Mapping the Maze of Assessment: An Investigation into Practice

Andy Gillett

Principal Lecturer

School of Combined Studies

University of Hertfordshire

AL10 9AB

01707 284986 [Tel] 01707 285241 [Fax]

A.J.Gillett@herts.ac.uk

Angela Hammond

Senior Lecturer

School of Combined Studies

University of Hertfordshire

AL10 9AB

01707 285221 [Tel] 01707 285202 [Fax]

A.Hammond@herts.ac.uk

Biographical Notes

Andy Gillett has spent most of the last 30 years teaching English both in the UK and abroad. During this time, he has taught mainly ESP - English for Specific Purposes - in universities, colleges, private language schools, offices and factories. For the last 20 years most of his work has been involved with English for Academic Purposes in British higher education. He is now mainly involved in organising, planning and teaching EAP courses to students taking a wide range of courses at the University of Hertfordshire. For several years, he has been involved with BALEAP - the British Association of Lecturers in English for Academic Purposes - and after spending two years as chair, he is now treasurer.

Before moving into higher education *Angela Hammond* worked at the British Council and has 30 years experience of education and training in both a UK and international context. She has worked and taught overseas and has developed teaching materials for a range of training programmes. She currently teaches research and study skills at undergraduate and postgraduate level in the Faculty of Interdisciplinary Studies at the University of Hertfordshire, where she has a particular interest in the development of generic materials that can be used for learning and study support.

Abstract

This article presents the results of a preliminary survey of assessment tasks undertaken by students in higher education at a particular university. A key premise of the study was that the ability to handle assessment is central to the development of academic and professional literacy. Much of the current literature on assessment demonstrates a concern that it is not currently achieving this end. The researchers developed a grid of various features of assessment, onto which they mapped tasks used at all levels and within all disciplines in their institution. They discovered considerable differences in the type and range of assessment tasks used across schools and disciplines. Furthermore, they identified a gap between the variation in tasks they came across and the relatively narrow range of activities and techniques covered in most study skills manuals. They believe that generic materials should broaden their base and that subject-specific material needs to be developed to accommodate the realities of lifelong learning.

Key Words:

assessment, assignments, graduate skills, interdisciplinary, lifelong learning, academic literacy, student performance

Mapping the maze of assessment: An investigation into practice

Andy Gillett & Angela Hammond, School of Combined Studies, University of Hertfordshire

Introduction

Successful academic study requires the learner to acquire competence and literacy on several levels. Given that these attributes are mainly demonstrated through the assessment process, the task of helping students develop strategies for handling examinations and coursework is inherent to the duties of the teacher in higher education. This is particularly important within the context of lifelong learning and the call from Dearing (1997) for effective, responsive teaching that would allow for "a society committed to learning throughout life." As teachers of English for Academic Purposes to international students and of research and study skills to both home and overseas students, the authors are in constant search of ways to help students develop these levels of competence and literacy.

Debate about the current state of assessment often expresses unease as to its suitability for the twenty-first century and the need for it to be " 'fit for purpose'" (Brown, 2004, p. 81). Knight (2002, p. 275) talks of "practices in disarray" where assessment becomes a site of conflict or power struggle, founded on an unequal relationship between the two parties (student and institution) and hampered by an in-built lack of clarity in the methods used to convey judgment on performance and gradings. Demands are made for greater clarity and openness in assessment processes and for more effective use of feedback and formative assessment, allowing learning to become emancipatory, developmental and lifelong (Boud, 2000; Yorke, 2003). This view of assessment as an ethical practice sits comfortably alongside the call from Biggs (2003) for constructive alignment, where the student is able to construct meaning only when teaching methods and assessment tasks line up with learning activities and outcomes.

Central to the view that assessment is in need of attention is the recognition of the importance of taking into account how the individual learns, signalling a shift in emphasis away from product towards process. Learner-oriented assessment demands far more variety in the range and scope of assessment tasks in order to cater for different preferences and learning styles (Marton & Saljo, 1984; Ramsden, 1992). It provides a basis on which the learner can build and negotiate the future. This is a key factor in the national drive to develop a student's employability during a degree in higher education. A long view of learning brings to the fore assessment tasks that allow for development and reflection. The ability of reflection to promote deep learning and to enable the learner to construct theoretical models on which to build has been demonstrated by Moon (1999), but its place within assessment is perhaps too often overlooked, with teachers and examiners falling back on more traditional methods such as the well-argued essay or project report. Sadler (1998) sees formative assessment as a cornerstone of a structure that enables the learner to manage performance and achieve their best.

