



NSW COUNCIL OF DEANS OF EDUCATION

RESPONSE TO

GREAT TEACHING, INSPIRED LEARNING

NSW GOVERNMENT DISCUSSION PAPER 2012

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Preamble

The NSW Council of Deans of Education (NSWCDE) commends the NSW Government discussion paper for its clear prioritizing of education, in this case specifically teaching and teacher education, as being of prime importance among government policies. NSWCDE commends it also for its clear understanding and appreciation of updated research insights into the central role played by quality teaching in assuring the best outcomes of education across the full range of measures, including but not restricted to academic achievement. The dynamic relationship connoted between quality teaching and its full effects is well captured in the paper's title, *Great Teaching, Inspired Learning*. Beyond all other contributing factors, recent research has underscored that it is the quality of teaching at the frontline of the supportive school community that has most positive impact on effective and sustained learning. Furthermore, research shows that the supportive school community can only be constituted once sufficiently resourced. NSWCDE wishes to highlight the importance of the Gonski (2011) report and recommendations, and the Australian Government's response (PM, 2012), in this regard.

NSWCDE, together with its national and international professional partners, has been at the forefront of much of the research noted above. It has also been a key stakeholder in the many reviews and reports of teaching and teacher education that have characterized the past few decades. It is therefore well placed to offer informative and research evidential responses to the current discussion paper. This formal response will endeavour to bring forward the main elements of research evidence and report/review insights in its answers to the questions posed by the discussion paper. It will proceed by responding to each of the five main sections of the discussion paper (with priority given to the first two sections, *Inspired Learning* and *Initial Teacher Education*).

NSWCDE reiterates its endorsement of the sentiments and directions of the discussion paper, and of the NSW Government's commitment to teaching and teacher education that is signalled by the paper. The hope of the NSW Deans is that its response will prove helpful. Furthermore, the commitment of the Deans is to provide whatever collaboration and support the Government might wish for in order to strengthen teaching and teacher education in the interests of their betterment and that of NSW.

[I] INSPIRED LEARNING

The Inspiring Teacher and Their Support: The Evidence

In recent times, there has been much interest in Finland's outstanding success in international testing. OECD (2010) remarks:

Finland ... has consistently ranked in the very top tier of countries in all PISA assessments over the past decade, and its performance has been especially notable for its remarkable consistency across schools. No other country has so little variation in outcomes between schools, and the gap within schools between the top and bottom-achieving students is extraordinarily modest as well. Finnish schools seem to serve all students well, regardless of family background or socio-economic status. (p. 5)

At a time when this success is being hailed as providing a benchmark of effective learning, it might be worth beginning the search for inspirational teaching there. The first clue is offered by Dr Pasi Sahlberg, one-time advisor and now a Director-General in the Finnish Ministry of Education and Culture:

The key driver of education development policy in Finland has been providing equal and positive learning opportunities and secure well-being for all children. Nutrition, health, safety and overall happiness belong to all Finnish schools. Finnish authorities, in this regard, have defied international convention. They have not endorsed student testing and school ranking as the path to improvement, but rather focused on teacher preparation and retention; collaboration with teachers and their union representatives; early and regular

intervention for children with learning disabilities; well-rounded curricula; and equitable funding of schools throughout the country...

By rejecting standardized testing and concomitant school and teacher accountability measures, Finland has instead charted its own path by focusing on equity, professionalism, and collaboration. (Sahlberg, 2012)

In a related commentary on the Finnish success, we read:

Finland has vastly improved in reading, math and science literacy over the past decade in large part because its teachers are trusted to do whatever it takes to turn young lives around. (Hancock, 2011, p. 1)

There are a number of matters to be considered from the above, with some of them seeming to be either well in place in NSW or elements of other current debates (eg. early intervention, well-rounded curricula, stakeholder collaboration). What seems most pertinent to the current discussion paper and NSW CDE's response is that success of the Finnish kind is said to be inspired by well trained, supported and trusted teachers who function in a supportive and sufficiently resourced school community that prioritizes student learning and wellbeing above all other considerations.

Significantly, Sahlberg's commentary is titled *Finland's Education Success is No Miracle*. It makes the point that Finland itself possesses a modest educational research culture, that it has done very little self-reviewing and that its success has come largely from taking seriously the research and reviewing done in other countries. Granted the strength of Australian educational research and that Australian education is "...one of the most over-reviewed in the OECD" (Zyngier, 2012, p. 1), it seems likely that the evidence trail in search of inspiration could well lead to Australia, at least in part. So what have these many reviews and Australian and international research told us that Finland may have taken more seriously than the places from which they emanated? While difficult to separate, we will attempt in this section to distinguish the issues of (i), the trusted and supported teacher (leaving well-trained to the next section) and (ii), the supportive and sufficiently resourced school community that prioritizes student wellbeing. As the Sahlberg and Hancock commentaries make clear, both of these issues present as challenges to an era in which high levels of centralization, regulation and standardization have become the norm.

Teachers and Teaching

The Tasmanian report, *The School in Society* (Tasmania, 1968), was the first in Australia to identify the range of autonomous diagnostic and therapeutic skills of teaching in a way that compared them with those of other professions of significance. It made the important point that, because of the peculiar nature, complexity and sophistication of these skills, teaching should be seen as being at least as important as other professions. Though largely forgotten, like so many of the other 'over-reviewed' reports into teaching and teacher education, the Tasmanian report is attributed with having had the potential to herald a new era for teacher professionalism in Australia (ACDE, 2003a). Importantly, the report was premised on the view that the teacher should be seen as more than a mere classroom mechanic, taking set curricula and applying them to students in their care. It directed thought towards the notion of the teacher as local diagnostician, curriculum designer and developer, and decision-maker about the teaching and learning most effective for the particular student body in question. It highlighted the need for teachers to know and relate positively to their own students so that the teaching they applied could be assured of being appropriate and, in that sense, ethical. As such, it provided a rationale for positioning the teaching profession closer to, if not alongside, other professions, like medicine, dentistry, engineering and law where professionals are trained not merely to accept standardized prescriptions but to analyse needs relevant to their own domain and to provide ethically appropriate solutions ultimately of their own making, albeit within the limits set by the protocols of their own wider profession (eg. the laws of the land, the accepted standards of practice, etc.).

Gradually, other States and territories responded in one fashion or another to the direction set by the Tasmanian Report and, in partial response to the greater teacher autonomy being presaged, the Whitlam Government established the original Curriculum Development Centre in 1975 to foster and

support ‘situation-based curriculum development’ across the country (Skilbeck, 1984). Although currently not a view popular with all, it might well be argued that some of the developments of the past decade or so, including moves towards greater centralization of services, curriculum, standardized testing and other accountabilities of the sort that Finland has eschewed, have actually worked against the professionalization of teaching proposed by the Tasmanian Report and practised in part in an earlier time. The argument could be extended to suggest that Australia once seemed well ahead of the game that Finland is now playing so well and, had Australian education maintained the momentum set by these earlier directions, it could well be receiving the plaudits that Finland is now enjoying.

