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## EXPANSION AND QUALITY

Robin Cohen

Measuring the quality of learning supplied in the expanded system of Higher Education has barely been addressed. While the Higher Education system as a whole is being bulldozed, without discussion or consent, into accepting a vocational mission similar to other sections of the education service, in practice the universities are becoming highly differentiated by function and prestige. External examiners kept a rough parity between the 40-odd 'old' institutions. With no CNAAs, no apprenticeship period as a 'University College' of an established university and a marked reluctance by senior academics to take on the job of external-examining, parity is rapidly disappearing as a goal. Perhaps, the free marketeers will assert, it is no bad thing that the 96 institutions now with university status will simply find their own niches. The 'quality' of their offerings will be informally assessed, they will say, by their 'customers'— their potential students and their prospective employers. This informal assessment will reinforce the banding of institutions according to their mix of vocational, teaching and research activities.

To have to accept this outcome will be a major reverse for those who wanted to extend educational opportunities fairly or equally for, given their inherited advantages, the rich, prestigious 'old' institutions will, by and large, retain or extend their power and status. There is likely to be a close parallel in this respect between an inadequately-planned and funded comprehensivisation of the secondary sector in the 1960s and the similarly improperly-implemented and financed comprehensivisation of the tertiary sector in the 1990s.

The Higher Education Funding Council's Consultative Paper on quality assessment takes the argument very little further—the Council being forced, as it sees it, to test only the quantifiable measures of 'quality'. These comprise: the cost to teach a student in any particular subject, the failure and drop-out rates, employment success after graduation, degree results, entry qualifications and the share of market applications to a course. It is difficult to imagine a more desiccated or incomplete agenda for quality control.

Continued on page 2

## EDITORIAL

There has been so much interest in the *New Academic* that we have had to expand the content to 32 pages for this issue. Our authors provide case studies of teaching and learning innovations in various Higher Education contexts, which cover both the new and the old University sectors. We also include some more theoretical discussions about the implications of change and expansion in student numbers for different kinds of institutions - as reflected by our lead article. This is the third issue of the *New Academic* I have had the pleasure of editing, and as I stand down from what has been a rotating role I am delighted to leave a 'queue' of excellent material for my successor. I am especially grateful to the *New Academic* editorial board for all their support, with especial thanks to David Jacques, Peter Knight, David Nicol, and Simon Horsman. Other members of SEDA have also provided excellent guidance and encouragement, not the least being Sally Brown, David and Carol Baume, Haydn Mathias, and Arnold Goldman. Finally, my thanks go to David Whiting for his general advice as well as the design and production of the final proofs prior to publishing.

**Danny Saunders**

**Editor,**

**November 1993**

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At best, these indicators may pick up a few of the symptoms, but will fail totally to address the causes and nature of the crisis in quality currently felt at the chalk-face. This crisis can be seen as a crisis in 'the quality of learning' and it is in this respect that the old phrase 'more means worse' takes on a new meaning.

### **Institutional breakdowns.**

At the beginning of the 1992/3 academic year we were largely spared the customary picture of students in sleeping bags in sports halls and on rented floor space. Canny university administrators had located near-bankrupt hotels to commandeer for emergency accommodation. After a few weeks, the miserable shared houses in the private sector took up the slack.

But if the students had a bed to sleep in after three or four weeks, they found the provision for learning

on campus woefully inadequate. There is hardly a university library in the country that has adjusted properly to the demands of mass education. Libraries in even the best research-based institutions are effectively repositories - designed for leisurely research and reflection. There are not enough seats, not enough copies of books or journals and not enough staff to keep the libraries open when part-time students need them. Nor have the technological solutions of inter-library loans, electronic databases, hypertext, hypermedia and CD-ROM discs become sufficiently comprehensive, cheap or accessible.

All the signs of demoralisation are there - reference books being hidden in stacks, key articles being ripped from journals and precious single copies of essential texts disappearing. The scholarly tradition of asking students to examine rival accounts, to criticise and

explore, to discover the joys of serendipity, have largely been abandoned. Students now read less and often rely on second-hand copies of simple textbooks. Many refuse to read a whole book and demand detailed page references for assignments.

The physical plant is also woefully inadequate. Surveyors have said that hundreds of millions of pounds will need to be spent on decaying buildings in the 'old' universities; this is even more true of the former polytechnics where local authorities strapped for cash have withheld capital grants for about a decade. Most lecturer's offices, which are commonly used for teaching, were built to cost-cutting UGC specifications. As the staff-student ratio deteriorated, it has become more and more difficult to squeeze a seminar group into an office. In the ex-polytechnic sector, the situation is worse, with shared offices and flimsy partition walls being the norm. Not surprisingly, some students get fed up with squatting on the floor and begin to cut seminars. Bench space in laboratories and the provision of commonplace consumables needed for experiments are increasingly restricted. A newspaper report about one former polytechnic described endless traffic jams in the mornings, standing-room only at the canteen and all the rolls of toilet paper being finished by 1.30pm.

The former polytechnic directors did the university sector as a whole no great service by rushing like Gadarene swine to embrace university status, without first demanding of government fundamental improvements in their library and laboratories and in teaching and student accommodation. The overheads that paid for these facilities are now largely devolved to the Research Councils, where a greater number of institutions will be competing for a declining pot of money. The macho postures of the ex-polytechnic administrations – that they will compete successfully with the 'old' universities – will not get round two facts of life. Those already well-endowed with adequate infrastructure will not be fundamentally disadvantaged, while it will be thin gruel all round for the rest of the system.

## Conclusion

In my recollection of school history the medieval monasteries were depicted as islands of literacy and civilisation in a sea of barbarism. No doubt this

characterisation of medieval Europe is a gross oversimplification, but the analogy may be a useful one. It is greatly to be hoped that the ancient foundations and other established universities will see their role not only as moving further away from secretive, narrow and discriminatory entry procedures, but as bastions against the new forms of barbarism I've described. If their elitism takes this more useful form, we shall probably ultimately be as grateful to them as we were to the dogged monastic orders of old.

At the moment the universities' public relations officers have a more important role than the most reputable scholars in their institutions. The image-makers are busy designing imaginative logos, inventing pretentious names and job titles, and producing glossy brochures and prospectuses with photographs of smiling students. But if behind this facade there are crumbling buildings, disillusioned staff, materially-impooverished students and cheese-paring facilities, the students will soon sense that they have been sold a lemon. Many will not care, but the brightest and best will loudly protest. All the ingredients are there for a rerun of 1968.

Access to a degraded system will degrade, not enlighten. Access has got to be to something worth having. This may not be a message that government ministers or university administrators wish to hear, but someone has to tell them. I strongly suspect that many colleagues share my views, but are inhibited from openly saying so by institutional loyalty or the fear of appearing elitist or 'anti-polytechnic'. It is actually quite demeaning, but a sign of the times, to have to insist that I write neither from the point of view of a particular institutions' interest nor from a prejudice against the former polytechnics.

I hold simply that the quality of learning has to be protected against the Philistines from within and without the universities. I do not pretend that this is a banner that many will march behind; the crucial battles have already been lost. An unholy alliance between the right, which wanted cheap access and lower unemployment figures, and the left, which wanted access at any price, has now been firmly cemented. Those forced outside of this consensus will have to huddle together in small, dedicated groups to defend scholarship, disciplined research and the love of learning.

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This contribution was extracted from a longer article, which is available from the author.*

## GENDER, LEARNING AND THE CONFERENCE CIRCUIT

*Peggy Nightingale*

### **What discourages women in academic settings?**

There is plenty of documentation of the disproportionate amount of time given by school teachers to boys, biases in assessment, and the different values attached to girls' achievements. There is accumulating evidence that similar events occur in Higher Education [1]. However, neither teachers nor students are often able to recognise from 'inside' what is going on [2], but when they do, their testimony is powerful [3].

Less easily understood are the attempts to ask, in Evelyn Fox Keller's [4] words: 'How much of the nature of science is bound up with the idea of masculinity, and what would it mean for science if it were otherwise?' The answers are extremely complex, but when developed carefully [4,5] the argument - that patriarchal modes of thought rely on dualisms, concepts of control, and linear causality while women tend to describe phenomena in terms of complexity, interaction, and constant change - becomes extremely persuasive.

### **The UNSW Equity Project**

A few years ago we investigated first year study in several quantitative disciplines. The project proposed to try to identify areas where women were underachieving or dropping out, to try to determine what the causes were, and to work with staff teaching in those disciplines to address the problems.

Careful study of grade distributions and attrition in first-year chemistry, physics, mathematics, accounting and economics turned up practically no indications of underachievement by women in these subjects. There were a few strange results - for instance, women were more likely to pass Standard Mathematics than men, but men who passed had a better chance of gaining a high grade. The only area where women seemed to be having problems as

compared to men, even after controlling for 'ability' as indicated by state examinations at the end of high school, was in Microeconomics [6].

When we discussed these results with staff in Economics, they suggested that the problem was that many students who are not admitted to the commerce faculty enrol in Arts, take Economics and try to transfer into Commerce on the basis of their first-year results. However when we looked at the data again, it turned out to be women enrolled in Commerce (who needed some of the best high school results in the university to gain admission) who were failing in disproportionate numbers.

A questionnaire was constructed to try to determine what aspects of the subject were troubling students, what they liked and what they disliked. We hoped to get some indication of things that troubled women more than men so we could do some follow-up interviewing and eventually suggest some interventions to staff. Both men and women complained of the pace of the lectures, the constant use of graphs which were hard to interpret and poor textbooks. When we asked about class participation and whether they were willing to ask questions or enter into discussions, more women reported themselves reluctant to speak. More women also said they preferred to study alone. Neither of these results seemed to advance our thinking very much.

In the end, we offered the staff the best advice we could about pacing and structuring lectures and providing support materials and getting the most out of the small group meetings they had. We also made available some feminist interpretations of Economics syllabi and pedagogy which our literature searches had uncovered.

Possibly a longitudinal study employing extensive interviews would be more productive; participant research is another possibility which has been



attempted in the United States. Perhaps the discouragement builds slowly, like a snowball rolling down hill, and we can only trace its path by working backwards; that is to say, perhaps women in their first year are not yet discouraged or disadvantaged enough to recognise a problem which will grow in subsequent years.

