**Using a competency based approach in nurse education**


**Summary**

This article examines the development of the competency based approach to assessment in practice within pre-registration nursing. An historical perspective to the approach is given, including brief descriptions of the different models that have been used in nurse training and how these relate to the current system of nurse education. The approach is examined in relation to government, professional and educational requirements. Implications for practice are discussed, taking into consideration staffing levels, training and availability of mentors and assessors, and the impact these have on nurse training.

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There is increasing pressure in the NHS for nursing graduates and diplomates to be both fit for practice and fit for purpose (Kenny 2004, Valentine 2004). Project 2000 (Kenny 2004) can be seen as the first of the modern training programmes. It was the first time that nursing students were classed as supernumerary on the wards and heralded a time of much change when it was introduced in 1989 (Valentine 2004). At this time all pre-registration nurse training became provided at higher education institutes (HEIs). It was criticised by policymakers and educational establishments for being too focused on outcomes—the competencies that needed to be achieved in documentation—rather than on the actual process of learning (Redman et al 1999). Its behaviouristic approach to learning was viewed as not the most appropriate for pre-registration nursing students (Kenny 2004).

Up until Project 2000, the main model for pre-registration nurse education was the apprenticeship model (Kenny 2004). Students were taught in schools of nursing that established close links to the hospital system. Nursing students formed a large part of the workforce and received a salary.

In 1998 the United Kingdom Central Council (UKCC) established a commission for nurse education. The commission, chaired by Sir Leonard Peach, was asked to propose ‘a way forward for pre-registration education that enabled fitness for practice based on healthcare need’ (UKCC 1999). Recommendations from its report *Fitness for Practice* (UKCC 1999) were developed further by a post-commission group in *Fitness for Practice and Purpose* (UKCC 2001).

Several strengths of the existing system were acknowledged and the problems that were identified related mostly to the variation in training throughout the UK. The need to move towards a more inter-professional learning approach was recognised, and this was reflected in the commission’s recommendations. One of these recommendations was that the required standards for nurse registration should be formulated using ‘outcome competencies’, and therefore consistent clinical supervision would be required (UKCC 1999). The Project 2000 model has since been adapted to the current system regarding issues surrounding *Fitness for Practice*. The Project 2000 model and the current system of nurse training are very different in terms of training methods. However, the primary goal of providing adequately trained nurses has remained more or less constant.

A further key difference between training programmes pre Project 2000 and Project 2000
and the current system of nurse training was the notion of awarding successful students not only with registration but also with an academic award. However, it soon became apparent that students paid a price for their educational achievements, which was a reduction in time spent in clinical environments (Kenny 2004).

The push for greater accountability in health care has led to greater emphasis on what the baseline standards of acceptable performance as given by the regulatory bodies should be (Redman et al 1999). Competencies have been developed as a way of setting these standards of what is the baseline acceptable level of competence and to help identify nursing as a professional occupation (Chambers 1998, Redman et al 1999). Maintaining these standards and assessing nurse competence help individual nurses and trusts to protect themselves from the increasing culture of litigation and compensation.

**Competency based assessment**

There are many definitions of competence and competencies in literature, and the differences in terminology are well documented (Chambers 1998, Girot 2000, McMullan et al 2003, Watson et al 2002). Watson et al (2002) examined 61 papers concerned with the assessment of clinical competence and found that in 22 cases the authors had made no attempt to clearly define or characterise what they meant by the term ‘competence’. This emphasises the lack of clarity on the issue of competence in nurse education.

However, the Nursing and Midwifery Council’s *Code of Professional Conduct* defines competence as: ‘Possessing the skills and abilities required for lawful, safe and effective professional practice without direct supervision’ (NMC 2002).

Ilott and Murphy (1999) and McMullan et al (2003) identify three different approaches to competence:

- Behaviourist.
- Attributional or generic.
- Integrated or holistic.

The behaviourist approach to competence specifies what needs to be done to fulfil the job requirements, and is ‘concerned more with what people can do rather than with what they know’ (McMullan et al 2003). The problem with this approach is that complex professional skills are reduced to lists of tasks. This approach disregards underlying attitudes, performance in a real life setting and the complexity of professional judgements (Ilott and Murphy 1999, McMullan et al 2003).

