was clear that four years was developing as the almost universal standard for initial teacher education. Yet in its 1996 report, *Professional Education and Credentialism*, the Higher Education Council (1996) appeared to repeat the errors of the Schools Council in its costings for

"moving to the new models" of preservice teacher education. The cost of moving to a four year undergraduate preservice teacher education model was calculated to be \$42.8 million (p. 49), based on the assumption that "the current intakes and total enrollment in undergraduate teaching courses are 14,758 and 35,909 EFTSU respectively" (Higher Education Council, 1996, p. 49).

Yet, at the time there would have been fewer than 5,000 students commencing three year programs in Australia, many of whom would proceed directly to a fourth year (estimated from Table 1, Preston, 1994, p. 8), and in total there were about 14,000 students commencing all initial teacher education courses (including graduate Diploma in Education, and not double counting three year BTeach graduates and one year BEd graduates). The HEC apparently used flawed government statistics, and included many one year, fourth year BEd courses, as well as some Diploma in Education courses, as "undergraduate teaching courses", and did not take account of existing four year programs. On the Higher Education Council's assumptions, but with more accurate mid 1990s enrollment data, the cost estimate would be in the order of \$3 million. Of course it now would be negligible.

Thus, while in practice four year (minimum) preservice programs were becoming almost universal, the policy debate within the Federal government assumed it was a long and expensive way off.

## **AUSTRALIAN DEVELOPMENTS IN AN INTERNATIONAL CONTEXT**

Teacher education has been fairly high on the international policy agenda since the mid 1980s as debates around the "quality of teachers/teaching" and "teacher professionalism" developed. Australia has been influenced by, and in turn has sometimes influenced, international developments in teacher education.

In the early 1980s in the USA, the focus was on school reform concerned with standardization and testing. Yet the debate changed in the mid 1980s, with a series of reports which focused on the quality of teaching and teacher education. The most significant of these were the National Commission for Excellence in Teacher Education (1985), the Holmes Group (1986), and the Carnegie Forum on Education and the Economy Task Force on Teaching as a Profession (1986).

The National Commission for Excellence in Teacher Education, which was sponsored by the American Association of Colleges of Teacher Education and

included members from school authorities, state and national government, school boards, universities/colleges, and teacher unions, included detailed consideration of many qualitative aspects of initial teacher education. Regarding length, the unanimous Commission position was for at least a (four year) bachelor's degree, with strong support for at least an additional year. A group of nine of the seventeen commissioners were less equivocal, stating the following:

We believe that the kind of teacher education program proposed by the Commission cannot take place within the usual four year baccalaureate. A minimum of four years should be devoted to the liberal arts component; a minimum of five years to the total program. (National Commission for Excellence in Teacher Education, 1985, p. 15)

The Holmes Group (1986) was also unequivocal at the time in their advocacy of a five year initial teacher education standard for "Professional Teachers" (p. 75). However, in the following years problems in moving to five year programs (from four year programs) became apparent, and this reform lost priority (Fullan et al., 1998, p. 50).

Initial teacher education in the USA was, and continues to be, generally of at least four years duration, and carried out in universities or colleges with formal approval from the states. The exceptions are emergency licensing in various forms in response to teacher shortages.

The Organization for Economic Co-operation and Development (OECD) Education Committee Working Party on "The Condition of Teaching" was established in 1986, and its work culminated in the report, *The Teacher Today* (OECD, 1990). That report noted the move in many OECD countries from two to three years of initial primary teacher education in the 1970s and early 1980s. The discussion in the report implied that at least four years of initial teacher education study might be necessary. The importance of a substantial grounding in "content" and the practical/pedagogical/professional aspects of teaching was noted, "teachers need a repertoire of teaching strategies that are embedded deeply in content areas" (p. 83). There was also an indication that the specialist skills of primary teachers are equivalent to those of secondary teachers. In more recent OECD education reports (*Quality in Teaching* [OECD, 1994], and *Educational Research and Development: Trends, Issues and Challenges* [OECD, 1995]) arguments and recommendations have a bearing on the length and structure of initial teacher education, and they are considered later in this paper.

