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The Impact of Oral Assessment on Physiotherapy Students' Learning in Practice

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The Impact of Oral Assessment on Physiotherapy Students' Learning in Practice

ABSTRACT

Given that all of us are potential users of health and social care services, the rigorous assessment of student health professionals in practice should be of common interest. However, rigorous assessment of practice based learning is notoriously challenging. One would expect assessment in the context of the workplace to be an indicator of fitness for purpose and for practice. However, some indication that health professional students, including physiotherapists, are less fit for practice on qualification than might be desirable suggests a need to rethink assessment practices. Drawing on insights from students, clinical educators and university visiting tutors in the United Kingdom, this paper offers a rationale for combining assessment by observation of performance with a formal oral assessment. We argue that complementarity between the two types of assessment when combined, means they allow us to gain a holistic impression of the student's overall performance. We will illustrate how the oral component of assessment influences how students go about learning and highlight its perceived 'added value' in terms of helping students prepare for employment. Our findings are theorized in terms of the extent to which assessment aligns with learning activities and learning outcomes, which we believe is vital in health professional programmes.

The purpose of this qualitative study was to explore the views of students, clinical educators and university visiting tutors, on assessment strategies used in clinical practice. Our objectives were to develop our understanding of the contribution made by each element of assessment to our overall view of student capability. On this basis, we would determine whether both assessment components were deemed necessary by all of the stakeholders.

INTRODUCTION

Assessment in the context of practice education poses 'a long running and difficult problem' (Chambers 1998, p.201) common to all health professional programmes. However, the imperative to protect the general public, and ensure a student's readiness for practice, must be a paramount concern for academic institutions (Furness & Gilligan, 2004). McDowell and Sambell (1999) highlight the need for assessment practices to be fit for purpose as a means of ensuring that students are also fit for purpose, or have developed appropriate skills and abilities within their programme of study. However, within a health context, fitness for purpose must translate into fitness for practice so that students meet competence criteria established by professional and statutory bodies (Department of Health (UK), 1997). This arguably requires a more focused and stringent approach to assessment. Crossley, Humphris and Jolly (2002) suggest that good professional regulation depends on quality procedures for assessing professional performance. We argue that quality of assessment should begin at undergraduate level. However, despite calls to reform systems for assessing student learning as a means of improving its quality (Hinett and Knight, 1996), the educational value of assessment seems to be underestimated (Crossley, Humphris & Jolly, 2002).

Contemporary challenges to placement assessment

Historically, the quest for fair, valid and reliable tools that minimise subjectivity has taken precedence (Chambers, 1998; Wood, 1982; Woolley, 1977). Given that practice placements in health are 'significantly time and resource intensive' (Rickard, 2002, p. 48), recent concerns have focused more pragmatically on what is manageable in terms of assessment in the context of the busy workplace. Health professionals in the United

Kingdom are operating in a context of constant restructuring of health services, in which staff shortages prevail. Increased pressure on clinicians, brought about through government targets, is compounded by increases in the number of student health professionals in training and requiring placement supervision. For example, since 2000 the number of physiotherapy student commissions in England has increased by 57 per cent in line with manpower service strategies and the Government's initiative to modernise the National Health Service (NHS) (Chartered Society of Physiotherapy, 2006). With similar percentage increases in Wales, and slightly less in Scotland and Northern Ireland, it is clear that what is deemed feasible within this context in terms of practice assessment is in danger of becoming reductionist.

Response to the challenges

Within physiotherapy undergraduate education in the United Kingdom, increased student numbers and perceptions of impending crisis in placement provision has created an imperative for higher education institutions to share placements to a far greater extent than has occurred previously. As a consequence, higher education institutions have been pressurized into findings ways to streamline placement processes. Assessment processes have been criticized for differing. For example, some programmes require the clinical educator to focus exclusively on observed performance, others include assessment of a presentation or have components that are assessed by academic staff once students have returned to the university. However, even where the requirement to assess observed performance is common to different programmes, assessment schedules tend to differ. This has highlighted the need for collaborative work between institutions around common assessment tools used by a number of programmes. These are designed to streamline assessment practices. The

Physiotherapy Placement Information Management Service (PPIMS) scheme is an example of such collaboration. PPIMS operates between ten higher education institutions providing pre-registration physiotherapy programmes in the south east of England, and includes a common practice assessment form which is utilised by all partner institutions. A similar shared assessment tool is used across four physiotherapy programmes across the Yorkshire region of the United Kingdom. A recently published report highlights the shared assessment tool as an innovative feature of good practice within physiotherapy (Mulholland et al, 2005). Such efficiencies should rightly be applauded, especially since performance attributes must be more or less common to students on all programmes. However, we suggest that they should not be considered a panacea.

The common assessment tool is seen as potentially "cut[ting] down on pen-pushing", however, the suggestion that efficiencies provided by such tools will promote quality and consistency in practice (Martell, 2005, p.8) rings alarm bells for us. It is easy to become ruled by increasing efficiency and by the promise of consistency but what does this mean for the overall quality of assessment process? The necessity to fulfil the needs and requirements of all parties is bound to have an impact on scope and rigour of assessment processes, questioning whether generic assessment forms alone will have the sophistication required to assess the complex range of attributes demanded of student health professionals.

