Revolutionising assessment in a clinical skills environment – A global approach: The recorded assessment

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Summary
Assessment is an essential component of education and a key element of the student experience. This is never more apparent than in the assessment of student nurses competency in practice skills. The use of clinical skills centres to facilitate the acquisition of nursing skills continues to gain popularity, nonetheless the methods used to develop and assess competency within these environments remains diverse with contemporary literature suggesting that the objective structured clinical examination (OSCE) is predominantly used.

This paper presents an innovative approach used within a skills environment to summatively assess nursing students at the end of their first year; one that seeks to cultivate clinical competency through a process of self-appraisal and appreciation of evidence-based literature.

The recorded assessment is a unique strategy that endeavours to make the learning experience more meaningful for the students, through the use of an audio-visual tool and written critique. The critique is crucial to the learning process by encouraging the student to adopt a critical and holistic view of their practice; essential skills for future practitioners.

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Background
Assessment is unquestionably a key element of the student experience (Heywood, 2000; Fry et al., 2003; Knight, 1995; Rowntree, 1987), therefore its purpose, whether to provide feedback during learning (formative) or to grade a student at the end of a programme (summative), should align to the student’s level of learning and course outcomes (Biggs, 2003), as well as being ‘fit for purpose’ (Kenny, 2004; Valentine, 2004; Pickard and Brown, 2006).
Conventional assessment strategies such as end of year exams may be seen as counter productive as the ability to recall information and memorise facts does not generate learning activities and increases the risk of student learning becoming passive (Brown and Glasner, 1999; Knight, 2002). To counteract this, a student-centred approach to curriculum planning will lead to assessment strategies that concentrate on learning experiences and student activity providing students with feedback and enabling them to take responsibility for their own learning, thereby fostering deep and lifelong learning (Ramsden, 2003; Gibbs, 1995). With the use of innovative assessment strategies that focus on skills of self-appraisal the students may learn to reflect on and in practice (Schon, 1983) preparing them to practise safely, as they strive towards competency upon completion of their course.

There is a abundance of literature attempting to define competency and methods used to assess this in nurse education, both nationally and internationally (Whelan, 2006; Cowan et al., 2005; Winters et al., 2003; King et al., 2003; Redfern et al., 2002; Boxer and Kluge, 2000). This is further complicated in the United Kingdom by the Nursing and Midwifery Council’s (NMC) decision to replace the term ‘competencies’ with ‘proficiency’. If, according to the Cambridge Dictionary (2007), competency is defined as “the ability to do something well” and proficiency is defined as “skilled and experienced”, this would in turn imply a higher level of expertise required of our nurses.

Traditionally, assessment of practical or laboratory skills has relied upon observation of the performance of one individual by others, running a risk of observer bias, halo, horn and hawthorn effects (Rowntree, 1987; Hand, 2006), thereby reducing its reliability. Contemporary literature suggests that the predominant strategy used to assess competency in skills environments in nurse education is now a modified form of the objective structured clinical examination (OSCE). It is suggested that this provides a valid and reliable tool for the assessment of clinical skills within a simulated environment (Nicol and Freeth, 1998; Khattab and Rawlings, 2001; Alinier, 2003; Major, 2005). Conversely, concerns continue to be raised regarding resource implications, the lack of emphasis on holistic care delivery and its limited transferability to practice (Knight, 2001; Rust, 2001; Redfern et al., 2002; Rushforth, 2007). In addition to this debate there are also concerns regarding the over-assessment of students (Brown, 2001; Race, 2001) in current curricula and the lack of innovation in the strategies used (Race, 2001; McDowell, 2001).

Whilst this dichotomy continues to exist, current healthcare reforms necessitate that we as educational providers have a duty to ensure that our students, at the point of registration, have the skills and experience to ensure accountability for their practice. Therefore, whilst the terminology relating to competency may have changed, the guiding principles remain the same: assessment within any educational programme should demonstrate that its’ purpose has been met.

**The role of clinical skills laboratories**

As part of the response to the ongoing concerns surrounding nurse competency (DoH, 1999; UKCC, 1999; NMC, 2004a; Moore, 2005; Spitzer and Perrenoud, 2006), clinical skills laboratories have been increasingly integrated into many nurse education programmes, with the aim of facilitating the acquisition of essential nursing skills and to complement the work-based learning occurring in practice.

Unlike the school-based practical rooms previously utilised in nurse education, the advantages of simulation have been endorsed in the literature as providing opportunity to practice repeatedly in a safe, risk-free environment, achieving a certain level of expertise prior to the application of ‘hands-on’ patient care in practice (DoH, 2001; NMC, 2004a; Scholes et al., 2004; Dent and Hesketh, 2004; Pfeil, 2001; Feingold et al., 2004; Murrell and Pegram, 2003).

