

CONCEPTIONS OF COMPETENCE

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Currently in countries like Britain, Australia and New Zealand there is a debate occurring about the place, if any, of competency standards in the higher education system. Certainly if a narrow, mechanistic view of competence is taken, the clear answer seems to be that competency standards have no place in the higher education system. However an increasing number of writers have claimed that a richer, more educationally attractive conception of competence is possible. Several professions in these countries have developed competency standards based on this enriched conception of competence. The main aim of this paper is to examine some key arguments proposed by philosophers of education about competency standards, dating back to the flurry of writing on this topic in the 1970s in the USA. The central question will be whether this emerging enriched conception of competence is compatible with the conclusions of the philosophers.

ARGUMENTS ABOUT THE NATURE OF COMPETENCE

As noted already, higher education opponents of competency standards agree that a narrow conception of competence is undesirable. The narrow conception sees competency standards as lists of particular, discrete vocational tasks. Not surprisingly, philosophers of education have been trenchant in their rejection of such conceptions of competence. A focus of their criticisms was competency- (or performance-) based teacher education (CBTE or PBTE), which had a brief flowering in the 1970s, particularly in the USA.¹ CBTE represented the attempt to apply theories of behaviourist psychology to the analysis of teaching. It was based on a very narrow conception of competence and was intended to dramatically revamp teacher education courses. According to Broudy² the CBTE approach defines

competence in terms of prespecified performances stated as segments of overt behaviour; it argues that practicing the performance directly is more efficient than achieving it indirectly through the conventional courses...competence training...contrasts an overt performance with the conventional program's promise of performance.

Broudy and others³ had no difficulty in demolishing the theoretical foundations of this narrow approach to competence. Although their writings were focused on CBTE/PBTE, their criticisms are sufficiently general to apply to the conceptualization of almost any occupation in these terms. Some ramifications of this approach to competence are outlined in the first column of Figure 1.

FIGURE 1: THREE DIFFERENT CONCEPTIONS OF COMPETENCE AND THEIR IMPLICATIONS

BEHAVIOURIST OR SPECIFIC TASKS APPROACH	ATTRIBUTE OR GENERIC SKILLS APPROACH	INTEGRATED OR TASK ATTRIBUTE APPROACH
1. Overt performance is competence	General attributes as predictors of future performance	Competence inferred from performance
2. Atomistic, reductive, trivial, mechanistic,	Abstract, remote from actual practice, problem	Holistic, richness, of practice captured

standardised, routine, discrete tasks or skills	of transfer. Overall rationale often lacking	
3. Large number of specific competencies -- list lengthens with complexity of work e.g., professions	Small number of generic competencies	Manageable number key competencies
4. Uniformity(1 right way)	Diversity (> 1 right way)	Diversity (> 1 right way)
5. "Doing" curriculum. Practical modules. Jettison current curriculum	Conventional curriculum. Fragmented into subjects	Powerful device for improving content, delivery and assessment of current curriculum
6. Central control of curriculum	Provider autonomy in curriculum	Profession/provider, joint control of curriculum
7. Checklist for ticking invalid assessment	Traditional assessment has its limitations	Competence demonstrated over time portfolios, etc. Assessment needs careful planning
8. Minimum competence "Lowest common denominator discourages excellence." "Deskilling"	Encourages excellence that is remote from professional practice	Richness of quality professional performance is captured

Higher education critics of competency standards, in rejecting the narrow approach to competence, usually prefer instead to focus attention on generic attributes as the best indicators of future successful performance. This has certainly been the common response in Britain, Australia and New Zealand. Some ramifications of this second approach to competence are outlined in the middle column of Figure 1. While a detailed consideration of this second approach is not the concern of this paper, its main difficulties relate to the fact that the link between a generic attribute (such as analysis) and actual professional performance is doubly vague -- firstly, because the claim that graduates develop a capacity for analysis typically is not subjected to detailed scrutiny, and secondly, because what analysis typically means in the day-to-day practice of the profession is not considered. The enriched conception of competence that has gained some currency -- particularly in Australia and, to some extent, in New Zealand -- attempts to address both of these issues.

