1992

Selected Professions Observed : Competency-Based Standards and Their Implications for the Teachmg Profession

Leo Bartlett
University of Central Queensland

Follow this and additional works at: <https://ro.ecu.edu.au/ajte>

Part of the [Teacher Education and Professional Development Commons](#)

Recommended Citation

Bartlett, L. (1992). Selected Professions Observed : Competency-Based Standards and Their Implications for the Teachmg Profession. *Australian Journal of Teacher Education*, 17(2).
<http://dx.doi.org/10.14221/ajte.1992v17n2.3>

This Journal Article is posted at Research Online.
<https://ro.ecu.edu.au/ajte/vol17/iss2/3>

and induction of new teachers, in professional development of experienced teachers and in distinguishing among teachers at the point of career progress to advanced or master teacher roles. However, if competency standards are expected to contribute to solving both the school improvement problem and the skills formation problems in Australia, the process of developing these standards must build a body of case evidence describing what teachers already know and are able to do.

REFERENCES

- Australasian Nurse Registering Authorities Conference. (1991). *ANRAC Nursing Competencies Assessment Project* (Three Volumes) North Adelaide: ANRAC.
- Cuban, L. (1988). Constancy and change in schools (1880s to the present.) In P. Jackson (Ed.), *Contributing to Educational Change: Perspectives on Research and Practice* (pp. 85-106). Berkeley: McCutcheon.
- Dawkins, J. S. (1989). Minister for Employment, Education and Training. *Migrant Skills: Improving Recognition Processes*.
- Eltis, K., & Turney, C. (1992). *Generic competencies for beginning teachers*. Report prepared for the National Project on the Quality of Teaching and Learning. Canberra: Department of Employment, Education and Training.
- Goodlad, J. (1984). *A Place Called School*. New York: McGraw-Hill.
- Hughes, P., & Radford, R. (1992). *National Competency Standards for the Teaching Profession: The Beginning Teacher*. Report prepared for the National Project on the Quality of Teaching and Learning. Canberra: Department of Employment, Education and Training.
- Holdzkom, D. (1987). Appraising teacher performance in North Carolina. *Educational Leadership*, 44 (7), 40-44.
- Jackson, P. W. (1968). *Life in Classrooms*. New York: Holt, Rinehart & Winston.
- Lortie, D. C. (1975). *Schoolteacher: A Sociological Study*. Chicago: University of Chicago Press.
- Louden, W. (1991). *Understanding Teaching: Continuity and Change in Teachers' Knowledge*. London: Cassell and New York: Teachers College Press.
- Louden, W. (1992). *National Competency Standards for the Teaching Profession. A report prepared for the National Project on the Quality of Teaching and Learning*. Canberra: Department of Employment, Education and Training.
- Louden, W., & Wallace, J. (1992). Competency standards in teaching: Exploring the case. Unpublished paper.
- National Commission on Education. (1983). *A Nation at Risk: The Imperative for Educational Reform*. Washington DC: US Government Printing Office.
- National Training Board. (1991). *National Competency Standards: Policy and Guide-lines*. Canberra: National Training Board.
- Masters, G. N., & McCurry, D. (1990). *Competency-based assessment in the professions*. National Office of Overseas Skills Recognition Research Paper No. 2. Canberra: Australian Government Publishing Service.
- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15 (2), 4-21.
- Sirotnik, K. (1984). What you see is what you get: Consistency, persistency, and mediocrity in classrooms. *Harvard Educational Review*, 53 (1), 16-31.
- Sykes, G. (1988). Inspired teaching: The missing element in 'effective schools'. *Educational Administration Quarterly*, 24 (4), 461-469.
- Tuxworth, E. (1989). Competency based education and training: Background and origin. In J. W. Burke, *Competency based education and training*. Barcombe, Lewes: Falmer Press.
- Woolfe, D. M. (1980). Developing professional competence in applied behavioural sciences. *New Directions for Experiential Learning*, 8, 1-16.

SELECTED PROFESSIONS OBSERVED: COMPETENCY-BASED STANDARDS AND THEIR IMPLICATIONS FOR THE TEACHING PROFESSION

Leo Bartlett

University of Central Queensland

INTRODUCTION: THE MACRO CONTEXT

The emphasis on competency-based standards (CBS) approaches to reform in teaching is the single most significant trend current in Australian education and in the professions generally today. The pressure for reform has come from industry, unions and government, and to a significantly lesser extent from the professions and parents. While there have been some reservations expressed about CBS among some sections of the Commonwealth bureaucracy in recent months, the idea of competency-based standards remains the overarching schema for micro-economic reform. The dominant press for reform can be attributed to federal (and state) interests and the policy-makers, who for largely economic or economic rationalist reasons recognise the importance of creating a multi-skilled and flexible workforce to produce (ultimately) a 'clever country'.

The impetus for reform is 'driven' by a metapolicy described as corporate federalism (Lingard, 1991; Bartlett, Knight and Lingard, 1992) which along with macro economic reform provides strategies such as CBS for the micro restructuring of work in occupations and the professions. This metapolicy has its origins in the documents *Skills for Australia* (Dawkins and Holding, 1987) which has been translated for the teaching profession into *Strengthening Australia's Schools* (Dawkins, 1988b). The succession of events focussing on different sectors of education and primarily driven by administrative concerns may be seen in the Green (Dawkins, 1987) and White Papers (Dawkins, 1988a) for higher education, the paper on *Teacher Quality* (1989), the *Report on Teacher Education in Australia* (Ebbeck Report) (1990), the national curriculum (AEC, 1989) and Schools Councils documents on *Australia's Teachers* (1990) (which does not mention CBS but is nevertheless about CBS). There are three interlocking themes that recur in these documents. They are the quality of teachers' work, the reorganisation and improvement of teachers' work, and preparation for teachers' work.

This brief paper is written in a context (a) where the National Project for Quality Teaching and Learning (NPQTL) aims to find constructive links among these three themes and; b) the NPQTL has taken measures in the past twelve months to give meaning to the concept of professional competence. This is reflected in the most recent commission to three groups in New South Wales, Victoria and Western Australia to develop, in a thoroughly untested form, competencies for teachers entering the profession.

While it was understood originally that groups from business, unions and the government alone would have the capacity to implement CBS, this has not occurred. Despite the strong influence of the National Training Board, which has produced a national standards framework (1991), the development of standards relating to paraprofessionals (levels seven and eight) in the teaching profession has been left to NPQTL. This situation has persisted despite the activities of the National Skills Formation Council with its production of this Australian Vocational Certificate Training System (Carmichael Report, 1992), and the publication of the Finn (1991) and Mayer (1992) Committees Reports.

