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Assessment options in higher education

Deborah Craddock[a]* and Haydn Mathias[b]

[a]*University of Southampton, Southampton, UK;* [b]*Centre for Learning and Teaching, University of Southampton, Southampton, UK*

This article evaluates an initiative to introduce assessment choice within a taught unit on an undergraduate healthcare programme as a means of addressing poor performance, especially for those students diagnosed with dyslexia. Students' perceptions of the assessment experience were sought via the use of two focus group interviews ($n = 16$). The article describes the effect the assessment experience had on students' stress levels, individual learning styles and achievement. Students' performance improved and statistical analyses indicated parity between the assessment methods offered with similar performance profiles between students with and without dyslexia. The conclusion reached is that while the introduction of assessment options may be time consuming for staff to develop, the benefits of an enhanced student-centred approach to assessment may be well worth this investment in time. Although a limited study owing to the small sample size, the results should be of interest to those academics who are concerned with assessment and its impact on students' achievement.

Keywords: learning and assessment; student involvement; higher education; dyslexia

Introduction

Mode of assessment can have a powerful influence on the learning behaviour of students (Hamdorf and Hall 2001; Biggs 2003) and assessing the performance of students is one of the most important activities educators undertake (Ellington 1999; Trotter 2006). The development of appropriate assessment strategies is therefore a key part of effective curriculum development, yet Boud (2000) suggested that higher education assessment practices do not equip students well for a lifetime of learning. Assessment has been described as 'the Achilles heel of quality' (Knight 2002). A report analysing the nine-year teaching quality assessment exercises carried out by the Quality Assurance Agency (QAA) for Higher Education in England and Northern Ireland noted that assessment was the practice in most need of improvement (QAA 2003). This report concluded that: a very narrow range of assessment methods was in use; there was an over-reliance on traditional examinations; marks bestowed did not mirror the assessment criteria; feedback was considered to be lacking and assessment tasks were frequently found to present an insufficient intellectual test and failed to differentiate between the demands of different levels of study (QAA 2003; Baty 2004; Boud and Falchikov 2006).

Student assessment in higher education can be used in a variety of ways: as a summative means of grading achievement to facilitate academic progression and providing certification of achievement (Boud and Falchikov 2006; Case 2007); as formative, summative and

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*Corresponding author. Email: dc13@soton.ac.uk

ipsative performance indicators for students, staff, modules, programmes, universities and external stakeholders (Brakke and Brown 2002) and to facilitate a fostering of life-long learning (Boud and Falchikov 2006). Students are increasingly seen as more active players in assessment as part of the process of learning (Boud and Falchikov 2006). Examples of assessment strategies to encourage active student participation have included the 'take home' approach (Biggs 2003), open book examination (Francis 1982; Hamdorf and Hall 2001; Biggs 2003) and students working with the unit co-ordinator to set their own examination questions (Baty 2006). The latter was considered to be an improvement on the common 'game playing' practices of simply recycling old examination papers or of giving students strong hints about the content of the paper (Baty 2006). Practice-orientated portfolios have also recently been used in higher education to demonstrate evidence of achievements for summative purposes (Brown 2003; Klenowski, Askew, and Carnell 2006). These ensure that participants are actively engaged in learning activities which culminate in the final assessment. As students become more aware of their own learning, through a process of metacognition (Hacker 1998), it is recognised that they are able to support others' learning (Klenowski, Askew, and Carnell 2006; Mok et al. 2006).

Offering a variety of assessment methods is often recommended as good practice in response to numerous critiques of the over-reliance on traditional examinations and their shortcomings. The arguments include the need to use methods which more appropriately assess different kinds of learning processes, the need to cater for differences in students' learning preferences and styles and the need to enhance learners' psychological approaches to learning (Gibbs and Habeshaw 1989; Cassidy and Eachus 2000; Kell and van Deursen 2002; Race 2006). There are also deeper issues to do with ensuring that assessment is constructively aligned with intended learning outcomes and in recognition of the powerful backwash effect that assessment has on students' approaches to learning (Ramsden 1992; Biggs 2003). Students' revision practices have been shown to be directly related to the kinds of assessments they had to undertake and, more subtly, affected their conceptions of, and approaches to learning (Scouller and Prosser 1994; Entwistle and Entwistle 1997; Scouller 1998). Assessment can therefore be strategically used to change the way in which students learn (Gibbs 1992).

