

Does the seen examination promote or constrain student learning?

Alison Whelan, Jeremy Brown
Edgehill University, Ormskirk
whelana@edgehill.ac.uk

Abstract

Composite evaluation by one group of student nurses undertaking a pre-registration diploma nursing course within one university setting highlighted a general perception among respondents that they only participated in 'rote' learning to pass the examination. It appeared that little knowledge was retained or used in their nursing practice. Views of students and lecturers were sought on whether the prescribed assessment strategy of a 'seen' examination does in fact restrict student learning.

A qualitative research methodology which adapted a phenomenological approach was used. Tape recorded semi-structured interviews were undertaken from a purposive sample of four university lecturers and six pre-registration nursing students. Data was analysed using thematic analysis.

The themes generated during analysis were: the advantages of the 'seen' examination, superficial learning, linking theory to practice, and the usefulness of other assessment strategies. There was an assumption made by lecturers that a number of students retained knowledge and information long enough to pass the 'seen' examination but not long enough to use it in their nursing practice.

The overall impression from the majority of respondents interviewed in this study was that the assessment strategy of a 'seen' examination is valuable to enhance knowledge and skills. However, most lecturers who participated in the study felt sitting a 'seen' examination did not encourage 'deep' learning among students. They believed this form of assessment encouraged students to 'rote' learn and therefore learn in a 'shallow' way.

Keywords

Student assessment, 'Seen Examinations'.

Introduction

Composite evaluation by one group of student nurses undertaking a pre-registration diploma nursing course within one university setting highlighted a general perception amongst respondents that there was little benefit from undertaking 'seen' examinations. Students claimed they only participated in 'rote' learning to pass the examination and subsequently little knowledge was retained and utilised in their nursing practice. This study focused on investigating the views of students and lecturers on whether the prescribed assessment strategy of a 'seen' examination restricts student learning.

Background

The purpose of assessment in an educational context may include enabling judgements about levels of skills or knowledge, measuring improvement over time, evaluating strengths and weaknesses, or ranking students for selection or exclusion (Wojtczak, 2002). In nursing and midwifery pre- and post-registration education, nurses are confronted with the necessity of successfully completing various forms of assessment if they are to achieve personal and professional goals (Neary, 2001; Dolan, 2003; Nursing and Midwifery Council, 2004; Brady, 2005). The assessment process is often seen as the most important aspect of a student nurse's course as it measures students' proficiency to practise (Quinn, 2000).

Assessment strategies should be considered to be more than just a tool to measure ability (Watson et al., 2002). Foster and Hawkins (2004) acknowledge that assessment tends to dominate the student's experience of learning and can be more influential than the learning process itself. Scant attention is given in the nursing and medical education literature to the relevance and importance of assessment and its impact upon

learning (Santy and Mackintosh, 2000; Shumway and Harden, 2003). Scouller (1998) identified little evidence of systematic study of how students perceive different forms of assessment. Considering the complexity of clinical competence a nurse is expected to demonstrate (Quinn, 2000), it is somewhat surprising that assessment methods used to assess such proficiency are rarely evaluated in terms of how students perceive them or how they influence learning.

The traditional concept of assessment strategies consisting only of examinations and essays has been increasingly challenged, with more creative assessment models. These alternative assessment strategies include poster presentations, portfolios and peer-assessed group projects (Newall-Jones, Osborne and Massey, 2005). It could be argued that the greater variety of assessment methods used, the fairer it is for students. A range of processes increases the likelihood of students demonstrating their best performance in at least some of the formats (Race, 2001). An assortment of assessment strategies used by many Institutions is strongly welcomed by students. It decreases dependency on the traditional formal examination, a method that does not suit the learning style of many students (Robson, 2003). Students should, however, be prepared to learn to engage and be assessed in different ways.

Criticisms have been made of examinations, such as the comparatively short time allowed, and the appropriateness of examination questions in meeting all the learning outcomes set (Oxford Centre for Staff Learning Development, 2002). The effect on students sitting an exam is unpredictable (Shumway and Harden, 2003). For some students the prospect of sitting an exam is stressful and can result in an emotional and physiological state described as 'exam stress'. Exam stress is known to interfere with academic performance (Timmins and Kaliszer, 2002). Applied to the examination setting it could be argued that a student who is intelligent and well-schooled in a given subject could fail an examination due to exam nerves alone (Newall-Jones, Osborne and Massey, 2005). If that were the case, then the examination is not a test of knowledge, or educational ability, but a test of how well the students cope with stress. In theory, examinations may be an excellent means of assessing a student's ability to work under stress, but do not measure what they are intended to measure, a student's level of learning and academic proficiency.