Problems in observing performance

Furthermore, the tendency for reliance on protocols largely based on judging observed performance is potentially problematic; they rely on the observation of performance

of one individual by another, which is inevitably subjective (Wood, 1982); they are vulnerable to students wishing to reinforce ideal impressions, which Goffman (1959/1971) contends is part of the rhetoric of training.

The impact of being observed on assessment outcomes is clear if we acknowledge that it is human nature to attempt to present oneself in the best possible light (Schlenker and Weigold, 1992). In the context of an assessment episode there is a risk that performance if well stage-managed can lead to inaccurate impressions of a student's abilities. For instance, on observing a student treating a patient, the clinician might assume that the student has chosen the treatment on the basis of a sound rationale, when in fact the student might simply be imitating an approach s/he has seen used by the educator without having the underpinning understanding. Research focusing on occupational therapists (OTs) indicates a tendency for students to engage in 'impression management' particularly when they are aware of being observed (Clouder, 2003). Furthermore, Alexander (1996) identified the potential for physiotherapy students to be strategic in attempting to appear confident and knowledgeable as a means of influencing the outcome of the assessment process.

Having identified a trend towards assessing observed performance in nursing, Brown (2000, p. 408) suggests 'the move to measure only that which is transparent, observable and measurable leads to an emphasis on narrowly defined scientific and technological aspects of nursing'. Furthermore, she argues that assessments based on behavioural learning outcomes provide little more than a baseline measure of student performance. In agreement, Girot (1993) is critical of the 'snap shot' approach to observation on which judgements about clinical performance are based. This is not to

totally devalue observation in its widest sense, given that it clearly provides a constant and convincing form of verification of student performance because it is founded on personal direct knowledge (Adler and Adler, 1994). However, Brown (2000) advocates the use of more than one type of assessment to gain insight into the complexities of what students learn in practice and this approach forms the basis of the assessment protocol described presently.

CONSTRUCTIVE ALIGNMENT AND ASSESSMENT IN PRACTICE

The concept of constructive alignment is adopted as the pedagogical rationale for the protocol central to the current study. The principle of 'constructive alignment' (Biggs, 2003) is premised on students constructing meaning through relevant learning activities. This implies a necessary appreciation of the learner's world and, in the context of practice-based learning, the demands of the workplace into which they will ultimately have to fit. Ensuring 'alignment' or consistency of approach to teaching and learning involves fostering a learning environment that supports the learning activities appropriate to achieving the intended learning outcomes. If teaching approaches and assessment tasks are aligned with learning activities assumed in the learning outcomes, relevant learning will occur (Biggs, 2003). The aim is to create a system that is tuned to supporting high level learning which is clearly desirable in novice health professionals.

Although we acknowledge the interaction between elements of the system, such as the learning environment and learning activities, space precludes detailed discussion of these factors here. Our primary focus is on the assessment processes employed and their alignment in terms of workplace expectations.

<u>'Performative' aspects of understanding</u>

Research focusing on high level, or the 'performative' aspects of understanding (Gardner, 1993), suggests that if students understand something properly they act differently in situations that require the content knowledge with which they have become familiar. Gardner does not specify the nature of the difference but one presumes that greater confidence and capability would be evident. However, Biggs (1996) argues that 'performances of understanding' are rarely called for in higher education, and indeed, are less feasible with larger student cohorts and less time for in-depth assessment; both factors that seem to be impacting placement assessment in contemporary health professional education in the United Kingdom. Given the complex problems with which student health professionals must learn to deal surely it is crucial that the practice assessment of student health professionals must be robust enough to allow students to demonstrate the performative aspect of understanding. Assessment of practical application of skills and competencies gives some indication of ability. However, one way of plumbing the depths of understanding underpinning action is through focused dialogue between the student and her/his assessors on placement.

The use of dialogue in assessment is supported by research that advocates the use of verbal data as a measure of understanding, which is underpinned by information processing theory (Ericsson and Simon, 1984; 1993). Human beings process information using short and long term memory. By studying short-term memory it is feasible to learn about the cognitive processes used in problem-solving. Ericsson and Simon (1984; 1993) argue that the cognitive processes which occur during problem-solving generate verbalisations that are part of the cognitive process that generates a

response. The connection between cognitive processes and verbalisation is supported by Jones's (1989, p. 1065) research on the use of verbal protocols in nursing, which suggests that encouraging nurses to make 'think aloud verbalisations' about specific cases has potential to reveal the cognitive behaviour underpinning clinical decisions made in practice.

ORAL ASSESSMENT

Oral communication dominates most fields of professional practice, therefore oral assessment is authentic in that it replicates the context of professional practice or 'real life' (Joughin, 1999). For this reason oral assessment is well established within medicine, law and architecture. In fact, the oral examination has been used for hundreds of years within, and is considered a rite of passage into, the medical profession (Swanson, Norman and Linn, 1995). Yet evidence suggests that assessment by observation continues to predominate across other health professions (Wragg et al, 2003; Janing, 1999; Hill, 1998).