While the characteristics of different assessment methods have been well documented (Race 2006), there has been little research into the provision of assessment choice (i.e. offering assessment alternatives) and the factors that influence students' decisions when selecting an assessment option. In order to inform curriculum development and validation processes, a pilot study was carried out in a level one unit as part of a BSc (Hons) health-care programme which introduced assessment options in order to provide students with greater flexibility of choice in relation to their learning preferences and as a response to the relatively poor performance of students with learning differences, notably dyslexia. This article reports on a case study of the development, implementation and evaluation of the scheme, and provides an account of the student experience.

Background to the development

One of the authors (D. Craddock) was involved in the delivery of a BSc (Hons) health-care programme. An issue arising in the programme was that larger than anticipated numbers of students were failing the traditional time-constrained unseen examinations across a number of units. This situation was not improved when students were given a further re-sit opportunity after being referred. Further investigation suggested that there were issues with learning differences, notably dyslexia. Following confirmation via

formal testing by the University's Learning Differences Centre, a high instance of dyslexia amongst the failing students was confirmed.

In a Report of the National Working Party on Dyslexia in Higher Education (HEFCE 1999), it was emphasised that although a disability, dyslexia is not a disease and cannot be cured. Dyslexia has been defined as a multifaceted complex neurological condition which is constitutional in origin (British Dyslexia Association 1998). The symptoms may affect numerous areas of learning and function, and it is particularly related to deficits in phonological processing with resultant difficulties in reading, spelling and written language (British Dyslexia Association 1998; Rosebraugh 2000; Wright 2000; Tijms et al. 2003). Recent legislation, such as the Special Educational Needs (SEN) and Disability Act (HMSO 2001), places new duties on further and higher education institutions to make acceptable adjustments to ensure individuals who are disabled are not put at a considerable disadvantage in relation to individuals who are not disabled in accessing further and higher education. The proportion of disabled students declaring dyslexia almost doubled between 1995/1996 and 1999/2000 with an estimated incidence of one in every 25 adults with dyslexia (Tinklin, Riddell, and Wilson 2004). With many students being identified as dyslexic during their studies in higher education (Richardson and Wydell 2003) it is therefore fundamental that educators are aware of students' difficulties in seminars or lectures and in the work they produce in terms of assignments and examinations (Wright 2000; May et al. 2006). The QAA has emphasised the need to take into account the needs of disabled individuals and to adapt delivery of programmes to accommodate students' individual requirements (QAA 1999), and this has resulted in further and higher education institutions implementing policies and practices to assist students with learning differences. Such practices have included additional time for examinations, readers, scribes, computers, academic writing training, copies of handouts, overheads and tape recorders, drop-in sessions for students, guidelines for students, additional tutorial time and one-to-one support (Wright 2000).

As providing a further opportunity for students diagnosed with dyslexia to re-sit the traditional examination resulted in similar poor performance, it was decided to look afresh at alternative assessment methods for those failing the initial examination and not just those diagnosed with dyslexia. The 'take home' approach (Biggs 2003) and open book examination approach (Francis 1982; Hamdorf and Hall 2001) were considered as alternatives to the traditional examination. However, this raised the issue of parity between those who passed the time-constrained examination at the first attempt and those who passed what some colleagues perceived as the 'softer' option at the referred assessment opportunity. At the programme's Examination Board considerable debate therefore ensued as to the best way not to disadvantage dyslexic students on the programme at examination, whilst simultaneously ensuring fairness to students sitting the standard examination format. This was documented in the External Examiner's Report and it was acknowledged by the programme team that with support from the External Examiner further research in this area was needed. It was therefore decided to pilot and evaluate the provision of assessment alternatives in a level one Key Skills unit. As this module was undergoing revision anyway, to promote parity, it was decided to offer assessment alternatives for the main assessment for all students with and without dyslexia.

