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Paramedic education: developing depth through networks and evidence-based research - reflections twelve months on

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Introduction

The research project; *Paramedic education: developing depth through networks and evidence-based research* was funded by the Australian Learning and Teaching Council (ALTC) in 2007. The ALTC (formerly Carrick Institute) was established by the Federal Coalition government to encourage research and innovation in university based education. A requirement of funding in the discipline based category is evidence of collaboration between universities. Nine universities were involved in the paramedic project with Flinders University as the lead team. These were; Ballarat, Charles Darwin, Charles Sturt, Edith Cowan, Monash, Queensland University of Technology, University of Tasmania, and Victoria University. Planning for the research began at the Australian College of Ambulance Professionals Conference in Adelaide 2006 with subsequent reporting at the ACAP conference in 2008. The primary aim of the project was to investigate the following two questions:

i) *What can be learnt from international pre-hospital service providers, professional associations, universities and the research literature that might contribute to meeting the future educational needs of paramedic graduates in Australia?*

ii) *What international and national models of collaboration and working relationships between ambulance service providers, professional associations and universities offer best practice examples for fostering an ideal working relationship for the education of future paramedics?*

The third aim was to formally establish a paramedic academic network to foster the exchange of educational ideas, and to further collaborative educational practice within the tertiary sector. This was achieved with the inaugural meeting in September 2008 in Melbourne hosted by Helen Webb from the University of Victoria and chaired by Tim Pointon (Flinders University) and Brett Williams (Monash University).

The following discussion of ideas draws on the findings detailed in the report in the light of twelve months reflection. Much has happened in this twelve months to consolidate or sharpen my thinking. These events include the Bradley Review of Higher Education, recent developments at Federal and State level around the development of clinical practice, the Health and Hospital Reform Commission, discussion within ACAP and the Council of Ambulance Authorities (CAA) on accreditation and registration, the recent Melbourne forum on professionalism hosted by this journal and the professional rate cases in South Australia and the ACT. The views expressed below draw in these as well as the report to flesh out some of the major issues.

Curriculum of the future

Focus group and interview discussion on curriculum predictably dealt with the tensions created for the paramedic profession as it establishes itself in the university sector, and the creation of new roles in response to the health workforce labour shortage. Like many professional university programs it is difficult to attract paramedic academics into the system given the high workload, the pressure on them to develop teaching programs, the need for paramedics to establish their own academic research careers, and the salary differentials. Predictably the various Council of Australian Government (COAG) reforms, including the proposals for national registration and accreditation of health professions, and the work of the National Health Workforce Taskforce were a backdrop to this study, however, we were unable to identify how these might directly impact on future curriculum beyond ideas already well incorporated into curriculum such as the need for flexible, evidence-based knowledge that prepared graduates for work in a variety of contexts. What these government reforms do highlight is the current state of flux in the higher education sector for health professional education and the need to monitor the impact of government led reform. This remains a continuing backdrop for the profession.

The question of how a university curriculum might nurture paramedic professional identity was one of the major issues of the study. This was a surprising finding from my perspective. Having spent sixteen years working as a sociologist in the School of Nursing and Midwifery at Flinders I was of the view that paramedics had managed to avoid the introspection that troubled nursing academics in the late 20th century as they worked to establish themselves as a profession with a distinct identity separate from Medicine. Paramedics either robustly aligned themselves with Medicine or as separate from allied health and nursing. The profession is not as gendered as Nursing or Midwifery and community status is high. Their identity seemed clear.