The drive to CBS is being articulated and funded through a range of agencies such as the National Office for Overseas Skills Recognition (NOOSR), the National Advisory Committee on Skills Recognition (NACSR), the Vocational Education, Employment and Training Advisory Committee (VEETAC), and the Commonwealth State Committee on Regulatory Reform (Bartlett, 1992a; 1992b). All these groups are agents of implementation in a reform 'process'.

This paper deals with aspects of competency and CBS, and focusses upon what is currently known about competencies in selected professions and their applications to the teaching profession (Masters and McCurry, 1990). The paper first reviews the ideas of competency and competence, and competency-based schemes noting the distinction between the more behavioural/performance and the attributional/intention conceptions of competence. This is followed by a brief review of competency-based schemes in

several professions with a longer discussion about the research and implementation of competencies in the nursing professions. The issues identified in that research are discussed in the context of teacher education. The paper argues for the relevance of a competency-based scheme that promulgates standards whilst serving the need for making more explicit the nature of competencies of a beginning teacher. The paper is an updated version of one of the first papers commissioned by the NPQTL.

COMPETENCY-BASED STANDARDS

The concepts of competency and standards have a variety of meanings in the literature. The sense in which the term competency is used in this paper follows from the analysis of competencies in the Nursing Competencies Assessment Project (NCAP) which developed competencies for beginning nurses (Butler, Alavi, Bartlett et al, 1991). In this research, the definitions of competency and competence had the following meanings:

Competency: a definable knowledge/skill/attitude or attribute made explicit in work (action) and attained in social contexts to a defined standard through practice, study and personal interactions.

Competence: the ability/capacity to work (act) effectively as judged against established or known standards and encompassing intellectual, cognitive and attitudinal dimensions. Competence is based on knowledge in a specific field (for example, teaching) and context, and is constituted of a set of separate competencies, units or domains considered at once and/or globally.

Standard: the level of achievement of a competency in action; that is, the 'performance' level of a specific professional practice. Standards represent what is known or what is desirable.

There are several distinctions that may be made between competency and competence. While it is not the purpose of this paper to explicate these differences, they refer to focus (restricted or wideranging), adaptability in practice, content dependence, transferability and others. The differences, of course, will relate to the knowledge-base one theorises about competence and hence competency.

A competent professional is a person who has or demonstrates *competence* across the *whole range of competencies applicable to the profession at a standard* (author emphasis) that is judged to be appropriate for the level of professional, for example, the beginning teacher or the extended/expert professional teacher who is being assessed. Hence CBS focuses on attributes, performance and standards (Hager, Gonczi and Oliver, 1990). The amalgam of these constitutes CBS. In addition a number of other selected terms will be used in the paper. They are:

- (i) *simple/specific competencies*, which refer to specific combinations of attributes/competencies. Highly specific tasks such as writing on a blackboard may involve a single attribute/competency. [However, it must be recognised that even a specific competency involves a range of competencies; in the above example, competencies related to classroom management and pedagogy would be inextricably related.]
- (ii) *complex competencies*, which involve complex combinations of skills and abilities with an underpinning knowledge basis, for example, questioning in classrooms involving pacing, interpersonal communication skills, personal skills (patience). Expert teachers (ASTs: advanced skill teachers) might be expected to exhibit a range of complex competencies in order to be judged competent professionals.
- (iii) the terms *competency* and *competence*, which do not possess stable definitions in many professions in an Australian context. They are constantly changing. This is most evident from empirical evidence collected in NCAP research. It might also be noted that there is unlikely to be agreement on these definitional meanings within the teaching profession and across professions generally.
- (iv) *domains* which represent clusters or a range of competencies having a similar character or reference point. Hence, in teaching, domains may be: member of profession; reflective practitioner; communication skills. Domains represent a reduction of many competencies to encapsulate recurring dominant themes, or an essential character of teachers' work.

These definitions of competency and competence focus on professional practice as intentional action in social contexts and may be distinguished

from behavioural definitions which emphasise the idea of performance which is the idea that tends to be advocated by the NTB and NOOSR. The former defines competency standards in the following terms (NTB, 1991:7).

Competency standards reflect the specification of the knowledge and skill and the application of that knowledge and skill to the standard of performance required in employment.

The principal differences between behavioural/performance conceptions of competence and competence conceived as an intentional form of action in social contexts relates to how one conceives the theory-practice relationship. In the former, the notion that knowledge is applied to behaviours as opposed to the expression of competency/competence in or through action; and the narrow focus on knowledge underlying workplace (employment) competencies as opposed to the broader knowledge base of competence involving professional, pedagogical, subject-specific and personal knowledge.

The NOOSR definition of competence, while emphasising attributes, skills and knowledge, similarly relies on a more psychologistic if not behavioural view of performance. It states:

The competence of professionals derives from their processing a set of relevant attributes such as knowledge, abilities, skills and attitudes. These attitudes which jointly underlie competence are often referred to as competencies. So a competency is a combination of attributes underlying some aspect of successful professional performance.

COMPONENTS OF A COMPETENCY-BASED SCHEME

A brief comment is presented here to lead the reader into some appreciation of the nature of CBS 'models' or schemes. The material is taken from the NCAP Report (Butler, Alavi, Bartlett et al, 1990). In this report the following statements are made: (p.1-2):

In curriculum terms, the effect of a competency-based model is to focus on the specification of educational outcomes rather than learning processes. The intention of the model is to furnish greater clarity and orientation to the providers of the educational processes. The implementation of the model requires a profound

curriculum change if the previous situation was exclusively based on knowledge and skill components. However, it is often found that parts of the full model are often already operating in many institutions.

And again (p.1):

in a competency-based model, students are accredited when they are able to demonstrate that their performance meets the standards on each of the competencies promulgated by the registering authorities. The means by which the competencies have been acquired is of secondary importance.

The CBS model has a national appeal more perhaps to the statutory and political groups and policy-makers identified in the introduction of the paper than to practitioners and educators. However, it has also been noted that:

- (i) *the efficacy of CBS schemes is unsupported by research evidence* (Tuxworth, 1989); and
- (ii) there is a move to CBS models in the professions internationally although, as Tuxworth (1989:20) again notes, *the effects of the impetus of the model have been minimal.*

It is relevant to note also the significantly failed attempts to introduce the model to education in the 1960's. The problem of identification and measurement of outcomes reduced the model to more simple forms of mastery learning based on behavioural objectives.

Hager, et al. (1990) outlines three approaches to CBS. They are:

- (i) performance approaches;
- (ii) attributes approaches;
- (iii) integrated approaches.

The categorisation is rejected in this paper for the following reasons:

- a) It assumes a theoretical notion of performance/task as behaviour which is not necessarily the case. Performance can be conceived in terms of intentional action in social context.
- b) Attributes (knowledge, skills) are separated from performance, representing a knowledge-action, theory-practice dichotomy.
- c) An amalgam of a) and b) lacks a sound theoretical basis.

It should be remembered that any CBS scheme is relatively complex. All schemes must have four principal components in professional education.