Developing and implementing the revised unit and assessment alternatives

The previous assessment for the Key Skills unit involved students carrying out a reliability study using a goniometer – an instrument that is widely used in healthcare to measure the

range of motions of joints (Norkin and White 1995) – and writing up a short report. This assessment did not address all of the learning outcomes of the module and was considered to be a difficult task for students new to research methods at level one. The areas of weakness included students' critical appraisal skills, data analysis, terminology and referencing. To ameliorate these problems students had been further supported by the unit co-ordinator reading through all students' draft submissions and providing written individual and generic feedback to all students prior to the formal submission date. This considerably added to the assessment load but did improve the pass rate of the summative assessment.

In reviewing the unit it was agreed that there needed to be more emphasis on research skills training at level one to introduce students to issues linked to reliability, validity and critical appraisal skills. The unit's learning outcomes were subsequently thoroughly revised to ensure that there was greater emphasis on research skills training as a precursor to the level two Methods of Enquiry unit. Two alternative assessment options were provided and in order to promote parity between each option, coherent linkages or 'alignments' were made between learning outcomes, assessment criteria, marking procedures and feedback mechanisms (Brown 2001; Biggs 2003). The first assessment choice was a closed book written assessment that involved students being given stimulus material in the form of a research scenario two weeks prior to the assessment. Students were then allocated two hours in which to answer all questions posed related to this scenario that assessed students' knowledge and insight. The second assessment choice required students to design a research study that addressed one research question, from a choice of two, in a specified format. This assignment was 2500 words ±10% and all students were given clear guidelines and a copy of the marking criteria.

Forty students, of which only five were dyslexic, took the revised unit and all passed the summative assessment. Of the cohort, 18 students opted for the closed book examination while 22 students opted for the option involving research study design. Following quantitative analysis of the cohort's summative assessment results for the unit using the Mann–Whitney U test, no significant difference was found in relation to results attained by students in the two assessment options [U = 181.5; p = 0.657; $n1$ = 18; $n2$ = 22; assessment option one: mean result 53.7%, SD 10.3; assessment option two: mean result 50.1%, SD 11.1]. This finding suggested that students choosing either assessment option were provided with similar opportunities in relation to student achievement. In other words, no one assessment option provided students with any unfair advantage over students who selected the alternative assessment option.

Interestingly, it was noted that all five students with dyslexia opted to complete the assignment option of designing a research study rather than the closed book written assessment. It was noted that there was no statistically significant difference between the assessment results of students with dyslexia and the assessment results of students without dyslexia [U = 86.5; p = 0.968; $n1$ = 5; $n2$ = 35; dyslexic students; mean result 48.8%, SD 9.01; non-dyslexic students: mean result 51.2%, SD 11.1]. Although not the primary aim of this pilot study this suggested that irrespective of learning differences there may be parity of opportunities in relation to student achievement. These findings were of interest to the course team, suggesting that the inclusion of alternative assessments in other modules across the programme was a feasible option, especially in enabling the assessment needs of students with specific learning differences to be met.

For all students with and without dyslexia, this assessment initiative met Broadfoot's '3Rs' – namely reinforcement, respect and relevance (Broadfoot 1986; Dean and Mountford 1998). The learning process was reinforced by encouraging students to have an appreciation of their strengths and weaknesses when selecting their assessment option. Respect for

learners was possible via an open collaborative relationship between students and the unit co-ordinator, and relevance was evident via information about students' skills, aptitudes and capabilities in relation to the healthcare profession associated with the programme and evidence-based practice (Dean and Mountford 1998). Such a student-centred approach to assessment can encourage all learners, irrespective of learning differences, to take responsibility for the learning opportunities offered to them and to promote deep learning (Gibbs and Habeshaw 1989; Edwards, Chapman, and Nash 2001).

Exploring students' experiences of assessment

Two focus group interviews were carried out in order to elicit students' views and establish contextual information relating to what influenced students to select one assessment option over another (Seale and Barnard 1998; Bryman 2001; Bowling 2002). It aimed to reveal factors influencing students' decisions when selecting an assessment option and in doing so explore whether students' learning needs were being met whilst also informing curriculum development decisions (Morrison 2003).

