



Essay

## Assessment of Work Based Learning: Some Lessons from the Teaching Profession

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The assessment of work-based learning is arguably one of the biggest challenges facing cooperative education practitioners worldwide. However, there are a number of professions such as teaching that have a long history of assessment, some of it informed by research. In this paper we examine current practice for the assessment of teaching practica in the United Kingdom and in New Zealand, illustrated by case studies from each country. We then consider what implications the experiences and research associated with assessment in teacher training may hold for other disciplines involved in work-based learning. The authors conclude that despite much debate and research, there is little consensus on the best means of assessment for teaching practica. Thus, the experiences of the teaching profession suggest that, despite assertions in the literature and governmental views, there are no simple solutions to the assessment of holistic learning experiences such as work placements (*Asia-Pacific Journal of Cooperative Education*, 2002, 3(1), 5-12).

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Work-based learning or cooperative education as an educational strategy has been practiced worldwide for many years (Wilson, 1972, 1997). Such programs are characterized by their diversity (see, e.g., Eames & Rowe, 1996) and are sometimes subject to criticism and skepticism from faculty and external bodies. Booth, Hargraves, Bradley and Southworth (1995) suggest that this is also true for the teaching profession: "Whereas doctors, for the most part, seem happy with the concepts of training, trainee and competence, teachers have expressed concern believing that such terms somehow lessen the profession and cast it in too *practical* a framework [italics added]" (p. 158). Likewise, in the minds of other tertiary education professionals, work-based learning is appropriate for vocational education like technical trades, but not for more 'academic' disciplines such as the sciences, economics, and business (Stones, 1994). This, as Schon (1983, 1987, 1995) has explained, has led to the inappropriate application of science-based research methods into the practical professional domains of, for example, economics, business and education. These inappropriate

methods have contributed to the development of assessment measures, which insist on measurable outcomes and technical competencies, devaluing the wisdom, intuition or artistry of practice.<sup>1</sup>

Employers value so-called soft skills such as interpersonal skills and communication skills that are more readily developed in the workplace (Burchell, Hodges, & Rainsbury, 1999; Hodges, Rainsbury, Sutherland, & Wong, 1998; Rainsbury, Burchell, & Hodges, 2000; Rainsbury, Hodges, Burchell, & Lay, 2002). In the view of the authors (based on their experiences in own their institutions), this mismatch of what employers value and what institutions are keen to assess, may be due, in part at least, to the difficulties associated with the assessment of work experience. These difficulties relate to the holistic context in which work experience takes place, and the complexity of the dimensions to be assessed. The authors suggest that defining the purpose of the work-based learning is

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<sup>1</sup> The implications for work-based learning are discussed later in this paper, but for a more detailed analysis see Grainger (2001a,b)

paramount, but because of the above difficulties this is not straightforward. Assessors therefore need to be wary of tending to assess the more easily labeled technical competencies, as this can be at the expense of important characteristics such as tacit knowing (Polanyi, 1969), intuition (Rubin, 1985) and artistry (Schon, 1983, 1987).

There is evidence in the literature to suggest that a similar situation holds for teachers with, for example, Cameron-Jones and O'Hara (1994) stating:

Previous research showed that the would-be employers of students qualifying as school teachers were frequently dissatisfied with the comments about students which the staff of the training institutions wrote on the students' final reports...The employers expressed a wish for comments that were 'well-evidenced and predictive' (p. 212).

Other research reveals that employers of new teachers "display[ed] a clear preference for 'evidenced' comments over 'predictive' comments" (Cameron-Jones & O'Hara, 1994, p. 213). Hence, it seems that in teaching at least, employers wish to see rigorous assessment procedures that can be backed up with hard evidence. Anecdotal evidence suggests that this situation also holds for other disciplines.