The push towards a view of assessment as a sustainable, long-term process that future-proofs the learner and allows for both personal and intellectual development heeds the Quality Assurance Agency for Higher Education (QAA, 2006) code of practice which includes in its precepts assessment practices of the highest calibre: General principles 3 ["...assessment practice that promotes effective learning"] and 6 ["...effective and appropriate measurement of students' achievement of intended learning outcomes"]. However a QAA review in 2003 also highlighted a lack of imagination and variety in assessment practices across higher education (Boud & Falchikov, 2006). In reminding us of the influential role assessment plays in the learning process Entwistle (1996, p. 112) warns against "entrenched attitudes" that resist change and ignore innovative practices. As a profession we are urged to interrogate the reasons for ignoring the full range of assessment techniques at our disposal (Rust, 2002) and the authors see this study as complementary to such an approach.

Despite the wealth of material available to students wishing to prepare for their assessment tasks (study skills books and courses, foundation and access courses, on-line study skills materials as well as workshops and advice sessions are common features of study programmes in higher education) there remains a mis-match. Study skills manuals provide excellent guidance on general techniques, but too often fall back on a tried and tested set of assessment tasks: how to write essays and how these differ from reports (e.g. Cottrell, 2003); how to structure a talk or work in groups (e.g. Drew & Bingham, 2004); how to take notes (e.g. Northedge, 1990). What is frequently missing however is any comment or advice on the purpose and function of the wide range of academic activities demanded of students (in the name of assessment) in their various subjects of study.

There is, though, research in English for Academic Purposes that contributes more to our knowledge about what students actually need to do, apart from writing essays. For example, Swales (1996) looks at the initial covering letters included with articles submitted to journals for publication; Hyland (2004) investigates dissertation acknowledgements and Jackson, Meyer & Parkinson (2006) look at report writing of science students in South Africa. The variation in tasks across subjects has also been investigated by, for example, Nesi & Gardner (2006) who discuss the way writing tasks vary across disciplines and highlight an increased realisation among professionals that writing tasks need to reflect the real world. Bloor (1999) surveys variations in research article methods sections across disciplines and Swales (1981) compares definitions in science and law. He points out that generic classes and materials may not he helpful to all students. More recently North (2005) has shown that what students have learned about writing in one discipline may not be appropriate in another field.

The current orientation of most study support materials means that our students are at risk of developing a restricted view of the type of assessment tasks expected of them in higher education. Furthermore, it would seem that anecdotal knowledge forms too much of our current practice: if students are to be better prepared for the process, we as professionals must first ensure that we fully understand the nature of assessment tasks being undertaken. This research is, in a sense, an attempt to carry out a novel approach to constructive alignment (Biggs, 2003), marrying up advice on

assessment practice coming from peers and regulatory bodies with scrutiny of what the learner actually experiences.

This then was the task that the authors undertook in seeking to address the gap between the need to develop a fuller range of assessment tasks and knowing exactly what is taking place at present. The main research questions therefore, were: What kind of assessment takes place across the different levels in the different subjects in higher education? and: Are these assessment practices appropriate for our students? Finding out answers to these questions would facilitate the task of supporting students in the assessment process more effectively.

Methodology

Teaching at our institution is carried within Schools of Study such as Education; Electronic, Communication and Electrical Engineering; Humanities; Film, Music and Media; Life Sciences and Law. Students are enrolled on programmes such as BA, BSc, LLM, MA. These programmes follow QAA specifications and consist of modules that are studied at different levels: 0, 1, 2, 3 & M. All modules are specified by DMDs – Definitive Module Documents. The DMDs list 23 discrete items of information that cover practicalities, credit points, modes of delivery and assessment details. The information given in this final area was used in order to find out more about what was actually going on in our institution.

A decision was made to sample the online DMD database and resulted in information from approximately one third of the database (2,367 modules) and the kinds of assessment tasks used. A preliminary survey of assessment types provided useful data and led to the realisation that the tasks listed needed to be categorised in some way to avoid producing a disparate set of activities that in some instances was very specific (e.g. timelog audit trail) and in others wide-ranging and generalised (e.g. critical review). A broad typology of assessment tasks used at different levels and with different disciplines was therefore developed.