Oral assessment has much to recommend it. Joughin (1999) suggests that it tests knowledge and understanding as well as problem solving ability, which incorporates the ability to 'think on one's feet' and the cognitive processes underpinning practice. In addition, it also taps into interpersonal skills essential to professional life, such as the ability to communicate, and personal qualities such as reaction to stress, confidence and self-awareness. However, limitations must also be acknowledged. Oral assessment does not allow assessors to sample a range of cases broadly enough to judge whether a student is competent because it is limited by the effects of 'case specificity' (Swanson, 1987). Case specificity (Newble, van der Vleuten and Norman,

1995) means that reasoning ability with respect to one case is associated with knowledge about that case with which a student is familiar, but that knowledge with respect to one case does not prove competence with respect to other cases. In addition, a review of the literature (Nayer, 1995) highlights a number of factors resulting in low reliability of oral assessment which include inconsistency of assessors, the use of non-standardized questions and fluctuations in student anxiety and verbal fluency. Other potential challenges of oral assessment include balancing questioning with setting a relaxed climate, ensuring that the student maintains focus, making sense of what is said, making a sound judgement with limited evidence and lack of written evidence of the interaction (Gibbs, Habershaw and Habershaw, 1988).

Notwithstanding identified limitations oral assessment has been found to engage the learner in the learning experience. Contrary to reports of the highly stressful nature of oral assessments (Henderson, Lloyd and Scott, 2002), research by Joughin (1999) found that students respond positively to oral assessment, making greater efforts to understand what they are studying in anticipation of questioning, preparing more thoroughly and finding it more personal, more demanding and more satisfying. Such responses suggest that oral assessment has the capacity to influence how students approach their learning and as a consequence how they perform in assessment.
The rationale for the use of oral assessment in the context described presently is its alignment with the learning environment, activities and outcomes of clinical practice placements. It cannot in itself be a measure of competence. However, anecdotal evidence suggested that in combination with the assessment of observed practice the oral assessment component increased the robustness of making a decision about a student's perceived level of competence. The purpose of this qualitative study was to

determine the value of the two assessment components used in practice and therefore whether they were both deemed necessary by all of the stakeholders in the highly pressurized context of contemporary practice.

RESEARCH CONTEXT

The context of the study central to this paper is the practice-based component of the three-year BSc (Hons) undergraduate physiotherapy programme at …. in the UK. The students spend a total of 34 weeks (a minimum of 1,000 hours) in full-time clinical practice. The first fifteen week placement block, which is divided into three five-week placements, occurs in the second half of Year 2 of the programme. A further fifteen week placement block, also divided into three five week placements, commences at the beginning of Year 3. Placement assessment is consistent in terms of mode across all six of these placements. An additional seventh placement that occurs in the final four weeks of the programme, and which focuses on the development of caseload management skills, is assessed differently (Clouder and Dalley, 2002) and is not considered in this study.

The standard module assessment on which this study focuses comprises two components. The first component focuses on observed performance of the student over a five-week period at the end of which the clinical educator is responsible for completing a summative assessment of performance. This component relies on both objective and subjective judgement. The assessment is criterion-referenced and adopts literal grades from 'exceptional' to 'unsatisfactory' across a broad range of attributes that fall under the following sections: professionalism, knowledge, learning, practical skills, effectiveness and evaluation, communication, self-management, safety,

presentation and punctuality. The student receives a literal grade for each section and an overall grade that should reflect performance across the different sections. Half-way formative assessment discussions with the clinical educator and university visiting tutor are built in and emphasis is placed on students self-assessing against the same criteria in preparation for the half-way discussions. Clinical educators are encouraged to take time to comment on each attribute offering advice on where and how improvement might be made as well as awarding an overall definitive mark for the performance component.

The second assessment component is oral in nature, taking the form of a viva voce, or oral examination, focusing on clinical reasoning. The clinical reasoning viva (CRV), as it is known, occurs during the final week of each placement. This component involves the clinical educator and university visiting tutor committing time to assessing students' clinical reasoning capabilities through a formal discussion of patients with whom the student has been involved. Following a five-minute introduction to the cases selected, by the student, the clinical educator and visiting tutor question the student about individual cases encouraging the student to make comparisons between cases and connections with underpinning theory and research evidence.

Questioning typically involves the testing of anatomical, physiological, pathological and research-based knowledge as well as insight into the individual patient's social circumstances, and psychological as well as physical needs. The approach aligns with that of Higgs and Jones (1995) in that we see clinical reasoning in broad terms as the thinking and decision-making processes associated with clinical practice. The

emphasis is on the student's ability to justify interventions and to share ideas about why, for instance, an intervention did not work for a specific patient. By focusing on specific patients each case is totally different.

Students are asked to identify two patients for discussion in Year 2 and four patients for discussion in Year 3. For each patient they are expected to produce an A4 sheet of factual information which includes the patient's history, presenting symptoms, main problems and treatment goals. The clinical educator and university visiting tutor choose the cases on which they wish to focus the discussion. Clearly this means that students are able to prepare for the assessment, for instance, anticipating questions that might be asked to some degree. However, the oral nature of the assessment means that the student must be able to think on their feet and to underpin explanations of interventions with a reasoned rationale that links knowledge to intervention.