### **Assessment of Teaching Practica: Some Considerations**

In addition to the usual academic requirements, entry into teacher training programs is subject to considerable scrutiny including interviews to ascertain the applicants' character. Furthermore, the assessment of teaching, including practica, is different to that of other professions. In contrast with many other disciplines, the mode of assessment is prescribed by ministerial or other governing bodies. Whilst the actual criteria used to assess practica are subject to change as a result of political shifts and changes of policy (see, e.g., Booth et al., 1995), assessment of teaching practica is done with reference to externally derived criteria. For example, in the United Kingdom (UK) the Department for Education and Employment (DfEE, 1997) published Circular Number 10/97 that provided a national curriculum for the initial teacher training, and this was followed up by Circular 4/98 which was intended to prescribe for the means of "equip[ing] all new teachers with the knowledge, understanding and skills needed to play their part in raising pupil performance across the education system" (DfEE, 1998, p. 3). Similarly, in New Zealand the assessment of students on practica is geared to the *Interim Professional Standards for Primary Teachers* (promulgated by the New Zealand Ministry of Education). These standards also inform the accountability measures in the performance management of teachers, and the *Dimensions of Teaching*, which are enshrined in the New Zealand Education Amendment Act (1997) and form the criteria for teacher registration.

The practicum is seen as a vital part of teacher training worldwide. Booth et al. (1994) point out that in the UK there has been a shift in emphasis from 'education' to the 'training' of novice teachers; the difference being an

increased emphasis on the time spent working alongside practicing teacher mentors; in other words there has been an increase in emphasis on the work-based learning component of teacher training. Commensurate with this increased emphasis on workplace training has been an increase in scrutiny of the practicum with the UK case typical in that "the commonality between courses offered has increased and the links between schools and training institutions have become formalized" (Monk & Dillon, 1995, p. 1). There have been, however, some reservations expressed about the increasing emphasis on the practicum in teacher training schemes with Dunne and Harvard (1993) noting: "It is undoubtedly instructive for student-teachers to work alongside experienced teachers" (p. 117), but going on to state: "It is a mistake to assume that classroom experience automatically provides the most appropriate learning" (p. 117).

Educational providers of teacher training now routinely undergo audits of their programs. These audits are highly targeted and are referenced against departmental/ministerial criteria. For example, the British DfEE (1998) Circular 4/98 states that to be awarded *Qualified Teacher Status* (QTA), teachers must achieve certain detailed standards (replacing the more general competencies set out in earlier circulars). Educational providers must then satisfy officials that the products of their course, that is, the teacher trainees, do in fact meet certain levels of competency. In order to do this, the providers must have appropriate mechanisms in place to assess teacher training, including the practicum.

### **The Nature of the Teaching Practicum**

The teaching practicum represents a crucial part of modern teacher training, and is different to usual work placements. As mentioned above, the training regime, including the practicum, faces external scrutiny in a manner not normally encountered in other disciplines. Because of this there are typically stronger workplace-based support structures in place, with workplace training conducted under the auspices of an experienced individual teacher (Booth et al., 1995). This teacher holds a crucial role and is in large part responsible for the training of the novice teacher for the duration of the practicum. It is interesting to note the change in status of this individual in recent times with Monk and Dillon (1995, p. 1) pointing out that: "even the name by which teachers responsible for students has changed from co-tutor or supervisor to 'mentor'." Indeed the literature refers to such individuals as mentors and there is now a body of literature on the difficulties mentors and student teachers face with the whole mentoring process (see, Monk & Dillon, 1995). Williams (1993), for example, found that many mentors were not particularly clear about the exact nature of their role in the training of student teachers and also felt they lacked adequate training to fulfil their role as mentors. Nonetheless, the mentors felt confident about their own expertise because of their previous classroom experience in teaching, strong interpersonal and classroom management skills, and the like. According to Monk and Dillon (1995), "the mentor's role predominantly involves making sure that student teachers *observe, participate* and

teach and, at the same time, develop their confidence” [original italics] (p. 2). In addition, the role may encompass any or all of advisor, assessor, counselor, guide, intermediary, observer, motivator, and role model.

### Current Practice in the Assessment of Teaching Practica

The constraints placed on tertiary educational providers from education departmental/ministerial governing bodies are clearly evident in the assessment procedures. Here we illustrate the structures in place in the UK and New Zealand and look in detail at the assessment of the teaching practicum for two very different teacher education courses: the Primary Post Graduate Certificate in Education (PGCE) course at the School of Education of the University of Leicester, England and the Bachelor of Teaching and Learning (BTcLn) at the School of Primary Teacher Education at Christchurch College of Education, New Zealand.

