Assessing the competence of student nurses

SUMMARY
- Competence is difficult to define
- Continuous assessment of practice, which involves reviewing the literature, is complex
- The study involved developing a suitable tool for assessing competent practice of student nurses
- The problem was investigated using Personal Construct Theory and Repertory Grid Technique
- The findings suggest that trained staff assess the socialisation process of becoming a children's nurse rather than the level of competence

KEY WORDS: Assessment, Competence, Personal Construct Theory, Repertory Grid Technique

INTRODUCTION
The assessment of competence, which is fundamental to the progression towards registration as a nurse, is arguably the most complex aspect of continuous assessment. This paper reviews some of the literature relating to competence in nursing practice and highlights the findings of the author's research in the assessment of competence as understood by a small group of registered sick children's nurses.

One of the most fundamental problems faced by assessors of clinical practice is defining competence. In 1994, the English National Board (ENB) in its document 'Creating Lifelong Learners' stated that "Diploma and degree programmes are planned to develop nurses who can give compassionate and competent care and communicate confidently, competently and sensitively," (ENB, 1994a). Although there is nothing ambiguous or confusing about this statement, the ENB offers no definition of competence in this context.

Definitions of competence are often inadequate in explaining what is required when assessing others. One of the simplest definitions of competence is by Tuxworth (1982) who describes competency as "the knowledge, skills and attitudes required to perform a given task or act." Unfortunately there is a risk with simple statements that they leave too much unsaid and may only contribute to the confusion. Miller et al. (1988) state that competence can be defined in one of two ways: a person's performance, or the quality or state of being an individual (i.e. the standard of performance at any given time, or a personal and abiding quality). These authors further define competence as "A psychological construct, concerned with the general ability of an individual to co-ordinate cognitive, psychomotor and affective attributes in the exercise of intelligent judgement" (Miller et al., 1988). This statement says little more than the one by Tuxworth quoted earlier, but appears to compound...
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the issue further. It is not possible, per se, to observe psychological constructs, although Runciman (1990) suggests that their manifestations are observable in competent performance. While (1994), however, argues that performance and competence are not the same thing. She suggests that practice assessors should focus on the performance of students in the real-life situation rather than on competence in general. Supported by current literature, While (1994) draws the reader's attention to the supposedly competent practitioner who fails to perform satisfactorily. This problem is echoed by Rittman and Osburn (1995) in their discussion of the unsafe student preparing for registration as a nurse. To overcome the problem of the apparently knowledgeable nurse who practises unsafely, Rittman and Osburn (1995) suggest that greater collaboration is needed between the academic and clinical worlds of nursing in assessing competence. Educationalists must accept the professional judgement of their clinical colleagues in determining success or failure in practice. The student who performs competently in a skills centre or in written assessments cannot expect to substitute this for safety in the real-life situation.

The UK Central Council for Nursing, Midwifery and Health Visiting (UKCC, 1989) defines the outcomes for registration as a nurse in rule 18A(2) of its statutory instrument no. 1456. However, these outcomes are too broad to be used alone as criteria to measure competence. Measurement of competence is based on 'observed behaviours' (Anderson and Knuteson, 1990; Hepworth, 1991), which require judgement by the observer, although Benner and Tanner (1987) challenge the view that "only measurable ... aspects of nursing should be the focus of assessment." In discussing expert nurses' use of intuition when planning care, Benner and Tanner (1987) define competence as being based upon experience. This implies an element of reflective practice. It is suggested that competent practitioners use rationale to support their judgements, whilst expert practitioners use intuitive judgement when planning care. Despite the contribution of the literature in defining competence, in practice it remains unclear. What has not been addressed in the literature is the understanding of competence by nurses who have the responsibility of assessing students.

ASSESSMENT GUIDELINES

Assessment of student nurses' clinical competence has been seen as an integral part of the overall assessment strategy since formal nursing assessment began. Developments in nursing education in the UK over the past 10 years have required the assessment of practice and theory to be interrelated to provide 'total assessment' of nursing competence based on the outcomes identified in the nurses' rules (UKCC, 1986).