## And what about conferences?

In July 1992 I attended three conferences in a row. The participants, organisers and topics were quite varied, but some occurrences were common to all three. First, males predominated as featured speakers although at all three conferences there were many women participants and some of them held high positions. Second, sexist language was common. Third, men and boys featured in the majority of illustrative examples and stories told in most presentations. Fourth, men dominated discussions and question-time. Fifth, when women presented qualitative research or experience-based analysis, they were subjected to harsh questioning and criticism which showed no attempt to comprehend their points. One leading expert on critical thinking asked, 'Surely, you do not wish to be accused of being illogical?' He insisted that logic and rationality are gender and culture-free. Sixth, many sessions were devoted to reports of attempts to categorise, define, list qualities, etc without involving the audience in any way and/or without moving these abstract discussions to any practical outcomes.

After being challenged, most male speakers who used a female pronoun or included women in an example had to call attention to 'doing it right'. This kind of cute posturing simply trivialised, patronised and denigrated every woman in the audience.

During those conferences I found myself either tuning out or dropping out of one session after another. I am conscious of many of the causes of my dissatisfaction, but I doubt that I would have been at the age of 20. I know there are many things happening at once which disadvantage women in higher education; I am increasingly frustrated at my own inability to demonstrate what they are and how they work to colleagues who express interest and commitment to improving things for women but who cannot see past the simplistic explanation: 'My best postgrad student was a woman but she quit to have a baby. That was all she really wanted.' If it was, fine, but it does not explain all the others.

## References

1. Hall, Roberta and Sandler, Berenice. 1982. *The Classroom Climate; A Chilly One For Women?* Washington, DC: Project on the Status and Education of Women, American Association of Colleges.
2. Lewis, Justus. 1986. *Sexism in the Curriculum*. Report. Melbourne, VIC: Education Unit, Royal Melbourne Institute of Technology.
3. Lewis, Magda and Simon R. 1986. 'A Discourse Not Intended for Her: Learning and Teaching within Patriarchy', *Harvard Educational Review*, 56 (4) pp457-472.
4. Keller, Evelyn Fox. 1985. *Reflections on Gender and Science*. New Haven: Yale University Press. p.3.
5. Bleier, Ruth. 1984. *Science and Gender: A Critique of Biology and Its Theories on Women*. New York: Pergamon.
6. Rothman, S. and Nightingale, Peggy. 1991. 'Gender, Race and Class Equity Issues in the University Curriculum'. In R. Ross (ed) *Research and Development in Higher Education*, vol. 13. Sydney: Higher Education Research and Development Society of Australasia, Inc. pp317-24

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## Now Available

SEDA Paper 77: Increasing Students' Independence by D Magin *et al*

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## OPEN BOOK EXAMINATIONS

*Thomas G.F. Gray*

Not many diversions are open to exam invigilators once the first flurry of activity in the exam hall is over and the stunned silence has taken hold. One of the more surreptitious pastimes is to pick up a question paper from another examiner's pile of spares and retire to a quiet corner to see what kind of questions other people ask. This is often interesting but it is usually quite difficult to appreciate what exactly is being expected of the examinee. Read by an outsider, most exam questions look like they are placing greatest demand on the student to recall knowledge. In the case of exam papers we have set, however, this is a charge we would probably want to deny. Many lecturers, especially in engineering, would argue that their questions are not memory-driven but depend on higher abilities such as analysis, problem-solving and the application of knowledge. Sparkes [1] has challenged this contention, arguing that 'the examinations academics set can often be dealt with successfully mainly by the exercise of only memory and well-practised skills - that is, by adopting a 'surface' approach to learning'.

Whatever we might claim, it seems likely that recall plays an important part in conventional exams. How many of us would care to sit a typical exam in our own subject, with only minimal preparation? We would want sometime, maybe a lot of time, to familiarise ourselves with basic knowledge in the area to be assessed. However, given access to books, notes, course material or whatever is necessary to remind us of key principles, we should be competent to address any question in our own discipline. If we couldn't do this, then there is something wrong. This is after all what we would expect to do in professional practice. An engineer who does not check facts but relies completely on memory would not be behaving professionally.

### **Definition of open book**

An examination based on this practice, of having reference information available for consultation, is classified as 'open book'. Students are permitted to use course notes, handouts or text books during the examination. This does not eliminate the need for memory, but it allows an examiner to shift the balance more towards the so-called higher mental abilities. Open book examinations have been tried by the writer in two undergraduate courses. One is a final year

class and the other is in first year (involving two other lecturers).

Apart from the open book aspect, the examination procedure is quite conventional in the sense that students are 'put to the test, alone and unaided' [2] and within a fixed time period. Although this procedure is artificial relative to real-life problem-solving, it is justified because it ensures that output in the examination is based on individual student performance and that all students face common examination conditions.

Open book exams in engineering are quite common in some quarters. Two engineering students from Strathclyde who studied for a semester at the Technische Hochschule Darmstadt found out by accident on the morning of a thermodynamics exam that they were expected to bring their own copies of the extensive printed notes. This arrangement is so normal there that special instructions are only given for exams where imported material is not allowed.

### **What reference material is permissible?**

The idea of simulating professional practice and the aim of shifting the balance away from memory work might imply that students in an open book examination should be allowed to bring in any material they wish. However there are good reasons for not doing this too readily.

First, free availability might favour students who could buy or borrow more books. This suggests only using material available to all students. Second, students might take too many references into the exam room and end up spending too much time scouring the texts for assistance, rather than trying to solve the problem using their own brains.

And there are practical considerations. Simple data sheets can be issued in the exam along with the question papers, whereas one will have to rely on students to take in material if a more extensive information base is required. Again, be wary of going too far, otherwise students may raid the University Library before an exam and end up sitting behind a shaky Tower of Babel on the exam desk. This is not fantasy. It has been reported that some students in Darmstadt bring in shopping trolleys full of books. This is tolerated by the invigilators, but perhaps the aim is to find out if the students know which references are worth taking into the exam!

To summarise, rather than a free-for-all importation of reference material, the aim is to find a point of balance where enough information is available to help the examinee produce thoughtful and realistic (in engineering terms) responses to testing questions, but not so much as to risk confusion or inequality of opportunity between candidates.

## **Implementing open book exams**

Fear of unknown outcomes is inhibiting to educational change. It is often better if change can be gradual and progressive. The present writer has introduced open book exams in stages, with pauses for thought and consolidation.

The first stage was to issue standard compilations of formulae and nomograms, special to the subject area. This at least identifies for the student what does not have to be remembered (and in a more logical way than apparently happens in an institution elsewhere, where a faculty ruling insists that students should not be required to remember formulae longer than two inches!) If the information provided is more extensive than that needed to solve the problem, this also tests ability to recognise, extract and use relevant information.

The next stage was to permit, and indeed to require students to take in their own copies of the data sheets. This was precipitated in my own case when it became irksome to issue fresh data sheets for the exam and recall them afterwards. However, a better reason for making this change was that many students had annotated their own data sheets in an interpretive way and it seemed unreasonable to rob them of their good efforts. This second stage had a number of unexpected benefits which are discussed below.

Once this step had been taken, the lack of logic in an arrangement which permitted one part of the course-note information to be imported, but banned the remainder of it, became embarrassingly obvious. As it had been beneficial to allow the importation of simple information sheets, it seemed worth taking the risk of following the same philosophy with the complete 60-page set of course notes. In theory there was a risk that enterprising students might include other bits of information in their copies, but the examination questions did not readily admit any advantage from cribbed information.

## **Benefits of open book strategy**

### *Deeper study of course notes*

The most positive outcome of the new strategy is that the course notes are now studied by a wider cross-section of students and in greater detail. Some students' notes certainly show more annotations and insertions. Apparent inconsistencies between the course notes and the recommended text are raised

more often with the lecturer. There is a higher frequency of student questions about interpretation and more revisions to notes have had to be made to meet ambiguities or to correct typographical errors which had never previously been noticed.

### *Develops important professional skills*

This discussion, as will already be evident, is written from the point of view of engineering, where professionals do not ordinarily rely heavily on memory for information. The open book approach therefore simulates more closely the way engineers work in addressing situations and solving complex problems. Engineers must be familiar with sources of knowledge and know how to use them. Unfortunately, some graduate engineers show a distressing lack of interest in how to use information sources, sometimes amounting to disdain, and it may be that we do not go far enough as teachers in promoting the skills required to retrieve information quickly and effectively. It is a constant source of surprise to find that students will claim that 'there is nothing about such-and-such' in a given set text, but they have consulted neither the contents list nor the index in coming to that conclusion.

The balance between recall and other abilities (perhaps it is wrong to call them 'higher skills') may also vary between one profession and another. The lawyers had better speak for themselves, but what experience I have had of advocates suggests that they have had to develop powerful abilities for instant recall of fine detail, often without being able to understand the technical meaning of the information.

### *Easier marking of exam scripts*

A rather unexpected outcome of open book exams is that it seems to be more straightforward to mark papers. In conventional exams, it is often difficult to follow through the marking of an answer where a student has incorrectly recalled a formula or procedure but nevertheless shows some understanding in the subsequent working out. Now the issues seem to be more clear cut. The examinee is able to check factual information (as a practising engineer would do) and tends to get this correct. If real understanding is lacking, however, this is usually more obvious in the answer. It is easier therefore for the examiner to discriminate between 'deep and superficial understanding' [1].

### *Exam anxiety*

At least some of the anxiety before and during an exam arises through fear of forgetting sometimes resulting in a mental block. In any queue of students waiting to enter an exam hall there will be several who are obviously trying to commit or re-commit facts to memory at the last moment. Having the source



of information available should reduce such problems, especially if the students have their own personalised copies.

No systematic studies have been attempted by way of comparison, as it is not practicable to run conventional exams and open book ones in parallel! General observation does not suggest that the adrenaline factor is lower in an open book exam. Conversations with students indicate that such anxiety as there is may be related to the fact that the exam is different in format and therefore not susceptible to some of the normal tricks of exam technique, such as 'question spotting' (or even, dare one say, memorising model answers). It is therefore important to build up confidence in the format by working through typical questions in the teaching periods and even by delineating beforehand the intended subject matter of each question.

Such feedback as there has been (as usual, from the better students) suggests that the final year students find open book exams testing and hard work, but fair.