The attributional or generic approach concentrates on the general attributes of the person necessary for effective performance. These qualities typically include critical thinking, adaptability, problem solving and self-confidence. It is assumed that these attributes will equip a person with transferable skills, which can then be applied to different situations. One of the main criticisms of this approach is that the general attributes required may differ considerably depending on the area of expertise. However, some competencies cannot be applied to all occupations, and personal character traits can only be assessed by subjective means. To measure a person’s adaptability or self-confidence objectively would be difficult.

The integrated or holistic approach is a combination of the behaviourist and attributional approaches. McMullan et al (2003) believe that a holistic approach to competence resolves some of the criticisms of the other styles. Accepting that there is more than one way of demonstrating competent practice takes into account, for example, the importance of professional judgement and clinical reasoning, which are fundamental professional competencies. It has been proposed that this approach to competence focuses more on ‘knowing how’ as opposed to ‘knowing that’ (Gonzci 1999). However, assessment will be more complex because a ‘one size fits all’ mentality will no longer be appropriate. This approach allows the integration of values and ethics into assessing competent practice. This also indicates that there is more than one way of being competent. It also means that assessment will need to be more complicated to reflect these issues (McMullan et al 2003).

**Advantages**

The competency based approach to assessment of clinical practice is best suited to nursing, because the competencies identified focus on the underlying principles necessary for them to be implemented – having to give a rationale for actions and issues surrounding professional accountability (Bargagliotti et al 1999). Using a competency based approach to assessment allows for adaptability in a dynamic working environment.

It is thought that, by using competencies, performance can be more effectively measured and understood. For any appraisal to be successful, it is important to have a clearly defined set of measures. Competencies provide the ideal foundations on which these assessments can then be made (Wynne and Stringer 1997). Because competency assessment focuses on outcomes, the ultimate goal is ‘to evaluate
performance for the effective application of knowledge and skill in the practice setting’ (Redman et al 1999).

A competency approach to assessment – based on the student’s performance in a clinical setting – could have more validity than previous forms of assessment, because it measures the skills and attributes needed to be assessed more accurately, taking account of ‘the capacity to integrate knowledge, values, attitudes and skills in practice’ (McMullan et al 2003). Wynne and Stringer (1997) believe that competencies can help to improve effectiveness in several areas. These include recruitment and selection, assessing performance and potential in training and development, and staff retention.

Disadvantages

While assessment based on competencies has advantages, it has been criticised for its inability to represent occupations that are characterised by a high degree of uncertainty and unpredictability (Lester 1994). Nursing could be classified as being unpredictable and having a high degree of uncertainty. Bolden and Gosling (2004) believe that a competency-based assessment approach could also be ‘overly universalistic’ – that management standards are of equal relevance to managers and staff in a wide variety of positions – but also that ‘standards may reinforce rather than challenge traditional ways of thinking’. They suggest that it is not realistic to assume that all situations could demand the same type of response.

By using a competency style approach to assess practice in pre-registration nursing education, the main competencies required for registration could be set out easily (Kenny 2004). This approach has certain parallels with academic and educational thinking, namely that set out in the Dearing report on Higher Education in the Learning Society (Department for Education (DfE) 1996). This report recommended that all HEIs should ensure that priority is given to the development and implementation of teaching and learning strategies, and that the main emphasis is on the promotion of students’ learning.

Critics of competency-based assessment centre on problems with judging competence from observed performance alone (Jones 1999). In addition, in an academic-based structure, pre-registration nursing students’ learning outcomes can seem inflexible. In this way, tensions between their learning needs and the dynamic nature of today’s healthcare system can develop, as there is potential for mismatch between the students’ identified learning needs and the seemingly rigid academic structure (Barr 2000).