There is no rigid framework for the oral assessment other than the A4 sheet of information on each patient, which tends to give a basis for discussion. However, the discussion, which commences with a brief overview from the student, mimics the case conference approach in that it is holistic and patient-focused, reviews history and management and looks ahead to long term goals in line with prognosis.

The duration of the oral viva is 45 minutes for Year 2 students and 60 minutes for Year 3 students. This increase in duration reflects an increased weighting of clinical reasoning against performance, from 30 per cent of the placement mark in Year 2, to 50 per cent in Year 3. Again, the assessment is criterion-referenced and adopts literal grades from 'exceptional' to 'unsatisfactory'. The clinical educator and university visiting tutor confer at the end of the assessment to agree a mark and to construct

feedback for the student. Feedback is immediate and the student has opportunity to discuss future learning needs to carry through to subsequent placements. If either of the two assessment components is not completed to a satisfactory level, the student is referred in the placement and must repeat and pass it prior to progressing to the next level on the programme, for instance, from Year 2 to Year 3. Both assessment components necessitate specific induction for new practice educators and visiting tutors as well as a thorough pre-placement briefing for students. Both were developed to ensure constructive alignment with learning activities assumed in learning outcomes (Biggs, 2003).

METHODS

A qualitative methodology was adopted for exploring perceptions of the assessment processes from the three alternative perspectives of students, clinical educators and university visiting tutors. Given that the study seeks to explore individual human experiences, which are deemed valuable for informing a greater understanding of aspects of the lived experience of either assessing or being assessed in the context of a clinical placement, it might be described as phenomenological in nature (Creswell, 1998).

Ethical Considerations

The qualitative study on which this paper is based was approved by the Local Research Ethics Committee, the University Ethics Committee and the Research and Development Department of a National Health Service Trust and was carried out between September 2004 and September 2005.

<u>Participants</u>

A purposive sampling method was used to recruit participants with experience of assessment processes being explored. Clinical educators and university visiting tutors were randomly selected from the placement database and invited to participate in the study. Student participants were recruited on a voluntary basis following completion of the first six practice placements on the basis that they would have maximum experience of the assessment processes. Since the student sample was a volunteer sample their mean marks for each assessment component of each placement were compared with the average marks for the whole cohort to check how representative the students were of their group and they were found to be close to the average.

The final sample comprised: eighteen Year 3 physiotherapy students (14 female and 4 male); nineteen clinical educators (15 female and 4 male) with experience of assessing students on placement ranging from eighteen months to eight years, including several with experience of other assessment protocols that allowed for comparison; eighteen university visiting tutors (15 female and 3 male) with assessment experience ranging from one year to several decades. Informed consent was sought and anonymity and confidentiality assured.

<u>Methods of Data Collection</u>
Having weighed critiques of interview studies as "contextually situated social interactions" (Murphy et al, 1998, p. 120) we opted to use one-to-one semi-structured interviews as our primary data collection tool. Semi-structured interviews are deemed most appropriate when the researcher knows most of the questions to ask but cannot predict the answers, providing freedom for the participants to explain their thoughts in their own words (Morse and Field 1996, p. 76). A small pilot study resulted in minor

changes to the semi-structured interview schedules, which were largely consistent across the three groups of participants (see Appendix 1 for a composite schedule of the range of questions asked of all three groups of participants). A total of 55 interviews were conducted. Each interview lasted approximately one hour and all were audio-taped.

Data Management and Analysis

Audio-taped interviews were transcribed and copies of transcripts were returned to participants for member checking to ensure accuracy and authenticity prior to analysis. All transcripts were anonymized and the two investigators acted as custodians for the tapes and transcripts. Transcripts were analysed by participant group. The two researchers coded the transcripts independently for each group then shared initial analyses. No predetermined coding structure was used. Instead, both researchers looked for statements in the transcripts about individuals experiences and perceptions of assessing or being assessed using the two assessment components. All statements, including opposing statements, were treated with equal worth. Together the researchers grouped statements identifying major themes arising from the data that we believe capture the 'essence' of perceptions about the assessment processes in accordance with the phenomenological tradition of inquiry (Cresswell, 1998). This approach resulted in highlighting the different emphases that members of each group might place on the same issue. The different perspectives allowed findings to be triangulated increasing the credibility of the research (Lincoln and Guba, 1985).

Rigour

Rigour is the way in which we demonstrate integrity, competence and legitimacy of research (Tobin and Begley, 2004). Our aim throughout the research was to be

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'thorough, careful, honest and accurate (as opposed to true and correct)' (Mason, 1996). In other words, we adopted the notion of 'trustworthiness', which is demonstrated through credibility, transferability, dependability, and confirmability (Lincoln and Guba, 1985).

Credibility is the extent to which the explanation fits the description (Janesick, 2000). Transferability refers to the extent to which findings can be deemed applicable in other contexts. Dependability is assessed on whether the research process is traceable and clearly documented and includes an element of reflexivity. Confirmability is concerned with establishing that interpretations and findings are derived from the data. We attempted to fulfil all of these demands. The study was not conducted independently, was relatively small and context specific. However, we were reflexive throughout the research process, through the writing of analytical memos, and are honest in presenting our findings, which we believe are likely to have resonance for others involved in assessing practice-based learning.