To lead us into a consideration of this third model of competence, let us examine what some of the early critics of the first model suggested in the way of alternatives. In an important paper, Noddings⁴ applied linguistic analysis to the problems of defining competence and of clarifying the relation between competence and human action. Her first main conclusion was that competence must be differentiated from performance. She arrived at this conclusion via a critique of Rylean behaviourism as an inadequate account of competence. The key argument here is that if competence consists of a series of observable behaviours, then the same series of observable behaviours will be displayed by anyone competent in a given field. But it is evident that not everyone competent in a given field will display the same series of observable behaviours (think of competent teachers) hence, competence is not the same thing as performance. Rather, it is something that underlies performance. In addition, Noddings pointed out, the occurrence of observable behaviours associated with competence in a given field may be explicable by causes other than competence (think of actors playing the roles of, say, surgeons). So, she concluded:

If competence as capacity, is to be retained as groundwork for performance, then the problem of identifying reliable indicators of competence arises and this, it seems to me, is a tough problem demanding

sophisticated methods and extensive investigation.⁵

She went on to recommend an empirically based, comprehensive, naturalistic study of actual professionals indisputably held to be competent as the main source of a description of competence. From this, in relation to teaching, she suggested that it should be "possible to construct theories that have some degree of the desired systematization...capable of producing categories that will aid us in describing competence and in evaluating it."⁶ Noddings stated that she knew of no program of CBTE or PBTE that met the considerations outlined in her paper. However, she commended earlier work by Kerr and Soltis as a promising extension of her ideas.

Kerr and Soltis⁷ attempted to provide "a theoretical description of teaching which is at least adequate to the task of identifying teacher competencies." I will not consider in any detail those aspects of their paper that were specifically concerned with the nature of teaching, though these ideas generated a significant debate.⁸ Rather, I will outline some of their general points about competence which are crucial to the third, enriched approach to competence which, I will be arguing, is much to be preferred to the two other approaches discussed so far in this paper.

Kerr and Soltis set out to develop "a theoretical model of teaching that possesses descriptive adequacy."⁹ Following Green,¹⁰ they proposed an *action* description rather than a *behaviour* description, because "one applies the adverb 'competently' only to those movements which a person *intends* as a *particular* type of activity...."¹¹

Thus, while it is possible to describe teaching, or any other human activity, as either *action*, which necessarily involves intended activity and appeals to a person's reasons and goals to explain the activity, or as *behaviour*, which can be specified directly in terms of observable movement and appeals to causes for explanation, our interest in competency advises an action description.¹²

The Kerr and Soltis recommendation was that professional competence be conceived in terms of a set of action categories that are necessary to carrying out the profession, with further elaboration and development reflecting the 'logic' of this set of action categories. It is interesting that, though the Kerr-Soltis proposal was published and debated from 1974 onwards, Noddings in 1984 reported that, to her knowledge, nobody had attempted to apply it to the problem of teacher competence. Walker's¹³ proposals on how to conceive of teacher competence are, as far as I know, the next development of this general view of teacher competence, although he seems to be unaware of the Noddings and Kerr-Soltis proposals.

PROFESSIONAL COMPETENCY STANDARDS

The basic ideas as to how professional competence might best be conceived, which I have identified in the work of Noddings and Kerr and Soltis, provide a good starting point for understanding the way that professional competency standards have been developed in the professions, particularly in Australia and (to some extent) in New Zealand. While I will not here describe the processes,¹⁴ the focus is on applying a suitable combination of applied social science research methods to arrive at a logically structured set of action categories of the kind described by Kerr and Soltis. This approach to conceptualising professional competence has been called the "integrated approach," because it brings together the "tasks" (or, more accurately, "key intentional actions") of the first approach and the attributes of the second approach.