The purpose of assessment

There are several purposes of assessment, for example, diagnosing areas where students are experiencing difficulty, and evaluating teaching and methods of session delivery. Perhaps, most importantly, by using competencies as an assessment tool, measurement of improvement in knowledge and skills or changes in behaviour can be made (Newble and Cannon 1998). From the student’s perspective, assessment results can be viewed as an incentive to learn because good results increase self-esteem (Knowles et al 1998).

Any skills-based curriculum, such as nursing, requires clearly stated methods of assessment. The teacher needs to know that the assessment process is adequate to gauge students’ knowledge and attributes accurately. Students need to know what is expected of them so they can demonstrate it to the best of their ability (Jolly 1997).

Assessment is essential for the maintenance of professional standards (McMullan et al 2003), and to provide safeguards for the general population (Chambers 1998). Nevertheless, assessment has been described as one of the most difficult, but perhaps one of the most crucial, parts of teaching (Newble and Cannon 1998). Assessment of performance also produces anxiety and a fear of failure for many students (Bargagliotti et al 1999).

Continuous assessment of practice (CAP) was designed to improve the reliability, validity and objectivity of assessment of pre-registration nursing students (Chambers 1998). However, this approach has also been criticised because assessments can be subjective (Chambers 1998, McMullan et al 2003, Watson et al 2002). Also, a large proportion of the CAP documents require learners to assess themselves (Chambers 1998). This could be problematic and open to manipulation by students, especially when coupled with inexperienced mentors or mentors facing time pressures (Iiott and Murphy 1999). Students lacking in self-confidence, for example, could underscore themselves and, if the mentor countersigns the scores without checking underlying knowledge, the student’s document will not reflect his or her true knowledge or understanding. Other students may be tempted to exaggerate or overestimate their achievements. Mentors may feel unprepared to challenge them, and simply go along with the learner’s self-assessment. This is an important issue which also applies to assessing students who are not achieving the desired competencies.

The number of, and variation in, the definitions of competence in the literature pose further complications (Girot 2000, Iiott and Murphy 1999, McMullan et al 2003). There are also difficulties in defining what is to be expected


Reliability and validity

Of fundamental importance when considering any kind of assessment is whether it is valid and reliable and, as such, how it should be applied to the measurement of clinical competence (Watson et al 2002).

Validity is concerned with whether the assessment is suitable for measuring attainment of specific learning outcomes. Validity of assessment is highly dependent on the identified competencies being assessed. Valid assessments will include aspects from a variety of learning domains, for example, cognitive or psychomotor (Ilott and Murphy 1999). This takes into account that some students will perform better under different types of assessment, for example, written, oral or practical. Inclusion of different learning domains in assessing practice can provide a more balanced and fair test. This could be achieved by using a wide range of techniques such as questions, reflective accounts and student demonstrations.

Reliability refers to how consistent and standardised the assessment format is, to provide assurance of comparable standards (Ilott and Murphy 1999). Standards of attainment should be benchmarked and objectivity should remain paramount to provide a fair test. It has been claimed that work-based assessments – such as the CAP document used in nursing – can be unreliable. The main reason is thought to be that they cannot reflect the variety in the real-life situation in terms of competent practice. Part of the solution may be to assess the student in terms of what he or she would do in a certain situation. If the student is able to think of a solution to a problem or a situation that he or she has not encountered in practice, and is able to relate either to a real-life situation, then this may have to be sufficient. However, it should be borne in mind that what students say they would do in a given situation may not necessarily be the same as what they would actually do. There is often more than one correct way of doing something; therefore a different set of results could be achieved by different students undertaking the same assessment (Ilott and Murphy 1999). The only way to know whether the student has successfully learned or understood the task is by directly assessing performance in the clinical setting (Bentley 1998).

Reliability is often dependent on the assessor, his or her knowledge, understanding and training. Where assessment is based on the judgement of one individual, however valid or reliable the assessment appears, bias may have inadvertently been introduced (McMullan et al 2003, Watson et al 2002). The problem of trying to create a balance between acceptable levels of validity and reliability needs to be considered.