A purposive sampling strategy was used to recruit participants who met the study's inclusion criteria (Mays and Pope 1995; Seale and Barnard 1998; Bowling 2002). The inclusion criteria consisted of students, with or without dyslexia, registered in level one of the BSc (Hons) programme within which this pilot study took place and the exclusion criteria consisted of level one students registered on all other healthcare programmes at the university not involved in this pilot research. The logic and power of purposive sampling lie in selecting information rich cases that will enable the study's aim to be explored (Mays and Pope 1995; Patton 2002; Stringer 2004). This procedure therefore ensured that the initial sample drawn included as many as possible of the factors that might affect variability of behaviour which could then be extended, if necessary, in the light of early findings and emergent theory (Mays and Pope 2000). It was however recognised that the small sample size might affect the transferability of the qualitative research results to other settings (Lincoln and Guba 1985).

In accordance with Morgan (1998) and Bowling (2002) two groups, each consisting of eight students ($n = 16$), volunteered to take part in this research. To encourage individuals to share their ideas and perceptions these groups were as homogenous as possible as they were selected for each group based on their common demographics and selection of assessment options with one group having completed assessment option one and the other group having completed assessment option two (Greenbaum 1998; Stringer 2004). In the focus group interview involving students who had completed the research design assignment option, three out of the eight students who participated had dyslexia. Both focus group interviews were carried out by the same moderator and meticulous records of all interviews and the process of analysis were documented in full (Mays and Pope 1995; Mason 2002). To ensure the data collection and interpretation accurately reflected the phenomena once the description of the phenomena was complete it was returned for validation to four of the students from the primary sample (Mays and Pope 1995).

Informed consent was obtained from all participants and it was made clear to the groups that the discussion should be between group participants rather than directing comments towards the moderator. A moderator's guide containing open ended questions was used during the focus groups and discussions (with participants' permission) were audiotape recorded and transcribed verbatim (Bryman 2001; Bowling 2002; Silverman 2005). Following the moderator's briefing, the focus group interviews commenced with open-ended questions about students' perceptions of assessment, opinions about the provision

of assessment options, factors influencing decision-making processes, benefits and limitations of the provision of assessment options and assessment methods. Each focus group interview lasted 45–60 minutes enabling sufficient time for a detailed discussion to develop in the presence of a fully briefed note taker (Patton 2002; Stringer 2004). To promote reflexivity, on completion of each focus group interview the moderator and observer remained for a short debriefing before a post-interview sheet was completed that enabled the moderator to record information regarding the interview process, rapport, insight, disruptions, etc. (Greenbaum 1998; Bowling 2002; Stringer 2004).

The principles of the grounded theory approach were used to analyse the focus group data. Conceptual categories were identified and indexed as they emerged from the data (Strauss and Corbin 1990; Pope, Ziebland, and Mays 1995; Seale and Barnard 1998) and all the data relevant to each category were identified and examined using the constant comparative method (Glaser and Strauss 1967; Mason 2002) in which the categories were progressively clarified and defined before presenting the emerging theory (Seale and Barnard 1998). The participant validation process revealed that the students considered that the data collected had been interpreted accurately and had reflected discussions within the focus group interviews.

The data emerged around three distinct themes: assessment and stress in students; individual learning styles and assessment options and academic achievement. Each of these main themes is detailed and described with supporting direct extracts from interview transcripts to illustrate the key findings. These extracts are cited verbatim unless indicated by dots […] to signal text that has been removed for the sake of brevity. In line with ethical considerations pseudonyms are presented in square brackets at the end of each quotation to maintain anonymity in the presentation of data.

Results

Sixteen students participated in the study of which thirteen were female (mean age 31.5, SD 8.7, range 19–46) and three were male (mean age 22.3, SD 3.5, range 19–26). The sample was considered to be a fair representation of the student population within the unit, with an increasing trend for female students to outnumber male students (Ballantyne 2000; Cassidy 2007).

Assessment and stress in students

The data suggested that the nature of the assessment influenced how students' perceived the assessment process and their learning experiences. Participants frequently reported feeling dissatisfied with their work and expressed feelings of stress when sitting time-constrained written examinations. When referring to such assessments words such as 'wary', 'stressed', 'concerned', 'anxious' were frequently used:

> … and if you are not feeling good in an exam you cannot wait until you are feeling better before you answer the questions … you have a one off opportunity to prove what you know … I never feel I have done myself justice in an exam and then I feel disappointed in myself and stressed. (Respondent B)

The data revealed that compared with summative assessments, formative assessments had a greater impact on the learning process. The majority of participants felt that this was because formative assessments were free of threat, which encouraged them to expose their strengths and weaknesses rather than to disguise them. Opportunities to obtain feedback

on knowledge or performance were valued by all of the respondents and led to a greater sense of achievement. Therefore, formative assessments were perceived to be more helpful in relation to facilitating their knowledge and understanding on a given topic.