One has to assume that the greater centralization/ standardization/ accountability measures, eschewed by the Finns but that have steered so much Australian education in recent times, are impelled by circumstances that will not be easily reversed. In this case, it will remain one of the challenges for teachers, unions and systems to find the balance between professional adherence to standardized mechanisms and the degree of autonomy necessary for each teacher to develop an individualized professional practice. Arguably, this latter feature is even more important than at the time of the Tasmanian Report, granted the weight of national and international evidence that the essential difference between student achievement and non-achievement revolves around the personal qualities and capacities of the individual teacher, far more than around issues of standardized curriculum or other aspects of school and system infrastructure (Osterman, 2010). The Australian Senate Report of 1998, *A Class Act* (Senate Report, 1998) specified as one of the essential features of teacher professionalism “*autonomy in organizing and carrying out their work and the need for the ongoing exercise of professional judgment*”. The well-heralded and persistent success of the Finnish education system seems to turn in large measure on precisely this issue: “Finland has vastly improved ... because its teachers are trusted (*as professionals*) (parenthetical insertion ours for emphasis) (Hancock, 2011, p. 1)

The weight of evidence referred to above began with the many attempts - research, report and review wise - to clarify the precise nature of the distinctive skills germane to the profession of teaching and to ensure that teachers were trained adequately in and around those skills, such that teachers could be ‘trusted’ to engage in the diagnosis and practice necessary to addressing the learning needs of the students in their care. Arguably, Lee Shulman, prominent educational researcher from Stanford University, contributed significantly in his notion of *pedagogical content knowledge*, defined as “that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding” (Shulman, 1987, p. 8). It was a notion that sat at the heart of the Australian Council of Deans of Education (ACDE, 1998) report to the Australian Government on initial teacher education. *Pedagogical content knowledge* debunked two popular but unhelpful myths that ‘knowing one’s subject is all that matters’ and ‘a good teacher can teach anything’ by asserting that knowing what and knowing how are inseparable in the business of effective teaching.

The USA National Board of Professional Teaching Standards report (NBPTS, 1999) amplified the complexity and sophistication of the skills entailed in pedagogical content knowledge:

Accomplished teachers have a rich understanding of the subjects they teach and appreciate how knowledge in their subject is created, organized, linked to other disciplines and applied to real-world settings. While faithfully representing the collective wisdom of our culture and upholding the value of disciplinary knowledge, they also develop the critical and analytical capacities of their students. Accomplished teachers command specialized knowledge of how to convey and reveal subject matter to students. They have a ‘pedagogical content knowledge’ command of a wide repertoire of teaching strategies that enable them to organize, adapt, and present the curriculum in ways that take due account of the specific contexts within which they teach and their students learn. They are aware of the preconceptions and background knowledge that students typically bring to each subject and of strategies and instructional materials that can be of assistance. They understand where difficulties are likely to arise and modify their practice accordingly. Their instructional repertoire allows them to create multiple paths to the subjects they teach, and they are adept at teaching students how to pose and solve their own problems. (NBPTS, 1999, pp. 3-4)

Such a conception of teaching makes it clear why good teachers require as much unregulated space as possible in which to ply their trade. Unlike earlier social science research (cf. Jorg et al., 2007), *pedagogical content knowledge* broadened the scope of education research from focussing on the context of teaching to dealing with the nature of teaching itself. This was not just educational research but more properly termed ‘teaching research’ or, as it has come to be called broadly, ‘pedagogical research’, including the research that sits behind the notion of ‘quality teaching’ as it has developed over the past twenty years (OECD, 1994). With this research, the theory base of teaching underwent arguably its most elaborate period of development with extensive longitudinal work on the effects of teachers and teaching on student achievement and success. In many ways, this research represents the synthesis of earlier psychosocial and sociocultural work, but with a particularly penetrating focus on the notion of pedagogy, both in terms of principle and practice. Each form of such research has attempted to identify just what it is about the art and science of teaching that makes a difference in the intellectual and wider development of students; in other words, what it is that inspires learning.

Newmann and associates’ (1996) work centred on the ‘pedagogical dynamics’ that characterize teaching that demonstrably works in gaining holistic student achievement, Darling Hammond’s (1997) work similarly focussed on the features of ‘quality pedagogy’ and Education Queensland’s School Reform Longitudinal Study (QSRLS, 1999) explored the notion of ‘productive pedagogies’ as applied to teaching and teacher education (Gore, 2001; Gore et al., 2004). In NSW, the original Quality Teacher Program submission (NSW, 2000), titled *Pedagogy for the Future*, outlined contextual challenges which face schools and teachers in the modern era. It identified ‘new’ and ‘effective’ pedagogies designed to meet these challenges. The NSW Quality Teaching model centres on three pedagogical dimensions that research evidence suggests produce the best outcomes in students. The three dimensions are:

- *Pedagogy that is fundamentally based on promoting high levels of intellectual quality.*
- *Pedagogy that is soundly based on promoting a quality learning environment.*
- *Pedagogy that develops and makes explicit to students the significance of their work.* (NSW, 2006)

Pedagogical research of these various species identified the essential blend of knowledge and skills required for effective teaching. In each case, the focus has been on the distinctive knowledge base of teaching and, in each case, the acid test has been about demonstrated student achievement as a result of this knowledge base being implemented effectively. The important and distinctive contribution of this new pedagogical research is in the demonstrated truth that student achievement can only be enhanced when the nature of the pedagogy required is targeted with precision and implemented with rigour, and with assessment for outcomes that is in tune with the entire process. Sitting at the bedrock of this pedagogy is the teacher, the well trained and trusted professional. Reform and innovation of contexts, be it physical infrastructure, curriculum or testing, achieves little or nothing if not accompanied by the kind of ‘pedagogical reform’ that positions and prioritizes the teacher’s character and capacity. Nonetheless, as we see in the case of Finland, teacher character and capacity can only be fully exploited in the context of an environment that is conducive to learning. Hereafter, and again on the basis of much research, we will refer to this conducive environment as ‘the supportive school community’, defined and understood by us to imply an environment that is both sufficiently and equitably resourced and one that prioritizes student wellbeing above all other considerations.

The Supportive School Community

While ultimately inseparable from the issue of teacher character and capacity, the potential of the learning environment instilled by systemic priorities to facilitate or stifle the teacher effect cannot be overstated. As Gonski (2011) identified so clearly, inequitable resource distribution and allied lack of sufficient resources for the ‘losers’ of such distribution is a key factor in Australia’s relatively poor international standing, just as the equitable distribution noted in the OECD (2011) quote above is seen as the key to Finland’s success. Evidence tells us that a commitment to equity, including equity of access to resources, contributes to high quality learning outcomes for all. (OECD, 2007).NSWCDE therefore takes this opportunity to endorse the insights rendered by Gonski and the positive response taken by the Australian Government (PM, 2012) to this report.