According to the integrated conception, competence is conceptualized in terms of knowledge, abilities, skills and attitudes displayed in the context of a carefully chosen set of realistic professional tasks ("intentional actions") of an appropriate level of generality. A feature of this integrated approach is that it avoids the problem of a myriad of tasks by selecting key tasks ("intentional actions") that are central to the practice of the profession. The main attributes that are required for the competent performance of these key tasks ("intentional actions") are then identified.

Experience has shown that when both of these are integrated to produce competency standards, the results do seem to capture the holistic richness of professional practice.

How do these integrated professional competency standards fare against some common criticisms of competency standards? One of the most overused terms in the critical debate has been "atomistic." Authors seem to assume that if an approach to conceptualizing competence is labeled, usually by themselves, as "atomistic" it can then be rejected without further argument. In chemistry, where atoms are discrete and independent units, they nevertheless combine to form molecules which have quite different properties to those of their constituent atoms. So here atoms are a highly useful unit of analysis and are consistent with subsequent powerful synthesis. In reference to competency standards, "atomistic" has no such clearcut meaning, nor does "holistic." Both are relative terms when applied to competency standards, and their application needs to be justified by further argument. The fragmenting of a profession into a myriad of tasks, as the first approach to competence discussed earlier does, is overly atomistic precisely because actual practice is much richer than sequences of these isolated tasks, and the overall approach fails to provide any synthesis of the tasks. In that case we are justified in concluding that the distinctive character of the profession has been destroyed by the analysis. However, the opposite mistake is adherence to a rigid, self-defeating monistic holism that rules out all analysis. In practice, some degree of atomism in approaches to competence will be acceptable, provided that it is accompanied by a suitable degree of holism. The above professional competency standards produced by the integrated approach are holistic in several important senses.

1. They are holistic in that competence is a construct that is inferred (as suggested by Noddings) from performance of relatively complex and demanding intentional actions (as suggested by Kerr and Soltis). The relative complexity of the actions can be gauged from the fact that a typical profession involves no more than 30-40 such key intentional actions.
2. The holistic character of such competency standards is due also to the fact that the tasks (or intentional actions) are not discrete and independent. For example, actual professional practice will often simultaneously involve several of these intentional actions.
3. A further sense in which these kinds of competency standards are holistic is that the intentional actions involve what Walker¹⁵ calls "situational understanding," i.e., the competency standards include the idea that the professional performer takes account of the varying contexts in which they are operating. A more general cognitive perspective is called on to frame a skilled intentional action appropriate to the context.
4. Yet another sense in which these kinds of competency standards are holistic is that by integrating key tasks and attributes, i.e., integrating intentional actions with characteristics or qualities of individuals, competence is constituted by a relation between the professional and their work.

In being holistic in the above senses, these competency standards are the opposite of any significantly atomistic approach, whether the atoms be tasks or attributes. In this way these professional competency standards strike a balance between the misguided extremes of fragmenting the profession to such a degree that its character is destroyed by the analysis or adhering to a rigid, monistic holism that rules out all analysis. That this balance is a reasonable one is indicated by the fact that these professional competency standards allow for professional discretion -- i.e., they do not prescribe that all professionals will necessarily act in the same way in a given situation. Nor do they require that all professionals will have identical overall conceptions of their work -- i.e., these professional competency standards are quite consistent with one practitioner having, say, a strong commitment to social justice, while another is just as strongly committed to excellence of practice.