> The formative assessments keep you on track, without being nerve racked about being an exam … (Respondent K)

> Because it is formative doesn't mean you take your foot off the pedal … you feel it is something you have to do your best in and it encourages you … it's a clearer indicator of your progress and you want to do well because you are getting feedback and you actually learn from it … (Respondent F)

The findings suggested that the nature of the assessments was directly related to the stress experienced by students. The students emphasised that such stress reduced their potential to develop both academically and professionally, and that students' views should be taken into account by unit co-ordinators.

There has been extensive debate in the literature about the relationship between learning and assessment and especially how formal assessment can undermine the learning aims of a curriculum. For example, Hamdorf and Hall (2001) have argued that summative assessment can be potentially destructive to learning when poorly designed and that the competitiveness engendered can be unhelpful for poor performers with low self-esteem. The work of Snyder (1973) and Phelan (1985) resonate with students' views in the study in feeling that they were being prepared for exams rather than being supported in achieving the avowed curricular aims of the programme. These findings endorsed conclusions drawn by Taras (2002) that students are disillusioned and frustrated because the aims and ideals for the pedagogical process appear to be shattered by the perennial pressures of summative assessments.

In agreement with Taras (2002) participants considered that formative assessments and feedback were essential both for judging work and for permitting learning to become a logical outcome. Taras (2002) proposed that the current accepted theory no longer separates formative–summative assessments and requires all assessment to be primarily formative in nature. Such practices require assessments to be focused on learning, separating grading and feedback, and utilising self and peer judgements (Black and Wiliam 2003). All of the participants recognised the crucial role feedback played in the assessment process, however there were increasing concerns that the provision of feedback was in decline. In accordance with Hounsell (2003) several participants advocated the use of peer review in the assessment process, reinforcing the need for more acquiescent and collaborative approaches to the assessment process to be adopted.

Individual learning styles and assessment options

The majority of participants felt that their perceived personal individual learning style influenced their choice of assessment option. Participants who identified themselves as reflectors indicated a dislike of written examinations and reported a preference towards coursework assessment alternatives. Interestingly, several participants were able to link individual learning styles to age recognising that mature students become reflectors over time.

> With different learning styles, if you could choose your own style of assessment you are going to prepare a lot harder for that … you know that if it is something you have chosen you can do well in it … (Respondent H)

You know your strengths and weaknesses so when you are given an option you choose the one you think you will perform better in … so if you are not given the option you are not given the choice … (Respondent M)

As a mature student I prefer coursework … I believe you become reflectors with age normally … (Respondent P)

Because I'm a reflector the coursework option gives me the chance to think about what I am doing and in doing so I am able to understand what I am doing … (Respondent D)

There was widespread agreement in the focus group meetings that the provision of assessment options was a definite improvement on existing assessment strategies offered within the programme. These findings reinforce recommendations by Fowell, Southgate, and Bligh (1999) and Kell and van Deursen (2002) that students should be exposed to curricula that vary both assessment modes and modes of delivery as all individual methods disadvantage some students. The provision of assessment options was also thought to be beneficial in relation to students' individual learning styles and this led to satisfaction amongst students who felt that they were being actively involved with assessment. In accordance with previous research, participants considered assessment to be one of the main defining features of students' approach to learning (Struyven, Dochy, and Janssens 2002). This reinforces other research that highlighted a significant correlation between students' preferred approach to learning and academic achievement (Cassidy and Eachus 2000). This finding was later strengthened by Jackson and Williams (2003) who reported that students who were assessed according to their first choice of assessment format outperformed students assessed to a format other than their first choice.