At the same time, NSWCDCE wishes to proffer the view that resourcing, essential as it is, does not constitute the entire issue concerned with the supportive school. There are more subtle but equally powerful insights to be found in recent pedagogical research that are at least as challenging to the conceptual world that has dominated Australian education in recent times. In that regard, Sahlberg's commentary above about the unimpeded space needed for Finnish teachers to engage in quality work germane to their profession and in a trusting environment is significant. It is the other clue to the issue of inspired learning, namely, creating a learning environment that is conducive to quality teaching, rather than surveillance:

The key driver of education development policy in Finland has been providing equal and positive learning opportunities and secure well-being for all children... By rejecting standardized testing and concomitant school and teacher accountability measures, Finland has instead charted its own path by focusing on equity, professionalism, and collaboration. (Sahlberg, 2012)

In the finer detailing of Newmann's (Newmann and associates, 1996) research around pedagogical dynamics, some of the subtleties of quality teaching, those with particular power to inspire effective and sustained learning, became apparent. Beyond 'dynamics' that might be considered predictable, such as sound technique and updated professional development, were ones that spoke of the need for school coherence, and the teacher's capacity to cater for diversity and establish an ambience of trust and care. School coherence referred to a commitment on the part of the school and individual teacher to be looking to the interests of the student body before any other consideration. Catering for diversity built on this through highlighting the importance of managing individual differences in a way that ensured each student's self-esteem was affirmed as a systemic priority, not merely an individual teacher one. The notion of establishing an ambience of trust and care built on these dynamics even further in ensuring that each student felt nurtured, protected and valued, and that the learning environment was a natural place for them, not just for others. NBPTS (1999) captured the centrality of these more subtle features of quality teaching in elaborating as follows:

Accomplished teachers ... treat students equitably. ... They .. adjust their practice based on observation and knowledge of their students' interests, abilities, skills, knowledge, family circumstances and peer relationships. ... they foster students' self- esteem, motivation, character, civic responsibility and their respect for individual, cultural, religious and racial differences (NBPTS 1999, pp. 3-4)

There has been no shortage of research-based evidence of the importance of these inspirational yet too often understated dimensions of teacher practice to overall student achievement in the intervening period, from Finland (Tirri, 2011), Singapore (Jing & Stewart, 2010), the UK (Hawkes, 2010; Arthur, 2011), the USA (Bryk & Schneider, 2002; Berkowitz et al., 2008; Narvaez, 2010) and Australia and New Zealand (Hattie, 2003; Rowe, 2004; Hattie, 2011; Lovat et al., 2011a). The synergy between the ambience of teaching and the eliciting of enhanced academic effect is what underpins Hattie's (2003) work on the 'expert teacher'. The expert teacher is not merely a well-equipped practitioner but one who is '...proficient in creating optimal classroom climates.' (p. 7):

The manner used by the teacher to treat the students, respect them as learners and people, and demonstrate care and commitment for them are attributes of expert teachers. (p. 8)

Arguably, the synergy spoken of has never been demonstrated more clearly than in the Australian Government's research project, *Testing and Measuring the Impact of Values Education on Student Effects and School Ambience* (DEEWR, 2009), which included evidence of the prioritizing of student wellbeing above all other considerations having the effect of creating calmer classrooms, fewer behaviour management problems, improved teacher-student relationships, enhanced student resilience and, finally, improved academic effect:

... there was substantial quantitative and qualitative evidence suggesting ... observable and measurable improvements in students' academic diligence, including increased attentiveness, a greater capacity to work independently as well as more cooperatively, greater care and effort being invested in schoolwork and students assuming more responsibility for their own learning. (p. 6)

In a day and age that sees so many of the assumptions about human development and the nature of learning being overturned by new forms of science and social science (Immordino-Yang & Damasio, 2007; Jorg et al., 2008; Diamond, 2009; Meltzoff et al., 2009; Raichle, 2009; Rosiek & Beghetto, 2009; Immordino-Yang & Faeth, 2010; Immordino-Yang, 2011), the above close relationship between teacher practice and the ambience of learning is hardly surprising. As an example, the neuroscientists, Damasio and Immordino-Yang, have engaged in intensive work around the neurobiology of the mind, especially concerning those neural systems that underpin reason, memory, emotion and social interaction, and their ramifications for learning. Their work is associated with the notion of the cognition/affect/sociality nexus, a way of conceiving of feeling and relating as not being separate so much as inherently part of all rational processes which, together, impel action and behaviour, including around learning:

Modern biology reveals humans to be fundamentally emotional and social creatures. And yet those of us in the field of education often fail to consider that the high-level cognitive skills taught in schools, including reasoning, decision making, and processes related to language, reading, and mathematics, do not function as rational, disembodied systems, somehow influenced by but detached from emotion and the body. (Immordino-Yang & Damasio, 2007, p. 3)

Research findings of this sort are causing educationists to re-think many of their assumptions about a range of developmental issues, including that of learning itself. The taxonomic notion that cognitive learning outcomes are separable from affective or social ones comes to be seen as inadequate. The idea that learning can be achieved through mastery instruction and testing, without reference to the physical, emotional and social ambience within which the learning is occurring, nor moreover to the levels of confidence and self-esteem of the learner, is similarly seen as potentially an obstruction rather than facilitation of learning. Such findings point to the need for pedagogy and learning environments that engage the whole person rather than just the cognitive person.

Summary

So, what does the evidence tell us about what it is that inspires learning? The evidence tells us that:

- It is first and foremost to do with the teacher who is well trained to manage what has been described as 'pedagogical content knowledge', an integrated blending of academic knowing and practitionership, knowing *what* and knowing *how*.
- Academic knowing must be well grounded in a higher education qualification appropriate to the knowing required and that these qualifications must be consistently upgraded. Practitionership, consisting of a range of practices concerned with technical skills, relational capacities and personal character, must be well grounded in a strong and supportive professional community.
- Inspired learning is impelled by effective teaching and that effective teaching is a complex multidimensional endeavour, comprising pedagogical content knowledge, technical practice, positive relationships and personal character. Each is as indispensable to impelling inspired learning and holistic student achievement as the other.
- The other, and related, part of the endeavour concerns the school community or environment, including the culture, of learning, that prioritizes student learning and wellbeing beyond all other considerations and, as Gonski has identified, is sufficiently well resourced to ensure an equitable site for learning.
- The shorthand for such an endeavour might be termed 'quality teaching in a supportive and sufficiently resourced school community that prioritizes overall student learning and

wellbeing, as defined and seen in effect in updated research, but still inadequately understood and integrated in the practice of teaching and teacher education.

In summary, these perspectives present as ongoing challenges to employment systems, unions and teacher education units to ensure their practices are consistent with and facilitative of producing and retaining teachers who are well trained and able to function as professionals in school communities that are sufficiently well-resourced and prioritize student learning and wellbeing to enable effective professional practice.

[III] INITIAL TEACHER EDUCATION

Because this is the issue of greatest concern to NSW CDE, we will attempt to respond to each of the main questions being asked. We will continue the practice of referring to the research and report/review evidence, much of it from Australia, and we will continue to refer back to the central issues around teachers and systems outlined above. If ‘quality teaching in a supportive school community’ is what impels inspired learning, including academic achievement and holistic student wellbeing, then initial teacher education must be directed towards producing that kind of result. Initial teacher education, in isolation from the whole of universities and from educational systems, cannot achieve this goal on its own. Partnership with other faculties and management of universities, and with the range of educational stakeholders, including employers, unions and parent bodies, is essential. At the same time, teacher education schools and faculties cannot retreat from their peculiar responsibilities to ensure that the academic and practical components of their programs match the goals that are agreed and for which they strive.