## Issues and implications

### *Setting open book examination questions*

The main issue for the examiner is that the style and content of questions needs to be re-thought. Mathews [2] divides exam questions into two types - 'information-demanding' and 'information-giving' - based on 'the degree to which a question provides material on which candidates are required to work'. Questions which begin 'Write short notes on...' or 'Discuss...', provide little material or information in the question that can be used in formulating the exam answer. Moreover, despite the examiner's intention in setting this type of question, students can often provide what appear to be well thought out answers by merely reproducing rehearsed material from course-notes or books.

In contrast, in an information-giving question, information or material is given in the stem of the question which the student is required to use in structuring the answer. For example, the question might start by presenting a new (unseen) set of circumstances and ask for an analysis, deduction or application to some problem. The idea is to move students away from reproducing well-rehearsed material and towards the *use* of information in new situations.

Questions of this type are more consistent with the principle of the open book format. However, the information to be used as the basis for an exam response need not be given in the question stem when using an open book format. *All or some* of that information can be made available in the imported database.

In an open book literature exam, for example, the

question might require students to compare two poems or to provide an appreciation of a writer's style. The question stem thus contains little information. But if students can take into the exam a particular anthology or set text they wouldn't have to commit these texts to memory. Instead, they would be able to concentrate on evaluating the imported material.

Another possibility is where both the question and the imported material contain relevant information that must be used together to produce an answer. Methods of analysis and procedures could be supplied in the open book material, rather than factual information. New material might then be given in the question. The test for the student would be to apply the correct procedures appropriately to a stated problem. For example, in a recent examination, numerical and technical information on developments in dry-cell technology was given in the stem of the question and the student was asked to provide reasons for the various metals substitutions which had been made in dry-cells and to analyse the potential for recycling. The course notes taken into the exam included discussion of general issues such as the basis for analysing the potential for recycling metals.

It will be evident from the above that the labour-saving trick whereby examiners use old questions with changed numbers becomes untenable. But there may be limits to the ingenuity of the examiner in thinking up brand new questions. If this happens, the imported reference material could be more heavily constrained so that more factual knowledge is required.

### *Knowledge of the basic facts still important*

Much can be learned from observing students in an open book exam. Some are seen to turn the pages of their reference material at high frequency while others calmly home in on the required spot after due consideration of the question. The latter, understandably, are the ones who know the basic facts and the structure of the subject well and are therefore able to extract the details efficiently. Given that a two or three-hour time period is insufficient to make fullest use of textbooks and other references, such students are at a considerable advantage, as perhaps they deserve to be.

What will be apparent is that the types of questions described in the previous section tend to 'find out' students who are only good at exams because they are good at recalling information or a procedure by rote. Again, it is difficult to know if the open book format produces different results. Analysis of the final year exam results in the 'before and after open book' situations showed no differences in the average marks or the spread of results. However there is no way of knowing if the same students would have scored



high marks in both situations. Probably not.

Those students who are able to recall basic facts (or even to know where to find them) will always do better, but there is an impression that fewer students in an open book exam come to a complete halt. That is, not so many are seen to be staring blankly at the question paper and fewer walk out in despair at the earliest possible moment. The availability of information provides some incentive to stick to the task at some level and to search for an appropriate answer.

### *The need for practice*

There is still a large proportion of students who have not yet made best use of the changed format. Worse still, there are some who act on the assumption that having the notes in the exam allows them to delay study until the night before. They are then in a worse position than for a closed book exam. Again, it helps to give practice in addressing the format. One useful strategy is to set a piece of coursework which has been taken from an earlier exam paper. This allows the student to appreciate in good time how the notes are to be used and how to respond to questions.

### *Directed reading*

It would seem that the tendency for students to improve their study of course notes does not extend so well to text books or other literature, even when this is part of the 'permitted material'. The reason seems to be that text book knowledge seems to be less focused to the course and therefore less important for the exam. There is also much more of it to read. This impression has been countered by including a 'directed study' list which focuses attention on specific elements of the set text. This may seem like spoon feeding but it is perhaps better seen as a way of

clarifying to the student what the lecturer is trying to emphasise.

### **Conclusion**

Judgement on whether student learning in the course and/or performance in the exam have been made more effective by open book must be subjective at this stage. However, the writer's impression is that the approach at least encourages deeper learning at the expense of memory of facts. This is partly due to the discipline imposed on the question writer to set questions which cannot simply be answered by recall.

More scope is provided to set questions, in that the information or knowledge base which can be assumed is much larger than in a conventional exam where basic information has to be recalled. It also promotes a realistic attitude on the part of the student, in that the professional response to a request for an analysis of a situation or a problem to be solved would be to check quoted sources and not to rely on memory.

I would be interested to make contact with others using such exams and to hear their experiences. Meanwhile I gratefully acknowledge the forbearance of colleagues who join in these exercises, sometimes against their better judgement.

### **References**

1. Sparkes, J.J. (1989) 'Quality in Engineering Education' *Occasional Paper No.1, July, Engineering Professors' Conference*.
2. Mathews, J.C. (1985) *Examinations: A Commentary* George Allen & Unwin.

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## TRANSFERABLE SKILLS TEACHING IN THE HUMANITIES

Phillip Cole

The idea of transferable skills has been central in developments in teaching and learning in Higher Education, yet there has been an underlying hostility to them in the Humanities. That mistrust is understandable: in the Humanities we believe that our task is teaching, not training; and even then we do not so much teach as enable students to learn. However, I want to suggest that this hostility is misplaced.

Transferable skills are not 'domain specific' - they are skills which have a wider use than the application for which they have been learned. The question is, of course, *which skills* should students be acquiring? This is an especially difficult question for Humanities subjects, because the 'product' at the end of the degree process has no specific identity which we can use to answer it. Engineering courses produce engineers; Social Work courses produce social workers—but what do Cultural Studies or Literature courses produce?

However, the fact is that Humanities subjects, taught in even the most traditional ways, involve students in transferable skills acquisition. Transferable skills are not new to Humanities teaching in Higher Education—they have always been part of the process: even sitting at the feet of a remote genius and becoming terribly confused about Wittgenstein's *Tractatus Logico-Philosophicus* involves the acquisition of transferable skills which will be useful in 'real' life.

What is new to the Humanities, however, is the claim that we should be *teaching* those skills. Why should we want to do such a thing? Because, I believe, of the recognition that these skills are of value in themselves - of such value that it is simply not good enough to leave their acquisition to chance. They must be recognised as having value alongside what we 'traditionally' teach - subject content - such that we must pay attention to them and make room for them on our courses.

If the objective of the educational process is the creation of positive autonomy, then transferable skills are especially empowering for students, whatever they choose to do with them. It therefore becomes important to identify those skills and to name them, and for students to participate in that process.

This identification and naming of skills is crucial, and is empowering in itself. In my experience, and

in the experience of careers advisers, Humanities students usually feel *disempowered* by the educational process - they feel, after they graduate, that they are not qualified to *do* anything. Writing essays on the *Tractatus Logico-Philosophicus* has not equipped them to cope with the 'real' world. The naming of skills can demonstrate to students just how skilful they are.

### 'Understanding' and 'skill'

In my subject, Philosophy, we make a distinction between 'knowing that' and 'knowing how'. 'Knowing that' is knowing the facts; 'knowing how' is having an ability or capacity. In much of our teaching our aim is to get students to know how, rather than to know that.

Knowing how is at the core of what all Humanities teachers are trying to achieve. We are not and never have been blindly trying to inculcate content.

'Knowing how' abilities can be divided into four levels of abilities:

- *general:*  
those abilities we would expect of any student taking a Higher Education degree.
- *area specific:*  
those abilities we would expect of any student taking, for example, a Humanities degree.
- *subject specific:*  
those abilities we would expect of any student taking a particular subject (for example, Philosophy or History).
- *module specific:*  
those abilities we would expect of any student taking a particular module.

### Applications

However, having established that there are such things as transferable skills in the Humanities, and that they are of value, what should we do about it?

1. *We can identify and name them*  
which means radically rewriting our course documents such that we do identify and name skills we believe our courses embody.
2. *We can communicate them to our students*  
which means radically rewriting the documentation we give to students.

3. *We can teach them*  
which means having to:
  - radically rethink our teaching and learning methods;
  - think about staff training needs;
  - rethink our course structures;
  - restructure our curriculum—especially the traditional time-table.
4. *We can ensure that students use them*  
which again means rethinking our course structures and time-tabling in order to find students the space within which to use and develop these skills.
5. *We can monitor their acquisition*  
which means having to radically rethink our coursework.
6. *We can test and assess them*  
which means having to radically rethink our assessment methods. Unseen examinations are of some use in testing understandings; but they are not so useful that they should be the only method of assessment.
7. *We can formally recognise them in our award systems*  
which means rethinking the awards system, perhaps involving certificates of competence or records of achievement.

I am not claiming that we must take all these steps if we are going to take transferable skills seriously in the Humanities. For example, many might feel it appropriate to stop at stage 5, and refuse to assess skills acquisition; others may think it sufficient to progress only to stage 2, simply alerting students to the fact that they will acquire certain skills during

their learning.

## Conclusion

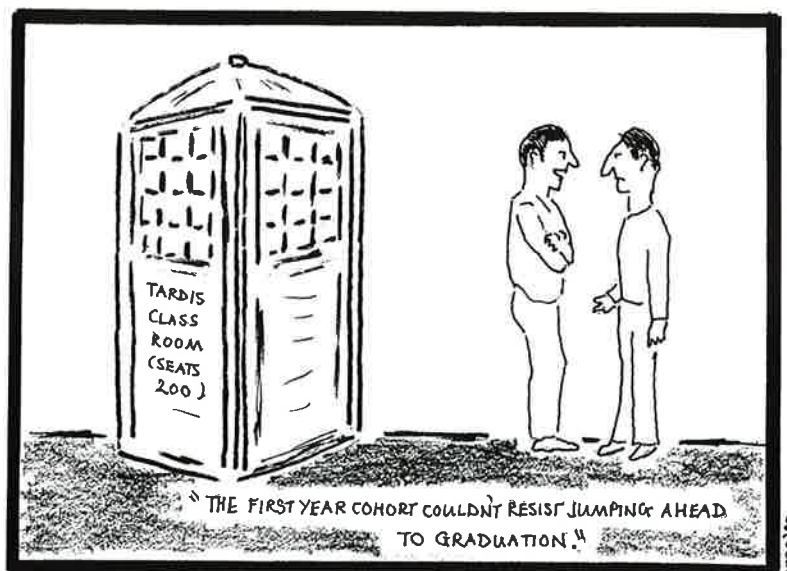
My comments about transferable skills have certain implications. First, it may be that the best approach to skills teaching is not through 'bolt on' courses, but within subject courses. This means all tutors need to become skills tutors to some extent.