The 1994 edition of the *International Encyclopaedia of Education* noted that "the worldwide trend is towards requiring a minimum of a bachelor's degree for programs to prepare teachers", and noted that in 1988 Taiwan increased its minimum requirement for primary teachers from two to four years (Gimmestad & Hall, 1994, p. 5997). In 1989 France undertook a restructuring of initial teacher education with prospective teachers completing an undergraduate degree then undertaking a "highly selective" two year graduate program (National Commission on Teaching and America's Future [NCTAF], 1996, p. 33). Five years of preservice teacher education is required of German primary school teachers (Teaching and teacher development abroad, 1998). A survey of Asia-Pacific Economic Cooperation members (Cobb et al., 1995) found a "common trend . . . toward more extensive preparation for teachers - especially elementary teachers."

### WHY IS LENGTH OF PREPARATION SO CRUCIAL? SOME PERSPECTIVES FROM RESEARCH

There is scant Australian empirical research comparing the outcomes of preservice teacher education programs of varying length. There has been research in Australia on issues such as beginning teachers' views about their preservice teacher education. However, even though respondents often included a mix of those who had completed three year and four year programs (e.g., the often-cited Batten et al., 1991), those results have seldom been reported. Findings of a survey involving 1,322 teachers in their second year of teaching in New South Wales were reported in Hatton et al. (1991). Of the primary teachers who had undertaken a four year, integrated program, 80 per cent saw themselves as "fairly" or "very well" prepared for their initial appointment (mostly in difficult-to-staff schools) by their preservice teacher education course. Only 65 per cent of those who had undertaken a three year course so considered themselves. The score for one year graduate Diploma Education was much lower. The findings for secondary teachers with three compared with four years of preservice teacher education were not reported though there were substantial numbers involved. Hatton et al. (1991) concluded:

The ratings indicate that a four year degree program, with carefully sequenced experience spread over a long period of time, is judged a more adequate preparation. There are also more opportunities for growth, integration, and reflection upon experience than can be incorporated into [a shorter course]. (p. 4)

The relevant research from the USA generally

compares four year graduates (who have completed an undergraduate teacher education program) with graduates of five year programs. It also compares teachers without some key aspect of initial teacher education with those fully eligible for a teaching license (four or more year qualification). For example, Fullan et al. (1998) note that "there is evidence of the benefits of extended programs in terms of placement and retention of new teachers, as well as teaching performance and professional commitment as perceived by graduates, principals and supervisors" (p. 14-15).

The National Commission on Teaching and America's Future, in *Doing What Matters Most* (NCTAF, 1997), reports:

Research confirms that teacher knowledge of subject matter, student learning and development, and teaching methods are all important elements of teacher effectiveness. Reviews of more than two hundred studies contradict the long-standing myths that "anyone can teach" and that "teachers are born and not made". This research also makes it clear that teachers need to know much more than the subject matter they teach. Teacher education, it turns out, matters a great deal. In fields ranging from mathematics and science to early childhood, elementary, vocational and gifted education, teachers who are fully prepared and certified in both their discipline and in education are more highly rated and are more successful with students than are teachers without preparation, and those with greater training in learning, child development, teaching methods, and curriculum are found to be more effective than those with less.

Not only does teacher education matter, but more teacher education appears to be better than less - particularly when it includes carefully planned clinical experiences that are interwoven with coursework on learning and teaching. Recent studies of redesigned teacher education programs - those that offer a five-year program including an extended internship - find their graduates are more successful and more likely to enter and remain in teaching than graduates of traditional undergraduate programs. (p. 10)

The report provides extensive data and references to support its conclusions.

Mark Fetler (1997) reviewed the literature and carried out empirical research in California on the correlations between initial teacher education (generally bachelor's only, compared with a full five year program) and student drop-outs (early school leavers), teacher resignations, and other factors. He referred to findings that "teachers with regular state certification receive higher supervisor ratings and

student achievement than teachers who do not meet standards [are not fully qualified]. Teachers without preparation have trouble anticipating and overcoming barriers to student learning, and are likely to have low expectations for low-income children" (p. 4-5). Moreover, from his own research Fetler found that "[T]he smaller the percent [in a school] of teachers with only a bachelor's degree, the lower the dropout rate. This influence appears to hold independently of poverty, and school size, and location" (p. 10).