Entry requirements and ATAR

It would be true to say that most teacher education faculties, and especially Deans and Heads of School, would prefer to have high ATAR cut offs than lower ones. This is for a range of reasons, not least the issue of status within the universities, where high cut-offs connote prestige. In fact, it is good for the entire profession when its professional training arm is seen to have prestige and sufficient rigour to be ‘hard to get into’. The connection between the profession and the status of its training arm has been a persistent item in the many reviews of and reports on teaching and teacher education (eg. Senate Report, 1998; NPBT, 1999; ACDE, 2003b; HoR, 2007). To this point, it sounds easy: set high cut off rates to bolster the prestige and be assured that only the brightest candidates get into teaching! Why has it not turned out that way and why will it never turn out that way without concerted agreement between all the parties?

Teacher education has developed into a popular program in the modern university, often among the university’s easier programs to fill and seen to have social utility (a huge turnaround from the past that should not be lost in the argument). In contrast with areas of huge capital expenditure, it can also be perceived to be relatively inexpensive (NSW CDE would hold a counter-view that, especially when its professional experience requirements are factored in, teacher education has actually been underfunded from the time of the Dawkins reforms – see below). Vice-chancellors have naturally argued for growth and the best growth is in popular programs with low infrastructure requirements so that the growth can be used to supplement the very expensive end of universities. This could be argued to be nothing more than good business management on the part of vice-chancellors, especially as they currently have to operate in a highly constrained business environment with little to no capacity to make money elsewhere on the domestic side, an increasingly challenging international environment, growing costs and lack of adequate indexation over many years. Furthermore, it is not just the vice-chancellors who have argued for this growth. OECD figures (OECD, 2011) have shown a persistent slide in Australians’ higher education participation rates, rendering the country less competitive with our major international partners, especially in Asia. Additionally, parts of outer and non-metropolitan Australia have been identified through a range of reports (cf. DEWR, 2008a) as having exceedingly poor higher education participation rates and so requiring greater access, normally argued to be

through increasing higher education places directed towards these locations. If and when these places are provided, a significant portion of them tend to be in teacher education because of its popularity and its perception of being a practical way of capacity building in less advantaged areas. In these circumstances, both vice-chancellors and federal governments often find themselves the targets, rather than the precipitators, of agitation for more places.

A case in point is seen in the Central Coast region of NSW, where a report into regional learning communities (DETYA, 2000) identified the multi-partner tertiary campus as having particularly strong potential to lift historically low tertiary participation rates. In response, agitation by the community, aided and supported by the NSW Government, eventually saw the Australian Government provide 520 extra places for the University of Newcastle's operations at the campus, to be rolled in over a three year period from the beginning of 2005. 390 of those places were in teacher education. Why? Because market research had shown that it was the only program likely to sustain such growth over such a period of time. There were also strong sentiments expressed by local stakeholder groups that too many teachers 'retired' to the Central Coast, so making for an older teaching force than was ideal and that the best way to offset this over time was to have teacher graduates able to be trained in their own region, undertake internships in their own region and so strengthen the likelihood that they would want and pick up a job as a targeted graduate. There were also complaints that the Central Coast campus was graduating an insufficient number of teachers to ensure an adequate supply of casual teachers, especially younger ones. Separate data testify to the unevenness of field placements in metropolitan versus non-metropolitan sites (NSWTEC, 2010).

The plan seemed to work. Within three years, the teacher education program had more than doubled. Anecdotal evidence over time was that there were more young teachers available for ongoing work and that it became easier to find a casual teacher at short notice. Importantly, there was a positive impact on the Central Coast's higher education participation rates (DIISRTE, 2009) and an allied impact on the feeling among locals that they had an effective tertiary operation in their region, of the type that the DETYA (2000) report had urged. All in all, the injection of extra places was seen as a 'good news' story. The rub is that the effect on TER (ATAR) scores at the Central Coast campus was devastating. In 2004, the lowest entry rate to a BTeach/BA (primary) was in excess of 85.0. By 2007, it was a little over 60.0 (source: UoN Corporate Information, 2007). The roll-on effect to the status of teacher education across the entire university was equally a negative one because growth on one campus had inevitable effects across all campuses, including on the main campus where ATAR cuts offs into teacher education generally diminished over the same period from approximately 82.0 to 67.0. The Dean could boast in 2004 that any teacher education entrant could have gained entry to Engineering. By 2007, the lowest ranked entrant was more than 10 points below the entry to Engineering. No Dean or Head of School of Education would idealize this situation.

The point is that raising the ATAR bar might seem like an excellent idea, and no Dean we know would fight it, but it is unlikely to happen unless the very complex array of factors, only some of which are noted above, are addressed. The situation now is even more complex, with the Australian Government's (DEEWR, 2008b) targets to increase by 2025 the number of Australians holding a bachelor degree, and the NSW Government's equivalent commitment (NSW, 2010). Anyone who knows the patterns of the higher education sector knows that teacher education will likely be a particularly strong candidate for helping to attain those numbers. It is popular, seen as career assuring, through full-time, part-time or casual employment domestically and even more assured and better paid overseas (again, all pointing to a huge turnaround from the early 1990s when modest enrolment targets could not be met); from the point of view of federal authorities, it is among the less expensive areas to resource and, for vice-chancellors, relatively free of heavy infrastructure costs and, with sufficient numbers, able to subsidize other more costly operations. In regional Australia, university campuses will be particularly hard pressed to find better ways in which they might grow and, allied to that, regional communities will continue to argue to have their teachers trained locally.

The other point that needs to be made is that, although a few short years later, the NSW Director-General went on record as saying that universities were training too many teachers (especially primary teachers), nonetheless, between the time of the DETYA (2000) report on regional learning communities and the Federal Cabinet decision of 2004 to fund a raft of new places, mainly in teacher

education (inevitably therefore in primary) and mainly in regional campuses, there was no stakeholder calling for the injection more loudly than the NSW Government, and especially the NSW Minister for Education. The same pressure to increase places remains evident in recent NSW Government policy (NSW, 2010). These matters are complex and it will be pointless to target the ATAR issue without reference to and resolution of them.

The final and obvious point to be made in cautioning too much energy being displaced on the ATAR issue is the persistent doubt that ATAR scores are good predictors of higher education achievement. At least one instance of evidence shows little variation in performance of teacher education students with ATAR scores ranging from 70s – 90s (Gore, 2012). It may be that there is a case for variation from students with lower entry scores but there is currently no evidence available of that variation in regard to teacher education. The other complicating factor around ATAR scores is that the consistent highlighting of cut-offs fails to take account and therefore does injustice to the higher and mean scores involved. Without detailed knowledge of each instance, the notion of cut-off could be referring to a handful of entrants, perhaps even one, who gained entry (perhaps through special consideration) whose score was many points below the next lowest score, while the evidence is that teacher education in fact attracts an impressive number of high performing ATAR candidates (Gore, 2012). In this way, over-emphasis on ATAR cut-offs can be a pernicious and distracting exercise. It should be noted that the arguably most rigorous of all reviews ever done on teacher education in Australia, and likely in the world, the Australian Government's *Top of the Class* (HoR, 2007), spent much time examining the issue of entry scores and ended up providing strong advice that it was largely a fruitless exercise and that the time and effort should be put into ensuring that, whatever the entry score, the required output was achieved through the suitability of the program itself.

