Looking back at 100 years of physiotherapy education in Australia

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It's not whether we have learned from history—we have but our awareness of what we have learned. Table 1. First physiotherapist Heads of School.

John Woods

Physiotherapy education in Australia has evolved, like the education of many other health care professions, from an apprenticeship often involving hospital-based training to the current day where it is a well recognised, high-demand degree program situated in the tertiary education sector (Higgs et al 1999). This remarkable transition has occurred in just 100 years. During this time, professional educational programs, many of which are intimately linked to the wider development of the profession, have undergone considerable development and growth. With a centenary of professional growth to celebrate, the intent of this editorial is to provide a brief overview of the major landmarks in physiotherapy education and to celebrate some of the visionary physiotherapy leaders who have made significant contributions to physiotherapy education in this country.

Elements of physiotherapy practice can be traced to ancient China, Greece and Rome, with significant developments occurring in Sweden and the Netherlands in the nineteenth century. Australian physiotherapy has its origins in the United Kingdom (UK) where, in 1894, an Association was formed by members of its precursor discipline—massage therapy (http://www.csp.org.uk/director/about/thecsp/ history.cfm). The growth of the profession in countries such as Australia, with strong historical and migratory links to the UK, followed (Turner 2001). Historical records indicate that massage therapists, who emigrated from the UK to Australia, were instrumental in the development of the profession in Australia (McKenzie and Facer 1980, Twomey and Cole 1985).

Massage, in the latter part of the nineteeth century, had gained credibility as being a respectable therapy (Martyr 2004). For example, Eliza McCauley undertook anatomy studies, including dissection at the University of Melbourne, and practised massage at The Melbourne Hospital. By 1905 small societies had formed in Victoria, NSW and SA. Late in the year, a meeting was convened in Melbourne to discuss the possibility of forming a formal association to be recognised throughout Australia. Mr Teepoo Hall and Dr John Springthorpe are attributed as the instigators and this meeting laid the ground-work for the formation of the Australasian Massage Association (AMA) in February 1906 in Victoria, New South Wales and South Australia (Forster 1975).

The first official education program, two years in duration, started in Victoria. The program of study was drawn up by the AMA and approved by Federal Council in May 1906. The program required a first year of study of anatomy,

State	Name
Victoria	Miss Patricia Cosh
South Australia	Miss Elma Casely
Western Australia	Mr Tom Lyall
New South Wales	Miss Janette Benn
Queensland	Miss Aura Forster

physiology, theory and practice of medical gymnastics and a course of anatomical dissections. In second year, students undertook anatomy, elementary medical electricity and the theory and practice of massage. In addition, they completed a second course on dissection and attended, during this second year, a recognised hospital for clinical training (page 2a AMA Branch Records). Educational programs, based on this curriculum, started in New South Wales (NSW) and South Australia (SA) in 1907 and 1908 respectively (Forster 1975). The three educational programs in NSW, SA and Victoria were all affiliated with university medical schools and their teaching hospitals. The first award was a Diploma of Massage from the AMA or later from the relevant registration board.

It is important to recognise that in the establishment of these three training programs the early pioneers had the wisdom and foresight to plan a two year course from the start, including all relevant subjects such as remedial exercise and electricity, which was taught by expert practitioners. These original courses were all associated with the Universities in the three States and were not completely hospital based, as in England, thus giving physiotherapy a greater potential to develop as a highly skilled and unified profession.

Students entering the massage courses in the early days were mainly female with the education overseen by medical doctors and anatomists, most commonly male. As the number of qualified masseuses increased, women gradually took on leadership roles in education. Pioneers included Mrs Kate Gilmore Reid and Ms Elma Casely MBE in South Australia; Ms Eliza McCauley and Ms Edith Pratt in Victoria, and Miss Lily Armstrong in NSW. These early educationalists demonstrated great dedication and passion; they received poor remuneration often working in difficult and cramped conditions (Forster 1975, APA SA Branch Archives). Physiotherapists eventually took on leadership roles in various states. The first physiotherapist Heads of School are presented in Table 1.