- (i) Identification of competencies: A list of competencies must be identified/established for professional accreditation (Gonczi, Hager and Oliver, 1990).
- (ii) Specification of standards: standards must be specified for each of the competencies.
- (iii) Program construction: an educational program must be designed to assist individuals or professionals to perform to the standards on each of the competencies.
- (iv) Development of assessment technologies: methods of assessment must be developed for the competencies.

What tends to be forgotten especially by policy-makers is that:

- (a) all components need to be integrated and related to produce a particular kind of CBS;
- (b) the separation of (i) and (iv), identification and assessment, reflects a dichotomisation of theory and practice. Any identification of the competencies should involve their assessment *in situ*/natural settings;
- (c) the identification of competencies (i) can represent statements about national standards. Competency statements reflect standards. Assessment of competencies is one means of promoting standards;
- (d) a CBS scheme can be used for prognosis or recognition of prior learning. The former is the more useful purpose for entry into the professions;
- (e) there are currently only a few approaches which incorporate best aspects of CBS schemes (Bartlett, 1992a; 1992b).

THE PROFESSIONS OBSERVED

A treatment of the movement to CBS in the professions is presented briefly in this section of the discussion. Relevant aspects applicable to teaching are included in the issues section of the paper. It might be noted at the outset that the idea of professions and their classification is not unproblematic. Hager, Gonczi and Oliver (1990) offer a detailed analysis of professions although their categorisation of professions according to approaches is questionable, as are sections of their 'critique'. Nevertheless, the following six professional groups were investigated by means

of document analysis and (to a limited extent) by telephone surveys for reporting in this paper. The professions selected for analysis at the time of original production of this paper (June, 1991) were those professions which had completed some work on competency-standards.

Since the time of first writing this paper, twenty professions have been supported by NOOSR in their development of competency standards according to guidelines, required by DEET through NOOSR (1992) for the projects it funds. A more detailed analysis of these initiatives is forthcoming in Bartlett (1993). The following material represents an update on six professions with some general comments about the first five professions' initiatives and their application to the teaching profession. Developments in the nursing profession are discussed at length because they are seen to be more relevant to teaching.

1. The Law Profession

In Australia, the work of Ayling and Constanzo (1984) has represented this profession's principal endeavour to establish competencies. The outcome of this work is:

- (i) the identification of fifteen skills in four global areas ('domains');
- (ii) the combination of these (post facto) with attitudes.

With respect to licensing, there is no national mechanism to recognise any competencies that have been identified. The Law Council of Australia is not involved; it encourages reciprocal recognition among the admission authorities in each state and territory. The Consultative Committee for States and Territories under New South Wales Justice Priestley has noted the absence of a national set of competencies for the profession and has some interest in the area. There is some indication that state admission authorities have strongly held views that are protective of their own (state) interests; and that they do not have a national perspective on competencies for the profession. The teaching profession similarly has no set of competency statements nor a national professional body. The question as to whether the latter should have an accrediting and registering function is of course a topic of vigorous debate.

There are several features of work in the legal profession that might be noted:

- (a) In the profession's approach represented in the above work of Ayling and Constanzo, there is a dichotomy in thinking about skills and attitudes, a dichotomy comparable to a separation between theory and practice.
- (b) Learning about competencies is separated from their assessment.
- (c) Focussing on general areas of competencies ('domains') offers little to link appraisal for professional development.
- (d) The national body offers little prospect for a national set of competencies. Furthermore, indications are that law may adopt a privileged professional position without appreciating the possible useful knowledge acquired in developing competencies.
- (e) Competencies have not been tested/validated in the workplace, against what is actually done among practitioners in the profession.

The law profession at this time appears to have little to say to the teaching profession about constructive links among practice, its improvement and teacher career structures.

2. The Medical Profession

When we draw lessons for teaching from other professions, we must take into account the conditions under which these other professions are practised. Teaching is a more politically and more sensitive public activity than what is witnessed in other professions. It has little to learn from the medical profession. This viewpoint is stated despite Hager, Gonczi and Oliver's (1990) assertion that the "integrated approach" to CBS with its three-dimensional model (Fabb and Marshall, 1984) for the Australian Family Medical Program offers several advantages and no major limitations.

However, when teachers are able to bill insurance companies for services, earn much higher incomes, work with students one at a time, deal with people who voluntarily seek their help, be appraised in terms of process rather than outcomes, afford to pay lawyers to defend their practice, and choose to practise alone or in groups - only then should teaching take a close look at what the medical profession does.

One might also anticipate that the medical profession might be the last profession to make constructive links among the nature of their work, career structure and professional development for

improvement. If it does, it will not rely on any government agency support such as that provided by NOOSR. The profession will self-regulate and continue to aggressively control its own future. The exception may be the Royal Australian College of Obstetricians and Gynaecologists which has a sophisticated credit points transfer or system and a number of varied programs for professional development.

3. The Engineering Profession

The Institution of Engineers initially produced a document listing "desirable qualities" in engineers. The Institute required completion of 150 hours of continuing education on a three-year rolling program but this was not related systematically to the careers of engineers or to appraisal for their progress as professionals. In May 1992, the Institution contracted with NOOSR to develop, in consultation with relevant parties, national core competency statements and performance criteria relevant to all disciplines of professional engineers at entry and 'experienced' levels (NACSR, 1992). The task was to be completed by mid December, 1992. The initiative is intended to remove workplace barriers preventing non-professionals from bettering their skills to achieve professional status. Competency standards are also expected to be an integral part of future industrial agreements.

The profession is following closely the guidelines for development of competencies (Heywood, Gonczi and Hager, 1992) and producing eleven 'units' each with five elements. The aim is to produce generic competency statements for all disciplines and for the workplace. The wide range of discipline structures in Engineering makes the task formidable. The competency standards statements are being prepared for the entry (graduate) and experienced professional. In addition, there is the complexity of producing statements for the different vocational skills and professional levels of competence in engineering. The latter reflects the need for articulation between TAFE and universities. Finally, the current development of competencies adopting a limited consultative process does not consider assessment methodology. One may conclude that the profession has undertaken an extremely ambitious program within a minimal timeframe. The research design and procedures for the development of competencies offer little of value to the teaching profession.

4. The Accounting Profession

The Australian Society of Certified Practising Accountants (ASCPA) offered multi-level status for 60 hours' professional development per triennium for "Certified Practising Accountant" status or 120 hours for specialist member status. This seems less than systematic as a national certificate for recognition of advanced skills and understanding. In February 1992, with the support of NOOSR, ASCPA, and with the involvement of the Institute of Chartered Accountants of Australia, commenced a project to develop *common* competency standards for the profession. The distinctive feature of the project was that it is being conducted as a two-year project with the New Zealand Society of Accountants, itself supported by the New Zealand Education and Training Support Agency. Two other challenging features are that there are at least six to eight specialist fields with the work of the profession very hierarchically organised (novice to expert) and team-based. In addition, the profession acknowledges high levels of change (for example, in capital markets, and laws and regulations). Aspects of design development include questionnaire (Delphi technique) and high levels of consultation. While the project is in a relatively early stage (Birkett 1992a; 1992b, 1992c) there appear to be worthy lessons for the teaching profession.