Current assessment schemes range from the objective structured clinical examination (OSCE) to student profiling linked to continuous assessment (ENB, 1996). Very few assessment schemes can claim to be problem-free. Pavlish (1987) refers to the assessment of clinical performance as the "elusive component" of nursing education, and Darbyshire et al. (1990) criticise the "fragmentation of assessment, which is irrelevant to and estranged from clinical practice."

Britain has no national examination or single, approved assessment scheme for nurses. The National Boards are responsible for the approval of programmes and institutions, but the universities and colleges are free to devise their own continuous assessment schemes of both theory and practice within the UKCC's interpretative principles. The ENB provides standards for assessment (1997), but does not impose a uniform assessment scheme for use throughout the country. This allows for flexibility in interpretation, but consequently there are as many schemes of assessment as there are schools of nursing and midwifery and often more than one scheme in each school. All schemes, however, lay claim to meeting the outcomes of Rule 18A(2) and show consistency in the main focus of assessment - the safe practice of the person being assessed. The elements of safe practice, however, are not always consistent in the minds of assessors. In the author's experience as a teacher of assessors, there is no common agreement among practitioners as to how much attention should be given to assessing the student's knowledge base.

When schools of nursing were first incorporated into higher education, the Council for National Academic Awards (CNAA) was reticent about approving schemes that entailed assessment by practitioners who were not graduates. This view was based on the belief that the assessor should have a deeper knowledge of the underpinning principles of practice than the person being assessed. Over the past eight years, universities and colleges have been able to demonstrate how professional development of clinical staff and experiential learning has more than compensated for any lack of academic qualifications. Within the framework provided by the UKCC and the National Board, guidance for assessors should be based on a consensus of opinion and shared understanding of the outcome of nurse education. This fundamental principle is the basis of development of any assessment tool.

DEVELOPING A TOOL FOR ASSESSMENT

The assessment of practice tool used within the schools of nursing of the University of the West of England is based on the outcomes of rule 18A(2) and the 10 key characteristics of expert practice (ENB, 1994b). It was devised over a period of one year by a working party composed of representatives from education and all four branches of nursing. Nineteen core learning outcomes, graded against Steinaker and Bell's taxonomy (1979) (Appendix A) form the basis of assessment. To these the student may add negotiated learning outcomes based on a learning contract. However, there is a tendency among some staff and students to specify detailed performance criteria within the contract that are often task-orientated. The identification of such criteria has been challenged by Grussing (1984) who suggests that "finite behavioural objectives" should not be synonymous with competence. Before its introduction, the tool used for assessing practice was greatly modified to exclude such detailed statements, although there was a tendency during the modification process to mistakenly refer to behavioural objectives as competencies. As a compromise, performance criteria for each learning outcome are included in the assessors' handbook to provide guidance for 'novice' assessors. However, there is a danger that these more detailed criteria will narrow the assessor's focus and become the tool by which a student is measured.

It should be noted that many assessors of student nurses feel uncomfortable without prescribed behavioural objectives for performance. The author's contact with and preparation of assessors has indicated that broad statements of achievement require more thought and interpretation on the part of the assessor than is necessary when detailed objectives are
used. Benner (1984) suggests that detailed statements may be necessary in the early stages of training. This view is supported by Girot (1993b), who found that assessors had an "overwhelming need" to measure students' performance against predetermined criteria in the first and second years of training, while recognition had to be given to the role of intuition in determining what constitutes a competent practitioner in the final year.

Benner (1984) has identified a number of reasons why competence-based assessment is so difficult for practising nurses. She believes that the most important qualities of a nurse are empathy, caring and relating to others, and that it is these "essentials for registration" that are the most difficult to assess. Assessment must also take into account the attitudes, good or otherwise, of the student being assessed in delivering care and is, therefore, subjective and context-bound. Continuous assessment of students increases the expectation that practising nurses will participate in the process.