Musch and Broder (1999) believe that test anxiety is merely a students' self-perception or emotional reaction that accompanies the awareness of being inadequately prepared for the test.

Habeshaw, Gibbs and Habeshaw (1986) contended that conventional 'unseen' examinations; with no access to books, notes or other resources were an ineffective way of testing ability. Students never face the same kind of test under such extreme pressure in any subsequent work. They suggested a more realistic way of testing students was to use 'seen' examinations where students are given copies of the exam paper before to the exam to assess their ability to use resources and research. They stressed that 'seen' exams do have some disadvantages. 'Seen' exams can result in large numbers of students seeking information from a limited number of books, exerting pressure on library provision.

'Seen' exams are thought to be popular with teachers because they to offer advantages over both 'unseen' exams and coursework (Race, Brown and Smith, 2005). Large numbers of students are often less anxious about the exam and their answers are arguably sometimes of a higher quality. Elements of luck involved in question spotting are eliminated. Student engagement in the act of plagiarism was noted to be a growing problem within Higher Education (Moon, 1999; Patterson et al, 2003). There is also an increased likelihood that students are able to acquire 'model' answers from the internet and memorise them before sitting the 'seen' examination.

Methodology

A phenomenological methodology was adopted. This approach focused on the lived experiences of the lecturers and students and their perceptions of 'seen' examinations (Cohen, Manion and Morrison, 2000; Bowling, 1997).

Tape recorded semi-structured interviews were undertaken from a purposive sample of four male university lecturers from four different branches of nursing (adult, child, learning disabilities, mental health) and six female pre-registration nursing students. Interview schedules are shown in Table 1.

Student interview schedule

Do you believe undertaking the prescribed assessment strategy of a 'seen' examination question under exam conditions in any way encouraged your learning as a student? If so, please explain why.

Do you believe the 'seen' examination constrained your learning as a student? If so please explain why.

What impact did undertaking a 'seen' examination under exam conditions have on you?

Of all the assessment strategies you have undertaken within your nursing curriculum, which do you believe has been the most effective in enhancing your learning and why?

Lecturer interview schedule

Do you believe from your experiences of a lecturer that 'seen' examination questions under exam conditions in any way encourages student learning? If so, please explain why.

Do you believe from your experiences of a lecturer that 'seen' examination questions under exam conditions constrains student learning? If so, please explain why.

Of all the assessment strategies you facilitate during the nursing curriculum, which do you believe is the most effective way of encouraging learning and why?

Table 1. Interview schedules

Ethical approval was granted by the Faculty Research Ethics Committee within the host university where the study took place. Written consent was obtained from participants before the commencement of data collection. Participants were informed and reminded that they were free to withdraw from the study at any time.

Inductive analysis (Hoepfl, 1997) was undertaken. Transcribed data was broken down into manageable units and placed into interrelated themes (Price, 2003). The analysed data was then returned to interviewees to check that it represented an accurate account of their experiences (Cohen, Manion and Morrison et al, 2000).

Findings

University lecturers who were interviewed had an average of 5.8 years' experience of facilitating 'seen' examinations. All six students had qualified as nurses one month before the study commencing and had all experienced different assessment strategies including 'seen' examinations over their three years of study.

The themes generated during analysis were:

- Focus
- Learning from Revision
- linking theory to practice
- Other assessment strategies.

Focus

The 'seen' examination enabled students to focus on one topic under review in detail. All persons interviewed and taking part in the study believed letting students sit a 'seen' examination encourages them to engage in some form of learning. Some participants believed preparing for and sitting 'seen' examinations constrained learning, others did not. 'Seen' examinations were perceived as an assessment strategy which encouraged students to engage in fact-finding exercises, such as reading and literature searches to answer the question.

Students when interviewed spoke of the learning strategies they used to prepare for sitting the exam, such as researching material and revising subject matter over and over again to assist in understanding it. Students' approaches to learning when undertaking this assessment process emerged as very personal and individual:

It made me learn a lot about that subject. Yes, it made you focus on exactly what you needed to learn rather than going around the subject and going off the mark with it (Student Interview (SI 4).

Personally, I find I like revising and cramming for an exam. I can do that, I work better under pressure (SI 5).

Lecturers also saw the benefit of 'seen' examinations:

If the student understands the question, reflects upon it and puts in the effort required to pass the examination, it is of some benefit (Lecturer Interview (LI 4).

Learning from revision

Despite these positive experiences of the 'seen' examination, lecturers raised concerns about the actual depth of learning being undertaken:

Does encourage learning but not always that deep (LI 1).

Cramming in as much information as you can the night before, write the exam and then 48 hours later it has gone (LI 3).