5. The Pharmacy Profession

Western Australia is the only state with a registration authority (1989) to register pharmacy graduates, using twelve clusters of specific competencies. The Pharmaceutical Society of Australia has also produced a set of competencies for Community Pharmacy Practice (David and Jacobs, 1990). This is a long list which focusses on pharmaceutical practice, tasks and roles. At a national level, there has been limited progress (June, 1991) on CBS and some reluctance to proceed since the profession feels that CBS "may be used against them". This is understandable in any Australian profession. It has added 'spike', however, for the pharmacy profession, which sees itself engaged in health care in a context where government intervened and located it in the sphere of commercial activity (through changing Pharmacy from the Health Department to the Finance, Industry, Technology and Commerce Department at national level).

Initiatives in Pharmacy offer a number of applications to the teaching profession.

- (i) Competencies focussed on practice (tasks and roles).
- (ii) The need to derive/validate competencies from and through practice (although the Pharmacy profession has not done this).
- (iii) The possibility of setting standards for competencies. (Although Hager, Gonczi and Oliver (1990) indicate the high costs involved, there are alternative strategies such as those observed in the Nursing Profession).
- (iv) The possibility of using practice-based competencies linked with initial education programs.

6. The Nursing Profession

The Nursing Profession was the first profession in Australia to:

- (i) establish a list of competencies validated from practice;
- (ii) specify standards through the use of cues and exemplars (Hager, Gonczi and Oliver's (1990) comment about the ANRAC competencies that they expressed as 'behaviours' is not likely accurate as are a number of their other comments and analysis with respect to recent initiatives in the nursing profession);
- (iii) implement an assessment technology (standard-reference testing);
- (iv) construct and implement a National Professional Development Program (Bartlett, 1992c).

Perhaps more significant than any one of the four achievements above is the fact that they were all accomplished through a national registration body, ANRAC. [From July 1, 1992 this group was dissolved and the Australian Nursing Council (ANC) established]. In addition, each state retained its own particular view of standards in nursing through its state registering authority. It is anticipated that the ANRAC competencies will be accepted by the National Board of Training, with implications for award restructuring, work reorganisation, professional development, and the redesign of curriculum in Higher Education Institutions where all nurse education will be implemented by 1993.

The ANRAC competencies focus on the competencies of entry nurses who are about to begin nursing; but the list of competency

statements might well apply to the 'extended professional' if there was extended validation for professionals at that level.

A few selected implications for and/or applications to the teaching profession include:

- (i) the promulgation of standards through the assessment of the competencies;
- (ii) an assessment technology focussing on prognosis for improvement of professional practice;
- (iii) the ANRAC competencies are used for several purposes:
 - a) for overseas skills recognition for nurses;
 - b) to reward excellence;
 - c) for mobility across states.
- (iv) the recognition of a dialectical relationship between theory and practice;
- (v) the possibility of involving collaboratively all persons in the profession including administrators, practitioners and researchers;
- (vi) the establishment of competencies and their assessment in an open, democratic and cooperative way;
- (vii) the development of competencies and their self-regulation in the profession;
- (viii) the recognition of institutional and state 'cultures' in which the competencies are assessed in context;
- (ix) the competencies 'applied' to different nursing settings [The ANRAC competencies were focussed on acute care settings but the professional development programme in 1991-1992 aimed to allow nurses to 'test' the applicability of competencies for other settings];
- (x) the competencies reflecting a body of knowledge or theory which could be used contemplatively in the design of nursing curricula;
- (xi) education of the profession to the complexity of knowledge underpinning the ANRAC competencies;
- (xii) a mechanism (the proposed ANC for management of standards and accreditation across states 'to ensure the mobility of' a multiskilled and flexible workforce.

The ANRAC competencies offer the teaching profession singularly important applications that will enhance the professional aspects of what teachers do.

Issues in Applications to the Teaching Profession

Issues are things about which we disagree at different times and conditions of occurrence. A selected number of issues is discussed here to indicate the kind and nature of further work that needs to be addressed in a CBS approach for the teaching profession.

The Issue of Skills and Knowledge

A review of CBS in the professions raises the issue of the knowledge-base of competence, the complexity of this knowledge and a broad versus a narrow view of skills. An argument could be made that teacher knowledge is more complex than the knowledge basis for competence in any other profession. This assertion can be supported empirically in the literature and in seminal research such as Connell's (1985) study.

Closer comparisons might be made between the nursing profession (the profession perhaps closest in kind to teaching) and the teaching profession. One view of the kind of micro relationships between forms of knowledge and the clients served is shown diagrammatically in Figure 1.

These selected comparisons suggest that the relationships between skills, knowledge and the practitioner are highly complex in both professions. Yet teaching on a one-to-one basis occurs in changing settings and different disciplines of knowledge with many learning arrangements (even within one classroom) and among many people. At the same time if one were to separate the three components in the figures above the result would be the production of a narrowly conceived skilled technician rather than a reflective professional teacher.

The Issue of Generic and Specific Skills

While many educators (particularly from the discipline of Psychology) have hoped to discover that teaching is a bundle of generic skills applicable across many professions, this kind of search has been generally unproductive. The issue of generic competencies raises many questions, but from the NCAP research it is clear

that it is neither desirable nor possible to assess competencies independently of context. A generic notion of competency in a CBS scheme might well fit comfortably with a view espoused by the authors of the Finn, Mayer, and Carmichael Reports and with organisations such as NACSR or the NTB, primarily because it offers maximum efficiency in the administration and management of teachers in a reorganised work structure.

Alternatively, the recognition of specific skills in different contexts and settings offers a more liberal or pluralistic view of skill which has the potential for making the establishment and assessment of competencies more complex. While there is evidence to suggest that the search

for generic skills is an impossible dream, it would appear that it is only possible to argue for their existence on ideological grounds.

The validated competencies in the NCAP study indicate that simple skills (recording dates on a patient's chart) could be regarded as generic and comparable to skills in education (writing on the blackboard). But most skills are more complex, occurring in varying combinations that alter in time and space. Further research in the teaching profession similar to that conducted in the nursing profession might provide evidence to reveal the specific and generic nature of specific/particular skills in teaching.

The Issue of Teacher Practice and Teacher Work

The concept of work with its attendant discourse of division of labour, work reorganisation, labour processes, outputs and other categories has become the dominant form of discourse applied to paraprofessional and professional occupations in recent years. The origin of the term 'work' may be found in industry, and there is always the potential to conceive the concept in terms of a narrowly defined cluster of competencies or skills tied to behavioural forms of workplace performance.