One proposal is to ensure that students are given more responsibility for their learning. However, if emphasis is put on students, they will need the skills necessary to identify their own strengths and weaknesses. The assessor then acts as a guide, helping students to undertake self-assessment (Hay 1995). Students need guidance from the assessor – to help them to identify learning goals and to help them to recognise when their skills have developed (Jolly 1997). Therefore, the learner could be considered as central to the process of competency based assessment. Jones (1999) states, ‘the process of competence-based assessment is an episode, involving the participation of a skilled, knowledgeable learner, and a more skilled and more knowledgeable assessor’.

Self-assessment should be treated with caution. Watson et al (2002) suggest that this method is susceptible to abuse and, if used alone, could be another way to introduce bias. However, they also suggest that, when used in conjunction with other forms of assessment, such as the production of portfolios, self-assessment may be successful. The use of a portfolio as an assessment tool can help to provide a clearer picture of performance. A portfolio for assessment can provide examples of students’ learning, in terms of knowledge, skills or specific learning outcomes (Williams 2003). As the use of portfolios becomes mandatory in the ‘Fitness for Practice’ framework, the benefits of using portfolios as another means by which competence can be assessed has been reflected in the recommended practice.

Other factors affecting learning

In 1999, the UKCC called on HEIs and service providers to work together more closely to teach students better practical skills earlier in education programmes (Audit Commission 2001, Department of Health (DH) 2001). It was believed that this would help to ensure that students would be fit for practice and fit for purpose on completion of their training.

The Code of Professional Conduct (NMC 2002) states that registered professionals have a duty to encourage students to develop confidence. The DH and the English National Board for Nursing, Midwifery and Health Visiting (ENB) jointly published guidelines for the training and preparation of mentors (DH and ENB 2001). Before 2001 there were no national
some students are left unsupervised and unguided in clinical practice (Wheeler J 2001). Even when other qualified members of staff work with students, those students whose mentors were absent for a high proportion of their placement spent almost twice as much time working completely unsupervised (Lloyd-Jones et al 2001). Lloyd-Jones et al’s study (2001) was conducted in response to previous research (Aspinall and Siddiqui 1996) suggesting that the benefits of mentorship can be directly related to the amount of time mentors are able to work with students – those who worked unsupervised are likely to be given tasks similar to those given to nursing auxiliaries (Lloyd-Jones et al 2001).

A total of 270 nursing students and their mentors were asked to keep an ‘activity diary’ for a week. The students were asked to make notes and tick boxes relating to each 30 minutes of activity completed while on placements. A total of 125 students and 117 mentors completed and submitted the diaries although, of these, the diaries of only 81 pairs were subsequently suitable to be analysed. The findings generally showed that when both students and named mentors were on the same shift, the students spent significantly more time in activities relating to their education than when they were not working together. The authors note, however, that when the named mentor was absent, other members of staff provided students with almost the same level of direct and indirect supervision as received by students whose mentors were present. It was noted that those students whose mentors were absent spent less time in activities related to education and less time working with qualified staff.

Clinical areas are under increasing pressure to find skilled and qualified mentors because of the increasing numbers of students (Burns and Glen 2000). Poor staffing levels on wards have a negative impact on educational support and training (Butterworth et al 1998). Often there are conflicts in roles – a nurse co-ordinating a busy ward area may be required to mentor or supervise students and this could lead to unnecessarily high levels of stress for both as, fundamentally, these are two very different roles. It has long been documented that the ward environment affects the quality of learning (Fretwell 1980, Ogier 1981, Wheeler M 2001). Adults will learn best in an environment that is comfortable – not only in a physical sense, but also where they feel at ease and able to express themselves freely and in a non-judgemental atmosphere (Reece and Walker 2000, Wheeler M 2001). Individual staff can have a major influence on the effectiveness of the clinical environment for teaching (Quinn 1995, Wheeler M 2001). Additionally the culture of the workplace is paramount to the success of the placement. For example, a ward which is not amenable to making the most of teaching and learning opportunities will not be viewed in such a positive light as one in which students feel valued. The relationships between staff are also important (Wheeler M 2001) and charge nurses in particular have been noted to have a major influence (Fretwell 1980). Fretwell (1980) states that: ‘the [ward] sister is the key person who controls the learning environment… (the ideal learning environment) is created by the [ward] sister and other trained nurses on the ward’. The type of leader a ward sister is, and whether staff are approachable, can also have a profound effect on learning (Ogier 1981). The need for good communication between staff was stressed as far back as 1964 (Revans 1964). Students’ responsibilities should not be forgotten: successful mentorship in nursing requires students to take responsibility for their own learning, and willingness to learn is one of the key foundations for a successful mentoring relationship (MacLennan 1995).