Rowntree (1987) defines sixteen modes of assessment that he juxtaposes (e.g. formative vs. summative) in order to stress the importance of matching the assessment method to its purpose. Habeshaw, Gibbs & Habeshaw (1993) set out a list of assessment tasks that takes the reader beyond the generic into the specific. Biggs (2003) provides guidance on the kind of learning that is being assessed by various tasks and more importantly, the cognitive functions lying behind these tasks. Using these complementary approaches to assessment practices, a grid of the six key areas considered to be important was developed. Within these six areas a sub-set of 22 features was drawn up.

In developing the grid, a conscious choice was made to move away from a product-oriented list of tasks such as essay or report into considering the process that lies behind each assessment task. The Assessment Strategies in Scottish Higher Education (ASSHE) project developed an impressive inventory of assessment tasks when it surveyed assessment practices across 22 Scottish Higher

Education Institutions in 1996 (Hounsell, McCulloch and Scott, 1996). Many of the features we selected for analysis mirror that inventory. However we believe that the particular strength of our categorisation is two-fold: firstly in its ability to reflect the complexity of the assessment process: practical activity, intellectual skills, developmental processes and personal involvement are all included; but secondly in the fact that it enables a diagnosis of whether assessment practices do meet the needs of the learning society. Four of the six categories can be linked to Honey & Mumford's (1982) four learning styles of Activist, Theorist, Reflector, and Pragmatist - hence in turn to Kolb's (1984) learning cycle - the other two touch on learner involvement and variety in assessment methods, both of which are highlighted in the literature discussed above. The grid is offered as a tool to anyone interested in knowing whether their assessment practices are fit for purpose.

The six key areas in the grid were:

Tasks T1-T6 [Multiple choice; Open book; IT based; Interactive; Group element; Role play]

These features go beyond the standard format of essay or exam to describe the nature of tasks the learner may have to carry out in the course of an assessment exercise. The tasks selected have in common that they need to be mastered before a student can be said to have achieved within an academic culture. The latter three demand some kind of interaction and as such link to Honey & Mumford's Activist learner. It was felt that it was important to have as the first broad category one that captured the main activities undertaken, in order to make our institution's assessment practices explicit.

Medium M1-M3 [Oral; Numeric; Diagram/Pictorial]

These three features define the means by which the learner represents achievement *other* than through the written word. They were chosen to record instances of an assessment task that call on the ability to communicate through speech, number or images.

Who assesses? A1-A3 [Self assess; Peer assess; Self set element]

The common thread in this set of descriptors is that they highlight the learner's involvement in the assessment process. Boud & Falchikov (2006) see the ability to judge one's own performance as central to life-long learning, enabling the individual to negotiate the uncertainties of future situations.

Cognitive C1-C5 [Analytic; Evaluative; Skills focus; Primary research; Theory focus]

In this bracket are five features that reflect certain intellectual processes that come into play during an assessment task. They draw in part on the higher order skills defined by Bloom (1956) as well as looking to Honey & Mumford's Theorist and are essential to a graduate level command of a subject.

Time-span S1-S3 [Reflective; Process/Periodic; Portfolio]

In addition to describing assessment tasks that take place over an extended period of time, this group of features has in common that each demands extended or continuous involvement from the learner and so focuses on development. As such, these are practices that foster deep learning and of course also link to Honey & Mumford's Reflector.

Work-related W1-W2 [Practice focus; Case study]

The final category might be said to meet the need of Honey & Mumford's Pragmatist but more importantly was chosen to describe activities that focus on the future and the work-place. Rust (2002) stresses the importance of real-world assessment practices to move the learner away from the virtual world of higher education. The inclusion of assessment tasks that can be said to fall into this category not only promotes lifelong learning but also enables us as educators to build graduate skills and employability into the curriculum.

As the DMDs were studied, a note was made each time one of the 22 features was reflected in the assessment tasks described. In order to ensure that the sample was representative, material from every School at levels 1, 2, 3 and M was looked at. All the DMDs sampled were approved for use in 2005/6 and useful information was found in approximately half of them. The work was split between both the authors and the work was regularly checked to ensure the same criteria were being used. It was realised quite soon into the research that the data found in the DMDs was very variable and not necessarily representative of the total picture. It is important to stress therefore that only a snapshot of assessment activity in our institution has been provided.