What workers in the teaching profession do, however, has for many years been conceived in terms of the concept of practice. There is a voluminous and scholarly literature on the idea of professional practice which may be improved through a process of reflection. The latter makes possible an exploration of the dual relationships between the individual's ideas and actions, and the individual and societal concerns. However, practice should not be conceived as a monolithic concept if only because it occurs in different settings (learning arrangements), and in different political, cultural and temporal contexts. Teacher practice has a complexity within which is embedded an accumulated history related to the idea of teaching competence. It also varies from teacher to teacher in their interactions with different groups of learners. Hence, the idea of practice is inherently problematic not only in its meanings but also in the social contexts which give it meaning and in which it is given meaning.

While the largely managerial concerns of the Commonwealth government, about teacher competencies and standards might want to conceive of teachers' professional practice in terms of industrial and vocational work (Marginson, 1990), there is the potential danger that this conception may dominate our understanding of what teachers actually do. The history of classrooms and pedagogy however, provides clear evidence that teachers can accommodate, distort and reinvent bureaucratic impositions to suit their own purposes. What is needed is not only a close scrutiny of the industrial discourse of work, a discourse that is occurring from macro contexts of policy formulation, but also a critical scrutiny of the concept of professional practice as well as the relationship between work and practice. There is the need for systematic enquiry that focusses on what teachers actually do, how their actions relate to the ideas of work and practice, and in turn how this is related to the demonstration of high standards of competence.

There are a number of questions that might be asked in the context of this discussion (the list is not exhaustive or comprehensive).

- What is the conceptual framework upon which a notion of competence can be theorised?
- What is the nature of workplace competencies and how do they relate to other competencies, for example, those directly associated with personal development qualities?
- How long will a particular description of competencies and related assessments be valid?
- What competencies are required for the teacher to be recognised as worker?
- What minimal standard of competence is needed for teachers to achieve certification as workers in the education industry?
- What are the minimal standards of competence needed to maintain a continuing certification of status of worker?
- What standards of competence constitute a notion of excellence for a professional worker/practitioner?
- How are standards determined in the profession?

The above questions assume a distinction between the use of the concept of practice as it has been used in the literature by authors such as Kemmis, Grundy and Bartlett, and the concept of work as it has been written about by Seddon, Marginson, Foggo, Preston and others; and in a different sense, the way it has been described by Hatton who writes about work as bricolage. Both of the concepts are written about in an educational sense in these literatures.

The sense in which the terms 'work' and 'practice' are used in this literature, however, contrasts with the sense in which the term work is implicitly used in NTB's document on *Competency-Based Standards: Policy and Guidelines* (1991) with its focus on vocationalism, tasks and task skills, and needs analysis. The word 'work' is conceived in a vocational training sense in publications by Bluer and Carmichael (1991). It assumes that a framework for the implementation of a CBS approach focussed on its view of 'work' can be applied across the professions; and similarly, that competencies can be identified in a serial way across the same occupations or professions. This blanket application to all professions reflects the increasing dominance of a vocational conception

of 'work' and the application of one competency-based approach for all. The approach lacks an historical consciousness and gives little attention to the historical roots of reform (Zeichner and Liston, 1990). Rather than provide arguments as to why the NBT's view of competence should be rejected, it seems more appropriate for the purposes of this discussion and for the NPQTL, to comment on the really useful knowledge signified in the two concepts 'practice' and 'work' as they are used in an educational sense in the literature of the teaching profession. It is pertinent to indicate that there is no comparably well conceived or larger volume of literature on these two concepts in other professions in Australia.

There are a number of distinctions that might be made between the two concepts and these should be the subject of future analysis. Only two distinctions are discussed here. First, teachers as professional practitioners engage in professional autonomous judgements about their own practice. These judgements relate to the Aristotelian notion of prudence and wise or informed choice (praxis). Hence, the most complex competencies are 'played out' in educational settings by reflective practitioners. Professional judgements are the product not only of a teacher's individual understanding of his or her practice and competency to effect good practice, but they also depend on the *material conditions of practice*. Hence changing one's practice and the competencies requires not only the changing of one's understanding but also the conditions of practice that make that understanding possible. Many recent policy documents do not address the issue of conditions and context of practice: it appears to be denied or relegated to the "too hard basket".

The teacher-as-worker in the sense promulgated by Seddon is somewhat less autonomous because of work requirements, and the rules and procedures expressed, for example, in duty statements, which are the industrial products of negotiation between unions and employers. The idea of teacher work is governed and limited by these kinds of industrial and quasi-legal views, but nevertheless provide boundaries for conceptualising the concept of practice - something that is not yet recorded with the analysis it deserves in the literature.

A second distinction is the minimalist sense in which standards are applied to the concept teacher-as-worker. That is, when the competencies which identify the teacher-as-

worker from non-teacher-as-worker are being determined, and when these identified competencies are being assessed, they tend to be identified as being few in number and assessed at low or minimal standards of competence. Hence, unions protective of their workers' employment status negotiate a minimal level of standard in as limited a range of competencies as possible. This is witnessed in Australia in many teachers' unions whose interests (with some notable exceptions) are focussed on industrial rather than pedagogical or curriculum matters.

But even in this minimalist sense of work, teacher-workers will still engage in praxis in demonstrating their competence, even though the nature of competencies may be more simple than complex. Unions who negotiate and in part define the limitations and constraints on teacher work are especially protective of minimal standards in periods of economic downturn. Conversely, during these same periods employers demand a broader range of competencies at a higher standard of performance. Under more economically volatile and favourable conditions of work, unions relax their minimalist position and may become the advocates of higher standards of performance and the identifiers of complex competencies that indicate excellence, all in the best interests of their members.

The proposition that minimalism provides one distinction between teachers' work and practice does not suggest that a deficit model of teacher work is being advocated. Much more analysis needs to be undertaken; this might be a priority for NPQTL since it has implications for identifying and assessing teacher competence. It does not have a necessary application for a CBS approach to teachers' work. As has been indicated in the brief discussion of other issues in this paper, it is possible to identify a CBS with national testing of teachers. If this occurs, by definition (of the term 'national'), the lowest common denominator in both identification and assessment of competencies will be sought and this will be compounded by the political and economic struggle by interest groups such as industry and the unions to seek a minimalist as opposed to maximalist interpretation of standards.

The above discussion is in need of critique but it suggests that the NPQTL might:

- i) interrogate further the relationships between teacher-practice and teacher-work. Both concepts have recognition in the literature on

pedagogy and education, but not in other professions;

- ii) enquire into the nature of practice-work through theorising from what teachers actually do. Again, there is a relatively large literature in education on theorising from practice but not within a reconstructed conception of teacher practice-work;
- iii) analyse implications for the identification and assessment of competencies construed in a minimalist sense. As indicated in another section, this would appear possible from understandings from the NCAP study in the nursing profession, with particular reference to beginning teachers entering the culture of teaching, and overseas teachers wishing to access teaching in an Australian culture;
- iv) provide a critique of vocational training frameworks and CBS approaches applied to teaching. There is also a need to review critically 'performance' based approaches that have some of the attributes described above (Walker, 1990).