The brief account of some research findings and authoritative reviews indicates that the length of initial teacher education can make a significant difference. The significance of this understanding should be appreciated particularly in the light of current research which indicates that teacher education does not make a great deal of difference to the quality of teaching are problematic (e.g., see Dunkin, 1995).

## TEACHERS' WORK

In the following section of this paper, an analysis of what is expected of teachers will be followed by a consideration of the implications of this for the length and structure of initial teacher education, taking account of common and alternative practices in the deployment of beginning teachers.

### What Is Expected of Teachers

The effective work of teachers is deeply professional in that it requires constant situational judgements which draw on high level competencies - complex and dynamic combinations of knowledge, values, skills, and personal dispositions, sensitivities and capabilities (Preston & Kennedy, 1995, p. 39). It is collective and strategic professional work in the sense that the core outcome - the education of students - occurs through the work of many teachers (and others) over many years, and optimal outcomes require complementarity of the work of those teachers (and others) over time and space. This is very different from some other professional work where the core activity is a discrete interaction between professional and client.

Quality teachers' work in schools has always been thus - to some degree. But there have been developments in recent years, which add to the complexity and responsibility of teachers' work. These developments cover *who* should be taught, *what* should be taught, and *how* teaching is best done.

The change in the dominant thinking about *who* should be taught was discussed in the Schools

Council's (1990) *Australia's Teachers: Agenda for the Next Decade*, where it was put simply as an "increasing tendency for the teaching workforce to become teachers of all rather than instructors of the able" (p. 29). This focus on teachers' professional responsibility to all students, not just the "already taught" or "easily teachable", places *teaching* at the centre of teachers' professional work. It means that teaching must vary according to particular students in particular circumstances, rather than expecting students to respond to a standardized presentation of content. Thus a responsibility for all students implies an on-going need for high level professional judgements, rather than the routine application of methods and materials developed elsewhere. It requires deep knowledge of learners - background knowledge about learning differences, difficulties and disabilities; about cultures and communities; as well as the capacity to learn about the individual students and their communities in every new situation. It requires the "pedagogical content knowledge" to transform and adapt content knowledge to each particular student or group of students. Being "teachers of all" also implies a responsibility and a consistent and ethical commitment to all students and their communities.

Changes in *what* should be taught are most striking in the incorporation of the "key competencies" (or similar) into the school curriculum. The key competencies highlighted in recent Australian literature are seven:

- collecting, analyzing and organizing information
- communicating ideas and information
- planning and organizing activities
- working with others and in teams
- using mathematical ideas and techniques
- solving problems
- using technology

Some of these may have been part of the curriculum in some way for a long time. What is new is the explicit, integrated approach, which is having an effect across the curriculum at all levels.

Changes in *what* is being taught also include an emphasis on content, which differs from that of the past. All teachers, at the secondary as well as primary level, have a responsibility to teach literacy and numeracy - to all students. All teachers also have responsibilities in areas such as Indigenous education - teaching Indigenous students, and teaching all students Indigenous studies. Primary teachers have responsibilities, which they cannot evade, across the key learning areas, though provision of specialist teachers differs between schools and systems.

The nature of the key competencies is such that central attention must be given to *how* teaching is done, and the appropriate pedagogy may be very different from traditional practices. Teachers need to work together in flexible new ways. The responsibility to teach all students means that pedagogy needs to be sensitive and responsive to individual needs. New technology can significantly change many aspects of teachers' work. Teachers not only need to know how to use the technology in their teaching and other professional work, but be able to make the judgements about its optimal use - how and when it should be used. They also need to be able to teach students its optimal use. The teachers and their students also need the understanding and skills to take advantage of other new or advanced technology as it becomes available.

### Structure of Initial Teacher Education

The previous sections of this paper have put the argument for substantial initial preparation of teachers based on the knowledge and capabilities required for effective beginning teaching and a potentially successful teaching career. Much of this was agreed by the advocates of the 3 + e + 1 model of initial teacher education in the late 1970s and 1980s. Certainly the case for even more substantial initial teacher education is stronger now, but the arguments for 3 + e + 1 still need to be addressed because of the influence they have held in policy circles, apparently even quite recently in the Higher Education Council.