Results

Although the DMDs were variable in the amount and quality of information they gave, the data gathered clearly showed that assessment features vary across levels, schools and modules. Figure 1 shows broadly how the different schools of study in our institution involve these features in their assessment. The darker areas show more involvement of the features listed along the top; the lighter areas show less. It is clear that schools are very different in their approaches to assessment.

It may be useful to highlight specific examples to give an idea of the picture that was built up across the institution. Five charts have been selected that demonstrate different tendencies:

- 1. Broad categories across all schools
- 2. Individual features across all schools
- 3. All features across all levels, example of one school
- 4. Comparison of one school with the institution as a whole
- 5. The most commonly-occurring types of assessment

Figure 2 shows which levels at our institution make use of the features in the 6 categories that have been identified. While it can clearly be seen that assessment does vary according to level (e.g. there

appears to be an increased diversity in the task category used at Master's level compared to the standard three years of undergraduate study) it is perhaps more useful to note the differences between the six broad categories. Category 3 [Who assesses?] appears to show that more could be done to involve the learner in the assessment process as at the most only 12% of Masters-level modules focuses on this aspect. Likewise although a healthy emphasis on Cognitive Skills [Category 4] was expected, it would be encouraging if the Work-related [Category 6] set of features figured more prominently.

Figure 3 breaks down these broad categories to show the range of assessment types present and demonstrates the variation in individual assessment tasks as the levels progress. Oral assessment, for example, appears to decrease from level 1 to level 3 and then increase at Master's level. As expected assessment seems to become more analytic and evaluative as it moves from level 1 to level M. It is encouraging to see that all levels involve a certain amount of primary research but one could question whether it is right that the emphasis on skills decreases as the academic level increases. In the first broad category [**Tasks**], the only strong feature is the group element. There is a wide range of assessment types used in the fifth broad category [**Time-span**]. Whilst a practice focus features at all levels in our institution, case studies do not appear to be underused given their relevance for employability. It may be that they suit some disciplines (e.g. Nursing, Business) more than others, but the anomaly bears further investigation, as perhaps does the fact that Numeric does not feature very strongly at any level.

Figure 4 shows the range of assessment types across all levels in one school – School A. It is to be expected that the variation across levels is much more obvious in this chart. Oral assessment, for example, appears to be quite rare in all three undergraduate levels, but very common at postgraduate level. By contrast group work appears to be absent from final year and postgraduate assessment. It is understandable to see a real emphasis on skills at Level 1 but perhaps puzzling that this feature then disappears at all other levels

If a single School is compared with the overall institutional picture, interesting variations are found. Figure 5, for instance, compares assessment in the School B with an average of all assessment types across the whole university. It seems clear that this School uses multiple-choice testing more than is typical and that it bucks a trend by using peer assessment more than others. However, oral testing appears to be much rarer than the average.

Figure 6 returns to a broad-brush picture to show which kinds of assessment are most common. It is encouraging to note that the areas that focus on higher order skills of analysis, reflection and evaluation stand up well, along with those that look to the employability agenda (*Practice focus, Oral, Group element*). It is worrying, though, that the most common feature (*Practice focus*) is covered least in study-skills books and generic skills classes, perhaps because this varies most from discipline to discipline. The prevalence of oral assessment across all graphs and charts represents an area which is covered only superficially in most books.

Figure 7 is in some ways the most important of all our results. It presents in rank order certain of the features that the research identified and that appear to be under-represented in traditional study skills support material, a situation discussed below.

Discussion

A central premise of our investigation was that in order to know how best to use assessment to help our students achieve learner autonomy and academic literacy we needed first to understand precisely what kind of assessment practices was in use. This in turn would allow for better support of students during the assessment process.

The research uncovered a wide range of differences in the type and range of assessment tasks used across levels and disciplines. The variety of assessment tasks used is far greater than the traditional diet of essay, report and oral presentation. Furthermore, it identified a gap between the variation in tasks documented and the relatively narrow range of activities and techniques covered in most study skills manuals. It is argued that such a case study of assessment practices in one institution is applicable to teachers and students elsewhere. As professionals, all lecturers need to know whether their assessment methods concur with the QAA code of practice, but more than that lecturers need to understand their assessment practices fully in order to make them explicit for learners, to identify and disseminate best practice amongst colleagues and ultimately help their students to succeed.