Within England, the introduction of continuous assessment schemes has meant that the principal assessors are staff nurses, who give the most guidance and support to students during their placements. With the ever increasing responsibilities of ward sisters/charge nurses in business management and indirect patient care, it is staff nurses who are observing students at close quarters.

The ENB (1997) requires an assessor to be a first-level registered nurse holding the same qualification for which the student is preparing. Furthermore, the student and assessor are required to work together for at least two days of each week of the student's allocation. This is intended to provide continuity, although it is accepted that assessment should be a team effort. Phillips et al. (1994), in discussing witness reliability in assessment, state that there are bound to be "variations in judgement" that can be overcome by witness triangulation. By listening to the views of others, including the student, misinterpretations and bias can be reduced.

The majority of assessment schemes used in the UK are criterion-referenced rather than norm-referenced. Arguments for and against which type constitutes a true assessment of a student's ability can be found in the literature. Norm-referencing is often considered to be unreliable as it is too subjective, whilst criterion-referencing is blamed for being too complex. Anderson and Knuteson (1990) believe that performance should be judged objectively and accurately and that objective clinical evaluation is the "desired goal of nurse educators." However, Hepworth (1991) argues that observation and perception are central to assessment and are influenced by the assessor's values and experiences and cannot, therefore, avoid being subjective. It could be argued that assessment, because it involves a judgement, equally reflects the beliefs, values and attitudes of the assessor and the student. Hepworth suggests that subjectivity does not necessarily render an assessment invalid or unreliable. In fact, it is suggested that the profession should accept the subjective nature of assessment as contributing to its value. Furthermore, it is possible that norm-referencing forms the basis of any criterion-referenced scheme; how often do assessors use themselves as the yardstick by which to measure students against assessment criteria? Assessors assess in the light of their perceptions and expertise (Hepworth 1991) with different sets of values and beliefs. 'Value' is a personal construct that suggests that subjectivity is an important aspect of any assessment. Reaching a common understanding of the criteria for assessment is a problem that seems almost impossible to solve given the diversity of assessors' perceptions of what constitutes competence.

Runciman (1990) suggests that nurse educators need to develop a range of assessment tools that address the increasing complexity of nursing. There tends to be a desire to keep assessment tools as simple and 'user-friendly' as possible. The author believes that any tool must be owned by those who use it and must test what it claims to test.

INVESTIGATING THE PROBLEM

The author undertook a study of the criteria used by staff nurses working in a British children's hospital when assessing students. The author's involvement in the preparation of assessors led to an increasing concern that the frame of reference being used when assessing students bore little resemblance to the criteria as set out in the assessment document.

The main concern was that assessors were assessing the socialisation process of becoming a nurse rather than the clinical competence of the individuals concerned. Interviews were conducted using Personal Construct Theory (Kelly, 1955) and Repertory Grid Technique (Fransella and Bannister, 1977) to elicit personal constructs by triadic comparison. The constructs were then analysed using simple content analysis. The staff nurses were chosen to participate in this study by sample of convenience and expert choice sampling (Smith, 1981). The staff nurses were required to fulfil certain criteria for selection to ensure a minimum level of experience. They needed to:

- Be registered children's nurses
- Be practising children's nurses for at least 2 years
- Have completed a basic course for preparation of assessors (two-day course or ENB 998)
- Be assessors of clinical practice for at least 1 year

Eight registered children's nurses were interviewed in the clinical environment for about 45 minutes each. Interestingly, when the purpose of the study was explained, none of the respondents questioned the meaning of the term competence or asked for any clarification.

Personal construct theory and repertory grid technique

Kelly (1955) considers that people are in a state of constant change and development, having to make sense of the world around them. To enable them to do this, Kelly believes that individuals construct mental models that are unique to them and made up of several personal constructs, which can be revealed by asking them something about themselves. A construct is a bi-polar way of viewing an object, person, or event as being different or alike. For example, we might be asked to describe the ideal nurse. Kelly (1955) would argue that the response given is based on the way good and bad nurses are viewed. However, respondents are required to verbalise ideas that are abstract and ever changing, which is not always possible. 'Repertory grid technique' developed out of Kelly's 'personal construct theory'. It is a useful device for collecting data and for analysing an individual's constructs.