All it teaches them to do is regurgitate those facts. It does not show their level of understanding' (LI 1).

The concern was that students did not use the learning by the time they graduated and worked in their nursing practice.

Linking theory to practice

The additional benefits obtained by students – apart from gaining theoretical knowledge when preparing to sit 'seen' examinations – were also highlighted. Examples given were:

- working to tight deadlines;
- managing time effectively; and
- presenting information obtained in a limited time scale in stressful situations.

All these skills were considered to be useful when students qualified as nurses:

You may have to present some work and do it in a short space of time ...it helps because you are under stress and it helps with your time management skills (SI 6).

The nursing curriculum consists of 50% theory and 50% practice. It was therefore seen as important by all respondents to use assessment strategies that gave students the opportunity to demonstrate their ability to link theory to practice:

The exam made me focus on one thing, it was coronary heart disease ... it gave me a better understanding about coronary heart disease and benefits of what diet to eat and things like that. It was good (SI 4).

Some students did not believe undertaking 'seen' examinations enabled them to achieve this:

You focus on exactly on that point and you don't learn the whole subject, only the bit for the exam (SI 3).

Other assessment strategies

The usefulness of using a variety of assessment strategies apart from 'seen' examinations to suit student's individual learning styles was highlighted. Some assessment strategies such as objective structured clinical examinations (OSCES) and problem-based learning (PBL) scenarios emerged as being more comprehensive than others in motivating students to engage in 'deep' learning and giving them the opportunity to link theory to practice:

Found OSCES good. You can relate them to where you are working and what you feel you need to know and that you want to learn (S1 1).

In this study participating in PBL and presenting solutions to problems in the form of a presentation was perceived by respondents as a most effective means of encouraging students to engage in 'deep' learning:

PBL makes students think about real life situations because only when people actually are admitted on the Ward are they in similar situations (L 4).

Discussion

Fry, Ketteridge and Marshall (2003) acknowledge that learning may involve a diversity of processes, such as:

- remembering factual information;
- mastering abstract principles;
- acquiring methods, techniques and approaches;
- reasoning;
- debating ideas; and
- developing behaviour appropriate to specific situations.

As the learning process can assume so many guises and include such a multiplicity of action, it would be reasonable to presume most students would have undertaken some form of learning to have prepared for sitting the 'seen' exam. What 'depth' of learning students attain at this time appears difficult to assess.

The distinction between 'surface' and 'deep' learning is important, because deep learning, which seeks mastery over a subject, is more desirable in professional education than shallow learning, which is merely designed to pass academic assessments (McMahon, 2006). Not all lecturers who participated in the study were convinced that sitting a 'seen' examination encouraged 'deep' learning among students. They believed this form of assessment encouraged students to 'rote' learn. Most lecturers considered 'rote' learning as 'shallow' as limited research and reading is undertaken by students when they engage in this particular learning process. However, Entwistle and Entwistle (2003) suggest that some students attain 'deep' learning memorising by 'rote'. This maybe the case but Abel and Freeze (2006:366) stress "nursing education is moving away from 'rote' memorisation and toward meaningful learning that promotes connection between new information and past learning."

It appears that it is not merely the mode of assessment undertaken by students that can have an effect upon learning; other factors were also identified by the participants. Examples given by them were how motivated the student is to learn, or how interesting the topic under review is found to be by students. It was stressed not all students are motivated to learn when sitting an exam, some put in the minimal amount of effort. Lecturers in the study believed that it is each student's attitude to learning rather than the assessment method they are expected to undertake which motivates students to learn. This point is illustrated by Norton et al. (2001) who explain that students often perceive assessment as yet another 'hurdle to jump over', pointless and inauthentic.

How students perceive assessment processes appears to affect the amount of effort many students put in to pass them. Respondents spoke of time constraints when preparing to undertake various forms of assessment and the problems anxiety can play when being assessed. Lecturers recognised that each assessment method simply needs to be seen in terms that distinguish its own strengths and its differences, rather than a replacement of any other assessment methods and procedures.

The overall impression from the majority of respondents interviewed in this study was that the assessment strategy of a 'seen' examination is valuable to enhance knowledge and skills. This supposition is similar to that repeated by Race, Brown and Smith (2005) who claim students who undertake 'seen' examinations experience distinct benefits. Students can use resources and engage in problem solving and evaluation to provide answers to examination questions presented to them. Students are also given the opportunity to demonstrate their retrieval of knowledge from memory, at a similar time as demonstrating how they can organise, present and analyse information, evidenced by writing skills when working under pressure.