Second, transferable skills in Humanities courses should be identified internally, and identified in terms of their educational value. The alternative is that they are identified in response to external pressures - for example, Government departments or industry or elsewhere.

Third, transferable skills teaching is not a method for coping with increased student numbers. If we are going to teach and monitor skills properly, increased student numbers without increased resources will make this task more difficult. The irony is that increased student/staff ratios make it more important that the student possess these skills and so can successfully engage in more student-centred work, but also make it more difficult to ensure that they do acquire those skills. It will be increasingly left to chance; and leaving educational opportunities open to chance means, of course, the continuation and reinforcement of social elitism.

Finally, you might note that I have not named any transferable skills. This is because which skills, and how many are appropriate, must be decided internally to each course or scheme. The introduction of transferable skills teaching into the Humanities need not be a threat to the idiosyncrasies and individualism of staff, students and courses, if we ourselves take the initiative and control their development.

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## BRITISH UNIVERSITIES IN THE WORLD OF BUSINESS

*Herbert C Macgregor*

British Universities are under pressure to change, to become more business-like, more accountable to the taxpayer, more 'productive'. How successfully can the university's traditional role and environment be adapted to conform to the principles of modern business and commerce?

The marketable products of a university are new knowledge and units of personal ability. We call them 'research' and 'graduates'.

The system for making new knowledge is straightforward. The workforce includes middle management (professors) and the skilled workers (lecturers). The latter tend to make their own judgements as to what to do when and generally end up doing most what they do best and very little of what they don't like. They are a heterogeneous bunch, most of them incredibly busy; but some doing as little as they can get away with. They are hard to recruit and poorly paid. The best are distinguished by their self discipline, which is fundamental to success in the circumstances of a loose employment contract. They are the core component of the workforce. Then there are the young 'professionals', the post-docs, 'the high fliers', the men and women who dedicate themselves entirely to advancing the frontiers of knowledge: clever, enterprising, curious, sociable, talkative, well integrated, hard working and young. The lowest rank on the shop floor is the trainee (the postgraduate student): outwardly not specially enterprising, curious nor communicative; yet they are tomorrow's professionals, they do a lot of excellent work and they are the only people in the western world who willingly do a complex job for a wage that barely provides for the most basic of living standards. Lastly there are the technical and support staff, the 'non-commissioned' ranks, who work from 9 to 5, provide overtime when needed, carry out all the 'routine' tasks and generally keep things functional. This is the team that generates new knowledge, except that they are not really a team. They are individuals, each standing or sitting at their own place on the factory floor, each doing his or her own thing, sometimes choosing to be screened off from the view of other workers, other times opting to work alongside their mates and share as much as seems appropriate.

The process for making new knowledge is quite

standard. The 'investigator' is trained almost to the limits of knowledge within a particular field and allowed to develop his own interests and identify those unknown areas that specially appeal. The focus is on unanswered questions, matters of controversy, unsolved problems or untested hypotheses. Arrival in a particular field of investigation (research) will be as much a result of the environment in which the person has worked as of the person's own initiative. By analogy, a worker who has been trained in the wheel section of the factory is unlikely to get involved in manufacturing headlights. Once the problem has been identified the investigator works out a plan for solving it. The plan is then assessed by peers, by analogy people who know about wheels and have worked with them for a long time, and the likelihood of solving the problem through this personalised approach is carefully assessed. If the assessment is favourable then resources (money, equipment, help) are made available and the investigator gets on with the job. The greatest likelihood is that the problem will not be solved, there will be a greater or lesser 'spin-off' of new knowledge from the work carried out and this may lead to a chain of new investigations, some of which are unrelated to the original objective. Nevertheless, new knowledge has been generated. A product has been manufactured. The investigator may have set out to construct a new kind of road wheel and ended up with a new kind of steering wheel, but so what.

The process becomes amplified if investigators are very successful. Then they become widely known and respected, photographs appear in the newspapers, they are awarded more resources, win prizes, enlist more helpers and end up managing a whole subsection of the factory and directing it towards certain specified goals. In all of this they have the unqualified blessing of management in the sense that they represent a means of securing funds that can be invested in the future of their establishment. And in the UK they are usually male, for reasons that defy explanation.

The production of graduates is a different matter. The supply of raw materials (school leavers) is inexhaustible. The demand for the product is assured. To a large extent the jobs of the workforce are

guaranteed and secure: they only get fired for criminal offences or gross immorality, and the latter is notoriously hard to define. The facilities on the shop floor are generally good and conditions of work are usually comfortable. Until very recently, competition between manufacturers (universities) was weak, each one having standards that were historically determined and unlikely to change significantly in circumstances other than a complete social revolution. Perhaps the new 'polytechnic universities', with their aggressive marketing strategies and long experience of industry and commerce, will change all that. We shall see!

Just how we manufacture graduates is determined by middle management - the professors in consultation with the lecturers and in consideration of national standards. Customer demand is not a major factor. A good quality product is a matter of pride, not of economic survival. The manner in which the product is shaped and assembled is largely dictated by the range of special expertise among the workforce. On the wheel analogy, if a manager decides that he has no-one in his workforce who can make spokes, then he settles for a product that doesn't have them. It will look different but it will work just as well, and it will still be a wheel. It's bound to fit somewhere!

One of the most interesting and remarkable parts of the manufacturing process for graduates is that members of the workforce are usually enlisted with zero training or experience, they receive no subsequent in-post training and they are seldom reprimanded or referred for remedial training if it becomes known that they are doing the job badly. They are called lecturers which signifies communication of information as a primary function. Yet the number who are skilful communicators is low. Within the framework of the entire manufacturing process this seems unimportant: there is a high level of inbuilt redundancy. The communicators repeat themselves and the information is retrievable from a range of different sources, books, videos, computers and so on; and to a large extent the product is pre-programmed to assist in its own manufacture; undergraduates tend to help themselves!

Quality control operates on a national scale with top management from one factory (external examiners) or 'firm' formally assessing the quality of another's product. If the quality is judged to be sub-standard then steps are usually taken to determine why and make improvements. Poor manufacturing quality rarely leads to dismissal of staff and the repercussions in terms of customer demand are seldom noticeable.

Management is quite extraordinary. The only experts are the accountants and finance officers who

balance the books. Fraud is almost unknown. Bureaucracy is minimal. The system is usually slow but it works. The rest of the management consists of amateurs recruited from the manufacturing workforce. Manufacturing skill begins to decline in middle age, competition from younger workers gets too fierce, and the chairs in the boardroom start to look more comfortable. They begin at the bottom of the table, absorbing all the rules and procedures and, provided they talk quietly and are reasonable, they slowly move towards the top. Their qualifications: basic intelligence, knowledge of most aspects of the manufacturing process and an amazing dedication to the system. Top management are full time employees and are paid at rates commensurate with their responsibilities, but they too are often untrained conscripts or volunteers from the factory floor.

Only the professors are different. They are usually appointed quite young. Competition for professorships is tough. The men and women who make the grade are among the best of their kind. They must excel in manufacturing skill, team leadership, decision making, accounting and personnel management. Most of them perform well in this dual manufacturing/management role until they reach their mid 50s after which they either escape to the ranks of top management (an infinitely easier job) or they go back to the shop floor and devolve their management responsibilities to junior staff who enjoy that kind of thing. A good proportion of them 'burn out' by the time they are 55. Too many of them die before they are 65. Those who are organised and fortunate enough to survive beyond retirement as vigorous and confident manufacturers rank amongst Society's most valuable and experienced people.

Our universities are, of course, a nationalised industry and there are all the usual problems. Pay is pathetic. Forward planning is impossible, and even if it's attempted, the plans never materialise unless they represent ways of reducing expenditure. Negotiation is impossible: there's nothing to bargain with. The trade unions are impotent: their membership is too dedicated, too reasonable, too comfortable and too unimportant to admit or react to adversity.

How does the system work? It works on trust. It employs people who are basically reasonable, clever, adaptable and who, for the most part, seem to enjoy what they are doing. Would it work better, give better value for money, if it were brought into line with other industrial operations? That is perhaps the most important question for 1993, as all our universities fumble self consciously with the strange rituals of modern business practice imposed upon them by an even more self conscious and misguided government - which at the same time demands a doubling of production and maintenance of standards.

The problem has its roots in the universities

understanding of their role in society. Fifty years ago the situation was clear. Universities were to educate young people, to promote and maintain scholarship amongst those who were responsible for conducting the education process, and to provide an environment within which particularly able scholars could apply their brains with the concentration and intensity needed to advance the frontiers of knowledge. It was an elitist sector of society but a respected one.

Today everything has changed. More people want educating, and teaching them is now very hard work and only rewarding to those who have the skills to do it properly. Existing knowledge is more diverse, more complex and much more abundant than it was 50 years ago, so that promoting and maintaining scholarship is, like teaching, a demanding and potentially overwhelming process. But perhaps the greatest change of all concerns the relations between universities, government and industry. In recent years, Government has invested taxpayers' money in universities. For a time the universities enjoyed the nation's confidence and were deemed to be too respectable and trustworthy to be held accountable for the deployment of their resources. Then two things happened. Science and technology became very expensive, and industry turned to universities for help. These events were to set in motion a process of far reaching change. Universities had to be held accountable to their governments. Their business had to be inspected, their policies criticised, their methods evaluated and their expenditure justified - justified to the man in the street whose television set provides the evidence upon which he exercises judgement in

casting his vote. Universities had, overnight, become industries with shareholders. At the same time their relations with real industry were expanding. The private sector was less willing to commit its own capital and manpower to advanced research and development programmes, so they turned to universities for help. Universities were quick to respond. This was a new and lucrative dimension for the impecunious but enterprising academic who was tired of teaching badly and having to account for every penny spent on a favourite research programme. So universities and industry became dependent upon one another. Education and the promotion of scholarship had to be replaced by training, contract and consultancy. Research was expensive and so had to be accurately targeted. Finance was foremost in the minds of management. Management learned from its new-found industrial partners and converted the laboratory, the library and the lecture theatre into factory workshops occupied by employees and manufacturing materials.

It can be argued that the change was inevitable and is wholly in keeping with the times, but it is far from certain that it has been effective. The old principles remain unshaken. Universities are there to produce new knowledge and new units of personal ability and to research and develop new and better ways of carrying out both these production processes. These are very special roles that require, above all, the intensive application, exploitation and development of human brains, and a brain can function at the top limit of its capability only in a rather special and highly personalised environment.