Within the School of Health and Social Care at Bournemouth University, it is acknowledged that clinical skills laboratories are unable to replace the experiential learning and consolidation of skills that occurs in practice. Nonetheless, they do have the potential to provide a platform of learning that need no longer focus solely upon skills competency but rather the development of a diverse set of professional qualities including self-appraisal, self-awareness and self-efficacy. These qualities, it is argued, support a more holistic approach to the competent delivery of care (Cowan et al., 2005; Price, 2005; Rolfe et al., 2001; NMC, 2004a).

Our philosophy is simple: ‘to provide a safe environment for students to learn by doing, exploring and reflecting on practice’. However, underpinning this philosophy are our essential key concepts of holism which are portrayed in image form and referred to as the ‘brick in the wall’ (see Fig. 1). These key concepts offer a multi-dimensional approach to skills delivery and underpin the principles not methods approach to teaching and learning occurring within the laboratories. Whilst there is no undue emphasis upon any one concept, they
are seen to support the central development of proficiency, with students encouraged to apply them to the application of each skill. These key concepts also serve as assessment criteria within the clinical skills laboratory’s summative assessment strategy.

In order to prepare the student for the end of year assessment, introduction to the process starts at the beginning of the academic year enabling them to have a participatory role in the strategy. The assessment guidelines, marking criteria, performance and critique are 'explained' thus endeavouring to promote familiarity and reduce the potential anxiety felt by students. Preparation involves the use of audio-visual recording (in pairs or small groups) from the first session, which is then played back to the entire group with the purpose of introducing and developing the concepts of self-appraisal and peer appraisal.

The recorded assessment strategy

In light of recent professional guidelines (NMC, 2004a) and subsequent curriculum evaluation, the clinical skills curriculum within this university has been intercalated into an accredited unit based upon individual health needs.

The assessment strategy for this unit takes a unique and innovative approach to the use of audio-visual tools to support self-assessment. The recorded assessment strategy provides the student with the opportunity to gain true insight into their own practice through a process of critical self-appraisal, not only their ability to perform a skill but also their ability to practice holistically. The intended learning outcomes of the unit considers the students ability to explore the role of the nurse and their accountability to the individual and significant others within a safe environment. The recorded assessment strategy consists of two stages; the recording followed by the written critique.

The recording

The first stage of the recorded assessment requires the students to work in pairs. Each student randomly selects a scenario outlining a skill that they are expected to carry out upon their colleague (see Fig. 2). The skills include a range of essential nursing skills such as assessing and recording a blood pressure, feeding a patient/client or transferring a patient/client from bed to chair. All of the skills used within the assessment have been taught and practiced within the centre during the preceding year.

Each student is required to perform their chosen skill whilst the tutors or technician records them using video or DVD. Following this, the recording is immediately checked for sound and picture quality prior to returning it to the student for the second stage of the strategy.

The use of audio-visual tools in education is not new and has been endorsed as being effective both as a teaching and learning as well as an assessment tool. There is well documented evidence to support its use in the development and appraisal of interpersonal skills (Burnard, 1991; Minardi and Ritter, 1999; Roter et al., 2004) and critical thinking (Rowntree, 1987) but less evidence is available to suggest that it is useful in the development of psychomotor skills (Woolley and Jarvis, 2007; Winters et al., 2003; Shorten and Robertson, 1996). As an assessment strategy it is argued that it provides effective feedback from both peers and instructors (Docherty et al., 2005; Winters et al., 2003; Chau et al., 2001). Nonetheless, its use within a...
simulated environment has continued to focus predominantly upon a task orientated approach to skills acquisition which fails to reflect the holistic nature of care delivery (NMC, 2004a; Cowan et al., 2005; Price, 2005) and continues to raise questions regarding transferability of such competencies into alternative contexts.

It should be stressed that the primary purpose of the Bournemouth University recorded assessment is not with competency alone, unlike many assessment strategies used in simulated environments. Indeed, competency in clinical skills requires the progression through an experiential taxonomy (Steinaker and Bell, 1979; Nicklin and Kenworthy, 2000), leading to eventual mastery or internalisation over a period of time and through repeated practice. We would argue that this level of mastery could not be achieved within a simulated environment alone. However, our assessment strategy supports the development of competency by focusing upon the students’ ability to appraise their performance of a skill through the written critique, using a holistic framework of care delivery and underpinned by relevant evidence.

The recording provides each student with a personal snapshot of their practice but unlike ‘real life’ this snapshot offers the student opportunity to review and appraise their practice over and over again informing their written critique.