In this study, similarities and differences can be identified to demonstrate the subjective nature of assessment. The grid is composed of rows and columns derived from the elements 'students' and the staff nurses' constructs.
Collecting data
At the beginning of the interview, the staff nurses were asked to identify four students; two they considered to be competent and two they considered incompetent. The identity of the students remained anonymous to the interviewee. By comparing three students (triadic comparison), eight constructs were obtained from each staff nurse giving an overall total of 64.

The staff nurse was then asked to rate each of the four students against the eight constructs that she had identified, on a scale of 1 to 7, with 1 as the positive pole and 7 as the negative. As an example, Figure 1 shows the relationship between the constructs given by staff nurse ‘A’ to student nurse ‘1’.

This information reveals the personal constructs that staff nurse ‘A’ used when identifying a competent student. It shows that student nurse ‘1’ was adaptable, reasonably sensible in her application of knowledge, happy with her role and safe in using her initiative. However, by choosing to place constructs 6 and 7 in column 4 (neutral), staff nurse ‘A’ was not sure if this student fitted into the team or showed any interest in children. She believed that student ‘1’ did not have very good rapport with children and parents. Given the distribution of rating, staff nurse ‘A’ considered student nurse ‘1’ to be reasonably competent.

The bi-polar constructs were:

1. Sensible application of knowledge/does not apply knowledge very well
2. Adapts well to nursing children/does not adapt very well
3. Happy with her role/not very happy
4. Safe use of initiative/does not use initiative
5. Efficient use of time/not very efficient in using time
6. Fits into the team/not fit into the team very well
7. Interested in children/not very interested in children
8. Good rapport with children and parents/not very good rapport with children and parents.

The most frequently occurring constructs identified by the sample group were:

- Uses initiative/lacks initiative
- Good communicator/poor communicator
- Eager to learn/not interested

The largest group of constructs (23.5%) related to the students’ personal qualities. The highest rating constructs within this group, however, related to the use of initiative. This represents an important construct of competence for the sample group and could be interpreted as an aspect of conformity. The student who uses initiative is more likely to do what is expected and to contribute to the smooth running of a ward. Further discussion with qualified staff has suggested that the underlying meaning of this construct has more to do with getting on with the work with the minimum of supervision rather than with initiation of action. The second most frequently occurring constructs related to the students’ enjoyment of their work. The impression given by most respondents was that if a student enjoyed caring for children and got on with people, then almost anything else in the students’ performance that may be negative, but still safe, could be overlooked.

The ACE Report (Bedford et al., 1993) emphasises the importance of staff development in collecting evidence, analysing data and developing frameworks for looking at practice. Regarding assessment tools, there should be evidence from more than one witness based on the student’s knowledge, skills, attitudes and understanding. This requires assessors to be knowledgeable, reflective practitioners, used to problem-solving and decision-making.

CONCLUSION
The results obtained from this small study show that the personal criteria the respondents used when assessing students’ competence are largely subjective and unmeasurable. This element of subjectivity has been addressed in the literature (Glass, 1978) and it has been suggested that it is not necessarily undesirable if it is limited to specific criteria. The results of this study contribute to the ongoing debate about competence in clinical practice and provide general guidelines for planning its assessment.

The criteria that are included in assessment tools provide a useful guide to help assessors to know what to assess, but they do not necessarily eliminate the subjective bias in assessing or address the assessor’s perceptions of competence. It is important that nurses who regularly assess students are aware of the value of a critical approach to their work. Equally important is the value nurses educators place on the assessors’ ability to make an informed professional judgement.