There are two pragmatic issues, and the substantive, pedagogical comparison between the ideal 3 + e + 1 model and four years of preservice teacher education. The pragmatic issues are, first, whether the 3 + e + 1 model ever existed in practice for substantial numbers of students/teachers and, second, the effect on the quality of education for school students of the 3 + e + 1 model as compared with the effect of a four year preservice model.

In practice it appears that the ideal 3 + e + 1 model usually ends up as a simple three year initial teacher education model. There is much evidence for this. Firstly, it appears that many teachers with three year qualifications have not enrolled in the fourth year program. Commencing student numbers in the fourth year BEd appear to have been less than half the commencing numbers in three year programs some years earlier (poor DEET [1991; 1992]/ DEETYA [1997] statistics make only rough estimates possible). Secondly, ending (or lowering) the "three year barrier", which prevented movement to the top of the salary incremental scale and promotion for teachers with only three year qualifications, was a major

industrial issue for teachers in most jurisdictions in the late 1980s and early 1990s, achieved in South Australia in October 1990. Thirdly, if the fourth year is taken up, it is usually quite a few years after the preservice program. Enrolment statistics for 1990 support this. In that year more than 70 per cent of students commencing a three year preservice primary teacher education program were under twenty years of age (through the 1980s it is likely that a higher proportion of commencing students were under twenty), while almost half of those commencing a "post-initial" bachelor's in primary education were thirty or over, and many of the younger ones may have enrolled in the course directly after completing the three year program. Finally, the *inservice* fourth year BEd has been seldom systematically related to an initial three year program or the early period of the teachers' professional practice - it has been a genuine continuing professional education program involving updating, enriching and further developing professional knowledge and competence, rather than a completion of the initial phase of professional preparation. In short, all of these is evidence that, while 3 + e + 1 was a serious contender in the policy debates, it has not really existed in practice.

The second pragmatic matter is the quality of education provided to school students by the 3 + e + 1 model, even assuming that the program does exist in the ideal form of completion of the fourth year within about five years of initial employment as a teacher. Current practices of teacher employment around Australia (and internationally) tend to place beginning teachers in difficult and demanding situations - often casual or short term employment, or in the hard-to-staff schools which experienced teachers do not find desirable because of geographic remoteness, the inherent difficulty, or low status of teaching in such schools. These beginning teachers tend to seek, and obtain, transfers out of these schools after several years - before they would be expected to have completed the fourth year of an ideal 3 + e + 1 model. Students who are disadvantaged in the schooling system in various ways - low income communities and low resource schools, geographic isolation, and so on - are disproportionately taught by beginning teachers in these harder-to-staff schools. The schools of the educationally and socially advantaged (such as high fee nongovernment schools) tend to employ teachers with proven experience and full qualifications. Thus the competence of teachers during the "experience" period of the 3 + e + 1 model is crucial in terms of the quality of teaching for those students who are already likely to be disadvantaged, yet by definition the teachers are not fully prepared because they have not completed the final phase of their initial teacher education. The likely much lower quality of

education for any school students taught by teachers before they have completed the fourth year is a major argument against the 3 + e + 1 or any three year preservice model. While there is always room for improvement in the deployment, support and supervision of beginning teachers, it is administratively very difficult to ensure that school students are in no way disadvantaged by a 3 + e + 1 or other three year preservice model of initial teacher education.

The substantive arguments related to the quality of initial teacher education for and against 3 + e + 1 as compared with four years preservice must take account of the assumed, existing, and possible pedagogical and curriculum practices in initial teacher education programs, as well as the intended outcomes of those programs. In brief, supporters of 3 + e + 1 generally believe that there are marginal diminishing returns in adding more content to courses - the three year courses are already "overloaded" with content which the students have difficulty coming to grips with in the absence of sustained practical experience. There is also the argument that much of the content considered necessary at one time would be redundant and replaced with new knowledge or issues in the future. From this perspective, the curriculum in the first higher education phase of the course is an aggregation of units or subjects, with no particular coherence or deep structure. In particular, most of the units are not integrated with the practical field experience, and have a traditional "academic", unpractical and "theoretical" orientation. Field experience in this preservice phase is primarily to ensure survival in the early period of teaching, providing only "basic pedagogical skills". It is the comprehensive teaching experience of the beginning teacher that would provide the basis for the "fusion of context and content". After a year or more teaching, the fourth year program would bring it all together. In the traditional 3 + e + 1 model, the three phases of the program are distinctly serial, discrete in time.