Fitness for Practice implies that interprofessional learning and working might be a way forward. This would not only address shortages of trained mentors, but would also assist in sharing core values across different disciplines. It would also help to provide students with better clinical experiences, thereby improving teamwork and getting them used to working within the multidisciplinary team (Barr 1998, UKCC 2001). This is a major part of the job for newly qualified staff and so would help them to understand these issues. This could also lead to increased variation in their clinical placements and would be a two-way process if nurses acted as mentors to students of other disciplines too (Humphris and Hean 2004). A multiprofessional approach should be encouraged by educational programmes to prepare students for the realities of working life (Valentine 2004). Work on this has already begun in the UK, and the UK Centre for the Advancement of Interprofessional Education (www.caipc.org.uk) promotes interprofessional learning. Barr (2000) cites preliminary findings from a systematic review of evaluations of interprofessional education stating that: ‘... analysis of the first 99 evaluations of interprofessional education found..."
that work-based interprofessional education was markedly more likely than college-based to improve the quality of service and/or bring direct benefit to patients.

**Criteria for a pass or fail grade**

Identifying whether a candidate has passed or failed is often made easier by recognising the absence, rather than the presence, of those behaviours listed in the competencies. In other words, it is sometimes easier to determine weaknesses, rather than competencies achieved. The assessment of whether someone is competent to practise is highly complex (Ilott and Murphy 1999). Skills or attitudes considered inadequate need to be described to assess the competencies that determine the individual’s ability to practise. The difficulty in discerning what constitutes a desired level of performance in a nursing course has been acknowledged (Ashworth et al 1999). Perhaps more worrying is the revelation that teachers using competency based education have expressed a lack of confidence in their ability to judge whether a student is competent (Jones 1999).

Several reasons have been identified for failing students. These include unsuitability for the profession, poor communication, dangerous behaviour (unsafe and lack of learning), and other implicit criteria. The concept of professional unsuitability is difficult to define but is cited frequently as a reason for failure. The idea of professional unsuitability is commonly described in terms of general negative attributes such as lack of initiative, irresponsibility, unreliability and gross misconduct. More specifically, behaviours such as dishonesty, theft, aggression, breach of confidentiality and manipulative behaviour have been identified as being unsuitable traits (Ilott and Murphy 1999).

An integral component in respect of safety was identified by Ilott and Murphy (1999) – whether the student has insight into any shortfalls in their knowledge. They make a pertinent point when considering the potential dangers of students who do not realise their lack of understanding or knowledge. If a student has artificial confidence it may be (erroneously) mistaken for competence, with disastrous consequences.

It may, however, be difficult in practice for assessors to fail students (Ilott and Murphy 1999). One reason is that assessors who are inexperienced and consequently have low confidence, may find it more difficult to assign a failing grade. It has also been suggested that assessors are tempted to give students the ‘benefit of the doubt’, particularly if the assessor has not directly observed that student (Chambers 1998). Clinical mentors may feel tempted to reward motivation and enthusiasm rather than actual achievement, which may further compound the problem (Ilott and Murphy 1999).

Wynne and Stringer (1997) suggest that using a competency approach can only be of benefit if all those involved understand the competencies across all levels of an organisation. The benefits of this approach will only be achieved fully if nurse managers, staff and students actively engage in the process. In nursing, core competencies required for registration and practice as a registered nurse are set by the NMC. Specific assessments may vary between institutions providing nurse training, although the standards set down by the NMC will remain the same for all pre-registration nursing students. All students must demonstrate that these have been met before successful completion of training. If all parties are willing to make the initial investment in time and effort to identify key competencies, it will be worthwhile (Lester 1994, Wynne and Stringer 1997).