During the early days, there was no official training program in Queensland or Western Australia. However in

Table 2. Growth of the early physiotherapy programs in Australia.

SA	
1908	Diploma in Massage, Medical Gymnastics and Electricity, AMA
1945	Diploma of Physiotherapy, Adelaide University (Associates of)
1970	Diploma of Technology in Physiotherapy, SAIT
1978	Bachelor of Applied Science in Physiotherapy, SAIT
1991	Bachelor of Applied Science in Physiotherapy, University of South Australia
2003	Bachelor of Physiotherapy and Masters of Physiotherapy (GE), UniSA
WA 1951	Diploma of the Physiotherapists Registration Board of WA, School of Physiotherapy at RPH – moved to the Shenton
	Park Campus of RPH in 1953
1970	Diploma of Technology in Physiotherapy, WAIT
1987	Bachelor of Applied Science in Physiotherapy, WAIT. In 1987 WAIT becomes Curtin University of Technology
1991	Bachelor of Science (Physiotherapy), Curtin University of Technology
2001	Bachelor of Science (Physiotherapy) and Masters of Physiotherapy (GE), Curtin University of Technology
QLD	
1938	Diploma of Physico-therapy, UQ
1951	Degree programs in physiotherapy (e.g. BAppSc) as well as Diplomas offered by UQ
1959	Degree named Bachelor of Physiotherapy, UQ
2001	Bachelor of Physiotherapy and Masters of Physiotherapy Studies, UQ
NSW	
1907	Diploma of Massage, Medical Electricity and Gymnastics, University of Sydney
1969	Bachelor of Science in anatomy, University of New South Wales, pre-requisite for Graduate Diploma in Physiotherapy,
	NSW College of Paramedical Studies
1973	Diploma in Physiotherapy, NSW College of Paramedical Studies
1976	Bachelor of Applied Science (Physiotherapy), Cumberland College of Health Sciences
1991	Bachelor of Applied Science (Physiotherapy), The University of Sydney
2002	Bachelor of Applied Science (Physiotherapy) and Master of Physiotherapy, The University of Sydney
VIC	
1906	Diploma of Massage AMA, The University of Melbourne, Royal Melbourne Hospital
1923	Diploma of Massage AMA with Masseurs Registration Board (MRB) as course authority
1933	Diploma of Massage
1940	Diploma of Physiotherapy
1959	Diploma of Physiotherapy revised course, broader clinical education
1962	MRB Diploma 'Physiotherapy School of Victoria', accommodated Fairfield Hospital, then at Lincoln House
1973	Bachelor of Applied Science (Physiotherapy), Lincoln Institute of Health Sciences
1990	Bachelor of Applied Science (Physiotherapy), La Trobe University
1991	Bachelor of Physiotherapy, The University of Melbourne
1994	Bachelor of Physiotherapy, La Trobe University
1998	Doctor of Physiotherapy, La Trobe University
Key	
	Australiasian (later Australian) Massage Assasiation

- AMA Australasian (later Australian) Massage Association
- GE Graduate entry
- MRB Masseurs Registration Board
- SAIT South Australian Institute of Technology WAIT West Australian Institute of Technology
- RPH
- Royal Perth Hospital The University of Queensland UQ
- UniSA University of South Australia

Table 3. Entry level programs offered in Australia 2006.

Program	University	Length of program (Years)
Bachelor degrees		
Bachelor of Physiotherapy	Charles Sturt University	4
Bachelor of Science (Physiotherapy)	Curtin University of Technology	4
Bachelor of Physiotherapy/Bachelor of Exercise Science	Griffith University	5
Bachelor of Physiotherapy	James Cook University	4
Bachelor of Physiotherapy	La Trobe University	4
Bachelor of Physiotherapy	Monash University	4
Bachelor of Physiotherapy	The University of Melbourne	4
Bachelor of Physiotherapy	The University of Newcastle	4
Bachelor of Physiotherapy	The University of Notre Dame Australia	4
Bachelor of Physiotherapy	University of South Australia	4
Bachelor of Applied Science (Physiotherapy)	The University of Sydney	4
Bachelor of Physiotherapy	The University of Queensland	4
Master degrees (graduate entry)		
Master of Physiotherapy	Canberra University	2
Master of Physiotherapy	Curtin University of Technology	2
Master of Physiotherapy	Griffith University	2
Masters of Physiotherapy	University of South Australia	2
Master of Physiotherapy	The University of Sydney	2
Masters of Physiotherapy Studies	The University of Queensland	2