*Herbert Macgregor is a professor within the Zoology Department at the University of Leicester.*



## Successful Instructional Diagrams

*Ric Lowe*

1993, Kogan Page. ISBN 07494 07115 (pbk) £12.95

Ric Lowe is to be congratulated for drawing together a wealth of sound advice and suggestions that will sensitise the designers of teaching and training material to the incorporation of successful instructional diagrams. The numerous check-lists that are provided will be useful to many of us as we try to implement his advice.

Ric's care in ensuring the potential designer considers the audience for whom the diagram is intended, specifies the objectives the diagram is to achieve, develops the diagram(s) through draft stages, submits them to field trials and finally evaluates their effectiveness, is to be commended.

The book adopts a relaxed, pleasant style and tone without the convoluted phrases that many instructional designers use. It doesn't bombard the reader with research evidence, takes a very pragmatic stance and tries to incorporate the advice it advocates into the diagrams it includes. Overall I enjoyed the book even though some of the early chapters seemed rather slow.

There are a number of aspects which detract from the book - at least one of which, I suspect, is not Ric Lowe's responsibility. Whilst the diagrams are excellent, the layout of the text is awful. At times there are so many words crammed onto a line there wasn't space between the words! It really does make it difficult to read. Ric Lowe does carry an example through the book which serves to illustrate many of the points he makes; it is generally successful. However, I was expecting more diagrams, more illustrations of the many valid points he was making. Indeed, on the few occasions when different types of diagrams were presented they added greatly to the point(s) being made. Of course this would have increased the size of the book, and its cost, but it would have been worth it.

**Fred Lockwood**  
The Open University

## Improving Your Students' Learning: Reflections on the Experience of Study

*Alistair Morgan*

1993, Kogan Page. ISBN 0 7494 0712 3 (pbk)  
£12.95

The press release quoted the author as follows: 'if we are to take our efforts to improve students' learning seriously, we need to take account of learning from the learners' experience.' This seems so simple; surely we all try to do this all of the time? However, reading this valuable book is a sure way of reminding

ourselves how much we may have forgotten about what it felt like to be a learner.

This doesn't try to lay down do's and don'ts for teaching and learning. It is a book that helps one to think. It provides an opportunity for the critical reflection mentioned throughout, and keeps one reflecting for longer than one might have guessed, because it's so interesting it's very hard to put down. Alistair Morgan reminds us that students happen to be real people, not robots in 'auto-learn' mode. Despite some intimidating subheadings (such as 'vocational extrinsic motivation') the abundant quotes from students make fascinating reading. There's also a marvellous account of what Australian trams can tell us about learning in everyday contexts.

**Phil Race**  
University of Glamorgan

## Action Learning: A Practitioner's Guide.

*Ian McGill and Liz Beaty*

1992, Kogan Page, ISBN 0749405805, £18.95

I share the values which underlie the practice of 'action learning' and which this guide seeks to foster: that genuine learning comes from reflection on experience; that it ought to lead to change in the learner and the world - that there should be a continuous loop - action followed by reflection, followed by action...; that such learning is an individual matter but that it is best accomplished in collaboration with others in face-to-face groups, through processes which are non-competitive, empathic, and which involve the use and development of inter-personal skills - listening, challenging, facilitating; that creativity is released when there are firm structures, agreed contracts and boundaries.

I agree that modern 'flat' management structures also require the skills developed in action learning 'sets'. It is indeed the case that inter-personal skills are underdeveloped by - and in - Higher Education, while being valued by employers and society at large.

This book doesn't attempt to convey the actual experience of action learning through vivid description. At times it is repetitive (p.124 repeats verbatim parts of p.79); it could usefully have been shorter (and thus cheaper). But even if the book were more 'literary', it would still not persuade the sceptics. That will continue to be done by individuals speaking from their own experience. What books like this do is to give them added legitimacy and authority.

**Colin Evans**  
University of Wales.

## **Classroom Assessment Techniques: A Handbook for College Teachers**

*T A Angelo and K P Cross*

1993, Jossey Bass. ISBN 1555425003, £22.95

Formative assessment of student learning improves teaching (and learning too, the authors believe in the absence of consistent evidence of the impact on learning). Through setting anonymous, brief, focused classroom assessment tasks during lectures and seminars, tutors get a clearer picture of what students, as a group, know and understand. As a result teaching gets re-shaped. Students are told about their strengths and weaknesses, and targeted remedial activities take place. Learning benefits include increases in student motivation; in student satisfaction; in their involvement in learning; and in their willingness to participate in a 'learning community'. There are benefits for tutors too - positive student response, co-operation with their colleagues and intellectual excitement.

Departments also benefit. Not only do Angelo and Cross insist that the department is the right unit for curriculum development, but they suggest suitable development strategies, including, a 'Teaching Goals Inventory', which is a useful device for clarifying what a department is trying to foster amongst its students.

The core of this long (427 pages), readable and excellent book is a set of 50 different classroom assessment techniques, which are described and illustrated.

There is much about assessment which this book never tries to cover. What it does is done well. It is necessary reference material for all working on curriculum and assessment renewal in HE.

**Peter Knight**  
Lancaster University.

## **Quality Assurance for University Teaching**

*edited by Roger Ellis,*

1993, The Society for Research into Higher Education & Open University Press, 322pp.

The book suffers somewhat from the time-lag between the writing of the individual contributions and the publication of the whole. Rapid changes in policy, procedures and attitudes over the last two years serve to highlight the datedness, despite the editor's laudable attempt to ensure his contributions are as up-to-date as possible.

Prospective readers are not likely to be impressed by exhortations to obtain student feedback or acknowledge good teaching through distinguished teaching awards. For example, George Brown's

review of some of the research on effective teaching is recommended by the editor as required reading for all teachers and, indeed, if you had never thought of teaching as 'facilitating a variety of learning' then this chapter would be invaluable. I suspect, however, that the potential readership will, more likely, be irritated by the adoption of a simplistic learner dichotomy (knowledge-seeker versus understanding-seeker).

The book is not a practical handbook for teachers wishing to introduce new initiatives into their teaching. Christine and Eric Saunders' contribution promisingly entitled 'Expert Teachers' Perceptions of University Teaching: The Identification of Teaching Skills' is frustrating because it does not identify these skills, instead it provides an account of a research project. Similarly, Jennifer Bore's account of how to draw out 'teaching standards' from quality circles only provides clues to action in the Appendix, which outlines purposes, aims, structure, process and outcomes of lectures.

Nor does this book really provide much in the way of practical guidance for administrators seeking ways to develop or enhance quality assurance procedures, even though John Dallat and Gordon Rae deplore the lack of training for university teachers, Ann Tate argues that the Enterprise Initiative has had a beneficial impact on teaching and learning, and Sarnne Magennis suggests that a fair, developmental appraisal scheme will improve teaching. The major exceptions are Roger Ellis' informative account of the implementation of BS5750 and Lewis Elton's Authoritative Model for teaching quality assurance.

The book is intended to stimulate thought and action in the 'vital area' of quality assurance. It will undoubtedly provoke thought but it might have been better had it more easily facilitated action.

**Lee Harvey**  
Quality in Higher Education  
University of Central England in Birmingham

**Please send books for review to:**

**Peter Knight,  
Educational Research,  
Lancaster University,  
Lancaster LA1 4YL.**

## EVENTS

## November

3-5 **Fifth Annual Staff Development Conference for all Staff Developers and Training Officers in Higher Education: Supporting Change in the Enlarged HE Sector - Implications for Training and Development.** Warwick. *Andrea Buxton, CVCP Universities Staff Development Unit, Level Six, University House, Sheffield S10 2TN; tel: 0742 824211; fax: 0742 728705; email: cvcp.usdu@sheffield.ac.uk. Fee: £295 incl.*

5-8 **Third International Seminar on Student Wellbeing and Development : Putting the Student at the Centre.** University of Twente, Netherlands. *Student Wellbeing Seminar, H & E Associates Ltd., 18 St Johns Close Saffron Walden CV11 4AR; Tel & Fax: 0799 527853. Fees: £475 (full); £410 (Early Bird (before 31 July)/SRHE members/students.*

29 **Conference on Quality and Europe.** London. *The Quality Support Centre, The Open University, 344-345 Grays Inn Road, London WC1X 8BP; Tel: 071 278 4411; Fax: 071 837 0290. Fee: £120.*

29-30 **Research and Teaching in Higher Education.** Dyffreyn Gardens Conference Centre, Cardiff. *Contact: Jill Brookes, Gala House, 3 Raglan Road, Edgbaston, Birmingham, B5 7RA; Tel: 021 446 6166.*

## December

7-8 **Strategies for Diversifying Assessment.** Oxford University. *The Oxford Centre for Staff Development, Oxford Brookes University, Gipsy Lane, Headington, Oxford OX3 0BP. tel: 0865 750918; fax: 0865 744437. Fee: £248 (res)/£188 (non-res).*

13-14 **Developing Students Transferable Skills.** Warwick University. *See Oxford Brookes entry 7-8 November. Fee: £238 (res)/£178 (non-res).*

14-16 **SHRE Conference 1993 on Governments and the Higher Education Curriculum.** University of Sussex. *Prof. Tony Becher, EDB, University of Sussex, Falmer, Brighton, BN1 9RG. Fees: Full Conf. (res) £245/SRHE Memb. £215; (non-res) £210/£180; Day rates: 14 Dec. £100/£90; 15 Dec. £90/£80; 16 Dec. £80/70.*

## April 1995

**International BP Conference on Student Tutoring.** *Contact: John C Hughes.*

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## STUDENT PRIORITIES

*Brian Jones*

How do you bridge the gap between what students think they need to learn and what staff think students need to learn? This was a question that came very forcibly to my attention as the result of a project at Thames Valley University last year. The two primary aims were:

- To analyse student's opinions of their current abilities and desired abilities in enterprise related skills and priorities for improvement.
- To identify currently available learning resources to meet enterprise related skills development.

The response to what students wanted their ability in each skill area to be was not felt worth analysis, as many students simply marked 'Excellent' for all skills. The priorities gave more useful information. These responses are set out in Table 1 from the 144 students, broken down by course. Table 2 contains the responses from 18 tutors.