The research shows that features key to what Boud (2000) has termed "sustainable learning" (development, autonomy and knowledge of workplace practices) are all too often under-used in assessment practice and as such suggest that assessment is not yet fit for purpose. It would seem that institutions need to look more closely at how assessment works across the range of levels and subjects to ensure that students are better equipped for the learning society. As educators we should be focusing on a much wider range of tasks than those traditionally represented in teaching, study materials and course design. It is also important to address the difference between the variation in tasks this research demonstrates and the problems it throws up. Generic materials should broaden their base and more subject-specific material must be developed to accommodate the realities of lifelong learning.

Conclusion

The study sprang from our concern that guidance from existing study-skills textbooks was too restricted and a belief that courses and books need to widen their scope if they are to serve as appropriate materials for students. It set out to investigate the range of assessment tasks that students in our institution undertake in order to become more aware of those students' needs and understand how to go about attempting constructive alignment. Turning first to existing information published in our module specifications we were able to identify a list of tasks that our students need to demonstrate competence in. This list was varied and dynamic, confirming our initial belief that the wealth of study material available relies on too narrow a basis of assessment types as its resource.

Our research has made us conscious of the need to steer teaching towards assessment tasks more carefully and to widen the scope of generic classes. Major publishers are not likely to be interested in developing support materials for too specialized a market; staff will need to develop their own materials which will almost certainly include the provision of on-line materials. This is no bad thing – the importance of tailoring the assessment task to the learner is well recognized and the task provides us with the opportunity to develop materials that will suit the current direction of our institution, in particular the issue of employability.

The information we have gathered rests exclusively on documentation rather than observed practice. We knew from the outset that our research would only ever indicate assessment activity in our institution, never describe or evaluate it. It is still not known how formative assessment is used within the sector, or how assessment develops as a student moves through the levels of a degree. Nor is it known how students themselves perceive assessment or what they think are effective practices in this aspect of their studies. If we are to take seriously the call from our peers to make assessment fit for purpose we need to know much more. The next step should be to investigate further by carrying out in-depth studies of courses and conducting interviews with both colleagues and students to see how these findings apply more widely across the sector.

Acknowledgement

The research involved in this project was supported by the University of Hertfordshire Learning and Teaching Development Fund, 2005-2006.

References

- Biggs, J. (2003). *Teaching for quality learning at university* (2nd ed.). Buckingham: Open University Press.
- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals.* New York: David McKay.
- Bloor, M. (1999). Variation in the methods sections of research articles across disciplines: The case of fast and slow text. In P. Thompson (Ed.), *Issues in EAP writing research and instruction* (pp. 84-105). Reading: Centre for Applied Language Study, University of Reading.
- Boud, D. (2000). Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education,* 22, 151-167.
- Boud, D. & Falchikov, N. (2006). Aligning assessment with long-term learning. Assessment and *Evaluation in Higher Education, 31,* 399-413.
- Brown, S. (2004). Assessment for learning. Learning and Teaching in Higher Education, 1, 81-89.

Cottrell, S. (2003). Study skills handbook. Basingstoke: Palgrave Macmillan.

- Dearing, R. (1997). *Higher education in the learning society.* Norwich: National Committee of Inquiry into Higher Education.
- Drew, S. & Bingham, R. (2004). *The student skills guide* (2nd ed.). Aldershot: Gower Publishing Limited.
- Entwistle, N. (1996). Recent research on student learning and the learning environment. In J. Tait & P. Knight (Eds.), *The management of independent learning.* (pp. 97-112). London: Kogan Page, in association with the Staff and Educational Development Association.
- Habeshaw, S., Gibbs, G. & Habeshaw, T. (1993). *53 interesting ways to assess your students.* Bristol: Technical and Educational Services.

Honey, P. & Mumford, A. (1982). The manual of learning styles. London: P. Honey.