#### *School of Education of the University of Leicester: Primary Post Graduate Certificate in Education*

This teacher-training course requires a first degree and lasts a total of 38 weeks. During this period students undertake three periods of practicum at three different primary schools. These comprise a two-week paired-teaching practice in the first term when the students work in pairs in a classroom in a largely observational and assisting capacity. During the latter stages of this practicum they also begin full class teaching. There then follow two major teaching practices of seven and six weeks respectively in the second and third terms. During these two major practica the students are generally taking around 80% of a full teaching allocation and they are assigned to a mentor and a university tutor who conduct the formal assessment of the student. Students are expected to plan and execute lessons, organize and manage their classes, attend meetings and interact appropriately with other members of staff at their practicum school.

The entire Primary PGCE course including the teaching practicum is assessed against a set of standards prescribed by the British Government. These standards effectively act as a national curriculum for teacher training in England and Wales. The standards document, entitled; *Teaching: High Status, High Standards* (DfEE, 1998) contains over 500 detailed standards which encompass a series of generic standards covering all aspects of teaching. These generic standards are grouped into four broad categories: *Knowledge and Understanding; Planning, Teaching and Class Management; Monitoring, Assessment, Recording, Reporting and Accountability* and *Other Professional Requirements*. By way of example, under the heading *Planning, Teaching and Class Management*, trainees, when assessed, must demonstrate (amongst other things) that they:

1. Ensure effective teaching of whole classes, and of groups and individuals within the whole class setting

so that teaching objectives are met, and best use is made of the available teaching time

2. Monitor and intervene when teaching to ensure sound learning and discipline
3. Establish and maintain a purposeful working atmosphere.

The *Knowledge and Understanding* standards are grouped under the three core subject areas within the *Primary National Curriculum* (DfEE, 1998), namely, English, mathematics and science.

Interestingly, the most recent guiding documentation cautions against the use of a ‘tick-box’ form of assessment for the standards (Teacher Training Agency, [TAA], 2001).<sup>2</sup> Rather, assessors of trainee teachers are urged to use the standards: “Flexibly, in whatever way will best suit the needs of individual partnerships” (TAA, 2001, p. 4). Examples of trainee teacher assessment are provided in guiding documentation, but the DfEE is quick to point out that these should not be prescriptive, nor are they to “provide models of good practice” (TAA, 2001, p. 5). Rather assessment should comprise direct observation of classroom practice by trainees, along with appropriate mentor-student trainee discourse. Hence, despite the rather detailed structure provided for the assessment of teaching practica by external governing bodies such as the DfEE, assessors are required to rely on their own professional judgement and experience.

Teacher mentors and university tutors use these standards to assess student’s performance during the teaching practica. Mentors are given training by the School of Education at Leicester on the whole mentoring process including assessment. Assessment is both formative and summative. Students are observed and monitored throughout their teaching practicum and are given oral and written feedback by their mentor and tutor indicating which standards are being achieved consistently and which standards require further work. Students also monitor their own progress through an *Individual Action Plan* in which they identify achievement (along with evidence) and set targets based on the standards. They also use a *Subject Action Plan* to record areas of weakness in their content knowledge and any remedial action they will take.

Mentors produce mid- and end-of-practice reports on students, and these, together with input from the university tutor, determine whether students achieve a satisfactory outcome to their practicum. There is no grading of the practicum - instead a pass/fail system is used.

On the basis of the teaching practica and university-based coursework, successful students develop a *Career Entry Profile* (CEP). This document is again standards-based and is presented by the *Newly Qualified Teacher* (NQT) to his or her employer. The CEP identifies areas of strength and weakness of each NQT. Government funding is available to provide support for NQTs in their first year of teaching. This is provided on the basis of an action plan drawn up by the school with the NQT.

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<sup>2</sup> Currently under review

Finally, the PGCE program within School of Education is periodically evaluated subject by subject by the *Office for Standards in Education* (OFSTED) who send out inspectors to determine whether all students being awarded *Qualified Teacher Status*, are in fact meeting governmental prescribed standards.