**Developing critical skills**

Theory and practice seem to be assessed separately by education institutions in terms of the value which is given to the different components (Girot 2000). Only a small proportion of degree programmes accredit or grade practice, documenting only that satisfactory outcomes have been achieved and the necessary hours have been spent on clinical placements. The right to apply for accreditation of prior learning (APL) to further qualifications from HEIs is currently reserved for those embarking on courses after registration, but a modified version of this system may provide some benefit for pre-registration students who perform well on practice placements.

It could be argued that professional education should be focused on the development of critical analytical skills, which will help to prepare them to respond more readily to change (Girot 2000). Stengelhofen (1993) identified that academic performance and clinical competence are closely linked and whether competency based assessment helps to nurture these skills merits consideration.

It is difficult to be certain that a competency based approach to education is fully appropriate. From an analysis of the literature from 1980 to 2000, Watson et al (2002) concluded that there was little to endorse clinical competence assessment in nurse training, not because this approach was inherently wrong,
but, because there was no valid published and reliable method of competency based training. Another complication is that many nursing students do not think that their CAP documents accurately reflect their skills and level of clinical competence (Cudmore 1996). Practice portfolios may be one way of helping to resolve these issues, when used in conjunction with the CAP document. The UKCC (now the NMC) has advocated the use of a practice portfolio since 1999. McMullan et al (2003) and Williams (2003) suggest that the process of developing a portfolio may help students to acquire such skills. Because students are responsible for creating such portfolios, they are taking responsibility for their own learning and development. Girot (2000) and McMullan et al (2003) advocate increasing the use of portfolios, because they bring together all evidence relating to fitness for practice. The use of portfolios reinforces traditional theories of adult learning, particularly Lindeman’s (1926) assumptions that adult learners are self-motivated and their learning needs to be self-directed to maximise it.

Nursing education should be geared towards practice (Wheeler M 2001). The influence of the practice environment should not be underestimated, because the atmosphere of the workplace can be crucial to the success of a placement and to what is learned during this environment. A pleasant working environment will be far more conducive to learning than one in which students feel unwelcome (Wheeler J 2001). Encompassing a more interprofessional approach to pre-registration nursing has been advocated as a way to improve pre-registration nurse education (Barr 1998, 2000, DH and ENB 2001, Humphris and Hean 2004).

The use of university link tutors has lessened student and mentor problems in clinical placements, but it is becoming increasingly difficult for link tutors alone to bridge this gap because of the large number of nursing students and the diversity of practice placements. Effective communication between university staff, ward staff and students means that problems such as misunderstandings about specific placement objectives, or staffing issues, could be identified before the placement starts (Gopee et al 2004). The importance of a clinical link person has also been identified (Gibbon 2000, Wheeler M 2001). This person, in addition to being a member of the nursing team

References
on the ward, would be easily accessible to students and colleagues. He or she would be ideally placed to liaise with link tutors, providing formal and informal educational support for mentors and students, and training for colleagues who wish to develop skills in teaching and assessing students.

Conclusion

The use of a competency based approach to assessment—with specific reference to the assessment of practice—can help to maintain professional standards (McMullan et al 2003, Redman et al 1999). The evidence suggests that evaluating students’ knowledge through practice alone may not provide an accurate assessment of their understanding and skills, so other ways to demonstrate their knowledge such as portfolios should be used (Jones 1999).

Professional educators, for example, university staff, should not assess students’ practice in a clinical setting, because they do not work alongside students on a day-to-day basis. For this reason, it is important that mentors in the practice environment assess competence in working conditions. Reasons for failure can then be identified early and communicated to the universities. Mentors should be able to recognise and use a combination of different approaches to assessment to gauge a student’s fitness to practice. HEIs have a responsibility to ensure that students are equally fit for purpose, practice and academic award. The NMC offers a clear framework to preserve the values outlined in Fitness for Practice and Purpose (UKCC 2001). Adhering to this should help to uphold the integrity of the nursing profession for the future NS.

References continued