- Hounsell, D., McCulloch, M. & Scott, M. (Eds.). (1996). *The ASSHE inventory: Changing assessment practices in Scottish higher education.* Sheffield: University of Edinburgh & Napier University in association with the Universities and Colleges Staff Development Agency.
- Hyland, K. (2004). Graduates' gratitude: The generic structure of dissertation acknowledgements. English for Specific Purposes, 23, 303-324.
- Jackson, L., Meyer, W. & Parkinson, J. (2006). A study of the writing tasks and reading assigned to under-graduate science students at a South African university. *English for Specific Purposes, 25,* 260-281.
- Knight, P. (2002). Summative assessment in higher education: Practices in disarray *Studies in Higher Education, 27, 275-286.*
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. New York: Prentice Hall.
- Marton, F & Saljo, R. (1984). Approaches to learning. In F. Marton, D. Hounsell & N. Entwistle (Eds.), *The experience of learning* (pp. 36-55). Edinburgh: Scottish Academic Press.
- Moon, J. (1999). *Learning journals: A handbook for academics, students and professional development.* London: RoutledgeFalmer.
- Nesi, H, & Gardner, S. (2006). Variation in disciplinary culture: University tutors' views on assessed writing tasks. In R. Kiely, P. Rea-Dickens, H. Woodfield & G. Clibbon (Eds.), *Language, culture and identity in applied linguistics* (pp. 99-118). London: BAAL/Equinox.
- North, S. (2005). Disciplinary variation in the use of theme in undergraduate essays. *Applied Linguistics, 26,* 431-452.

Northedge, A. (1990). The good study guide. Milton Keynes: The Open University Press.

Quality Assurance Agency (2006). Code of practice for the assurance of academic quality and standards in higher education. Section 6: Assessment of students. Retrieved May 31st, 2007 from: http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/section6/COP_AOS.pdf

Ramsden, P. (1992). Learning to teach in higher education. London: Routledge

Rowntree, D. (1987). Assessing students: How shall we know them? (2nd ed.). London: Kogan Page.

Rust, C. (2002). The impact of assessment on student learning: How can the research literature practically help to inform the development of departmental assessment strategies and learner-centred assessment practices? *Active Learning in Higher Education, 3*, 145-158.

- Sadler, D.R. (1998). Formative Assessment: Revisiting the territory. Assessment in Education: Principles, Policy and Practice, 5, 77-84
- Swales, J. M. (1981). Definitions in science and law evidence for subject-specific course component. *Fachsprache, 3*, 106-112.
- Swales, J. M. (1996). Occluded genres in the academy: The case of the submission letter. In E.
 Ventola & A. Mauranen (Eds.), *Academic writing: Intercultural and textual issues* (pp. 45-58).
 Amsterdam: John Benjamins Publishers.
- Yorke, M. (2003) Formative assessment in higher education: moves towards theory and the enhancement of pedagogic practice. *Higher Education, 45,* 477-501.

Work- related			
N1 W			
0%			
Analytic; Evaluative; Skills focus; Primary			
research; Theory focus			

Figure 1. Percentage of modules in schools that involve particular feature.

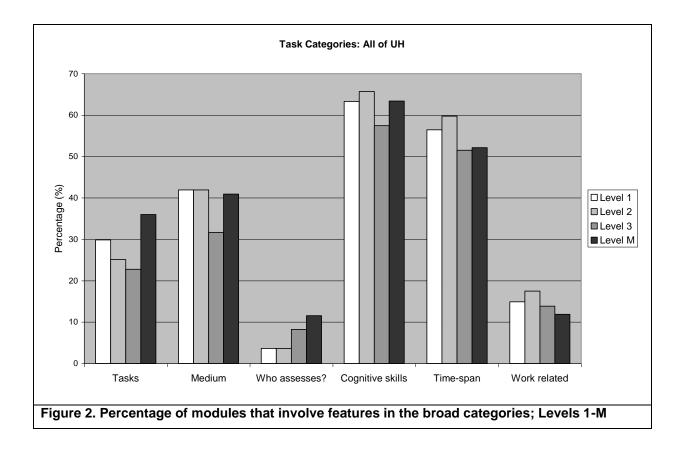
Oral; Numeric; Diagram/Pictorial

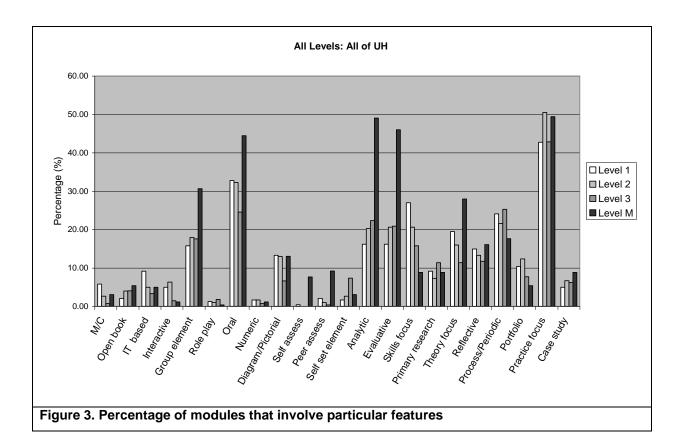
Who assesses? [A1-3]