The nature of these competency standards will obviously determine how they should best be assessed. Since they are based on the idea that competence is a construct that is not directly

observable but rather is inferred from successful performance, it is clear that performance will be vital for assessment. Equally vital will be the requirement that sufficient evidence be gathered to justify the inference. While evidence from performance will be central to assessment, it may be supplemented by other kinds of evidence. This follows from the integrated nature of these competency standards in which attributes underpin performance. This means that the attributes often figure in the performance criteria. Thus, in some instances, evidence about possession of attributes, such as certain kinds of knowledge, might usefully supplement evidence of performance.¹⁶

EDUCATIONAL IMPLICATIONS OF THE INTEGRATED APPROACH

Finally in this paper, I consider what integrated professional competency standards mean for higher education. This discussion will be structured around the points in the third column of Figure 1. (The previous section dealt with the first two points, that competence is inferred from performance, and the holistic nature of the competency standards. So this discussion will start at the third point).

Competency standards make no claim to exhaust all facets of a profession, just as traditional entry procedures for professionals don't claim to be totally comprehensive. What a good set of competency standards does do is to provide a clear statement of what is considered to be important in competent performance in that profession. This is something which has been a long felt need of registering authorities and the like in Australia, thereby pointing to weaknesses in the present arrangements. After all, it would be rather strange if people who are in the business of registering or educating professionals insisted that it was too hard to specify what it is that distinguishes professional from non-professional performance. This is essentially what these competency standards do. To point out that professional work is complex is simply to require that valid standards need to take account of this complexity. It is already evident in the professional competency standards that have been developed so far in Australia that it is possible to capture the complexity of professional work.

Moving to the fourth point: some people worry that competency standards will demand a uniformity in the way professionals practice that is totally inappropriate. It is pointed out that there is more than one correct way to perform most professional tasks. The problem here is that "standards" are taken to imply "standardization" of procedure. In fact the standards are typically about outcomes, and leave it open as to how the outcomes are achieved. The professional competency standards that have been developed so far in Australia do allow for the diversity that is proper to the practice of a profession.

Another worry, which brings us to the fifth point, is that as a result of establishing competency standards, the corresponding courses that prepare people for the profession will adopt competency-based training.¹⁷ Academics are, of course, correct in their rejection of professional courses becoming a series of practical modules, as the roles and tasks approach to analysing professional competence suggests.

However, when competence is conceptualized via the integrated approach in terms of knowledge, abilities, skills and attitudes displayed in the context of realistic professional tasks (or intentional actions), these consequences no longer follow. Rather than recommending the adoption of competency-based training, the integrated approach, by also emphasising requisite knowledge, abilities, skills and attitudes, offers powerful guidance for improvement of traditional courses in respect of content, teaching strategies and assessment procedures. So, for example, testing graduates against the competency-based standards would effectively identify strengths and weaknesses of the course. Hence, though I uphold the integrated approach to conceptualizing professional competence, I do not recommend the adoption of competency-based training for professional courses.

Competency standards also offer educational and assessment benefits. The competency standards themselves are a powerful guide to providers of professional education. However, it needs to be emphasized that they are not a curriculum document. For example, entry level competency standards

specify what new graduates should be able to do, but say nothing about how this state is to be achieved. Hence for providers there is as much flexibility as ever to decide what to teach, how to teach it and how to assess it. However, assuming that there is room for improvement in most existing courses, a good set of competency standards will provide invaluable guidance on content changes as well as new methods of delivery and assessment. As always, there is more than one way to teach effectively.

Beyond entry level, competency standards offer considerable guidance for the longer term development of the profession. Continuing professional education (CPE) has been criticised frequently in Australia for lack of direction and/or rationale. The clear specification of what a competent professional needs to be able to do will provide a much sharper focus for CPE.¹⁸ Similar considerations apply to refresher courses for people returning to the profession after an absence or people whose training is out of date. The value of competency standards for efficient and equitable recognition of overseas qualifications is also important.