1938 approval was granted for a program to commence at the University of Queensland (Martyr 1997). This program led to the award of a Diploma of Physico-therapy which was quickly changed to a Diploma in Physiotherapy the following year with graduates being eligible for registration as masseuses. Thus, Queensland is the only state in Australia in which the training of physiotherapists has always been formally conducted by a university. The development of this program is attributed to the hard work and dedication of Dr Harold Crawford, Professor Goddard, and Ms Stoddard who lobbied the University of Queensland tirelessly for the establishment of a program throughout the 1930s.

In Western Australia, whilst there were practitioners of massage therapy prior to the 1950s, the earliest official recognition of the profession was the Physiotherapists Act of 1950, prompted by the poliomyelitis epidemic during the 1940s. The Act established the Physiotherapists Registration Board and included responsibility for educating and examining physiotherapists. The Western Australia School of Physiotherapy was established in 1951 and offered a Diploma program in physiotherapy. The inaugural head of school, Tom Lyall, and his successor John Keating were both UK-trained physiotherapists.

In 1933 a three year course was introduced in Victoria and subsequently, the curriculum for all physiotherapy education programs extended from two to three years duration to incorporate more muscle re-education and clinical work (Hammond, APA SA Branch archives). This was significantly influenced by the poliomyelitis epidemics of the time and the pioneering work of Vera Carter (Bolwell, APA Vic Branch archives). The demand for masseuses increased greatly during World War II and many masseuses enlisted for military service (Forster 1975, Wilson 1995). During this time, the Australian Massage Association was renamed the Australian Physiotherapy Association and educational programs changed their names to physiotherapy (Wilson 1995 p. 15).

such The demand for health professionals, as physiotherapists, grew following World War II such that by the mid-1960s due to a series of Government reforms the education of physiotherapists, along with other professions, was redirected to the major tertiary education sector and the qualification transitioned from a diploma to a degree, usually a Bachelor of Applied Science (Twomey and Cole 1985). To accommodate these new degrees, Colleges of Advanced Education (CAEs) and Institutes of Technology were opened to house vocationally-orientated courses such as physiotherapy (Cameron 2001). Programs were increased to four years to accommodate a more solid foundation in biological and pathological sciences, and an increase in the teaching of behavioural sciences, whilst still retaining an emphasis on the acquisition of professional skills and clinical experience (Hammond, APA SA Branch archives, Forster 1975, Higgs et al 1999, Twomey and Cole 1985). Table 2 summarises the major changes to the early programs.

The program in Queensland, however, remained at the University of Queensland. Aura Forster, the first physiotherapist to be appointed Head of the School of Physiotherapy at the University of Queensland, fought to have the course retained within the university during the 1960s as other programs moved into Institutes of Technology. This led to Queensland having the only University-based program allowing the development of postgraduate studies. Thus, for several years, the University of Queensland was the only institution in Australia where a PhD could be obtained in the discipline of physiotherapy; Margaret Bullock obtained the first PhD in Australia in 1969. In the last three decades in particular, a research culture and PhD programs have grown and flourished in several Australian universities, ensuring Australia's international leadership in physiotherapy research.

For the first 75 years of the profession, physiotherapists worked under the direction of medical practitioners. However, a landmark article in 1975 raised the issue of physiotherapists working autonomously (Galley 1975, 1977). This was strongly supported at the time when 'the growth in knowledge and the increased breadth and depth of clinical skills and responsibility which graduates now have and accept, equips them to examine, treat and assess patients from a wider area of referral than in the past' (Hammond et al 1976 p. 53). In 1976, the APA rescinded the Ethic requiring referral for treatment by a medical practitioner.