'Use of Computer' is clearly seen as the most important skill, being put as first choice by 25% of the students. It was however significantly above 25% for the two Information System (IS) courses and significantly below 25% for the HND in Computer Studies. Nearly half the student responses mentioned this skill as one of the three priorities.

'Giving a Verbal Presentation' was rated as the highest priority by nearly 15% of students and mentioned as one of the three priorities by well over a third of them.

'Understand Financial and Business Systems' was a high priority amongst the Computer Studies and IS students and the third highest skill to be mentioned as a priority by about 30% of students overall.

'Knowing your own Strengths and Weaknesses' came out bottom, being mentioned only four times as a priority. Next lowest was 'Listen, Fact Find and

Organise Information' with 13 mentions and 'Work With Others in a Team' with 16 mentions.

The staff responses make interesting comparison with the students. Staff clearly rated 'Listen, Fact Find and Organise Information', along with 'Learn and Understand New Skills and Ideas' as top priorities. These were followed by 'Produce Clear and Concise Written Material' and 'Use Computers' with all the other skills scoring substantially less.

### **Learning resources availability**

A review of learning resources showed a fairly thin and patchy coverage. Resources for the areas that the student had chosen as their priorities were in general better catered for than average. Particular areas needing extra resources are:

- Listen and Fact Find.
- Problem Solving.
- Assessing Personal Strengths and Weaknesses.

### **The Way forward**

Ideally we would like to provide a good level of resources across the board for Enterprise skills. But it seems clear that education and enlightenment are required to reconcile the differing priorities of student and staff.

Do we start by addressing the skills the students see as priorities, then lead them on to the other skills? Or should study skills be the first introduction to these topics? Will first year students take notice of their tutor's assessment of what their priorities should be, or might they take more notice of employers' representatives? This is a problem other people must have come across. Will anyone with a successful strategy please get in touch with me urgently.

*Brian Jones is a Principal Lecturer at Thames Valley University. He is Co-ordinator of his School Enterprise activities and Chair of the University Transferable Skills Network. He edits a termly newsletter called Multimedia and Knowledge Based Systems. Subscription is free to all interested parties.*

# STUDENT PRIORITIES

Table 1: Results of Skills Survey

Student Topics	Total Overall 1st	Total Overall 2nd	Total Overall 3rd	Total Choice
Listen/Fact Find/Organise	5	3	5	13
Learn/Understand Skills	5	8	7	20
Verbal Presentation	21	23	11	55
Debate/Negotiate Views	8	6	5	19
Clear & Concise Material	5	13	12	30
Work in a Team	4	9	3	16
Assess Risk/Solve Problem	7	8	17	32
Manage Time Effectively	13	9	9	31
Work with Numerical Info	6	9	13	28
Financial & Business Sys	9	25	10	44
Computers	36	16	13	65
Foreign Language	10	3	13	26
Plan/Develop Career, Skill	7	7	9	23
Strengths & Weaknesses	1	1	2	4
Job Applic & Interview	7	4	15	26
<b>Total Returns</b>	<b>144</b>	<b>144</b>	<b>144</b>	<b>432</b>

Table 2: Results of Survey of Tutors' views of the Enterprise Skills Needed by Students

Staff Topics	Total Overall 1st	Total Overall 2nd	Total Overall 3rd	Total Choice
Listen/Fact Find/Organise	5	5	2	12
Learn/Understand Skills	5	3	4	12
Verbal Presentation	1	1	1	3
Debate/Negotiate Views	0	0	1	1
Clear & Concise Material	0	3	4	7
Work in a Team	0	0	1	1
Assess Risk/Solve Problem	1	0	2	3
Manage Time Effectively	0	1	1	2
Work with Numerical Info	1	1	1	3
Financial & Business Sys	0	2	0	2
Computers	4	1	1	6
Foreign Language	0	0	0	0
Plan/Develop Career, Skill	0	1	0	1
Strengths & Weaknesses	1	0	0	1
Job Applic & Interview	0	0	0	0
<b>Total Returns</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>54</b>

## STUDENT ENTERPRISE TEAMS

*Steven Wallis*



### **The Growing need**

With the expansion of access to Higher Education comes the need to develop new ways of supporting large student groups, particularly in the first year of their courses.

The pressure on staff comes from a variety of sources. There is the need for a relatively compact tutoring team to monitor the progress of individual students as well as the group as a whole. It is all too easy in a very large group (100 plus) for individuals to face problems and to lose touch with the course unknown to both staff and fellow students. As the group size approaches 200 it is likely that one student at least will be facing a *serious* problem each week of the year with the possibility that this will pass unnoticed by the Course Team.

The pressure on students is equally great. The trauma of progressing to Higher Education (which for many involves personal upheaval, moving away

from home and an established social group), has always been there. This now involves the problems of establishing new relationships within the anonymity of vast class sizes where individual problems, difficulties and anxieties may pass unnoticed. The impact on the individual student may be severe and contribute ultimately to under-achievement, withdrawal or failure.

The problem promised to come to a head this session at the University of Greenwich when numbers in the School of Computing and Information Technology reached an all time high: about 140 students entered the BSc courses and a further 180 joined the Higher National Diplomas. In anticipation of the need for new support systems the School, drawing from similar models in other Faculties of the University, established a system of 'Student Enterprise Teams' (SETs), which would provide the necessary student support mechanism.



Figure 1: Staff/SET Contact

	Week 1	2	3	4	5	6	7...
Tutor							
1	A	E	I	M	A	E	I...
2	B	F	J	N	B	F	J...
3	C	G	K	O	C	G	K...
4	D	N	L	P	D	H	L...

## The SET

Previous practice recognised three levels of student contact; the relatively economical lecture with an SSR of, say, 180:1; the tutorial/laboratory class with an SSR of about 30:1; and the pastoral care of students which is often arranged on a 1:1 basis. The SET system recognises that there are staff-student relationships that need to be more personal than that enabled by a tutorial, but that can be arranged more efficiently than the 1:1 relationship. The new level is the SET, at about 6:1, and the successful operation of the system depends as far as possible on organising pastoral care in groups, moving to individual contact only when personal circumstances demand.

To this end students are allocated to SETs during their induction period. The allocation is generally random with the exception that each SET contains either zero or more than one woman, and some account is taken of proximity of accommodation to facilitate SET meetings. In the HND course with a high proportion of mature students, an additional rule is that mature students are distributed across the groups (giving, in fact, about two in each of 30 SETs). The published rule is that SET membership may not be changed, although where real problems arise in a SET or where the SETs are clearly depleted by withdrawals, then re-grouping is sometimes unavoidable. The SETs inevitably form the building blocks for higher levels of grouping, so that tutorial groups of 30, for example, are built from clusters of five SETs.

Whatever informal week-by-week contact that may occur between the SETs and the Course Team, the key control mechanism for the SET system is the periodic formal meeting. Taking as an example a class of 96, divided into 16 SETs of six students (A-P) and with a Course Team of four tutors, a schedule of weekly meetings would take the pattern shown in figure 1.

This means that each tutor is formally responsible for a particular quarter of the class and meets all of his/her students formally over a four week cycle. In any given week one quarter of the class is monitored (for example, for attendance and course problems) giving a constant cycle of formal feedback to the Course Leader on the quality of the student experience. In fact all SET meetings are documented on standard forms which provide the basis for periodic tutor feedback.

## Student support

On a day-to-day basis the SET is the peer support mechanism in the otherwise daunting context of 150+ class sizes.

The student who has attendance problems will be quickly monitored by the SET. Where this is a symptom of a personal problem this signal can be rapidly notified to the Course Team and individual contact and counselling ensues. When a student is unavoidably absent for routine short periods of, for example, illness, the SET members can cover for this absence by the collection of course notes, courseworks, handouts and other information. The SET also provides the opportunity to share resources both physical and personal: the cost of text books can be spread by students contributing to SET, rather than personal copies of books for example; and the SET can benefit collectively from the sharing of the variety of personal strengths of its members. Some may have a strong background in particular subjects (for example, mathematics and programming) and can disseminate that knowledge to the benefit of SET members, or some may have personal skills (organisational, communications) that complement those of others in the SET. Collectively the SET naturally forms the basis for group project work.

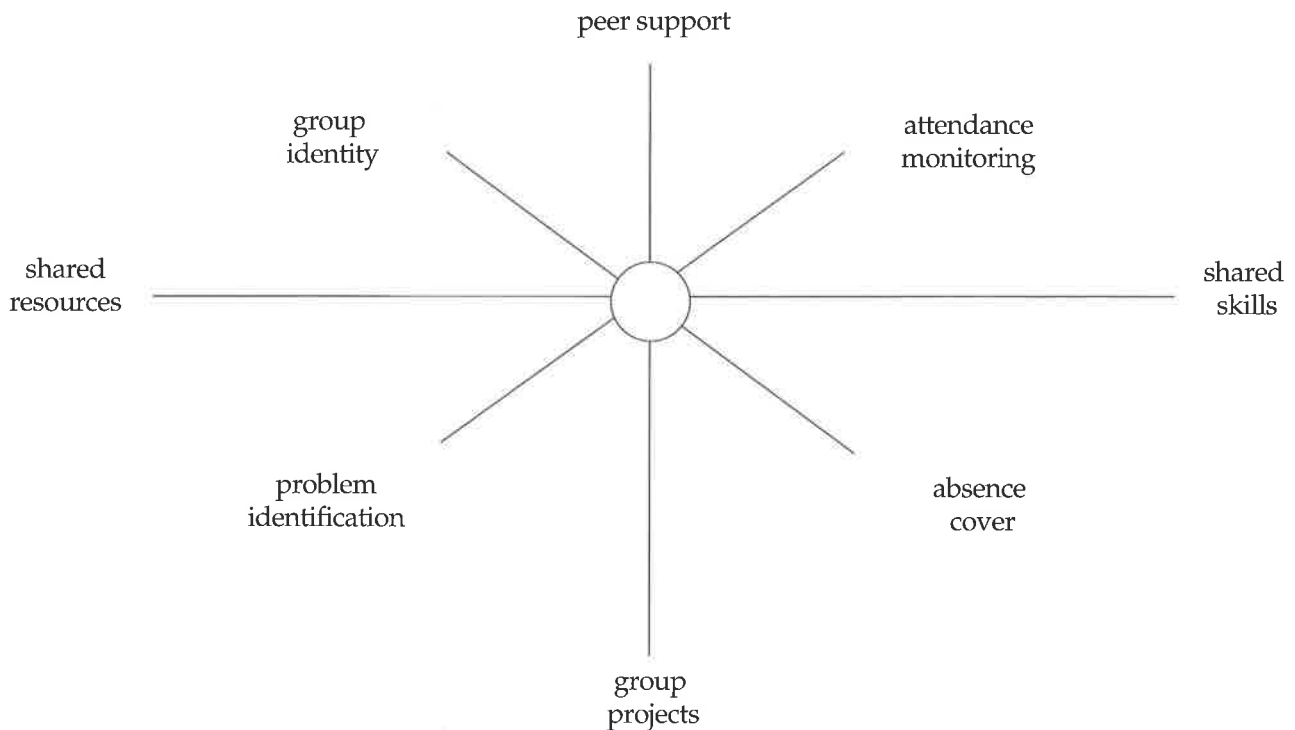


Figure 2: Student Support

## The future

The SET system has been enthusiastically received by both the Course Team and the students, and has brought about a transformation in the effectiveness of student support. The teams have, though, identified a number of factors to improve the system for future intakes:

- pay rather more attention to SET membership to avoid academically weak groupings,
- avoid SETs which are predominantly all mature or younger students,
- suggest, for example, SETs comprising 2 'A' level, 2 BTEC and 2 mature members: students feel this is more appropriate than geographical considerations,
- set a very early piece of group work in order to consolidate the SETs as soon as possible in the first term,
- late enrolments have proven to be the most likely to withdraw and should, therefore, be grouped together to avoid depletion of other SETs,
- ensure that a room is made available for tutor/SET interaction in a relaxed atmosphere.

The overall feeling is that the SET system has been extremely successful for about 80% of the student intake, and has yielded instant feedback on attendance and other problems. Late enrollers have benefited from the easy friendship provided by the SET and students with a weakness, (particularly Maths or English) have received support from their peers.

The final verdict rests with the students - they are asking for the system to be carried forward to their second year of the course!

*Steven Wallis is Associate Head of the School of Computing and Information Technology at the University of Greenwich and is responsible for developments in the School.*

# NETWORKING ACROSS EUROPE

*Sheila McCallum and Sue Wall*

## **What is networking?**

By networking we essentially mean the development of personal contacts to explore ways in which teaching and learning are achieved in other countries. Networking investigates institutional practices, exchanges ideas and information on current teaching methods, as well as updates international variations in our subject discipline. It also establishes strong links for educational exchanges.

To operate exchange programmes (for staff and students) facilitating all aspects of operating in another country we *must* know our opposite numbers in partner institutions by more than just a name. We must know them well enough to have home telephone numbers, to have developed a shared sense of trust and commitment, a joint willingness to go beyond the merely necessary to doing everything required for a successful programme.

## **Institutional demands**

All institutions need to Europeanise or internationalise courses - either by making opportunities for staff and student exchanges within such programmes as Erasmus and Tempus, or by developing this aspect of a particular curriculum, course delivery or research.

Networks are ideal for finding contacts, either for your professional advancement or to meet institutional demands. You start from a shared interest in a particular subject, and this often leads to offers of exchanging information, ranging from explanations of specialised vocabulary to foreign journals. From these subject-interest-led discussions real friendships develop, so that when you travel you are accommodated in a home, not a hotel, and you begin to experience different cultures at first-hand, not as a tourist.

## **How to network**

The simple and proven rule is that you must put immeasurable amounts of invisible and informal time and effort into achieving the visible and formal successes of an effective network. Chance alone will not move things forward, and at first the rewards may not appear to justify the effort.

We both used a specialist organisation as our starting point. A number of them exist and your institution may already have membership. This means

that you avoid all the administrative side of setting up first meetings - venue, hotel accommodation, and checking attendances. If some other organisation organises the event, you can concentrate on your preparation. Find out in advance who the other delegates will be: do some background reading on the country/ies involved.

You could also approach existing partners from your own or other departments, professional associations, town-twinning officers, academic year books, the British Council, or foreign embassies.

Decide what you want from this first contact. Is it student exchanges? Is it an invitation on which to base an application for funding from the Erasmus Bureau or the British Council? Is it a collaborator to help you with an aspect of personal research? If you have a clear aim this at least gives you the first question to ask. Almost inevitably the first person you do ask will not have the information you require - but you have broken the ice, begun talking, and making contacts.

You need to develop some basic intercultural communication skills. Advice and assistance may be available from the languages department or via specialist short courses (provided internally or externally). Network advisers or peer support groups may also assist. The international marketing and international business sections of your library should provide informative texts.

Do pay attention to the written, spoken and silent impressions you make. Carry clearly printed business cards with your telephone and fax numbers with international dialling codes. Confirm your conversations in writing and always send typed letters. Handwriting styles vary as widely as their interpretation.

How skilled a linguist are you? Often people can understand conversations or written materials in a foreign language, but cannot easily speak it. The solution may be for each of you to speak your own language, clarifying points as you go along. Such two-language conversations can be highly effective. You can use faxes to warn someone that a telephone call is coming through. Then you or your contact can have an interpreter nearby.

Body language is also a minefield of misrepresentation - don't waste time agonising over whether to shake hands or kiss the French delegate. It is always better to be yourself, at ease and natural,



# NETWORKING

rather than making insecure efforts to practice mannerisms you are not familiar with.

Also, remember to develop a tolerance of cultural distinctions such as different meal times and socialising patterns, as well as knowledge of term dates in other lands.

## The Way forward

It is crucial that certain 'rules of engagement' are accepted.

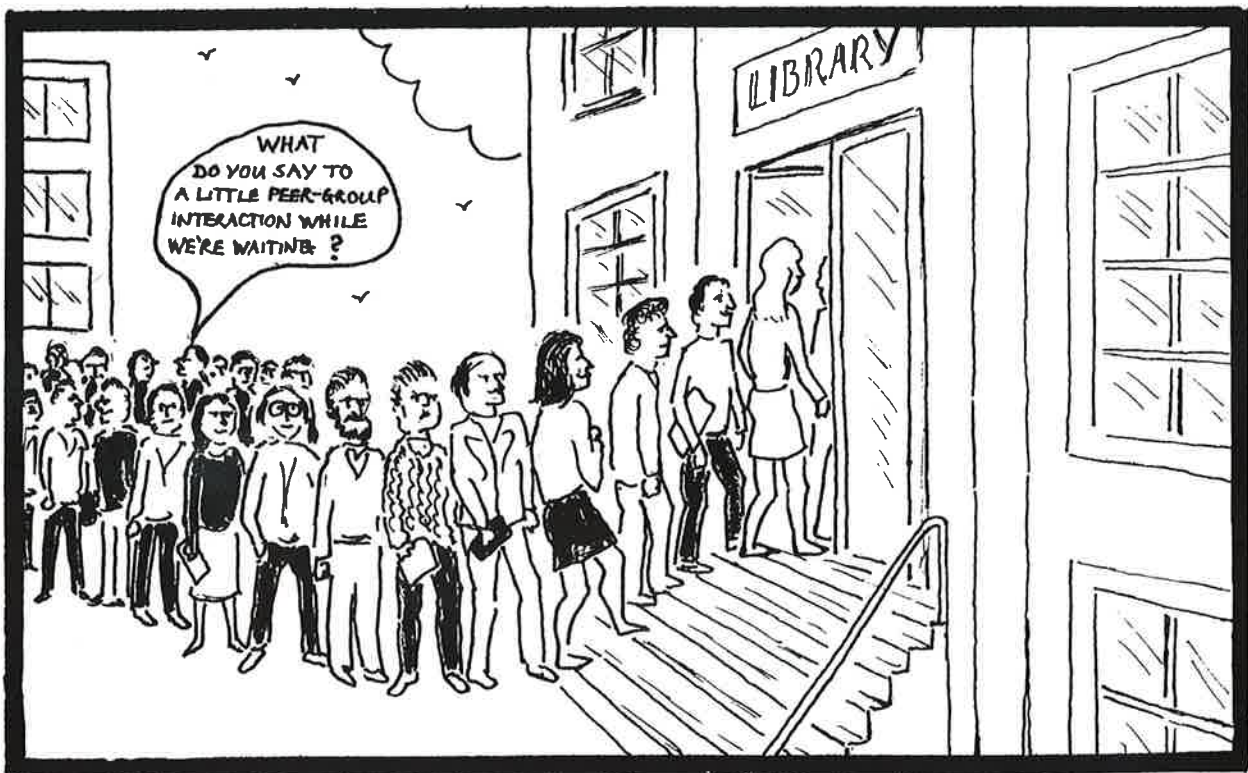
- Professional respect and trust, building credibility through the understanding that each member will be open with information - but will also respect intellectual property - is fundamental.
- A network is essentially supportive, not competitive. Seconding institutions must be sensitive to this.
- Networks aim to give delegates ideas to take back to their home institutions—so all delegates should be prepared to discuss ideas rather than steal them.

- Although not competitive, networks are selective. Funding bids and joint curricular development require members who run compatible courses in a compatible manner.
- Selection does not equal exclusion - a network can usefully have active participants in one project, who are observers in another.
- Efficient, accurate dissemination of information through the network is essential. This takes time. Individual network members must assume personal responsibility for tasks, and then carry them out.

## Lasting benefits

Networks assist course and curriculum development, staff development, staff/student exchanges, planning credit transfer schemes and joint recognition of awards. The contacts gained by networking will ease your way through the new demands made by the internationalisation of Higher Education.

*Sheila McCallum and Sue Wall are in the Business School, Carlisle Campus of the University of Northumbria at Newcastle.*



# THE NATURE OF MENTORING

*Ralph Tuck*

Assessment of our own performance [1] involves facing our own inadequacies, frustrations, ambitions, inhibitions and motives. We often prefer to ignore some or all of these semi-hidden realities. As a result we can easily avoid making a constructive reconciliation between 'past hurts', present obligations and future possibilities/ambitions. It is, however, essential that we do achieve a realistic reconciliation, however temporarily. If not, we cannot sustain the strain of two roles: performer and assessor. These are demanding and uncomfortable at best—hence, the crucial role of the mentor as one who encourages us to face ourselves, but who also supports us in our disappointments (or otherwise). I am especially interested in mentoring as helping learners who are engaged in work-based experience after having studied at college for a few years.