*School of Primary Teacher Education, Christchurch  
College of Education: Bachelor of Teaching and Learning*

This pre-service teacher education course at the Christchurch College of Education (CCE), runs for three years full-time, with education papers offered in partnership with the University of Canterbury. It can be taken at the main CCE campus in Christchurch, any of the regional campuses around New Zealand, or by distance education, in which mode it also can be taken over five years part-time. Despite the range of delivery methods and locations, course consistency is possible through, amongst other things, assessment processes that focus on required outcomes. The learning outcomes for practica are quite specific, but in contrast to the UK system that defines standards quite precisely, in the CCE system, the assessors exercise professional judgement as to whether or not the learning outcomes have been met. These judgements are subject to systems of internal and external moderation. The three-year course is divided into six semesters of 15 weeks each.

The New Zealand situation is somewhat different from that in the UK. The basic primary teaching qualification has changed in status over the last decade from diploma to degree,<sup>3</sup> which has brought a reversal of the trend observed in the UK. So that in New Zealand the trend is towards a shortening of the amount of time that students spend on professional practice, and an intellectualization of the content of teacher education programs. This has led many former colleges of education to amalgamate with universities. The assessment emphasis for teaching practica has shifted towards evidence-based technical competence, although there are still opportunities to recognize individuality as discussed below.

Under the former Christchurch College of Education Diploma course, just prior to the changeover, the six professional practices allowed nine weeks practica in Year-1 and 10 in Year-2 and Year-3. In the Bachelor of Teaching and Learning (BTchLn), this was initially reduced to eight weeks practica in Year-1, but in 2001 following a review of the degree, this was further reduced to seven weeks in total in Year-1, with first practice being only three weeks in duration. Subsequent practica in Year-2 and Year-3 remained at five weeks with six practices in total. Students take on increasing amounts of teaching, beginning with small groups, quickly building to full class teaching and periods of full management, with a minimum requirement of 15 consecutive days on final practice. Periods of full management involve planning, implementing, evaluating

and assessing children's learning in the seven *Essential Learning Areas* (Ministry of Education [MoE], 1993), participating fully in the wider activities of the school and completing tasks designed to focus their understanding on the links between teaching theory and practice.

New Zealand teachers who volunteer to have student teachers in their classes are known as *Associate Teachers* (AT) rather than mentors as in the UK – although the duties are similar. For Christchurch College of Education, ATs register their availability with the College, and this is subject to approval by the principal. The College provides professional development for associates and holds 'briefing meetings' prior to practice to familiarize ATs with the learning outcomes that they will need to assist the student teachers to meet. An observing lecturer, who is usually the student's *Professional Studies Lecturer*, visits the student at least once during the placement. The AT reports in writing on the student's progress, and the AT and Professional Studies Lecturer collaboratively assess the student's progress. Final responsibility for assessment of the practicum rests with the Lecturer, who may confer with other colleagues at the College, and/or make further observation visits if the learning outcomes are not being clearly and consistently demonstrated. A modest allowance of around NZ\$52 (ca. US\$20) per week (the New Zealand Educational Institute Collective contract rate) for the duration of the placement is paid to ATs by providers, and is one example of the long term formalization of links between teacher educators and schools which exists in New Zealand. The existence of specially staffed and funded schools, called 'normal' schools, set up to work closely with colleges of education in providing for teaching practica, is another.

The assessment criteria for the practica link closely to the *Interim Professional Standards* for teaching, which also form the basis for *Primary School Performance Management Systems in New Zealand Schools*, and the *Dimensions of Satisfactory Teaching* as promulgated by the *Teacher Registration Board* in accordance with the New Zealand Education Amendment Act (1996). The *New Zealand Qualifications Authority* (NZQA) scrutinize the appropriateness of learning outcomes during the accreditation process for each learning institution.