Despite attempts to ensure a standard curriculum in the early 1900s, education programs developed relatively independently. Prior to the full incorporation of physiotherapy into tertiary education, physiotherapy registration boards had responsibility for awarding the qualification in most States. The boards retained accreditation responsibility until the Australian Council of Physiotherapy Regulating Authorities (ACOPRA) began this function following the development of the Australian Physiotherapy Competency Standards in 1994 (ACOPRA 2005). During the 1970s interaction between the program leaders enabled exchange of educational ideas and in 1994 the first of the biannual Australasian Heads of Schools of Physiotherapy meeting was held. This continues to support educational programs throughout the country.

In 1987, following the construction of the new national higher education system, CAEs and the like were gradually amalgamated into Universities so that by 1991 there were no CAEs or Institutes of Technology (Dawkins 1988). Thus, in the early 1990s, the training of physiotherapists moved into the university sector. At this time, there were six physiotherapy schools: two in Victoria, one in SA, one in WA, one in NSW, and one in Queensland. However by the start of the 21st century, there was a rapid increase in numbers as five new universities commenced physiotherapy entry level degrees (Table 3). An initial attempt to consider graduate entry programs in 1990 was not supported by the APA, but later endorsement at the end of the 20th century saw the introduction of the fast-track graduate entry degrees as an additional pathway to an entry level physiotherapy qualification (Table 3). At the start of this centenary year, another two universities (Monash University and James Cook University) will commence entry level degree programs bringing the total number of entry level degrees being offered in Australia to 18.

Increase in the number of programs has not been matched by growth in the health sector. Thus there are concerns that entry level physiotherapy students may not have adequate access to all key areas of physiotherapy practice during their education programs (http://www.acopra.com. au/accreditation/index_html). How the profession and the universities deal with this mismatch in resources and requirements, in future years, is pivotal to the ongoing education of physiotherapists in this country. Postgraduate education programs in universities developed from the three month Vertebral Manipulation course, run largely by Geoffrey Maitland MBE under the auspices of the APA in Adelaide from the mid 1960s. Due to the vision of the heads of schools at SAIT (Marie Hammond) and WAIT (Dr Jack Gilbert) and the hard work and commitment of Geoff Maitland and Patricia Trott in Adelaide and Brian Edwards and Lance Twomey in Perth, a Graduate Diploma in Manipulative Therapy was offered in both Perth and Adelaide for the first time in 1974. Sydney joined the ranks in 1979, and Melbourne in the early 1980s, and gradually postgraduate programs, initially in manipulative physiotherapy but later in other fields, were developed around the country. The first postgraduate Master degree was offered in 1990 at The University of Queensland and the first Professional Doctorate in Physiotherapy program was offered by La Trobe University in 1998.

Physiotherapy in Australia has become a strong academic and clinical discipline. Several Australian universities have world renowned research programs whose outcomes are driving teaching and learning to ensure graduates are skilled in contemporary evidence-based clinical practices. Challenges facing university educational programs today include curriculum development to incorporate the ever changing and expanding scope of practice of physiotherapy to ensure graduates have entry-level competencies for immediate registration to practice as first-contact practitioners, and the concurrent financial challenges in the health and education sectors which is impacting on the delivery of clinical education. These challenges must be met by the profession through strategic activities and innovative and creative changes to continue the strong history of physiotherapy education in this country.

The current status of physiotherapy within this country and internationally reflects the effort, wisdom, and foresight of some inspirational leaders who have helped shape and accommodate this profession in an ever changing landscape. Reflecting on the past can often provide directions for the future. Physiotherapy education is intimately bound with the developments of the profession as a whole, and our history behoves us all, students and practitioners alike, to fulfil the promise and hope of those who have achieved so much for this profession in the past.

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