The written critique

Having randomly selected and performed a skill from the range of scenarios, the student now moves on to the second stage of the assessment strategy, the written critique. The critique consists of a 2000 word narrative that encourages each student to appraise their practice against specific criteria (see Fig. 3) and underpinned by evidence-based literature. The students are able to appraise their performance by viewing their recording several times. They will be expected to consider the skill itself as well as their mode of delivery, such as communications skills used and methods employed to minimise cross infection.

This summatively assessed stage of the strategy evolved from our expectations that the students will be able to perform safe, effective, holistic practise in a simulated environment. The written critique is a key learning process designed to encourage the students to become ‘metacognitive’ learners (Moon, 2001), understanding what they have done, why they did it that particular way and what they have learnt from the experience in terms of skills, attitudes and knowledge.

A review of the criteria was carried out to ensure their transparency to all concerned which Biggs (2003), Pickard and Brown (2006), Boud (1995) and Race (2001) propose increases their validity. They also reflect the key concepts our ‘brick in the wall’ philosophy, thereby continuing the theme of holism. This process necessitates making critical judgements on one’s own practice and levels of proficiency (Boud, 1995; Race, 2005; Price, 2005), as well as recognising any additional learning required (Fullerton, 1995), central concepts of self-regulation and accountability in nursing (NMC, 2004b). The integration of self-appraisal into nursing curricula has increased dramatically over the last two decades (Boud, 1995; Welsh and Swann, 2002; Race, 2001; Pickard and Brown, 2006), supported by suggestions that it encourages ownership of learning, a requisite in a student-centred curriculum (Knowles, 1990; Rogers, 1983).

Marking, feedback and evaluation

Students’ learning can be assisted by not only completing the assessment and the written critique but also by the subsequent feedback provided by the tutor/facilitator. Evidence shows that feedback needs to be timely, individual, empowering, motivating and manageable (Rowntree, 1987; Race, 2001; Welsh and Swann, 2002) and as such a developmental activity.

Within the School of Health and Social Care a standardised assessment feedback form is currently in use within the curriculum. The existing form, however, does not truly reflect the practical elements of the recorded assessment and therefore a new form has been piloted that incorporates the following:

- A broad marking criteria replicating those within the assessment guidelines.
- A grading system that allows the student to gauge the level of their performance.
- Inclusion of a grading system that enables the students to visibly see where their strengths and weaknesses lie within their reflective critique on their performance.
- Additional space for individual markers to provide further feedback commentary.

It is our intention to use an evaluative pilot study to determine the value of the newly introduced marking and feedback tool, from both the students and markers perspective.
Assessment Criteria

Taking into consideration your accountability to the patient/client you should consider the following criteria within your performance and critique:

- Maintain a safe environment for yourself and others
- Carry out effective infection control measures throughout
- Demonstrate good verbal and non verbal communication
- Obtain consent
- Demonstrate respect for privacy and dignity
- Demonstrate respect for patients/clients comfort and preferences

Your critique will need to explain your actions, what you did well and the areas for improvement, using current and appropriate literature and the Harvard referencing system.

Figure 3  Assessment criteria.

Initial reflections

The assessment strategy is in its’ infancy as a summative assessment and the question of validity and reliability are under review. It was envisaged that from the design of the form students’ may be able to value both elements of the assessment as meaningful. For a student being assessed on a psychomotor skill through a written assessment only, Reece and Walker (2003) accredit that this would comprise low validity. Conversely, the combination of the performance and the self-reflective critique could demonstrate high validity; as evidence of what the student has learnt not what is taught is graded (Brown and Glasner, 1999; Race, 2001).

A previous study evaluated the recorded assessment strategy in its’ formative structure and was carried out in 2003 (Phillips et al., 2004). Overall, the views of the students were positive and the following comments reflect their feelings at the time, which continue to be echoed today (see Fig. 4). The written critique was considered to be a highly effective learning tool that encouraged a critical appraisal of practice and evidence, thereby contributing toward the development of safe, competent and informed future practitioners.

Conclusion

Clinical skills laboratories remain popular environments for the acquisition and assessment of essential nursing skills. However methods used to assess competency remain diverse. The Bournemouth University recorded assessment is a unique strategy.

Student comments:-

“I need to go on a diet”

“It was quite daunting......to actually know that you’re going to go in and be videoed and that its just on you”

“Its more interesting isn’t it? Rather than just doing it, you’ve got a video, you can watch it and see what you have done wrong”

“You just feel like, well what bit did I actually do right? You can actually review it yourself and see and learn from it a bit more”

Figure 4  Student comments following the recorded assessment.
Rather than focus on skills competency alone it encourages the development of proficiency through a process of critical appraisal and appreciation of evidence-based literature.

This paper has discussed the use of this innovative assessment strategy which we consider may revolutionise the development of competency and other key skills within a simulated environment and has the potential for transferability both inter-professionally and globally.

References


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