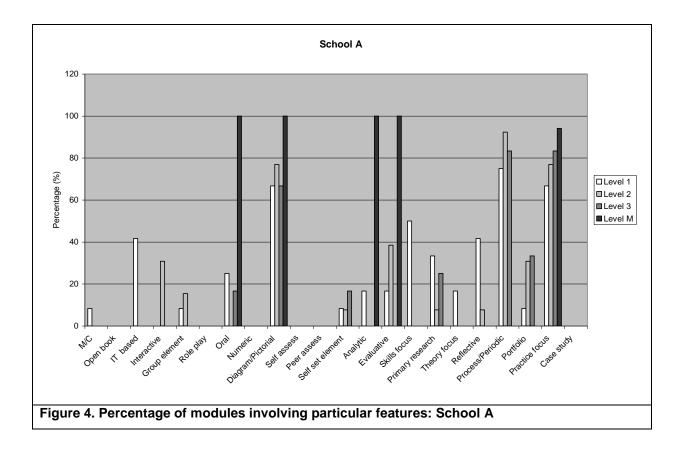
Self assess; Peer assess; Self set element

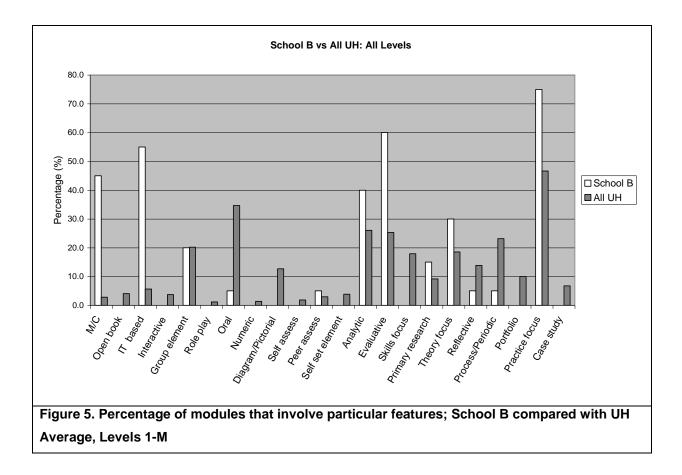
Reflective; Process/Periodic; Portfolio

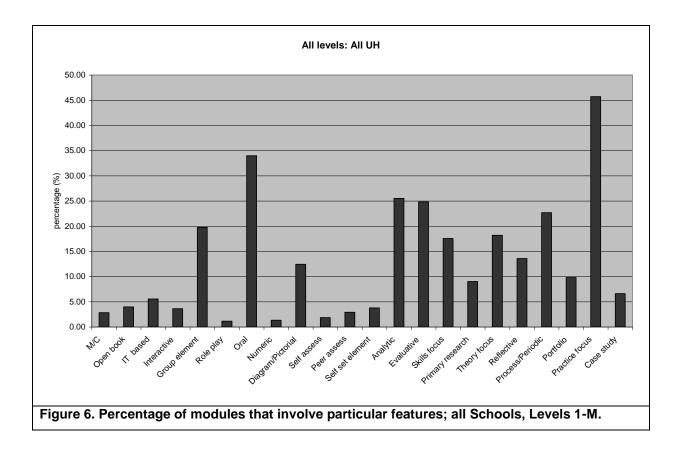
Work-related [W1-2] Practice focus; Case Study











Levels 1-M.	
Figure 7. Percentage of modules that involve particular features, in rank order; all Schools,	
3.0	Peer assess
3.7	Interactive
3.9	Self set element
4.1	Open book
5.7	IT based
6.8	Case study
9.2	Primary research
10.0	Portfolio
12.7	Diagram/Pictorial
13.9	Reflective
17.9	Skills focus
20.2	Group element
23.1	Process/Periodic
34.7	Oral
46.6	Practice focus