In addition, we employed triangulation and used member checking. Peer evaluation in the form of a reference group consisting of four members from within and external to the institution, was employed to further enhance rigour. In reporting our findings we attempt to balance analysis and interpretation with description (Janesick, 2000) so that credibility, confirmability and transferability to other practice-based learning contexts might be assessed.

RESULTS

Complementarity of Assessment Processes

The primary focus for the research was on whether the two assessment components were deemed necessary by all of the stakeholders, not least students. Our findings support the relevance of the performance element of the assessment as *'a given'*. Students considered performance assessment to be *'essential'* and directly linked *'to the workplace and having to treat patients'*. It involved demonstrating the *'basic fundamentals'* of practice such as *'open, honest communication'* and *'focussing on the patient'*. The oral assessment was seen as developing clinical reasoning ability, which was deemed an essential aspect of learning and practising as a physiotherapist. The skills learned from engaging in a viva, such as listening, verbalising ideas, reflecting, responding appropriately and constructing arguments to support decisions made, were perceived as highly applicable to practice. Students spoke of the benefits of having two different types of assessment that covered different aspects of practice. While the performance component addressed *'performance as a whole',* the viva component was to one student the means by which she was able to *'put it all together'*. As another student explained, *'it shows your thought processes'* and *'helps you get used to articulating how you've assessed the patient and where if you've been able to, to connect to why you are doing a treatment'*.

Although university visiting tutors thought that the addition of a viva made the assessment *'tougher'* in comparison with assessment strategies on other programmes, they believed it made for a *'rounded assessment'* that was strengthened by the increased objectivity that they brought to it by virtue of being *'slightly more distant'* and *'less emotionally involved'*. Clinical educators felt that having two different

strategies had potential to *'bring out the best of the student in all their areas'* and gave students *'the chance to show their strengths'*. Continuing assessment over the entire placement was seen as suiting some students, whereas *'others shine more at the big event* [the viva]*'*. The viva was seen as a particular *'opportunity'* for students *'who are lacking confidence in the clinical situation to show their strength'*. One educator suggested that the oral assessment could *'differentiate between …… a good and confident physio and somebody who is actually going to be a high flier'*.

Clinical educators perceived that together the two components were assessing different attributes, although there was a *'need for interaction between both'*. Assessing observed performance allowed for students' *'growth'* or development over time on placement, whereas the oral assessment tested *'thinking on the spot'* and *'performing under pressure'*. There was acknowledgement of the difficulties associated with observation and it was recognised that students generally *'try to come across as best as they can to their educator'*. Clinical educators had strategies, such as gaining insight from other team members to judge student performance. However, they agreed that although *'you can get quite a fair idea'* of a student's reasoning capabilities during placement, *'you can't guarantee it''* primarily due to *'pressures you are under with your caseload'*. Rather than being considered problematic, the time committed to an oral viva was considered a valuable opportunity to ensure that all students' reasoning capabilities were assessed on a more equal basis.

Oral Assessment and Learning

The first and possibly most profound influence of the oral assessment component was on students' motivation to learn. There was clear evidence from students, clinical

educators and university visiting tutors that the oral assessment increased levels of

motivation to '*really work throughout the placement'*, starting earlier and working to

the very end to gain breadth of understanding. One student acknowledged that '*it*

forces you to learn stuff which you wouldn't otherwise learn'. Another said '*I think a*

lot of the learning I have done on placement is because of those exams'. [Without it]

I think you would just plod along'. A clinical educator supported this last comment,

suggesting that without it students could probably '*get away with doing a little less*

work', while another developed this point further by suggesting that the assessment

contributed to maintaining standards:

> '*If you just had to produce pieces of coursework, turn up*
> *between 9 and 5 for five weeks and show you weren't unsafe*
> *you would probably get people sneaking through much*
> *easier'*.

As well as providing the '*motivation to actually do the work'* there was general

agreement that preparation for the viva meant '*go[ing] into a great deal of depth'*.

Students contrasted this deep learning with that which occurred over the placement,

which they perceived was necessarily superficial because it was so diverse. The

onerous demands of clinical practice could result in treatment choice based on

'*someone suggesting it',* or adopting the '*University'* approach without being '*100%*

sure exactly how it was working'. However, the oral assessment was perceived to

drive deeper learning, forcing students to discover '*the why'* behind their practice.

Reflecting on the relationship between the cognitive processes that underpin practice

and being able to experiment with new techniques, one student highlighted how

although she engaged in clinical reasoning '*when treating someone'* the thought of

being questioned about that patient led her to go home and research treatment options

to a greater extent. Then having the opportunity to return to the patient to '*put your*

hands on' was seen as a definite advantage. The student felt this was a completely different learning experience from, for instance, a post-placement theoretical essay, which might drive the same depth of learning but separate from the reality of the workplace. This seems to suggest that the student is making a connection between the assessment and its perceived authenticity that transcends the wish to get a good mark.