The Charles Sturt research team took the lead on this aspect of the project and used the concept of *signature pedagogies* to explore what or how paramedic curriculum was distinctive and how it might highlight the uniqueness of the profession. As we note in the report, 'A distinctive model of education is summed up by Shulman[1] in the idea of a "signature pedagogy" used to describe the attributes, strengths, characteristics and unique concerns that *set one discipline apart from others in higher education*' (emphasis added). Shulman further defines a robust signature pedagogy as producing an autonomous professional who can practice in an environment of uncertainty while at the same time providing opportunity for student/practitioners to 'recognise the social and moral implications of their decision-making and practice'. [2, p. 19]

The key terms above are *practice in an environment of uncertainty* and *autonomous professional… set apart from others*. This uncertainty is structural and comes from the various reforms alluded to above, including the emergence of new roles, not just for paramedics, but for Nurse Practitioners and allied health professionals, and to the call for multidisciplinary, transdisciplinary and interdisciplinary care to be mandatory and a condition of accreditation and registration. The call to universities to produced multidisciplinary classrooms as evidence of best practice, but also as a result of economic constraint, comes at an awkward time for the paramedic profession. This is clearly demonstrated in one of the interviews with academics teaching in paramedic programs in the UK at post-graduate level. Exemplary in its approach to interdisciplinary collaboration the University of London Masters program educates Nurse Practitioners, Enhanced Paramedic Practitioners and Physician Assistants in the one program, and in the same classroom.[3] For me this raises questions about how each profession differs, and why a health service would employ a Nurse Practitioner over an Enhanced Paramedic or a Physician's Assistant? Does multi-skilling or role substitution transform the practitioner; be they nurse or paramedic, into something other than a paramedic, into the new transdisciplinary generic health professional? In Britain where salaries and career structures coincide for all three groups the issues are not as acute, but in Australia this lack of alignment may see one profession dominate the enhanced practitioner field. Other identity issues that emerged in the research included a strong dislike for the term 'allied health professional' as a descriptor of paramedic despite the fact that increasingly government agencies are using these categorisations.[4] While paramedics debate the use of this term they miss out on funding. It may also explain the most recent positioning of paramedics in the Australian socio-economic index of occupations at a low 58% compared to medicine at 100%, and allied health and nursing at around 80%.[5] The low prestige status of Paramedics may well be because of their refusal to be categorised within an existing typology.

Nursing and Midwifery forged their identity by separating themselves out from Medicine in the late 20th century. Paramedics are working in a more complex environment in the early 21st century and have no intention of positioning themselves in opposition to organised medicine. Further, as noted above the barriers to professional identity, and the development of a signature pedagogy, are structural, and linked to government attempts to harness the health professions to a reform agenda. These issues differ from the ones Nursing experienced when it first entered the tertiary arena. However, I would also argue there has also been a cultural shift. Identity formation for the individual or for a program of study, has always been a key cultural trait, but for individuals it is now understood to be created by the self as part of a do-it-yourself biography, rather than simply through membership of a group such as a socioeconomic class, church, or club.[6] Identity is now individually constructed. The do-it-yourself individualism of contemporary identity allows for boundless possibilities, but it also produces separatism from community. The enigma of the paramedic profession is that it is highly communional, with identity forged in high levels of workplace collaboration, high union membership and a strong sense of professional culture. In my view the contemporary paramedic student is caught between the strong ties of membership to a defined corporate group, and their own expectations that they must create their own identity in a highly individualised world. This sense of self-responsibility is reinforced within the profession by the barriers to employment, the most controversial being psychological testing and what many professional paramedics in the focus groups identified as 'lack of road readiness'. For the graduate student there is a tension between the academic curriculum and the need to scale the barriers to employment. I would argue that these barriers are perceived by students to be over-come through projections of the self- or self promotion, rather than solely by academic performance. It is this tension that partly explains student rejection of all but the very

technical aspects of the curriculum. This rejection makes it difficult for paramedic academics to establish a paramedic signature pedagogy - or perhaps this is what it is!

Debate over what constitutes 'road readiness' is at the core of the report. In the analysis of focus group interviews we reduced it to an issue of maturity, which once again throws the onus back on the student to project themselves as worthy of employment. The dimension that at first glance seemed to be missing from the paramedic signature pedagogy was what Shulman[2] suggested were the ethical or moral preparation to serve communities and individuals in times that are perilous and unpredictable. These are the supporting sciences of law, ethics, politics, health psychology, sociology and social epidemiology. What is evident in the report is that these knowledge domains are clearly embedded in the curriculum, but how these disciplines contribute to creating a road ready and mature graduate is not clearly articulated, understood or accepted.