A further worry, represented by point six, holds that competency standards are developed and controlled by government bureaucrats. In fact, the philosophy behind the development of competency standards in Australia is that the profession or industry owns and develops the standards. In many cases, university staff are active members of the professional body, hence they have strong representation on the body that owns and develops the competency standards. In all cases, the professional body is a major stakeholder that is entitled to significant input into courses for their profession. Competency standards present a unique opportunity for professions to raise their community image by increasing their level of professionalism. For one thing, the competency standards are an explicit public statement of what the profession does, something that has not previously been available publicly in most cases. One aspect of professions increasing their professionalism would be a mature and productive relationship between the professional body and the providers of the courses.

The above considerations give the lie to a related misconception about competency standards, that everything that takes place in a course is dictated centrally by faceless bureaucrats. In fact, given that the profession will own the competency standards, there will be no more central control than at present in, for example, accounting and engineering, where, in Australia, the professional bodies accredit the courses.

Since the competency standards are a powerful guide to providers of professional education, without being a curriculum document, they provide common ground for discussion between providers and the profession that doesn't exist now. The lack of such common ground in the past has seen some providers fragment into a series of specialist departments that compete with one another for funds, staff, etc., and thereby lose sight of the totality of professional practice. The competency standards will enable the relative roles of the providers and profession to become clearer in a mutually cooperative environment.

Still a further worry, point seven, holds that assessment of competence involves ticking off a checklist of observable behaviours. Given the complexity of professional work, this is seen as a futile attempt to achieve objectivity at the cost of sacrificing validity.¹⁹ I accept this as a criticism of the behaviourist task approach to competency standards. However when the integrated approach to competency standards is adopted, competence is not something that is directly observed. Rather, as pointed out above, competence is inferred from performance. This has the effect of placing assessment of competence in the same boat as other kinds of assessment in academic institutions in that procedures are available to maximise its validity and reliability.²⁰ If these procedures are followed, then assessment of competence is as "objective" as any of the alternatives. Similar points apply to claims that competency standards are too vague for assessment purposes.²¹ Experience in Australia has been that a properly planned and executed competency analysis will yield standards as specific as the case requires. Finally, point eight presents a criticism that is commonly put forward in

relation to entry-level competency standards. It holds that because they prescribe minimum standards, they therefore discourage excellence by reducing everything to the lowest common denominator. A variant on this is that they promote deskilling. These charges are no more logical than making the same claims about traditional examinations on the ground that there is a minimum mark for gaining a pass. More specifically, this myth is based on a complete misunderstanding of the nature of the standards. For the charges to have any substance, the standards would have to relate to tasks that admit of no degrees of performance, i.e., you either can do it or you can't. However, in professional work, (and in most other kinds of work), such tasks are rare. Typically, the standards relate to tasks that admit of many degrees of performance, as does the task of taking a traditional examination. In both cases, the existence of a minimum satisfactory level of performance is consistent with a full range of performances from excellent through failed.²²

In addition, as already discussed, entry level competency standards are not a curriculum document. Of course the expectation is that most graduates of professional courses will greatly exceed the performance levels specified by the entry-level competency standards, just as most entrants to the professional courses greatly exceed the entry requirements.

CONCLUSION

A series of arguments about competency standards by various writers, particularly philosophers of education, has been considered. It has been found that a way of developing competency standards that conform with the general requirements and principles proposed by these arguments is possible. This way of developing competency standards appears to meet all of the theoretical objections that have been raised against competency standards. Those that have been developed so far in Australia for professions according to these principles also seem to be satisfactory. How well they work out in the long term remains to be seen.

¹ See *Exploring Competency Based Education*, ed. W.R. Houston (Berkeley, California: McCutchan, 1974) for a comprehensive discussion.

² Harry S. Broudy, "The University and the Preparation of Teachers," in *Advances in Teacher Education* vol. 1, ed. L. Katz and J. Rath (Norwood, New Jersey: Ablex, 1984), 3.