The next step then is to bring the fourth year into the initial sustained experience period, but not changing the first three years. As noted earlier, this is the proposal of the 1986 *Improving Teacher Education Report*, and there are similarities with the preferred option of the 1990 Australian Education Council working party on teacher education (NBEET, 1990a). A further step is to connect the fourth year to the preservice program (to consider it a "course lengthening"), putting a condition on such course lengthening that it could only occur if there is "an integrated program of professional work and further study" developed within the framework of a

partnership between universities, school authorities, and the teaching profession (e.g., Higher Education Council, 1990; NBEET, 1990b). This model still leaves the first three years of the program untouched.

Some of those developing and implementing initial teacher education programs through the period to the early 1990s (for example, drawing from Dewey [1916]) did seek coherence and integration. However, in the early 1990s, the principles of coherence and integration, especially the deep integration of "theory" and "practice" and integration of generic understandings and specific instances, have become widespread and explicit. The basis of that coherence and integration is a vision of teachers as committed, effective practitioners (as highly professional in the sorts of ways outlined earlier), not individuals who "know" an aggregation of matters, and have a collection of skills not particularly connected with the more significant things that they "know". The new course objectives tend to focus on the development of effective practitioners, deriving the curriculum and pedagogy of the course explicitly from a practical understanding of how that development could best be achieved in the context of the university, the student teachers, and the situations in which the graduates are likely to find themselves as beginning teachers. This contrasts with the older models of course objectives which listed specific material to be covered - almost as an end in itself. There is also the application of constructivist or similar learning theories. In the new courses there is a range of perspectives or philosophies involved, incorporating notions and practices of active learning, contextual learning, group learning, inquiry and reflection and, in some cases, the application of professional competency standards or problem-based approaches (see, e.g., Beattie, 1997; Crawford & Deer, 1993; Hager, 1996; Marland, 1993; Preston & Kennedy, 1995). The overall model for such courses is developmentally integrated. For example, Hager (1996) describes a three level course structure where "each of the levels is to be thought of as *nested in*, and as a prerequisite for, the next level" (p. 241). (Emphasis added.) "Nested in" implies a different relationship between elements than the strictly serial structure of the 3 + e + 1 model and its successors.

The integration of specific instances, such as understanding the circumstances and learning needs and styles of students from a particular recent refugee ethnic group with generic understandings - notions of diversity of students and their communities in the context of developing generic capabilities (developing relationships with students and parents) helps to overcome the problem of the "overloaded curriculum." Understanding and being able to take

action in relation to specific cases is part of developing the broader understandings and capabilities, which are necessary for effectively responding to new specific instances in the future.

Coherence and integration, especially in the context of the common practices of deployment of beginning teachers in Australia, entail the completion of the initial program preservice. It has now been generally accepted, at least by the profession, that any course involving at least four academic years pre-employment could provide an adequate preparation for employment as a teacher. Quality induction, support, and continuing professional education are still necessary for the novice beginning practitioner, however well prepared, to develop full professional expertise, but that is another issue.

## CONCLUSION

Preservice teacher education has moved to a general (but not yet universal) four year standard in the face of indifference, even hostility, from successive Federal governments and authorities and some school authorities. Yet, it is clear from international benchmarks, research outcomes, the changing nature of teachers' work, and developments in the pedagogy and curriculum of initial professional education that this is the preferred direction. A recent Federally-funded, collaborative project, the National Standards and Guidelines for Initial Teacher Education project, will ensure that the general issue of quality in teacher education is not ignored. The project report (Adey, 1998) provides a comprehensive set of recommendations that could see national accreditation and standards as a key platform for developments in the future. The lessons from the review outlined here are clear: if gains are to be made in improving teacher education, the commitment and leadership of teacher educators are essential; so are the involvement of other stakeholders and a supportive policy environment.

## NOTES

<sup>1</sup>This paper is an edited extract from *Review of the three-year minimum preservice teacher education requirement of the Teachers Registration Board of South Australia*, prepared by Barbara Preston for the Teachers Registration Board of South Australia, May 1998. The views expressed here are solely those of the author.

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