We note in the report that Australian programs appear to give more attention to the supporting sciences than the small number of British programs examined[7,8] and Canadian paramedics who were interviewed certainly lamented the lack of social sciences in their curriculum. In the British university education programs we examined the supporting sciences tend to be integrated into existing paramedic clinical topics, the courses are shorter in duration, or they courses provide significantly more clinical practice for students and thus reduce time for theory and supporting sciences. Both the course as Kingston/St George's University and at Sheffield Hallam University have significantly more clinical than Australian programs, but are shorter in duration.[7,8] Analysis of the curriculum in Australian based paramedic programs, and reported in the appendices; tend to have the supporting sciences as standalone topics. This is both a strength and a flaw. A standalone approach strengthens the theoretical component of the supporting sciences. An example helps to illustrate the point. The Flinders University curriculum includes a topic on social epidemiology with a strong theoretical basis in sociological theories based on the social determinants of health. It could be argued that this topic provides a secular rationale for understanding and compassion towards the disadvantaged. Importantly the topic provides an intellectual tool for theory building, for understanding stigma, prejudice, and the profile of patient load that should allow graduates to transfer this learning to a range of situations across their professional careers.[9]

This theoretical approach should facilitate sound transfer of learning in the field. However, this principle is confounded by the failure of the supporting sciences to provide experiential learning that applies the theoretical work to practice. This occurs in two domains. First, in the report we note the responses of non-paramedic academics who lamented their lack of knowledge of paramedic work. This is a major deficit in the preparation of those academics who teach the supporting sciences and it requires a remedy. Some universities have overcome this to an extent through the employment of paramedic social scientists. The second deficit, not evident in the report, but an issue worthy of future research, asks to what extent do those academic paramedics teaching clinical skills, reveal in their teaching sessions, how the performance of technical skills is embedded in their own deep humanness, care and compassion for clients and families? In short there is a gap between those who teach the supporting sciences and the paramedic academics who teach the technical skills. I would argue that were paramedic academics and the social scientists to understand in a deeper way the curriculum of the 'other' and reveal this in their teaching, students would be able to integrate both sides of the curriculum more effectively.

Relationship with industry

The second major area for investigation was the relationship between industry, the profession and university programs. The paramedic profession in Australia is unique in this regard.

Course coordinators may argue that they are producing a graduate able to find employment anywhere in Australia, but in reality they must also provide a curriculum that meets the needs of the local monopoly service. Universities need industry for the training and education of students, and the employment of graduates and what is clear in the report is the significant generosity of the services. But paramedic academics also hope to educate more than what the service wants at this moment in time; they aim to educate a graduate for the future able to readily adapt to regional differences and health care reform. This requires an alignment between themselves, the profession (formally constituted as ACAP), and the industry (formally constituted as the CAA and the state services) as to what is the signature pedagogy.

The tension for all parties arises out of academic autonomy and university control of the curriculum in what is a shifting era. While most health professional programs are subject to professional accreditation, for paramedics, accreditation is provided through industry, not the profession. Conversely for industry, it is not longer clear who controls the numbers. The Bradley Review points to the de-regulation of student quotas.[10] De-regulation of student numbers will put enormous strain on student clinical places and it is trite to suggest that this can be overcome through simulation or alternative venues. Universities will look to the profession and industry to assist them in maintaining the uniqueness and firm identity of the paramedic profession.

Despite these complex issues the future looks optimistic for the profession. Australians regard paramedics highly, and young people are highly motivated to take up the profession. It is a good time to be a paramedic.

Link to Executive Summary
Link to Full Report

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Note

The views expressed in this Editorial do not necessarily reflect the views of the Australian Learning and Teaching Council Ltd.