³ See, e.g., Harry S. Broudy, W.H. Drummond, R.B. Howsam and B. Rosner, "Three Perspectives on CBE: A Panel Discussion," in *Exploring Competency Based Education*, ed. W.R. Houston; H.C. Johnson, "Not One 'Unnecessary Wriggle': Some Questions About the Presuppositions of C/PBTE," *Educational Theory* 25, no. 2 (1975): 156-67; and James S. Kaminsky, "C/PBTE: An Investigation in the Philosophy of Social Science and Competency/Performance Based Teacher Education," *Educational Theory* 25, no.3 (1975): 303-13.

⁴ Nel Noddings, "Competence in Teaching: A Linguistic Analysis," in *Competence: Inquiries into Its Meaning and Acquisition in Educational Settings*, ed. E.C. Short (Lanham: University Press of America, 1984), 17-28.

⁵ Noddings, 18-9.

⁶ Noddings, 21.

⁷ Donna H. Kerr and Jonas F. Soltis, "Locating Teacher Competency: An Action Description of Teaching," *Educational Theory* 24, no. 1 (1974): 3-16. (The following quotation is from page 3.)

⁸ See, e.g., Nel Noddings, "Teacher Competency: An Extension of the Kerr-Soltis Model," *Educational Theory* 24, no. 3 (1974): 284-90; and Nel Noddings, "Competence Theories and the Science of Education," *Educational Theory* 24, no. 4 (1974): 356-64; and H.C. Johnson.

⁹ Kerr and Soltis, "Locating Teacher Competency," 4.

¹⁰ T.F. Green, "Teaching, Acting and Behaving," *Harvard Educational Review* 35, no. 4 (1964): 507-24.

¹¹ Kerr and Soltis, "Locating Teacher Competency" 4-5.

¹² Kerr and Soltis, "Locating Teacher Competency" 4-5.

¹³ J.C. Walker, "A General Rationale and Conceptual Approach to the Application of Competency Based Standards to Teaching." (Paper prepared for the National Project on the Quality of Teaching and Learning. Canberra, Australia: University of Canberra.)

¹⁴ For details see Andrew Gonczi, Paul Hager and Liz Oliver, *Establishing Competency-Based Standards in the Professions* (Canberra, Australis: Australian Government Publishing Service, 1990); Susan Ash, Andrew Gonczi and Paul Hager, *Combining Research Methodologies to Develop Competency-Based Standards for Dietitians: A Case Study for the Professions* (Canberra, Australis: Australian Government Publishing Service, 1992); and Lindsay Heywood, Andrew Gonczi and Paul Hager, *A Guide to Development of Competency-Based Standards for Professions* (Canberra, Australis: Australian Government Publishing Service, 1993).

¹⁵ J.C. Walker, "The Value of Competency Based Education" in *The Effects of Competency-Based Education on Universities: Liberation or Enslavement?*, ed. J. Hattie (University of Western Australia and Murdoch University, 1992), 101.

¹⁶ For a detailed treatment of these points see Andrew Gonczi, Paul Hager and James Athanasou, *The Development of Competency-Based Assessment Strategies for the Professions* (Canberra, Australis: Australian Government Publishing Service, 1993).

¹⁷ See, e.g., P.D. Ashworth and J. Saxton, "On 'Competence'," *Journal of Further and Higher Education* 14 (1990): 3-25. (They express this concern on pages 18-9.)

¹⁸ For discussion see Paul Hager and Andrew Gonczi, "Competency-Based Standards: A Boon for Continuing Professional Education?," *Studies in Continuing Education* 13, no. 1 (1991): 24-40.

¹⁹ See, e.g., Ashworth and Saxton, "On 'Competence'," 22-3.

²⁰ See Gonczi, Hager and Oliver, *Establishing Competency-Based Standards in the Professions*, Section 5.

²¹ Ashworth and Saxton, "On 'Competence'," 21-2.

²² For a discussion of the kind of standards, called "described standards" that are appropriate for professional tasks, see Gonczi, Hager and Oliver, *Establishing Competency-Based Standards in the Professions*.