Should entrants have studied English, maths and science?

The current standards, which require teacher education students to be in the top 30% of the population in literacy and numeracy, appear sufficient as a starting point. Whether maths and science should be required at the HSC level is debatable and whether or not HSC 2U maths provides a suitable foundation for primary teaching is debateable. One might as well make out a case for the need for history, art, music, and perhaps philosophy and other aesthetics. After all, if one takes the theory of the neurosciences seriously, many students will gain their best access to mathematical and scientific interest and proficiency through immersion in more aesthetically oriented learning.

Should candidates be assessed for personal as well as academic qualities?

In an ideal world, yes! Granted the numbers involved and the stretched resources of most teacher education faculties, the idea of interviewing and/or other forms of individual appraising of prospective candidates is probably not practical. As the research cited above testifies, however, it is increasingly demonstrable that the best outcomes for students, including academic, result from teachers and environments that prioritize their wellbeing and promote their self-esteem. This renders the teaching role a more complex one than being merely about technical proficiency. It points to the need for teachers to be sufficiently mature, in terms of personal emotions and social capacity, that they are able to instil this kind of environment in their classrooms. These research insights need to be part of the mix in thinking about and targeting a suitable candidature. Again, this consideration must modify any tendency to concentrate too much attention on the issue of ATARs.

Should teacher education only be offered as a postgraduate course?

While such a proposal would fit neatly with the Bologna protocol and with some experimental programming in Australia, there is no overwhelming evidence that entry to teaching through a postgraduate program offers a better result than entry through an undergraduate program. Especially through undergraduate mechanisms like the 'double degree' (a four year combined discipline content plus professional award), the essential benefits of the postgraduate option spelled out so clearly in the Auchmuty Report (1980) have been satisfied. These benefits centred on the need for teachers to be experts in their discipline as well as their classroom practice – hence, the need to achieve a discipline degree before moving on to teaching. The implicit criticism of Auchmuty to be found in the Correy

Report (1980) (pre-empting something of the notion of pedagogical content knowledge) was that the learning of the discipline and how to teach it should be integrated rather than separated. With the double degree, the strengths of both Auchmuty and Correy have been accommodated. Students complete a major discipline strand (alongside those whose sole study is in the discipline) at the same time as they are completing professional teacher education, moving throughout between learning in the discipline and learning how to teach the discipline in the classroom context. The ‘double degree’ mechanism has also coincided with, or perhaps been at least partly responsible for, a massive turnaround in the popularity of teacher education, a feature of enrolment patterns that, we would argue, should not be seen as a negative under any circumstances. Earlier problems, referred to above, that saw teacher education as a particularly unpopular, low status option in higher education were the real problems.

The alleged major benefits of postgraduate programs (cf. Ferrari, 2012) can also be achieved as well through an integrated undergraduate program of the ‘double degree’ kind. Having said this, it may be a better practical strategy in some cases to target graduates of specialist degrees and encourage them to move to postgraduate teacher education. The reason is not that this is necessarily a more effective way to train teachers (the combination of Auchmuty and Correy perspectives, and the general tenor of ‘pedagogical content knowledge’ would suggest otherwise) but simply that the most capable candidates in some areas (eg. maths and science) will tend to move straight to the specialist degree because of the stronger career options waiting at the end. As a result, the best chance of these people being lured into teaching will be throughout and towards the end of the specialist degree; hence, is seen the desirability of the postgraduate teacher education pathway as at least an option. At the same time, it will have to be recognized that this will not happen (least of all among the most capable graduates – those with most choices) unless there are some privileged entitlements on offer (such as accelerated pay scales, joint appointments in universities, etc.). This will entail another challenge for systems, unions and universities.

Should we limit the number of places?

This issue is related to the one above concerning ATAR scores. Beyond what was said there, there seem to be two main issues, one practical and one concerning vision. The practical issue concerns whether it would be possible to limit places. Unanswered questions include: Would a federal government with a popular growth agenda limit a prime source of honouring its promise? On what basis would it be encouraged to do so? Unless federal government imposed limits, would universities willingly limit a popular program with demonstrated potential to subsidize costs? Why would they? What capacity would a state government have to limit them, even if firmly committed to the idea and convinced of the wisdom of doing so? Is it practical to limit places that are easy to fill (eg. primary) with places that are difficult to fill (eg. maths & science), granted that candidature for the former is unlikely to be the same candidature for the latter?

The issue of vision concerns whether there genuinely are too many trained teachers and on what basis this is claimed. Within this issue, there are two components, a concrete one and a more ethereal one: (1) whether figures provided on graduated teachers nationally compared with permanent entry figures into the NSW public system represent a fair and informed estimation of supply, demand and the overall and sustained needs of schools; (2) notwithstanding the answer to (1), whether teacher education should be reserved exclusively to those entering the teaching service for any defined period of time or whether it plays a wider role for today’s society.

- (1) Even when premised solely against staffing needs in schools, the appropriateness of national graduation figures have to be premised against the needs of all school systems across all states and territories, allowing for full-time, part-time and casual staff (in one of the most highly casualized employment sectors), as well as taking account of average employment duration rates, likely retirement and other attrition rates, and all of this in the context of downward pressure on class sizes and increasing restrictions on who can and cannot be given supervision responsibilities of children in a school. In addition, as with other professional training courses, allowance is made for the fact that an increasing portion of Australian professionals tend to spend at least some time practising their profession overseas and the active industry of

international recruiting firms is testimony to the fact that Australian teachers are considered an especially popular target for overseas recruitment. All of these considerations need to be built into supply/demand/needs calibrations. The figure provided in the NSWVCC advisory paper that NSW alone requires 2 million days of casual employment (utilizing 30,000 casual teachers) per year underlines the inadequacy of overly simplified calibrations around national graduations versus the full time employment needs of one public system. ACDE (2000) conducted arguably the most rigorous supply and demand research ever done in Australia. Over many years, all the factors were built into the calibrations, consistently showing a supply problem in the future. Since that time, there has been a huge injection of teacher education places but, granted the rate of attrition of these young teachers from the system, together with the high retirement rate pending, one still has to wonder whether supply is truly sufficient to cater for the full array of needs of the various systems. Additionally, as ever, the regional arms of these systems will require special consideration in this regard.