This study's findings therefore highlighted that not only did students show preference for assessment options which they felt reflected their dominant approach to learning, but also that such students were also able to perform better when assessed according to their favoured approach (Entwistle and Tait 1990; Cassidy 2007). It is recognised that students are aware of the characteristics of assessment and that changing the demand characteristics will influence the actual learning approach adopted (Marton and Saljo 1997). Assessment strategies can therefore be used positively to encourage students to adopt a deep approach to learning (Boyd and Cowan 1985; Biggs 2003).

Assessment and feedback have been identified as being central to learning and to the student's experience (Gibbs 1992; Thomson and Falchikov 1998) with moves towards students having greater involvement in assessment of their own learning (Boyd and Cowan 1985; Biggs 2003; Falchikov 2005; Baty 2006). Yet, Glasner (1999) and Taras (2002) raised concerns that student involvement in assessment in higher education is still relatively rare. This pilot study demonstrates that the provision of assessment options enabled students' individual learning needs to be more fully addressed and reduced the level of anxiety associated with the assessment. It is anticipated that such an assessment strategy would benefit not only students with specific learning difficulties but all students who have the opportunity to become motivated and satisfied via their active involvement with assessment process.

Academic achievement

Assessment was identified as the area to which students attached the most importance and the majority of students indicated a positive attitude towards being given a choice from two assessment options within the unit. It was implied that the provision of such assess-

ment options would generally reduce stress associated with assessments and was considered to be a 'forward thinking' strategy in higher education:

> … well by assessment options you choose the one that is best for you … it makes sense for all students to be able to choose the assessment option they prefer … (Respondent G)

> Knowing you have a choice is really important … it's important not to underestimate how stressed people feel about exams. Some people find it really difficult to be locked in a room for two hours … (Respondent J)

> There needs to be flexibility in the system because for whatever reason it is the university's responsibility to get students through the course to a certain level of knowledge. Does it actually matter fundamentally which way each student reaches the end point if they all have the same amount of knowledge? If someone who finds exams stressful can provide an explanation of a certain topic verbally as opposed to sitting an exam I would have no problem giving that person the same qualification as someone who sat an exam … (Respondent N)

The students in this pilot study placed great importance on learning and assessment in higher education in relation to academic development. Yet in Tinklin, Riddell and Wilson's (2004) study this was identified as an area of concern for disabled students, emphasising that a cultural change within higher education is required to improve learning and teaching for all students. Participants confessed that in their learning assessments were approached as a means to an end (i.e. instrumental learning with extrinsic rewards) rather than valuing both for their own sake (i.e. expressive learning and intrinsic rewards). This illustrated the phenomenon of assessment backwash (Biggs 2003) and the extent to which student learning is influenced and directed by methods of assessment (Entwistle 1981; Evenden 1986; Rowntree 1987; Ramsden 1992; Boud 1995; Hamdorf and Hall 2001).

Conclusion

The current assessment culture favours an integration of learning, teaching and assessment (Rust 2007), the involvement of students as active and informed participants and a focus on the processes as well as the products of learning (Struyven, Dochy, and Janssens 2002). A number of characteristics deemed indicative of this assessment culture includes: active participation in genuine, real life activities that require the application of existing knowledge and skills; participation in conversation between learners (including tutors); commitment to developing criteria and self regulating one's own work; utilisation of a diverse range of assessment modes and methods adapted from different subject disciplines; option to build and apply characteristics such as reflection, resoluteness, resourcefulness and professional judgement and behaviour in relation to problems; and acceptance of a limitation of judgement and the value of having conversations to facilitate the development of new ways of working (Schwartz and Webb 2002; Bryan and Clegg 2006; Rust 2007). In line with this emerging culture (Schwartz and Webb 2002; Bryan and Clegg 2006; Rust 2007), students in this study were encouraged to become more actively involved in the assessment process thereby enhancing their motivation to do well. With input from the External Examiner both assessment choices were constructively aligned to the same learning outcomes of the unit thereby ensuring content validity (Fowell, Southgate, and Bligh 1999) and all students had the opportunity to select an assessment option that encouraged them to adopt a deep approach to learning (Gibbs and Habeshaw 1989; Edwards, Chapman, and Nash 2001). All students, with or without specific learning difficulties, were

therefore provided with a reasonable and fair opportunity to demonstrate their learning (Cannon and Newble 2000).