Finally, the concept of teacher work is essentially an Australian idea emerging from a particular view of the workplace. Any derivation of competencies of teacher-workers must be based on that workplace (described in an Australian literature as 'theorising from practice'). It would be entirely inappropriate to follow an international trend, such as occurs in the US, to establish and assess competencies independently of the workplace. On the other hand, it would be conceptually inadequate to assume that all teacher competencies are 'tied' to the workplace. Explicit statements about teacher competencies must be derived from an espoused knowledge-base of the professional teacher.

The Issue of CBS and Teacher Education Programs

The value of a CBS approach as it was conceived in the NCAP study of the nursing profession has already been commented on in relation to its potential application to the teaching profession; and for its usefulness in the design of new curriculum in initial teacher education programs. The nursing competencies assume a knowledge-base that involves both critical and technical knowledge (Anderson, 1991). One of the criticisms aimed at the ANRAC competencies however, is that they have been inadequately theorised or conceived.

Similarly, the kind of professional and content knowledge required in initial teacher education programs is also associated with 'critical' intelligence and not only technical intelligence which, narrowly defined, has a closer affinity with vocational skills-based CBS approaches. Critical intelligence leads to the development of professional competence in beginning teachers; it makes them responsible for solving their problems; it sharpens their insights; and, as the basis for developing civic and critical intelligence; it has instrumental value in that it contributes to economic growth by teaching neophyte educators how to reason well in all things.

The Issue of Being Competent and Proficient

In constructing links between work and career structures for continuing professional development, it is useful to distinguish between being *competent* in initial teacher education and being *proficient*, the latter having the idea of being 'expert' and 'making progress' within a continuing professional education framework.

In the NCAP study, a distinction was made between the beginning nurse and the extended professional. These stages of development are well documented in educational literature as phases of teacher development ranging from *survival* to *consolidation* to *maturity* and finally to *proficiency*. The problem is to determine what kinds of competence (often related to forms of licensing, certification, registration or accreditation) are appropriate at the various stages of professional development (Queensland Board of Teacher Registration, 1987).

From the NCAP study it was proposed that a range of competencies could be identified and assessed at a minimal level of competency. The research was also about the promulgation of standards in the profession. That is, it had a formative aim to promote excellence or quality in nursing practice through a form of assessment known as standard-reference testing (Sadler, 1987). It also had a summative purpose, namely to indicate minimal levels of competence of an entry nurse. While the NCAP research tended to focus on the validation of competencies in practice with a lesser emphasis on assessment processes, the latter has been reviewed in the National Professional Development (NPD) of nurse professionals in five states (Bartlett, 1992c). The NPD program indicates that the two aims are not incompatible.

A first phase of research for the profession is to develop a list of competency statements. In the NCAP research this was achieved by expert nurses or extended professionals; a similar process could be followed in the teaching profession. This procedure incidentally is currently being adopted in the New South Wales Department of the School of Education.

A second phase is to test the competency statements in practice through observation of teachers' work. The methods to be employed here should be based on what is known in the profession, namely methods based on learning for improvement through action research, clinical supervision and other forms of reflective enquiry.

A third phase requires the validation of competence through sources other than observation of practice. The reports used in practice teaching schools reflect the competencies in action. What is needed is a systematic analysis of these reporting forms to assess whether the list of competencies for beginning teachers exist in practice.

A more appropriate focus might be to concentrate on the probation of beginning teachers in the first year of teaching rather than on the assessment of competencies in initial teacher education programs. Through a process of peer and system review, appropriate competencies could be assessed for defined standards at minimal levels of competence.

One final issue might be addressed. In the NCAP research, the competencies of beginning teachers were observed in the first three to six months of beginning nursing practice. It may be argued that the competencies of the extended professional and proficient nurse could give a better 'picture' of what is expected of the beginning practitioner. In reality, it would probably be more meaningful to conduct research in both areas and determine how the competence of each is related.

The NCAP methodology acknowledged the importance of the workplace, theory-practice relationships and, above all, ownership by the profession of standards in the profession. The critical issue is that the research design and method used should encourage professionalism while acknowledging the legitimate claims of registering authorities. As will be seen in the section on the issue relating to national testing and a mechanism for accreditation, the nursing profession is currently attempting to establish appropriate management infrastructure to ensure

that the profession is self-regulating. The teaching profession might well draw upon lessons from the nursing profession and its most recent reforms and initiatives.

While the idea of being *competent* is appropriate for initial teacher education, the idea of being *proficient* is more appropriate for the continuing professional education of teachers particularly in relation to the Advanced Skilled Teacher (AST). More complex competence and combinations of competencies will be involved in making explicit the qualities of 'expert' teachers and ASTs. The emergence of consortia in a number of states could support teachers in developing profiles for their task of making explicit their advanced skills and competencies.

The Issue of National Testing vs National Mechanisms

Much of the recent discussions on teacher professionalism and development related to standards and reform has focussed on the areas of national standards and national competency standards. Much of the debate has centred on whether national standards should be linked with a testing process such as a competency-based scheme regulated by a national professional body (McCrae, 1992); or whether national standards can be promulgated through a national professional body which acts as a mechanism for teacher development (National Teacher Registration Forum, 1991). This latter kind of agency exists in the US (Porter, 1991).

At a more organisational/structural level, there are a number of options available to license professionals and to support standards in the profession.

- (i) Retention of the status quo: no national registering or accrediting body.
- (ii) Reciprocity for active professionals: the status of professional experience allows provisional registration in another state.
- (iii) Full reciprocity: any registered professional is eligible for registration in any state.
- (iv) Deregulation: any qualified professional is recognised (for employment) at the discretion of the employer.

It is significant to note that VEETAC has recommended deregulation for the teaching profession (Keys, 1991). Their decision was made on the basis that the profession performs well on

four of five criteria but fails the criterion on Health and Safety, a compulsory criterion for recognition. The basis for this decision appears somewhat arbitrary, and is currently being reviewed for a number of professions within VEETAC. However, deregulation still has significant implications for the profession in a national context where there are registering authorities in Victoria, South Australia and Queensland only; Tasmania has a private sector authority and New South Wales a Classifiers Committee of the State Department of Education. The teaching profession has no national representative group.

The teaching profession, unlike the nursing profession does not therefore have a registering authority in every state. The critical issue is that the nursing profession has acted to self-regulate the profession. It has established the Australian Nursing Council (ANC) to replace ANRAC, a group which will:

- (a) accredit competency-based standards across states and therefore ensure at least mutual recognition and transferability of qualifications within the professions as a whole;
- (b) have the ANRAC competencies acknowledged by the NTB and recognised as a basis for award restructuring and career structures.