- (2) The other issue of vision is the less concrete one around the ultimate purpose to society of teacher education. From arguably the least attractive program in the new universities of Dawkins' 'unified national system' twenty years ago, teacher education has grown to be an exceptionally popular program of study. From the program of the nineties that was routinely cut, closed down completely, or threatened with one or the other, teacher education has survived to become a mainstay of the higher education sector and, as mentioned already, likely to be even more so if the participation goals of the current Australian Government are to be realized. While NSWVCC does not wish to appear defensive about the rightful and proper querying of its appropriate format for the current era, it seems nonetheless that much of this important history, including the revival of teacher education throughout the 1990s and into the 2000s, against all the odds of constrained funding and the practicum burden, is too often lost. What can be seen as a very positive story too often becomes a negative one; even the fact that it has grown so substantially is now being couched as a problem. In fact, throughout this time of growth and popularity, it has become common place to see the finest entrants into a university in a year choosing teacher education above all other choices, and going on to graduate as outstanding university products, demonstrated through their routinely achieving honours, university medals and a range of plaudits that Deans of Education would scarcely have dared dream about twenty years ago. Many of these evidentially excellent graduates have taken up jobs in Australian schools or overseas. The saddest aspect of this same era concerns the attrition rate of the same people from the teaching service, especially the public one. Were it not for the fact that these teachers are often seen to move into other gainful employment in which they utilize the teaching skills they have acquired, this attrition would seem like a waste. Is it a waste, however, is the question? It seems that, in the era being spoken about, teacher education has often supplanted the BA or BSc as the base degree, the life and career preparatory form of study. The 'double degree', that has become the most common form of undergraduate teacher education, seems now to be seen as possessing all the benefits of the BA but with a sharper and more assured entry point to gainful employment, the lack of which remains the enduring burden of the BA (DASSH, 2008). While it seems desirable to attract a greater number of these more capable graduates into teaching for some period of time, overall success will rely on the kinds of system, union and university collaboration noted above regarding maths and science teachers, more attractive career pathways and the kinds of less regulated environments that research, and the Finnish phenomenon, tells us good teachers need in order to practise best their profession.

So, are there too many graduate teachers when all the above is considered? NSWVCC would suggest the case is at least contestable.

Improving the practicum

More words have been directed to the issue of professional experience (practicum) than any other single feature of teacher education. In recent times, among others, the Australian Institute for Teaching and School Leadership (AITSL) (NIQTSL, 2005) and NSWVCC (NSWTEC, 2010) have engaged in work related to quality of access and effect of the professional experience component of

teacher education. Both reports have extolled the essential nature of teacher education practicum but also identified significant problems related to logistics of supply and demand, as well as resourcing. From the time the original relative funding model (RFM), that coincided with the Dawkins' reforms, failed to take account of practicum costs (a long term ACDE claim that HoR 2007 finally accepted), teacher education as a whole came to be seen by vice-chancellors as a badly underfunded area of their new operations (leading in turn to much of the cutting, pruning and closing down mentioned above). While the RFM had taken account of the far more modest practicum costs in nursing and social work, and even the performance costs associated with art and drama, the costs associated with the national award (AIRC, 1990) concerning the payment of teachers for supervising practicum appeared to have evaded the attention of the RFM drafters and, later, vice-chancellors who unwittingly agreed to take all responsibility for such costs from what had, in the days of the teachers' colleges, been funded through internal distribution within education systems. Teacher education faculties have been paying for this systemic error ever since, caught between schools and teachers rightly wanting their pay and vice-chancellors and university financial systems that expect them to cover all of their costs within the slice of their budget, premised somehow on RFM or later equivalent models. There was a short period of reprieve when the Federal Budget of 2004 provided an injection of \$129m directed to university practicum costs. This 'IPCTE' fund provided much relief for three years but has progressively been reduced and has now been 'rolled in' to new DEEWR formulaic funding, with an injunction that an amount of \$758 should be allocated by universities to the professional experience component. The net effect would seem nonetheless to amount to funding per capita for this component of about one-third of the special funding provided between 2005 and 2007. Practicum remains a problem for teacher education faculties trying to manage their operations within university systems and, in the present environment of reduced funding (vis a vis 2005-2007), upward pressure on 'days' to be spent in practicum and the threat of substantial increases in the level of payment to be made under the national award, NSWDE simply needs to make the point that the issue must be fully comprehended as we look together for better ways for practicum to work for professional readiness.

Even granted the issue above, Deans and Heads of School remain firmly committed to the practicum component and to increasing its quantity and quality wherever possible. In fact, despite the difficulties, teacher education faculties have, by and large, managed to find a range of ways in which time in school could be increased sustainably within financial constraints. Increasing observation components and the internship are two ways in which this has been achieved. Certainly, where a position in a school is dedicated to the business of supporting practicum (as is the de facto case in places), the experience seems much enhanced for all parties, especially for the students in question. Where that dedicated party plays some part in the university's operation (through conjoint status, guest lectures, etc.), the student's practicum experience seems much more part of a smooth and seamless operation, rather than the crossing of a divide. McAlpine (2012), who has spent some time himself playing such a cross-sectoral role, offers some important guidelines for developing such an operation amidst the inevitable challenges of professional experience from the points of view of both sectors.

Limiting practicum places

This issue needs to be addressed within the context set above concerning ATAR cut offs and limiting places generally. NSWDE would also like to stress its desire to be engaged in collaborative work with NSWDEC and the teacher unions to continue to develop innovative and mutually helpful ways in which professional experience can be managed logistically, providing the necessary 'on the ground' training for student teachers while ensuring adequate support for the school and supervising teachers. Moreover, NSWDE would be keen to explore ways in which strengthened partnerships around professional experience might transform it from being seen as a burden to being seen as a resource for teachers and schools. NSWDE has been instrumental in forging partnerships in the past that have resulted in innovations like 'internship'. It wishes to stress that it sees such partnerships as the optimal ways in which the practical problems of professional experience can be overcome and that the inevitable increase of teacher education places under the current Australian Government's growth plan can be adequately accommodated in this vital area (cf. NSWTEC, 2010). We believe this will be achieved best through a concerted state wide plan than by individual universities forging their own partnerships with schools.

Stronger partnerships and interchangeable personnel between universities and systems

Further to the above, movement of personnel between the university and the school seems to be the most promising way of strengthening the partnership and making for the seamless experience for the student teacher. Some universities in the past have had strong secondment arrangements that have seen teachers spending part of their time at university and, conversely, academics spending time in schools, without the need to change salary/superannuation arrangements at either end. Invariably, the teacher on 'secondment' was the practicum coordinator for the school working to ensure a smooth operation in the school and, together with other equivalent parties from other schools, working with the university practicum director to ensure student teachers were being prepared adequately for the experience and, after the experience, that it was properly evaluated and integrated into ongoing academic training. The seconded teacher often enjoyed formal conjoint status at the university and the role was seen in terms of professional development and likely to play a part in promotion. NSWDEC and NSWTF combined to put a stop to these schemes some years ago, arguing that any secondment had to entail full recouping of costs (ie. the university had to pay the full cost of any teacher time involved), so making it prohibitive. While understandable from an actuarial and, perhaps, industrial view, it is the kind of thinking that obstructs the good and facilitative practice that universities see in other professional areas where flexible arrangements allow for smooth interchange between the academy and the profession. Moves to such flexibility, together with re-negotiation of the entire terms of the national award, would be warmly welcomed by NSWDEC. NSWDEC would also recommend consideration of overseas models of practicum that are premised around regimes like 'service learning' that seem to facilitate and strengthen the professional experience component of training in general and teacher education in particular (Furco & Billig, 2002; Murphy & Tan, 2012). Service learning was trialled in a number of places in Australia during the time (approx. 2005 -2008) that the federal ministry was funding annual service learning conferences (2006-2007). The more movement that can be achieved between the sectors the better, especially between teacher education faculties and schools. As suggested, prime arrangements have been in place in recent times. The will in teacher education faculties to have them in place remains but they must be part of a wider, positive and integrated strategy, rather than being seen as patronizing or punitive, as a requirement that 'university staff must spend some specified amount of time in the real world' would appear. This has potential to be a formula for tokenism rather than genuine partnership.