Our study has revealed several reasons why students and lecturers believe 'seen' examinations both encourage and constrain learning. The small sample size and the potential threat of students being influenced by the interviewer's position as a lecturer within the university must be considered as limitations to this study when interpreting the results. This study demonstrates that additional research with a wider student study population should be undertaken, to investigate further whether sitting 'seen' examinations constrains or encourages student learning.

References

All websites accessed 17 May 2011.

- Bowling, A. (1997) *Research Methods in Health. Investigating Health and Health Services*. Buckingham: Open University Press.
- Brady, A. (2005) Assessment of learning with multiple choice questions. *Nurse Education in Practice* 5(4): 238–242.
- Cohen, L., Manion, L., Morrison, K. (2000) *Research Methods in Education*. 5th edn. London: RoutledgeFalmer.
- Dolan, G. (2003) Assessing student nurse clinical competency: will we ever get it right? *Journal of Clinical Nursing* 12(1): 132–144.
- Foster, T., Hawkins, J. (2004) Performance of Understanding: A new model for assessment? *Nurse Education Today* 24(5): 333–336.
- Fry, H., Ketteridge, S., Marshall, S. (2003) Understanding student learning In: Fry, H., Ketteridge, S., Marshall, S. (eds) *A Handbook for Teaching and Learning in Higher Education, Enhancing Academic Practice*. 2nd edn. London: Kogan Page Limited.
- Habeshaw, S., Gibbs, G, Habeshaw, T. (1986) *53 Interesting Ways to Assess Your Students*. Bristol: Technical and Educational Services Ltd.
- Hoepfl, M.C. 1997 'Choosing Qualitative Research: A Primer for Technology Education Researchers'. *Journal of Technology Education*. 9(1) pp. 1-16.
- McMahon, T. (2006) Teaching for more effective learning: Seven maxims for practice. *Science Direct. Swets Wise*. 12, (1): 34–44.
- Musch, J., Broder, A. (1999) Test anxiety versus academic skills: A comparison of two alternative models for predicting performance in a statistics exam. *British Journal of Educational Psychology*. 69(1): 105–116.
- Neary, M. (2001) Responsive assessment: assessing student nurses' competence. *Nurse Education Today*. 21(1): 3–17.
- Newall-Jones, K., Osborne, D., Massey, A. (2005) Academic skills development – changing attitudes through community practice. *Brookes eJournal of Learning and Teaching* 1(2): 1–18.
- Norton, L.S., Tilley, A.J., Newstead, S.E., Franklyn-Stokes, A. (2001) The pressures of assessment in undergraduate courses and their effects on student behaviours. *Assessment and Evaluation in Higher Education* 26(3): 269–284.
- Nursing and Midwifery Council (2004) *Fitness to practice – rule order 2004*. London: Nursing and Midwifery Council.
- Oxford Centre for Staff Learning Development (OCSLD) (2002) *Purposes and Principles of assessment*. www.brookes.ac.uk/services/ocsd/2_learnth/briefing_papers/p_p_assessment.pdf.

- Price, B. (2003) Phenomenological research and older people. *Nursing Older People* 15(5): 24–29.
- Quinn, F.M. (2000) *The Principles and Practice of Nurse Education*. 4th edn. Cheltenham: Stanley Thornes.
- Race, P. (2001) *The Lecturer's Tool Kit. A practical guide to learning, teaching assessment*. 2nd edn. London: Kogan Page.
- Race, P., Brown, S., Smith, B. (2005) *500 Tips on Assessment*. Oxford: RoutledgeFalmer.
- Robson, K. (2003) Good practice in assessing students with disabilities. *Exchange* (4):16-18
www.exchange.ac.uk/files/eissue4.pdf.
- Santy, J., Mackintosh, C. (2000) Assessment and learning in post-registration nurse education. *Nursing Standard* 14(18): 38–41.
- Scouller, K. (1998) The influence of assessment method on students' learning approach: multiple choice question examination versus assignment essay' *Higher Education*. 35. pp.453–472.
- Shumway, J., Harden, R. (2003) AMEE Guide No. 25: The assessment of learning outcomes for the competent and reflective physician. *Medical Teacher* 25(6): 569–584.
- Timmins, F., Kaliszer, M. (2002) Aspects of nurse education programmes that frequently cause stress to nursing students – fact finding sample survey. *Nurse Education Today* 22(4): 203–211.
- Watson, R., Simpson, A., Topping, A., Porock, D. (2002) Clinical competence assessment in nursing: a systematic review of the literature. *Journal of Advanced Nursing* 39(5): 421–431.
- Wojtczak, A. (2002) Glossary of Medical Educational Terms. *Institute for International Medical Education*
www.iime.org/glossary.htm.