Assessors should be in no doubt as to what they are meant to be assessing. Personal experience has shown that documents imposed from the top down are more likely to be criticised and eventually devalued, whereas those documents that are owned by clinicians are more likely to succeed as valid tools. This often means accepting unity in diversity and moving away from a central locus of control. Assessment of student nurses is arguably the most complex aspect of continuous assessment, particularly when attempting to
integrate the assessment of theory with practice. Ultimately any assessment tool is only as good as the people who use it, and perhaps competence, like beauty, is in the eye of the beholder.

REFERENCES
APPENDIX A

NB: The grading criteria and essential core outcomes reproduced here represent only part of the assessment document used by the Schools of Nursing of the University of the West of England, Bristol. A learning contract and ongoing action plan are also an integral part of the assessment of practice. On return to the student the documents are maintained by them in a portfolio of learning experiences.

Grading criteria
An adaptation of Steinaker and Bell’s taxonomy of learning (1979).

<table>
<thead>
<tr>
<th>Categories of taxonomy</th>
<th>Stages of achievement</th>
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<tbody>
<tr>
<td>Exposure – STAGE 1</td>
<td>The student observes and participates safely in the activity being carried out and begins to recognise her/his own learning needs</td>
</tr>
<tr>
<td>Participation – STAGE 2</td>
<td>The student participates safely in the activity and recognises the consequences of her/his actions. The student is able to learn from experience and modify behaviour/activity as required. The student is able to provide a rationale for her/his activity. The student begins to demonstrate evidence of research-based practice.</td>
</tr>
<tr>
<td>Identification – STAGE 3</td>
<td>The student is able to undertake an activity with increasing confidence and with due regard to safety. The student is able to provide a rationale for her/his activity and begins to explore alternative options and solutions. The student begins to demonstrate evidence of research-based practice and critical thinking.</td>
</tr>
<tr>
<td>Internalisation – STAGE 4</td>
<td>The student demonstrates competence and recognises the consequences for professional practice. The student performs within recognised standards of care and provides a good role model. Shows evidence of research-based practice and critical thinking. The student begins to demonstrate the ability to monitor and evaluate standards of practice and makes suggestions for improvement where required.</td>
</tr>
<tr>
<td>Dissemination – STAGE 5</td>
<td>The student demonstrates the ability to monitor and evaluate standards of practice and makes suggestions for improvement where required. The student is knowledgeable and skilled enough to teach, motivate and influence others (e.g. junior students) within the care environment</td>
</tr>
</tbody>
</table>

Diploma of Higher Education Nursing Studies
By the end of Year 1 students will have successfully achieved STAGE 2.
By the end of the Common Foundation Programme students will have maintained STAGE 2.
By the end of Year 2 students will have successfully achieved STAGE 3.
By the end of Year 3 students will have successfully achieved STAGE 4.

Diploma of Higher Education Children’s Nursing Studies
By the end of the first 6 months students will have successfully achieved STAGE 3.
By the end of the course (1 year) students will have successfully achieved STAGE 4.

Example of Essential Core Outcomes
(Formatively and summatively assessed)
The assessment document has 19 essential core outcomes based on UKCC rule 18A and the ENB 10 key characteristics.

Learning outcomes
1. Exercise professional accountability for practice
2. Use a structured approach to undertake a comprehensive assessment of an individual
3. Use a structured approach to formulate a comprehensive care plan
4. Demonstrate effective skills in the implementation of the care plan
5. Use a structured approach to evaluate care given
6. Communicate effectively with individuals and in group situations
7. Demonstrate appropriate interpersonal skills when interacting with others
8. Develop, sustain and terminate a therapeutic relationship
9. Demonstrate safe practice through adherence to relevant legislation and agreed policies and procedures
10. Utilise relevant research in the delivery of care
11. Work as an effective member of a team
12. Demonstrate the ability to be flexible and innovative in practice
13. Participate effectively in the process of change
14. Act as a health promoter
15. Reflect on and maintain own professional development
16. Demonstrate use of teaching skills in the education of others
17. Demonstrate use of resources in the delivery of care
18. Demonstrate management and organisational skills in the provision of care
19. Recognise a need for, and contribute to the maintenance of quality in the care environment

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