The assessment process is regarded as a dominant influence on the way in which students learn (Biggs 2003; Rust, Price, and O'Donovan 2003; Case 2007). It is therefore fundamental that any assessment practice should be designed to have an educationally thorough and constructive influence (Case 2007). A major challenge of all assessments is to ensure that effective measurement is used (Dolan 2003). In the development and implementation of assessment options offered within this unit of study, it was important to guarantee coverage of the curriculum in order to ensure content validity and reliability (Gipps and Murphy 1994; Dean and Mountford 1998; Dolan 2003). It is however recognised that, in accordance with Boud and Falchikov (2006), assessment activities in one unit of study will need to complement those in others. A recommendation is therefore made that assessment options should be offered in each unit of study within a programme to encourage a holistic approach to assessment in which a high degree of co-operation between those teaching different parts of the programme is essential (Boud and Falchikov 2006).

To facilitate the development of students via their active involvement in the assessment process, educators are required to comprehend some key assessment concepts, such as the link between learning outcomes and success criteria, the use of rich questioning and the role of feedback in a pedagogy focused on learning, self- and peer-assessment (Black and Wiliam 2003). Academic staff development is therefore needed to increase awareness of the learning needs of all students particularly those with specific learning difficulties (Hall and Tinklin 1998; May et al. 2006). This is being addressed by many institutions where Higher Education Academy (HEA) accredited programmes, such as postgraduate certificates in academic practice, are offered to enable new academic staff with teaching responsibilities to reach a nationally recognised standard of competence in teaching and learning support (HEA 2007). In addition, further monitoring and evaluation of statistics and services for disabled and non-disabled students are essential to highlight and strategically address difficulties and barriers encountered by students (Tinklin, Riddell, and Wilson 2004; May et al. 2006). In light of reported instances where disabled students have encountered insensitive or inappropriate behaviour by staff (Hall and Tinklin 1998), such strategies would in turn make staff accountable for their practice (Tinklin, Riddell, and Wilson 2004).

The persisting difficulties of dyslexic students that affect their studies need to be recognised by higher education institutions (Hatcher, Snowling, and Griffiths 2002). With a growing group of academics pioneering often radical alternative methods of student assessment (Baty 2006) the need to develop an evidence base for developments in the field of assessment is imperative. As assessment is for learning and learning is at the core of the aims of higher education (Dearing 1997; Garrick 1997), the findings of this study highlight the need for further full-scale evaluative studies to: (1) explore the provision of assessment options within units in higher education in order to establish effective assessment strategies and (2) compare students' with and without specific learning difficulties views towards assessment in higher education. It is further recommended, in accordance with Manogue et al. (2002), that educators involved in the design and implementation of new curricular strategies inquire into the evidence for the need to introduce new forms of assessment that are in alignment with a student-centred approach to learning.

A progressive viewpoint on assessment and its essential processes is regarded as a component of learning and teaching to be implemented and strategically evaluated by higher education (Rust, Price, and O'Donovan 2003). Careful planning of assessment

activities accompanied by an evaluation strategy is therefore advocated in which Biggs' (2003) idea of constructive alignment is extended to include not only consistency of purpose between the proximate elements of programmes, but also to ensure learning-oriented assessments foster future learning after graduation (Boud and Falchikov 2006). However, in the development of such an adaptive curriculum to ensure sustainability, there remains a need to be ever mindful of institutional, resource and time constraints (Case 2007). It is recognised that the inclusion of assessment options within units may be time consuming for unit co-ordinators to administer, however in light of these pilot results the rewards of an enhanced student-centred approach to assessment and learning may outweigh this additional burden on staff. With a rising number of students being diagnosed with dyslexia such considerations are timely (Tinklin, Riddell and Wilson 2004).

Acknowledgements

Notes on contributors

Deborah Craddock is MSc programme leader and school lead for Inter-professional Education at the University of Southampton and has achieved the status of fellow of the Higher Education Academy. She is currently involved in educational research related to learning, teaching and assessment of inter-professional education initiatives and actively leads in curriculum development initiatives. She has been teaching in higher education for over 11 years.

Haydn Mathias is now an independent higher education consultant. He was director of the University of Southampton's Centre for Learning and Teaching until 2006. He has worked in educational development and research in higher education for 30 years and had led numerous workshops and programmes on teaching and learning for academic staff.

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