Balance of requirements

Again, we refer to the notion above of 'the trusted teacher in the supportive and sufficiently resourced school community that prioritizes student learning and wellbeing' as constituting the best evidence we have of what works and hence what is needed in teacher education, both in the university and as the prime goal for practicum. Australian and international studies have consistently reaffirmed this formula in one way or another. So, content discipline studies, behaviour management strategies and time spent in schools (the items in the question) are all important but only if they are directed towards achieving this ultimate product. For the most part, NSWDEC believes the content discipline aspect of teacher education has been assured through Institute of Teachers' requirements. Time in schools is important but, as argued, it is not time as much as quality experience and smooth movement between the sectors facilitated by interchangeable personnel that seems to work best. Again, research and practice in service learning would seem to have potential to inform. In terms of the much vaunted behaviour management issue, we would argue that Australian research has provided many clues of what is needed. Quality teaching research has shown that behaviour improves when targeted practice and rich intellectual environments improve. Additionally, the earlier projects in values education provided ample proof that instilling trust and care in the learning environment as a priority in itself had capacity to change the behaviour mix substantially:

Everyone in the classroom exchange, teachers and students alike, became more conscious of trying to be respectful, trying to do their best, and trying to give others a fair go. We also found that by creating an environment where these values were constantly shaping classroom activity, teachers and students were happier, and school was calmer ... student learning was improving. (DEST, 2006, p. 120)

Wider range of specializations

With current Institute requirements in place, wider specializations are better seen as postgraduate options that individuals and systems can pursue.

Exit assessments

NSWCDE would be of the view that Institute requirements, together with standard employment procedures, should obviate any need for further assessment of graduates. The best mechanism for ensuring that systems receive the graduates they want and need is to ensure common understandings about the parameters of teaching and teacher education, and shore up the partnerships between all stakeholders, in the way that this discussion paper mechanism is striving to do.

Summary

In summary, NSWCDE sees the main issues regarding initial (and ongoing) teacher education as being as follows:

- ATAR cut-offs for initial teacher education is only an issue for school-leavers, who comprise an ever-decreasing proportion of the entrants to the teaching profession. Their minimum ATARs have fallen, and are likely to remain low, although at the same time there is evidence of an increase in the average ATAR. The reasons minimum ATARs have fallen are complicated. Teacher education has become a popular and populous program of study (in contrast with twenty years ago) and is likely to remain so while job prospects (including but not exclusively in school teaching in all its varied full and part-time dimensions across systems in Australia and overseas) continue to be strong and there is a popular national agenda to create greater university access for a larger number of Australians.
- NSWCDE believes that due to the complexity of teaching, entry into teacher education courses requires a range of entry measures. ATARs are not the best predictors of success in teacher education programs and do not reflect the diversity of teacher graduates that are needed by society, hence we need flexible pathways for entry, especially for under-represented groups. However, we acknowledge that courses that require high ATARs for entry tend to have greater standing and respect within the community, hence ways do need to be considered to ensure entrants to the teaching profession gain greater standing and respect.
- The Australian Government's *Top of the Class* (HoR, 2007) spent much time examining the issue of ATARS and entry scores, concluding that it was largely a fruitless exercise and that the time and effort should be put into ensuring that, whatever the entry score, the required output was achieved through the suitability of the program itself.
- Evidence available suggests no differentiation in the quality of the product between undergraduate (esp. of the 'double degree' kind) and postgraduate teacher education. Nonetheless, for practical reasons, less popular/ more difficult to attract areas (eg. maths and science) might be better managed through initiatives at the postgraduate teacher education level. Success in attracting the most talented into these vital areas will necessitate all key stakeholders, including universities, collaborating to develop more flexible pathways, incentives and support structures..
- The option of limiting places in teacher education is constrained in its potential as long as teacher education remains popular in the market place, is relatively cheap to resource and, on current sector trends, is the most likely way that the Australian Government's higher education growth and access policy will be successful.
- The issue of supply, demand and need remains vexed and contentious. There is clear evidence of unmet need at almost all levels of school systems across all states and territories, if we look at the full range of full-time, part-time and casual staff (given education is one of the most highly casualized employment sectors), as well as taking account of average employment duration rates, likely retirement and other attrition rates. All of this in the context of downward pressure on class sizes and increasing restrictions on who can and cannot be given supervision responsibilities of children in a school. In addition, as with other

professional training courses, allowance has to be made for the fact that an increasing portion of Australian professionals tend to spend at least some time practising their profession overseas and the active industry of international recruiting firms is testimony to the fact that Australian teachers are considered an especially popular target for overseas recruitment.

- There is also the issue of the overall role played by teacher education in our society. Once upon a time, it was a course of study undertaken only by those heading to classroom teaching, and there were fewer career choices. Especially through ‘double degree’ undergraduate or combined undergraduate/ postgraduate degrees, this has been transformed into the current situation that sees teacher education playing a role not dissimilar to the BA, as a broader life preparatory study but with enhanced career options, not all of them restricted to teaching in schools. The NSW CDE believes this is to be encouraged and it is better to get highly talented candidates into the profession, even if their tenure in schools is short, than not attract them at all.
- While it seems desirable to attract a greater number of these more capable graduates into teaching for some period of time, retaining their services will rely on the kinds of system, union and university collaboration noted above regarding maths and science teachers, more enticing and rewarding career pathways and the kinds of less regulated environments that research tells us good teachers need in order to practise best their professional skills.
- Professional experience remains an underfunded and difficult dimension of teacher education. The loss of clearly-identified funding injections from the mid-2000s is placing pressure again on university-based teacher education’s capacity to resource it adequately. At the same time, professional experience seems too often to be regarded as an unwanted burden by schools. A concerted effort on the part of systems, unions and universities is required to establish a different understanding and pact around practicum. Ease of movement of personnel between systems and universities, with dedicated functions to smooth the pathway for student teachers between the academic and practical components of their programs, seems to be the optimal way forward. There are examples of these arrangements from the past but these have been blocked through actuarial and industrial constraints. We also recommend that some international models of the practicum that have been established to mentor and support student teachers, at the same time enhancing the professional learning of their supervisors/mentors be examined. The contribution of large numbers of student teachers to the school system needs to be re-imagined and modified in practical ways to ensure that this valuable resource functions as an asset to enhance the work of schools and all key stakeholders recognise the benefits of hosting student teachers for school improvement and staff development.