The question to be answered is: Is it possible to have a national body without the competencies? DEET's position (March, 1992) was that a national professional body could only be established if there was a CBS scheme. This may be appropriate if the competencies are used for promulgation of standards, that is as the means for prognosis and improvement of practice. This is the principal intent of the ANRAC competencies and relates to national standards through the profession appealing to the same competencies.

Competency standards tied to registration purposes could be a state registering authorities' matter co-ordinated by a national body. Mutual recognition through a national (co-ordinating) body would then be possible (NBEET, 1991). States' rights issues are addressed and the individual professional 'cultures' in each state left 'intact'.

The above situation refers only to beginning or entry professionals. It does not refer to re-entry or overseas trained professionals who are seeking

admission to practice in this country. The kind of assessment for these persons relates to recognition of prior learning and not prognosis. This function could be served by a national body.

The teaching profession could:

- (i) adopt a similar CBS approach for first-year teachers. The procedures should invest ownership in the profession. In addition, the lessons to be learned from the NCAP research would improve these procedures;
- (ii) use trained peers, ASTs and persons within the profession to assess competencies;
- (iii) establish a national mechanism for purposes of registration of overseas and re-entry professionals and for testing for excellence.
- (iv) establish recognised state authorities for purposes of registration and mutual recognition (Queensland Board of Teacher Registration, 1991). Where a state does not do this, the profession is of course in danger of being appropriated by employers.

The principal advantages would be:

- a) (ii) would satisfy the Health and Safety criterion required by VEETAC (although there is some doubt about the quality of this group's decision);
- b) the profession would be self-regulating but avoid the dysfunctions of national testing (Fensham, 1980);
- c) a monolithic model of CBS would not be imposed nationally but each state could register and interpret (assess) competencies recognising their own teaching and curriculum cultures;
- d) the established professional management infrastructure would avoid the necessity of being regulated by a government agency or by a quasi-qualified group such as the Australian College of Education.

IN CONCLUSION

While it may be that NPQTL will now have the capacity to define the meanings of competence and a CBS approach, possibly dominated by peak bodies in business and the unions, it is necessary that the political and policy agenda behind the move to CBS in the profession is made explicit. In talking to professional groups, albeit briefly, in the short time available to write this paper, it was evident that various stakeholders, administrators

and practitioners were nervous and suspicious of the move to CBS.

The teaching profession needs to be politically conscious about the agenda driving the move to CBS, but more professionally informed. This is said in a context where CBS approaches throughout educational history demonstrate a series of failed attempts to impose reform and to control teachers' work. Teachers themselves will be cynical and suspicious if on the one hand documents such as *Australia's Teachers* argue that teachers' work should be made explicit but on the other hand a monolithic model of CBS imposes further stringent conditions on their work in the process of the latter being made explicit.

Second, unless teacher educators (parents, teachers, university lecturers, faculties of education in universities) are included in the processes of establishing a basis for a CBS approach, it is unlikely that any 'partnership' between various groups will be possible. To date there has been a tendency to exclude teacher educators and a greater propensity by DEET, the unions and employers to believe that they have the solutions to problems in the profession.

There is an added difficulty in as much as most CBS approaches focus on prior learning as opposed to prognosis; that is, a standard achievement within an occupation is measured by how well one can perform skills and demonstrate a knowledge for a specific level of achievement or performance rather than the formal qualifications one attains. This is the vocational training focus adopted by many professions. Teacher educators might be forgiven for thinking, especially in the absence of their participation in recent developments, that this move to CBS in the teaching profession is nothing more than a strategy to develop a list of competencies to ensure that the duration of initial teacher education programs for those institutions that have three year programs, remain just that. An additional consideration is that teacher educators in higher education institutions, having rejected generally the Ebbeck Report's (1990) recommendations, tend to view the Commonwealth's move to CBS as another attempt to implement an agenda driven by cost-saving and management strategies rather than by a professional view of teaching.

The recent statement by the Australian Vice-Chancellors' Committee (AVCC) that the idea of competency and competence in relation to levels seven and eight of the National Standards

Framework scheme have no place in universities raises further questions for teacher educators. The AVCC statement is clearly focussed on private sector professions (medicine, law, etc.), but how that group will defend the statement for public sector professions such as education and health is yet to be seen. To date the AVCC has had little to say and provided (covertly) minimal support in resisting developments that might adversely affect teacher education.

There are other issues that emerge from a review of a selected number of professions and a move to CBS, and in particular, a review of the nursing profession. These issues include the more technological aspects of assessment of competencies. Issues include: assessors as instruments; the question of objectivity and subjectivity; and several others.

The move to a prescriptive behavioural/performance-based CBS generally equated with a vocational-training perspective has only minimal to no relevance for the teaching profession. The adoption of a CBS scheme, however, based on standard-reference testing which promulgates standards in the profession has relevance. Such an approach, initially tested in the development and implementation of competencies in the nursing profession, could clearly apply to beginning teachers. There are implications also for continuing professional education and profiling for expert teachers or ASTs. The development of competencies for the latter is yet to be considered seriously and is more problematic. The need is evident, however, if teacher career structures are to be acknowledged and teacher work is to be reorganised to meet current social and economic change in the workplace and in society.

NOTES

1. The twenty professions currently developing competency standards with the support of NOOSR, as at October 1, 1992 are: accountancy, agricultural science, architecture, chiropractic/osteopathy, dentistry, dietetics, engineering, medical scientists, medical radiations science, nursing, occupational therapy, optometry, pharmacy, physiotherapy, podiatry, psychology, social welfare, speech therapy, teaching, and veterinary science.