Although developments in New Zealand have trended towards the intellectualization of teaching, many of the assessment issues inherent in the practica, for example, the influence of external bodies, and the emphasis on observable competencies, are very similar to those currently faced in the UK. In New Zealand, however, the influence of the *Tomorrows' Schools* legislation adds an extra dimension (Department of Education [DoE], 1988), for while purportedly dismantling a controlling layer of external school regulation in the form of education boards, and devolving substantial power to individual school boards, Tomorrow's Schools brought about a massive centralization of school policy in the form of accountability measures for teachers, and legally gazetted curriculum statements which mandate the *Achievement Objectives* (AO) in all curricular for all age levels of children. All New Zealand teachers must plan to meet these AOs and schools must have in place

<sup>3</sup> For a commentary on how the market forces policies of the *Tomorrows' Schools* era (Ministry of Education, 1988) in New Zealand Education has led to outcomes such as this; see, Grainger (2000, 2001a)

systems to ensure that children's progress can be measured and reported in these terms. The first step in assessing the effectiveness of student teachers' planning, therefore, is to check that an appropriate AO from the curriculum statement is providing the focus for learning. So it is easy to see how the assessment of work based learning in the teaching profession, due to its well referenced competencies and standards, can *claim* a kind of rigor and respectability which may be more difficult to achieve in other work-based learning situations.

In the BTchLn the Professional Studies Lecturer from the College, guided by the written formative assessment of the AT on criteria related to the professional standards and dimensions of satisfactory teaching discussed above, assesses students against predetermined learning outcomes. Students themselves record evidence of having met the outcomes and this is then verified by the lecturer and/or AT. While this may seem to be a highly technicist approach, in fact the criteria have sufficient breadth to capture the more holistic aspects of being a successful teacher. For example, one learning outcome is: "Uses the Design Process to plan, implement and assess children's learning in a series of lessons in three curriculum areas" (MoE, 1993). It is immediately clear if the student has followed the stages of the *Design Process*, from the documentation of pre- and post-teaching achievement levels, clear teaching points, evaluative comments and reflections on the lessons taught. However, each of these stages allows scope for professional artistry, as well as technical competence, to be demonstrated and, to a certain extent, assessed, offering the opportunity to assess what is really valid in terms of successful teaching, rather than just the atomised, decontextualised competencies which can be reliably replicated.

### Research into the Assessment of Teaching Practica

An examination of the literature suggests that there is some debate as to what constitutes the attributes of good teaching. Stones (1994) asserts that there "is a considerable literature on the difficulty of identifying the criterial attributes of good teaching" (p. 236). Previous studies of methods of assessment suggest that in the fairly recent past at least there were no real identifiable consensual criteria of teaching competence (McCulloch, 1979).

Reynolds (1992) in contrast claims that there is now reasonable consensus on what constitutes competent beginning teaching. Competent beginning teaching, according to Reynolds, covers three phases; pre-active, interactive, and post-active. The pre-active phase is concerned with lesson planning - including the physical space, critique of content and materials, understanding the curriculum and the like. The interactive phase refers to classroom practice and covers an enormous gambit of activities such as physical environment, the implementation and adjustment of plans during instruction, organization and monitoring of students, time and instructional materials and evaluation of student learning. The post-active phase is concerned with reflective practice, professional development and interaction with colleagues, with

competent teachers routinely seeking, via reflection, to improve their teaching.

Competency-based assessment, despite its wide use in teaching and the medical profession (Booth et al., 1995), is not simple. Monk and Dillon (1994) point out that: "Teachers experienced with competence-based training will be aware that there are problems with the implied model of assessment. How, for example, is the ability to 'maintain pupils' interest and motivation' assessed adequately, accurately and fairly?" (p. 3), and Stones (1994) likewise points out that "different raters assess the same piece of teaching very differently" (p. 236).