Clinical educators also acknowledged the depth of learning that the CRV inspired. One suggested *'they can't get away from the fact they've got to get to know that patient'* and *'know things inside out'*. A student supported this view in suggesting the viva '*opened up other things for me that I hadn't thought of'*. The drive to gain thorough understanding led students to explore avenues, which they might otherwise not have utilised such as being proactive in talking to other professionals and questioning those around them. Searching for novel approaches or new knowledge with which to impress assessors appealed to some of the more competitive students who found it fun. However, on a more general level clinical educators and university visiting tutors perceived that the oral assessment encouraged students to *'go and research things'*, to understand the *'why'* behind the *'doing'* and the *'evidence behind things'*.

Despite the absence of a formal pre-determined format to the CRV other than the A4 sheets, which appeared to structure thought and discussion to some extent, the students felt that the viva provided a structure within which clinical reasoning skills were developed. One student suggested *'it's a template for working through things methodically'*. Others agreed that the scope of questioning in the viva gave them insight into the breadth of understanding necessary. Perhaps most importantly, being

able to articulate their ideas gave students an increased sense of *'confidence in their*

competence'. One student was hopeful that *'if I keep using that structure it will*

become embedded' thus further developing clinical reasoning ability. She intended to

continue to use the approach to interrogating her own reasoning processes post

qualifying as it clearly suited her approach to learning. However, perhaps most

importantly the viva appeared to have provided a benchmark for the complexity of

thinking required to be fit to practice:

> *'to some extent it's possible to be a practitioner without really*
> *thinking but the opposite occurs through the clinical*
> *reasoning exam... it does just make you think and that's good*
> *training for the future'*.

Oral Assessment and 'Added Value'

An exciting and simultaneously challenging aspect of conducting qualitative research

involves learning to accommodate the unexpected into a frame of reference. Rather

tangential to our focus, we identified a strong theme particularly from the student

group suggesting that the oral assessment was being valued in terms of preparation for

employment. One student suggested *'it's [the CRV] a selling point'*. While the oral

assessment was stressful to some students others took it in their stride and saw it

'more like having a chat about your patients'. There was a perception that this type of

discussion mirrored what might be expected to occur with regularity in practice as, *'as*

a junior you are going to be questioned about the patients you are treating'. Clinical

educators supported the students' perceptions of working in the NHS and agreed that

the experience of the oral assessment reflected the demands of the *'under pressure'*

aspect of practice for which, students needed to be prepared. To *'be able to give oral*

comments in a clinical reasoning way' was deemed highly advantageous *'because*

that's what happens in real life in the NHS'. This was reiterated by many of the

clinical educators who maintained it *'enables the students to present their patients in a pressurised environment'* and prepares them for *'multi disciplinary team meetings where you are asked for your opinion and you've got to back it up'.*

Confidence developed in articulating thoughts in a formal setting appeared to be transferable to other situations. Several students who had been interviewed for junior posts suggested that they had been less daunted at interview because the oral assessment had prepared them for in-depth questioning by a panel of interviewers. The perception of having *'the edge'* on students from other institutions with whom they came into contact on placement was developed through weighing comparative demands of programmes and most specifically assessment strategies. Although the addition of an oral assessment meant that students felt that they had to work harder than their counterparts (a fact that was supported by clinical educators and university visiting tutors), this was not resented on the grounds that they felt, compared to the other students, they were coming out *'a more rounded and developed student rather than just getting through'* and would *'be better clinicians as a result.'*

However, the benefits were not confined to students. A number of clinical educators saw preparation for the oral assessment as benefiting their own learning. One identified *'the bonus that you are learning as well',* which she acknowledged was promoting her own continuing professional development that in turn enhanced student learning.

DISCUSSION

The focus of this paper has been confined primarily to the impact of our assessment processes on students' learning in practice. Our findings seem to indicate that when used to augment assessment of observed performance, oral assessment has authenticity, enables insight into the 'performative' aspect of understanding (Gardner, 1993), increases motivation to learn and has 'added value' for students, supporting previous research findings (Joughin, 1999). Although not a direct measure of competence, in combination, the two assessment components increase the robustness of making a decision about a student's perceived level of competence. Findings appear to suggest that the two types of assessment used to assess practice based learning complement one another. While the importance of assessing observed performance, even taking into account some of its difficulties, remains undisputed, the oral assessment appears to be perceived as a strategy for assessing different capabilities as well as '*pulling* [the placement] *together'* for students. Our understanding of the contribution of both assessment components has been enhanced and it is clear that all stakeholders deem both components to be necessary. This finding supports Brown (2000) in advocating the use of more than one type of assessment to gain insight into the complexities of what students learn in practice.

Our findings seem to support the suggestion that assessment is a dominant influence on student learning (Ramsden, 1992). This creates an imperative to ensure that we choose the 'right' assessment (O'Donovan, Price and Rust, 2004) that encourages the right type of learning and the thirst for knowledge and understanding that will enhance patient outcomes and practice. The oral assessment is not without its limitations and challenges (Nayer, 1995; Gibbs, Habershaw, and Habershaw, 1988;

Swanson, 1987). However, for all of its brevity in relation to the entire placement period it appears to provide a mental structure and a focus that influences how students approach learning throughout the placement. If, as suggested the oral assessment provides '*a template for working through things methodically',* we might usefully attempt to articulate the template for future students about to engage in clinical reasoning processes in practice for the first time.