REFERENCES

- Anderson, D. (February, 1991). What should we be teaching our undergraduates? *ACE News*, pp. 3-4.
- Australian Education Council (1989). *Common and Agreed National Goals* (The Hobart Declaration). Canberra: AGPS.
- Australian Education Council (July, 1991). *Young People's Participation in Post-compulsory Education and Training*. (Finn Report), Canberra: AGPS.
- Australian Education Council (1992). *Employment-related Key Competencies for Post-compulsory Education and Training*. (Mayer Report). Melbourne: Australian Education Council and MOVEET.
- Ayling, R. and Constanzo, M. (1989). Towards a model of education for competent practice. *Journal of Professional Legal Education*, 2(1).
- Bartlett, V.L. (1992a). One Nation: the Regulation of Teacher Quality and the Deregulation of the Teaching Profession. Inaugural Lecture. University of Central Queensland, Rockhampton.
- Bartlett, V.L. (1992b). Vision and Revision: a Competency-Based Scheme for the Teaching Profession. Keynote Address, Australian Teacher Education Association, Ballina, N.S.W. (Forthcoming in *Australian Journal of Teaching Practice*).
- Bartlett, V.L. (June, 1992c). A National Professional Development Program. Report to the Australian Nursing Registering Authorities, Adelaide.
- Bartlett, V.L. (1993). The Professions Observed; the Next Domino in the Development of Competency Standards in the Professions. (In preparation).
- Bartlett, V.L., Knight, J. and Lingard, R. (1992). Restructuring teacher education in Australia. *British Journal of Sociology of Education*. 13(1), 19-36.
- Burkitt, W.P. (August, 1992a). A question of competence. *Australian Accountant*, pp. 57-58.
- Burkitt, W.P. (September, 1992b). A question of competence. *Australian Accountant*, pp. 35-36.
- Burkitt, W.P. (October, 1992c). A question of competence. *Australian Accountant*, pp. 50-51.
- Butler, J., Alavi, C., Bartlett, V.L. et al. (October, 1991). ANRAC Nursing Competencies Assessment Project. Report to the Australian Nurse Registering Authorities Conference, Volumes 1-3. Adelaide.
- Bluer, R and Carmichael, L. (1991). Award restructuring in teaching. *Unicorn*, 17(1), 24-29.
- Connell, R. (1985). *Teachers' Work*. Sydney: George Allen and Unwin.
- David, B. and Jacobs, S.M. (November, 1990). Development of Competency Standards for Assessment of Overseas Pharmacy Graduates. Report to the Australian Pharmacy Examining Council, Curtin University of Technology, Perth.
- Dawkins, J.S. and Holding, C. (1987). *Skills for Australia*. Canberra: AGPS.
- Dawkins, J.S. (1987). *Higher Education: a Policy Discussion Paper*. (The Green Paper). Canberra: AGPS.
- Dawkins, J.S. (1988a). *Higher Education: a Policy Statement*. (The White Paper). Canberra: AGPS.
- Dawkins, J.S. (1988b). *Strengthening Australia's Schools: a Consideration of the Process and Content of Schooling*. Canberra: AGPS.
- Dawkins, J.S. (1989). *Migrant Skills: Improving Recognition Processes*. Canberra: AGPS.
- Dawkins, J.S. (1990). *Quality of Teaching An Issue for All: An Initial Statement*. Department of Employment, Education and Training, Canberra: AGPS.
- Fabb, W. E. and Marshall, J. R. (1983). *The Assessment of Clinical Competence in General Family Practice*. Lancaster: MTP Press.
- Fensham, P. (1980). Setting priorities in educational research: national testing is counter-productive to the educational task. *Vestis*, 23(2), 43-46.
- Foggo, D. and Robson, D. (February, 1991). *Teacher Education Policy and Teacher Appraisal Policy*. Australian Teachers Union, Melbourne.

Gonczi, A., Hager, P. and Oliver, E. (December, 1990). *Establishing Competency-Based Standards in Professions. National office of Overseas Skills Recognition, Research Paper No. 1.* Canberra: AGPS.

Hager, P., Gonczi, A. and Oliver, E. (November, 1990). *Competency-Based Approaches to Professional Education.* Paper presented at the Australian Association for Research in Education Conference, Sydney.

Heywood, L., Gonczi, A. and Hager, P. (1992). *A Guide to the Development of Competency Standards for the Professions. Research Paper No. 7, NOOSR.* April. Canberra: AGPS.

Keys, W. (February, 1991). *Report on Commonwealth Legal and Administrative Powers in Overseas Skills Recognition. National Advisory Committee on Skills Recognition.* Reference No. 3, Canberra.

Lingard, R. (1991). Policy-making for Australian schooling: the new corporate federalism. *Journal of Education Policy.* 6(1), 85-90.

Marginson, S. (August, 1990). *Productivity in Education: Measurement and Improvement.* University of NSW Public Sector Research Centre, Discussion Paper Number 9.

Masters, G. and McCurry, D. (1990). *Competency-Based Assessment in the Professions. National office of Overseas Skills Recognition, Research Paper No. 2.* Canberra: AGPS.

McCrae, G. (1992). *A National Professional Body for Teachers: a Discussion Paper.* Canberra: AGPS.

National Advisory Committee on Skills Recognition (1992). *Migrant Skills Newsletter.* 8, September.

National Training Board (1991). *National Competency Standards.* Canberra: AGPS.

National Board of Employment, Education and Training (1990). *Teacher Education in Australia.* (Ebbeck Report). Canberra: AGPS.

National Board of Employment, Education and Training (1991). *Mutual Recognition of Standards and Other Regulations in Australia.* Discussion Paper prepared for the Special Premiers' Conference Working Part on Tariff Barriers, 19 April.

National Teacher Registration Forum. (1991). *Teacher Recognition: Towards 2000.* Report for a National Conference on Reciprocal Recognition of Teacher Education Qualifications and Mobility of Teachers, Melbourne, April.

National Training Board (1991). *Policy and Guidelines.* Canberra: AGPS.

Pharmaceutical Society of Australia (1989). *A Set of Competencies for Australian Community Pharmacy Practice.* Mimeo, Canberra, March.

Porter, P. (1989). *Review of Policy Developments in Relation to Teacher Quality in the United States.* Paper prepared for the Schools Council of the National Board of Employment, Education and Training, Canberra, September.

Queensland Board of Teacher Registration (1987). *Project 21: Teachers for the Twenty First Century.* Committee Report to Board to Teacher Registration (Qld), Brisbane.

Queensland Board of Teacher Registration (1991). *Report of the Working Party on Induction of Provisionally Registered Teachers.* Brisbane.

Sadler, R. (1987). Specifying and promulgating achievement standards. *Oxford Review of Education.* 13(2), 191-209

School's Council (1989). *Teacher Quality: An Issues Paper.* Report prepared by Schools Council for the National Board of Employment, Education and Training. November, Canberra: AGPS.

School's Council (1990). *Australia's Teachers: an Agenda for the Next Decade.* Report prepared by Schools Council for the National Board of Employment, Education and Training. Canberra: AGPS.

Seddon, T. (1990) Productivity as a positive. *Australian Universities Review,* 1 & 2, 75-76.

Seddon, T. (1991). Who says teachers don't work? *Education Links,* 38, 4-9.

Shulman, L. S. (1987). Knowledge and teaching foundations of the new reform. *Harvard Educational Review,* 57, 1, 1-22.

Tuxworth, E. (1989). Competency based education and training: background and origins. In I. W. Burke (Ed.), *Competence Based Education and Training.* London: Falmer Press. Chapter 2.

Walker, J. (1990). *Policy Directions in Teacher Education and Professional Development.* Mimeo, University of Canberra, Canberra ACT.

Zeichner, K. and Liston, D. (1990). Traditions of reform in U.S. teacher education. *Journal of Teacher Education,* 41(2), 3-20.