The difficulty of assessing teaching practice is that "it is impossible to sample the learning exhaustively" (Stones, 1994, p. 237). Hence, assessment is inevitably based on impressions gained from small 'sample' of the beginning teachers performance. The sheer magnitude of the task of training a nation's teachers in the UK has led to a desire on the part of some researchers to provide for more efficient assessment of teaching practica, shifting away from broad-based assessment towards instrument-driven assessment (Porter, 1988). Teaching practica are, according to some authors, able to be assessed by the use of assessment instruments that provide micro-level statements of effective teaching behavior, or on general guidelines indicating 'productive' teaching (Porter, 1988). In the UK the latter approach has been customary (McCulloch, 1980; Preece, 1993). Nonetheless, Preece (1993) developed the *Exeter Teaching Practice Schedule* (ETPS) designed to provide guidelines for university tutors, schoolteachers and students involved in teaching practice. The instrument covers three broad areas: *Management and Teaching Skills*, *Personal and Professional Qualities*, and *Evaluation Skills*. Preece points out that the ETPS covers all three phases of what Reynolds (1992) identified as the requirements for competent beginning teaching - hence the Exeter model possesses some theoretical foundation. Statistical analyses of the data suggest that the ETPS is reliable across a single summative scale. Triangulation of data with conventional judgements by experienced teachers, suggested that this instrument was able to identify highly competent and weak teachers, leading Preece to suggest that widely used profile systems of assessment could be replaced by quantitative scales of competence. However, some authors have reservations about the use of instruments (see, e.g., Stones, 1994), viewing them as too simplistic to assess a holistic experience like teaching practica.

### Implications for Other Disciplines

The authors argue that the danger of too much emphasis on technical competencies,<sup>4</sup> is that it can overshadow characteristics such as the tacit knowing, (Polanyi, 1969), intuition (Rubin, 1985) and artistry (Schon, 1983, 1987) of

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<sup>4</sup> In this paper technical competencies are the itemized micro-skills of teaching, which describe the minutiae of teacher behaviors such as use of voice, gesture and posture. Every discipline will have its own micro-skills of practice, but how the practitioner or student practitioner implements these skills in the holistic context of the workplace makes valid assessments difficult.

the professional practitioner, and so 'rigor', if it is in fact achieved at all, comes at too high a price. The classroom (and indeed other workplace settings) is a highly complex environment full of unpredictable variables such as childrens' needs backgrounds, social skills and physical, mental and emotional attributes. Thus to itemize out the skills of teachers in a way which divorces them from the infinitely variable context in which they work, is to miss the essential essence of what it is to be a teacher.

It would seem then, that the future of assessment procedures in wider work-based learning situations would depend on the following issues being satisfactorily resolved:

1. What is the purpose of work based learning - to achieve technical competence or practice professional artistry - or both?
2. What are the achievement objectives for work placements and do these link to a widely recognized schedule of benefits for students?
3. How can academic and industry staff work collaboratively to assess student success, and is this measurable in terms of externally referenced criteria?
4. How does context impact on learning and how should this impact on assessment criteria?

Brooker, Muller, Mylonas and Hansford (1998) point out "while there is a significant body of literature concerning practice teaching, research focused on the assessment of the practicum has been largely ignored" (p. 18). Given the importance and long history of the practicum in the training of teachers, this is a remarkable observation. Even more concerning is the observation by Reynolds (1992, p. 1) that "research on teacher effectiveness has largely been the province of researchers, not teachers. Therefore it is not always of great use to teachers." Thus it seems that the teachers' voices have been lost in the morass of research conducted by educational providers and regulations implemented by governing bodies.

Hence, it seems that despite the vast experience of the application of work-based learning as an educational strategy in the teaching profession, there are no simple answers of clear indications of what might constitute best practice for the assessment of practica or work placements for other disciplines. This is not entirely surprising given the widely varying nature of those work placements, which may be in the laboratory in a quality control department of a large food manufacturing company, or in the software design department of a computer firm. The question, "what is the purpose of work based learning - to achieve technical competence or practice professional artistry - or both?" is even more than the complex dichotomy that it is in teaching, where the actual work to be done remains fairly consistent. In wider work-based settings, what constitutes technical competence and what constitutes professional artistry will vary with the type of work. This suggests that the most significant need is for each industry and their training providers to carefully identify the target behaviors, attitudes, approaches or standards indicative of competence and artistry, then establish which of these can best be demonstrated on practica. However, the experiences of the

teaching profession do provide some insights into what might be avoided; and this of itself is valuable knowledge for all practitioners in the area of work-based learning.