NSWCDE is alert to ongoing research and critical analysis relevant to initial teacher education both in Australia and internationally (Gore, 2001; Gore et al., 2004; Yost, 2006; Zembylas, 2007; Jasman, 2009; Jones, 2009; Gore et al., 2010; Lovat et al., 2011b; Caldwell & Sutton, 2012). We wish to stress our willingness and desire to engage with employment systems, unions and other stakeholders in forging improved practice that fortifies both the academic and practical preparation of teachers for the future. We would be happy to extend the range of practicum experiences if teacher training institutions were resourced appropriately to place a greater number of students in rural and remote locations. We are working on mechanisms to improve the arrangements of placements to reduce the current pressures on schools and are happy to work with other key stakeholders to develop more coordinated systems of placement and supervision. The work of the joint NSW CDE-NSWIT Working Party of Professional Experience has clearly demonstrated the significant improvements that are achievable with greater coordination and partnership, including more standardised processes and reports.

[III] ENTRY INTO THE PROFESSION

The evidence would suggest that only well prepared teachers make it into the teaching force. The combination of Institute of Teachers (formerly TQAP) requirements on teacher education content and NSWDEC employment requirements and strategies (including intensive mechanisms like targeted graduate) would suggest there are adequate provisions for ensuring that only suitable candidates secure ongoing employment. This claim can only be strengthened by the figures supplied in the discussion paper of annual employment needs of NSWDEC versus the national supply each year. These figures suggest that employments systems have a rich array of candidature from which to choose and, together with evidence already supplied of teacher education graduates doing exceptionally well in their academic preparation, that this candidature is a highly talented one. There is no evidence that the combination of measures above is not working. What is evident is the high level of attrition from the teaching force, and especially among these new, highly talented and apparently well trained personnel.

The main problem therefore seems to be in the experience of teaching that these people have in their first years in the system. Reasons for this are no doubt complex and people will have their views, including that, in spite of the above evidence, they have not been trained well for the realities of the job. If this is the case, one could only conclude that the Institute provisions and DEC employment practices are flawed. Assuming that this is not the case, the greater evidence is that either: the realities of working in schools are not conducive to the retaining of employees judged by the system itself to be suitably trained and job ready; or, that, at the very least, these teachers have been insufficiently supported in the transition from university to full time employment. A study by Schuck et al. (2010) provided some evidence of both. Regarding the former, it found a category of new and enthusiastic teachers with high level technical skills and strong aspirations but who find it hard to accommodate those aspirations in schools as they are: "They find their preferred approaches to teaching difficult to enact in what they perceive as a conservative educational environment. Unable or unwilling to compromise they intend to leave." (p. 93) The same study found large numbers of new teachers, often highly motivated and, in some case, having left successful careers in order to enter teaching, nonetheless "...experiencing significant difficulty and feeling inadequately supported." (p. 93)

For both of the above categories, there would seem to be scope for strengthening the partnership between universities and schools beyond that noted above regarding practicum to including ongoing partnership that smooths the transition years and supports new teachers in schools more adequately. This could entail the notion of ongoing interchangeable staff that builds on the 'practicum' concept to ensure that school based personnel spend time at the university dealing with students who are about to gain employment and, conversely, university based personnel spending time in schools supporting new teachers. Between them, these staff members would take especial responsibility for ensuring that new teachers, on reduced load ideally, were given time and assistance in adapting to the new realities they face. Stronger partnerships could also allow the most highly motivated of teachers to be fast-tracked where they desire it, into conjoint positions in universities where they might experience the opportunity to teach at another level and/or participate in research, so providing for a richer career pathway than the one that seems too often to frustrate and impede them in their desire to stay in the teaching service.

Summary

In summary, the main issues are as follows:

- The combination of Institute of Teachers requirements on teacher education content and NSWDEC employment requirements and strategies suggest there are adequate provisions for ensuring that only suitable candidates secure ongoing employment. There is no hard evidence that this is not the case and, if it were so, then these provisions would be failing. The problem seems to be in retaining recently trained teachers beyond a few short years of service.
- The above situation seems to point to another area of need where better partnerships and ongoing relationships between universities and schools are needed in order to smooth the transition years and support new teachers in schools more adequately.

[IV] DEVELOP AND MAINTAIN PROFESSIONAL PRACTICE

A number of reports over time have noted the professional development of teachers as a particular weakness in Australian education (Ramsey, 2000). Granted the importance of the item as a key positive indicator (or pedagogical dynamic) in quality teaching research (Newmann and associates, 1996; Darling-Hammond & Baratz-Snowden, 2005; Darling-Hammond & Bransford, 2007; Gore et al., 2010; Darling-Hammond, 2012), this is a feature of the profession that cannot be overweighted. It is again an area where systems and universities could collaborate far better, provided there is sufficient time and incentives. It is clear that time is an issue – in Singapore, Hong Kong and Shanghai teachers teach fewer albeit larger classes which provides more time to engage in collaborative professional learning. In Finland the average junior secondary class is about 20 and teachers also have time for collaborative professional learning. NSWDEC is also now competing directly with other school systems that routinely require a Masters' degree for leadership positions and further formal study as a key item in ongoing performance management.

Summary

In summary:

- Professional learning stands out as a key feature in those regimes where quality teaching is seen to have its fullest positive effects.
- The place of upgraded formal qualifications should be seen as standard practice for ongoing professional development. This is another area where systems, unions and universities can work more profitably together to ensure that postgraduate qualifications are both academically challenging and professionally suitable.
- Supervising teachers should be acknowledged as professional learning
- We want to work with the Commonwealth for the adequate funded places in initial teacher education and post-graduate teacher education courses.
- University as a provider – already regulated, teachers as researchers in their own schools.

[V] RECOGNIZE AND SHARE OUTSTANDING PRACTICE

This area is related to the previous one. With teaching becoming increasingly demanding and complex, with accountability measures becoming more and more obtrusive, there needs to be a review of the teachers' work to build in more opportunity for professional learning and sharing at the expense of less productive and more menial pursuits. In a profession where, in other countries, a Masters' degree is considered a prerequisite for ongoing professional development and where other school systems in this country require the same level of attainment, NSWDEC needs to establish a similar policy. This is another area where systems, unions and universities can work more profitably together to ensure postgraduate qualifications are both academically challenging and professionally suitable.

Summary

NSWCDE recommends that attention be given to providing more extensive opportunities for teacher upgrading and renewal, including higher levels of accreditation, a range of different fellowship programs, including secondment to teacher education institutions and a meaningful extension of the concept of Centres of Excellence.

Conclusions

NSWCDE reiterates its endorsement of the sentiments and directions of the discussion paper, and of the NSW Government's commitment to teaching and teacher education that is signalled by the paper. In the response within, NSWCDE has attempted to bring forward the many strands of evidence that have been gathered over the past decades, much from Australia, that it believes to be relevant. The

hope of the NSW Deans is that the response will prove helpful. Furthermore, the commitment of the Deans is to provide whatever collaboration and support the Government might wish for in order to strengthen teaching and teacher education in the interests of their betterment and that of NSW.

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