Having opportunity to learn to articulate clinical reasoning in the context of a professional dialogue was considered hugely beneficial especially since it was learned under the notional protection of allowances being made for being a student rather than a junior staff member. The perceived authenticity of the oral assessment in replicating practice, and the feelings of personal achievement when depth of understanding has been achieved, appears to have the cumulative effect of enhancing students' confidence in articulating their thinking. This in turn makes students feel better prepared to step into practice as graduates. We use the term 'added value' to give a provisional label to these findings that suggest that the oral component of assessment prepares students for the workplace in ways that we had not predicted. This finding highlights how outcomes cannot always be predicted and therefore challenges the notion of watertight constructive alignment (Biggs, 2003). Perhaps we should reconsider intended learning outcomes in an iterative way.

Countering claims for employing reductionist approaches to assessing students in practice we have shown that, despite requiring the commitment of clinical educators and university visiting tutors, formal oral assessments received no adverse criticism in terms of time pressures. In fact, on a positive note, clinical educators suggest that the

oral assessment benefits their own learning. This finding seems important and certainly worthy of further research on the wider impact of assessment processes on clinical educators since there are clear links between their learning and maximizing learning in the students for whom they are responsible.

We currently have no evidence to support a claim that our students are better prepared for practice than their peers from other institutions therefore cannot account for associated costs of assessment in real terms. However, neither can we account for other 'softer' benefits for all stakeholders or for the wider implications for practice. We argue that investing in highly rigorous assessment places greater importance on the practice-based component of health professional programmes. One university tutor suggested that in the United Kingdom the practice component can be perceived to be '*the Cinderella part of the course';* in other words, it can experience under-investment because it occurs in practice rather than in the university. However, the way in which learning is assessed is indicative of what we believe to be important (Chandler, 1991). By playing down assessment of practice-based learning we devalue it and consequently risk devaluing the practice component of professional programmes. Conversely, authentic assessment in practice motivates students to engage in deep learning and appears to stimulate clinicians learning, increasing the credibility and profile of practice-based learning.

CONCLUSION

On the basis of the evidence presented we argue that a constructively aligned approach to the assessment of practice-based learning is germane to producing health professionals who are well prepared to step into the workplace. However, in focusing

exclusively on the assessment of practice-based learning we have not had opportunity to explore the other aspects of a constructively aligned curriculum (for example, the teaching and learning environment) as it helps students make meaning in a practice setting. Abstracting assessment as one element of a system risks overlooking its impact on those other aspects; this is highlighted by the suggestion that the assessment impacts on clinical educators' learning. If clinical educator learning is enhanced, it seems reasonable to suggest that this must in turn enhance the quality of the learning and teaching environment and ultimately practice in a cyclical way. Our findings support Crossley, Humphris and Jolly's (2002) suggestion that the educational value of assessment is being underestimated. We encourage colleagues to question assumptions about the types of assessment deemed feasible in practice and to consider exploiting the potential impact that assessment might have for all of the stakeholders.

REFERENCES

Adler PA and Adler P 1994 Observational Techniques. In: Denzin NK, Lincoln YS (eds) Handbook of Qualitative Research, Thousand Oaks, California, Sage, pp 377-392.

Alexander HA 1996 Physiotherapy Student Clinical Education: the influence of subjective judgements on observational assessment. Assessment and Evaluation in Higher Education 21: 357-366.

Biggs JB 1996 Enhancing teaching through constructive alignment. Higher Education 32: 347-364.

Biggs JB 2003 Teaching for quality learning at university. 2nd Ed. Buckingham, Open University/Society for Research into Higher Education.

Brown N 2000 What are the criteria that mentors use to make judgements on the clinical performance of student mental health nurses? An exploratory study of the formal written communication at the end of clinical nursing practice modules. Journal of Psychiatric and Mental Health Nursing 7: 407-416.

Chambers MA 1998 Some Issues in the Assessment of Clinical Practice: A Review of the Literature. Journal of Clinical Nursing 7: 201-208.

Chandler J 1991 Reforming nurse education 2 – implications for teachers and students. Nurse Education Today, 11: 89-93.

Chartered Society of Physiotherapy 2006 Managers' News. London, Chartered Society of Physiotherapy.

Clouder DL 2003 Becoming professional: exploring complexities of professional socialization in health and social care. Learning in Health and Social Care 2: 213-222.

Clouder DL, Dalley J 2002 Providing a 'safety net': Fine-tuning preparation of undergraduate physiotherapists for contemporary professional practice. Learning in Health and Social Care 1: 191-201.

Creswell J W 1998 Qualitative Inquiry and Research Design: Choosing Among Five Traditions. Thousand Oaks, California, Sage.

Crossley J, Humphris G, Jolly B 2002 Assessing Health Professionals. Medical Education 36: 800-804.

Department of Health 1997 Project 2000: Fitness for Purpose - Report to the Department of Health. University of Warwick, Centre for Health Service Studies and Institute for Employment Research, University of Liverpool, Department of Nursing, Liverpool.