Stones (1994, p. 238) asserts that the assessment of practica is "atheoretical and criteria of competence are ill-defined." Examination of the literature reveals little to contradict this proposition. Hence, the authors would argue that it is inappropriate to pursue through quantitative measures, the rigor of science-based traditions, which are clearly inapplicable in social-based disciplines such as education. To reduce a complex activity such as teaching to scales of technical competence would be to achieve reliability (i.e., the replicability of results over time) at the expense of validity (a true idea of what it is important to measure about teaching - or other disciplines). The vast resources of various governing bodies have, in our view, not lead to demonstrably better standards of assessment of teaching practica; certainly it appears there is no research evidence to support such a view.

Stones (1994) laments any attempts to see assessment as anything other than the complex task that it is: "The flawed nature of assessment should be recognized and the...common practice of awarding finely graded assessments be abandoned" (p. 239). Such a view is consistent with other authors views about the complexity of assessment. Research in the UK has shown that even with a pass/fail system, few teachers in the UK system fail to complete their teacher training courses with a passing grade (Stones, 1994; Stones & Webster, 1984). The way forward for the assessment of teaching the practicum according to Stones (1994) is to replace summative assessment with formative assessment - something UK mentors, for example, already feel comfortable with and would thus likely require little training in (see, e.g., Calderhead & Shorrock, 1997; Dunne & Harvard, 1993). This mode of assessment in which student and teacher focus on learning rather than accountability and emphasizes growth and development over 'final judgement'. The development of an individual capable of reflective practice (Schon, 1983, 1987) and diagnostic evaluation of their own strengths and weaknesses as a practitioner in whatever field they are engaged in (Stones, 1994), will likely be of more long-term benefit than assessment based on a rather spurious grade that is based, at best, on a sampling or snapshot of a students' ability on the day or days in which it was conducted. Instead of leaving their program of study with a 'pass' for their teaching practicum or work placement for other disciplines, novices can leave with a profile or portfolio of their abilities (such as the career entry profile model employed for newly qualified teachers in the UK). This will enable employers to ascertain if these individuals possess the skills and attributes desired.

The need to maintain high standards of provider accountability, that is, to ensure that graduates leave courses with assessment statements which show they have met the required learning outcomes, need not conflict with the portfolio concept. A portfolio, when it contains items selected by the student according to guidelines related to the learning outcomes, can work in partnership with an assessment statement. The portfolio allows individuals to

present and interpret their own learning, reflect on the theory practice interface and share the meaning they have derived from their experiences, with would be employers. The portfolio concept, therefore, can offer insights into the 'soft skills' discussed in the introduction, and help to solve the mismatch between what employers value, and providers find difficult to assess, because it allows individuals to reflect the attitudes and values that underpin their professional artistry.

## References

- Booth, M., Hargraves, D.H., Bradley, H., & Southworth, G. (1995). Training of doctors in hospitals: A comparison with teacher education. *Journal of Education for Teaching*, 21(2), 145-161.
- Brooker, R., Muller, R., Mylonas, A., & Hansford, B. (1998). Improving the assessment of practice teaching: A criteria and standards framework. *Assessment and Evaluation in Higher Education*, 23(1), 5-24.
- Burchell, N., Hodges, D., & Rainsbury, L. (1999). What competencies does the workplace expect for business graduates? Some perspectives of the top 500 companies in New Zealand. In D. Hodges & C. Eames (Eds.), *Proceedings of the Third Annual Conference of the New Zealand Association for Cooperative Education* (pp. 1-12). Rotorua, New Zealand: New Zealand Association for Cooperative Education.
- Calderhead, J., & Shorrock, S.B. (1997). *Understanding teacher education*. London: Falmer.
- Cameron-Jones, M., & O'Hara, P. (1994). What employers want to read about new teachers. *Journal of Education for Teaching*, 20(2), 203-214.
- Department for Education and Employment. (1997). *Circular Number 10/97: Requirements for courses of initial teacher training*. London.
- Department for Education and Employment. (1998). *Circular Number 4/98: Teaching: High Status, high standards. Requirements for courses of initial teacher training*. London.
- Department of Education. (1988). *Tomorrow's Schools: The Reform of Educational Administration in New Zealand*. Wellington: Government Printer.
- Dunne, R., & Harvard, G. (1993). A model of teaching and its implications for mentoring. In D. McIntyre, H. Hagger, & M. Wilkin (Eds.), *Mentoring: Perspectives on school-based teacher education* (pp. 86-102). London: Kogan Page.
- Eames, C., & Rowe, W. (1996). *Cooperative education programs in New Zealand: A database handbook*. Hamilton, New Zealand: New Zealand Association for Cooperative Education.
- Grainger, S. (2000). Opening windows on the real world of teachers: Mission impossible? The potential of interview analysis to access teachers' 'theories in action'. *Journal of Educational Research*, 5(1), 99-109.
- Grainger, S. (2001a). Accessing professional artistry: The importance of cooperative education and the limitations of classical research. *Asia-Pacific Journal of Cooperative Education*, 2(1), 1-5.
- Grainger (2001b). Professional artistry or pre-determined standards? Creative genius or paint by numbers? In L. Finch (Ed.), *Proceedings of Fifth Annual Conference of the New Zealand Association for Cooperative Education* (pp. 44-55). Rotorua, New Zealand. New Zealand Association for Cooperative Education.
- Hodges, D., Rainsbury, E., Sutherland, J., & Wong, C. (1998). Collaborative assessment: The employers' perspective. In *Proceedings of the Third Asia-Pacific Conference on Cooperative Education* (pp. 1-7). Hong Kong: The Hong Kong Polytechnic University.
- McCulloch, M. (1980). *School experience in initial BEd/BEd Hons degrees validated by the Council for National Academic Awards*. London: Council for National Academic Awards.
- Ministry of Education. (1993). *The New Zealand Curriculum Framework*. Wellington, New Zealand: Learning Media.
- Monk, M., & Dillon, J. (1995). *Learning to teach science*. London: Falmer.
- New Zealand Education Amendment Act. (1996). Wellington, New Zealand: Government Printer.
- Polanyi, M. (1969). The logic of tacit inference. In M.Greene (Ed.), *Knowing and being*. Chicago: Chicago University Press.
- Porter, A.C. (1988). Understanding teaching: A model for assessment. *Journal of Teacher Education*, July-August, 2-7.
- Preece, P.F.W. (1993). The assessment of teaching practice performance. *Research in Education*, 49, 23-27.
- Rainsbury E., Burchell, N., & Hodges, D. (2000). Workplace requirements in the third millennium: Business students and graduates' perspectives on the desirable competencies. In L. Finch (Ed.), *Proceedings of the Fourth Annual Conference of the New Zealand Association for Cooperative Education* (pp. 13-22). Rotorua, New Zealand: New Zealand Association for Cooperative Education.
- Rainsbury E., Hodges, D., Burchell, N., & Lay, M. (2002). Ranking workplace competencies: Student and graduate perceptions. *Asia-Pacific Journal of cooperative Education*, 3(2), 8-18.
- Reynolds, A. (1992). What is competent beginning teaching? A review of the literature. *Review of Educational Research*, 62(1), 1-35.
- Rubin, L. (1985). *Artistry in teaching*. New York. Random House.
- Schon, D.A.(1983). *The reflective practitioner*. New York. Basic Books.
- Schon, D.A. (1987). *Educating the reflective practitioner*. San Francisco. Jossey-Bass.
- Schon, D.A. (1995). The new scholarship requires a new epistemology. *Change*, 27(6), 26-35.
- Stones, E. (1994). Assessment of a complex skill: Improving teacher education. *Assessment in Education*, 1(2), 235-251.
- Stones, E., Webster, H. (1984). Implications for course design of failure and retrieval rates in initial teacher education. *Educational Research*, 26, 172-177.
- Teacher Training Agency. (2001). *Handbook to accompany the Standards for the Award of Qualified*

*Teacher Status and Requirements for the Provision of Initial teacher Training*. London.

Williams, A. (1993). Teacher perceptions of their needs as mentors in the context of developing school-based initial teacher education. *British Educational Research Journal*, 19(4), 407- 420.

Wilson. (1972). Reflections on what a coordinator is. *Journal of Cooperative Education*, 8(2), 57-61.

Wilson, J. (1997). *Creating & initiating a cooperative education program*. Boston, MA: World Association for Cooperative Education.

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