Ericsson K, Simon H 1984 Protocol Analysis: Verbal Reports as Data, 1st edn. Cambridge, Massachussetts, Harvard University Press.

Ericsson K, Simon H 1993 Protocol Analysis: Verbal Reports as Data, Revised edn. Cambridge, Massachussetts, The MIT Press.

Furness S, Gilligan P 2004 Fitness for Purpose: Issues from Practice Placements, Practice Teaching and the Assessment of Students' Practice. Social Work Education 23: 465-479.

Gardner HW 1993 Educating for Understanding. The American School Board Journal July 20-24.

Girot E 1993 Assessment of Competence in Clinical Practice: A Review of the Literature. Nurse Education Today, 13: 83-90.

Gibbs G, Habershaw S, Habershaw T 1988 53 Interesting ways to assess your students. Bristol, Technical and Educational Services.

Goffman, E 1959/1971 The Presentation of Self in Everyday Life. London, Penguin.

Henderson J, Lloyd P, Scott H 2002 'In the real world we're all put on the spot at some time or other, so you need to be prepared for it': an exploratory study of an oral method of assessing knowledge of mental health law. Social Work Education 21: 91-103.

Higgs J, Jones M (eds) 1995 Clinical Reasoning in the Health Professions. Oxford, Butterworth Heinemann.

Hill PF 1998 Assessing the Competence of Student Nurses. Journal of Child Health Care 2: 25-29.

Hinett K, Knight P 1996 Quality and Assessment. Quality Assurance in Education 4: 3-10.

Janing J 1999 Interrater Reliability of Paramedic Student Field Performance Evaluations. Prehospital Emergency Care 3: 265-266.

Janesick VJ 2000 The Choreography of Qualitative Research Design: Minuets, Improvisations and Crystallization. In: Denzin NK, Lincoln YS (eds) Handbook of Qualitative Research, (2nd Ed.), pp 379-399. Thousand Oaks, CA, Sage.

Jones J 1989 The Verbal Protocol: a research technique for nursing. Journal of Advanced Nursing 14: 1062-1070.

Joughin G 1999 Dimensions of oral assessment and student approaches to learning. In: Brown S, Glasner A (eds) Assessment matters. Buckingham, Society for Research in Higher Education/ Open University.

Lincoln YS, Guba E 1985 Naturalistic Inquiry. Thousand Oaks, CA, Sage.

Martell R 2005 Student placement tool cuts down on pen-pushing. Physiotherapy Frontline April 20, pp 8.

Mason J 1996 Qualitative Researching. London, Sage.

Mc Dowell L, Sambell K 1999 Fitness for Purpose in the Assessment of Learning: students as stakeholders. Quality in Higher Education 5: 107-123.

Morse JM, Field PA 1996 Nursing Research: The Application of Qualitative Approaches. London, Chapman Hall.

Mulholland J, Mallik M, Moran P, Scammell J, Turnock C 2005 Making Practice-based Learning Work: An Overview of the Nature of the Preparation of Practice Educators in Five Health Care Disciplines. Occasional Paper No. 6, London, Higher Education Academy Health Sciences and Practice Network.

Murphy E, Dingwall R, Greatbatch D, Parker S, Watson P 1998 Qualitative research methods in health technology assessment: a review of the literature. Health Technology Assessment, 2: 1-260. Available online at:

http://www.hta.nhsweb.nhs.uk/execsumm/summ216.htm (Accessed 14 July 2005)

Nayer M 1995 The assessment of clinical competency: an overview and preliminary report of Canadian physiotherapy programs. Physiotherapy Canada 47: 190-199.

Newble D, van der Vleuten C, Norman G 1995 Assessing Clinical Reasoning. In: Higgs, J, Jones M (eds) Clinical Reasoning in the Health Professions. Oxford, Butterworth Heinemann, 168-178.

O'Donovan B, Price M, Rust C 2004 Know what I mean? Enhancing student understanding of assessment standards and criteria. Teaching in Higher Education 9: 325-335.

Ramsden P 1992 Learning to Teach in Higher Education. London, Routledge.

Rickard W 2002 Work-based Learning in Health: evaluating the experience of learners, community agencies and teachers. Teaching in Higher Education 7: 47-63.

Schlenker BR, Weigold MF 1992 Interpersonal Processes Involving Impression Regulation and Management. Annual Review of Psychology 43: 133-168.

Swanson D B 1987 A measurement framework for performance-based tests. In: Hert IR, Harden RM (eds) Further Developments in Assessing Clinical Competence. Montreal, Can-Heal Publications, pp 13-45.

Swanson D, Norman G, Linn R 1995 Performance-based assessment: lessons from the health professions. Educational Researcher 24: 5-11

Tobin G A, Begley C M 2004 Methodological Rigour within a Qualitative Framework. Journal of Advanced Nursing, 48: 388-396.

Wood V 1982 Evaluation of student nurse clinical performance – a continuing problem. International Nursing Review 29: 11-17.

Woolley W 1977 The long and tortured history of clinical evaluation. Nursing

Outlook 25: 308-315.

Wragg A, Wade W, Fuller G, Cowan G, Mills P 2003 Assessing the Performance of

Specialist Registrars. Clinical Medicine 3: 131-134.