The mentor has several functions in helping learners to reflect on such experiences as they are acquired:

- as an enabler of the self-assessment process
- as a 'mirror' to the learners' own ambitions and understandings
- as a provider of 'unconditional positive regard' [2]

Teachers and carers in the community concerned with vulnerable individuals (or those at risk during a time of change) will appreciate the value and necessity of this totally supportive function of the mentor. The same goes for the universities and colleges: all of our students are going through some kind of transition.

Without a trusted but informed and powerful 'supporter' among the academic staff, learners are unlikely to escape from their obedience to the requirements and judgements of those in authority above them. Students have thereby learned that by 'carrying out orders' they have been rewarded if only by academic success. Often they expect this to bring them a valuable reward - a good degree leading to a well paid job after graduation. If this means 'jumping through academic hoops' then, usually, they are more than happy to do so!

Mentoring breaks from this tradition. Mentors are:

- entering into a defined relationship with the learners (this transcends the rather ill-defined role of 'personal tutor')

- also admitting limitations to their own capacity to be the 'experts' in this 20th century of massive technological changes and information explosions!
- providing the security which enables the learners to examine their own development and experiences objectively.

So much for the role. But what qualities are required of mentors? Intending mentors will need to be:

- patient listeners
- attentive but detached and resisting any reflex action to judge overtly or condemn anything said or done by the learner. Instead, they will be praising wherever possible and/or 'returning' any problem back to the learners to be reconsidered from other 'angles'. Always the mentor's aim is to enable the learners to understand and come to terms with their own personal realities and potential
- aware of the difference between mentoring and counselling. He/she must be prepared to look for experienced professional counselling help if the learners' problems become very serious and thus threaten to cause the mentors distress [2]
- understanding of how the self-assessment process (including documentation) functions
- skilled in challenging without insult
- willing to believe that the learners' individual interpretation of future developments may possibly be valid. [3]

Is the above difficult? Impossible for some? Yet everybody surely acts as a 'listening board' or a 'sympathetic ear' in other life situations? For example, informally with friends at a pub or a club, with relatives at home or with colleagues in an office or a staff room. The context and the defined role make the difference. Tutors' habits of passing judgements over a lifetime in the academic setting may be very difficult for some academics to give up.

Tutors will need preparation for mentoring. Below is an outline of a short two-day training course for both would-be mentors and their clients:

## Sessions

1. Definitions of mentoring, reflecting by means of a

# MENTORING

diary.

2. Curriculum implications.
3. Skills of mentoring.
4. Mentor role-plays.
5. Joint sessions with learners engaged in work-based experience.
6. Joint sessions with company verifiers/supervisors.
7. Dealing with problems.
8. Resolving problems.
9. Development of individual action plans and formation of a mentor support group.

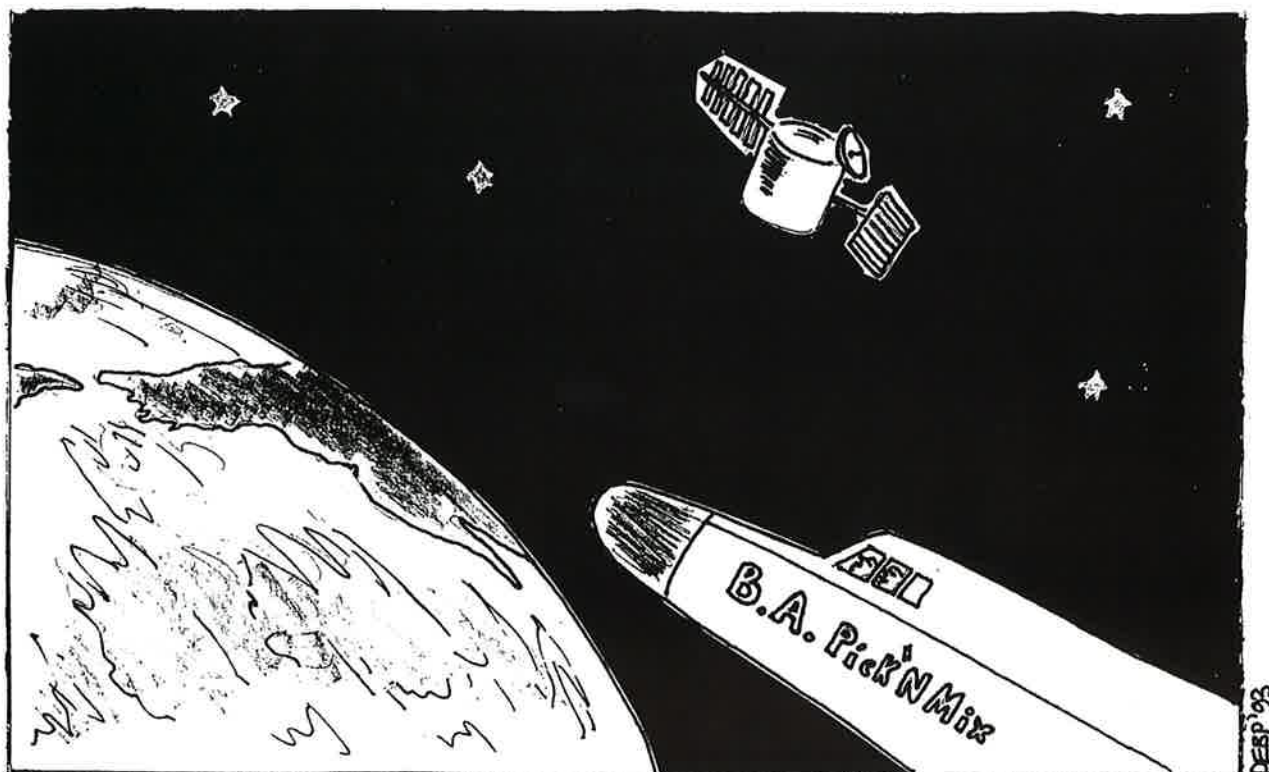
A non-judgemental supportive mentor is essential to the success of self-assessment by the learners of

their own work-based experience during Higher Education. It is a legitimate role in its own right. It is an important facilitative role which is different from tutoring but which enhances the learning experience. It complements tutoring but requires active acceptance of its different ethos.

## References

1. Habermas, J. (1972) *Knowledge and Human Interests*, London: Heinemann Education.
2. Rogers, C.R. (1967) *On Becoming a Person* London: Constable.
3. Kolb, D.A. (1982) *Experiential Learning: Experience as the Source of Learning and Development* London: Prentice Hall.

*Ralph Tuck is a Senior Lecturer in the School of Education at The University of Huddersfield as well as being an active non-stipendiary priest in the Church of England.*



WELL, WHADDYA KNOW! IT'S A FREE-FLOATING MODULE!



## HEALTH AND SAFETY IN LABORATORIES

*Malcolm Fox and Roger Latham*

*At de Montfort University we have replaced a more conventional delivery of Health and Safety training in practical chemistry by a student-centred learning approach based on work units. The emphasis is on the use of non-book media, communication skills, the completion of tasks and self-assessment. The aim is to introduce Health and Safety matters at the very beginning of a course in an integrated fashion, with the more general benefit of highlighting student-centred learning in their early days in the institution. By treating the University as the employer and the students as employees, the approach emphasises the legislative framework which currently places a duty of care upon all people at work.*

### Induction

Students are introduced to the learning package during their induction week. They are required to acknowledge and declare that they have received, read and understood the Safety Policy document. Indeed, they cannot be issued with their laboratory locker of equipment until this declaration has been completed and therefore would not be in a position to follow the practical course. Students are also introduced to the Health and Safety at Work Act (1970) in relation to the responsibilities of both employers and employees.

In particular, their attention is drawn to the 'Hazard Assessment Sheet' which accompanies all experiments carried out by undergraduate students, and which must be completed before any laboratory work is commenced. Considerable emphasis is placed on the statutory duty to cooperate by reference to the wearing of laboratory coats and safety spectacles and the use of correct waste disposal methods.

These particular learning materials include activities such as the analysis of an accident which was reported in the local press, following up the hazard information on a chemical from information in a standard database. They culminate in a multiple choice post test. A short (18 minutes), but extremely effective commercially available video film entitled 'Flashpoint', of which there are multiple copies in our University library, is also used. The students see a realistic train of events which lead up to a disastrous fire in a laboratory fume cupboard. They must then answer a number of questions about the 'Flashpoint' video and are also taken through a detailed analysis of the incident. This is followed by a class test in relation to Heinrich's Axioms.

### Good practice

Aspects of good laboratory practice are also

introduced. A part of the course on communication emphasises that sight is by far the most important sense of perception and uses examples to highlight the five major types of hazard sign, followed by a self-check. Another part is concerned with the safe handling of chemicals and introduces the Department's measures for controlling the ordering, use and disposal of chemicals.

It is suitable at this stage to introduce the University's Risk Assessment form which will be relevant to student project work. Industrial hygiene is also introduced and, in particular, the COSHH Regulations. This requires the students to watch another video, 'COSHH and The Chemist' (again multiple copies are available in the library), which is another realistically staged scenario concerning the COSHH assessment of materials in chemical research laboratories. Safe laboratory procedures are outlined with particular emphasis on personal protection, as are regulations dealing with accidents and emergencies. There are regular self-checks at key stages of all of the course units and there is a final post test.

Throughout the period of this student-centred learning approach we encourage our students to remember that safety is not addressed as a 'one off' issue which can then be placed to the side. Safety is an ongoing matter which builds on the foundations laid down in these units. Indeed, the majority of accidents happen to experienced people who become a little 'casual' in their laboratory procedures.

### Predictive value

A separate and a valuable outcome of this student-centred learning course is the early indication of an individual student's ability to operate successfully in Higher Education. If we recall the demands placed upon first year students by this course, there are three

assignment tasks and three multiple choice tests, each of 16-18 questions. Within that regime the students must also organise themselves to view two videos in the library, complete several short non-assessed activities and self-checks. The course takes place over the first three weeks of the first year, at a time when few other overall course demands have built up. In general, we are impressed by the good performance of most (90%) students doing this course.

What was unexpected was the predictive value of a student centred learning work unit programme at the very beginning of a student's course in Higher Education. There appears to be a strong correlation between properly completing these student-centred learning units within the specified timescale and subsequent performance on degree courses/HND courses. In this pilot project the units were followed by nearly 150 students from the first years of the BTEC

HND (Sciences) and Studies. Of this cohort, 25 students showed up as potential problems and ultimately 19 of this number still had academic problems at the end of the session. The Health and Safety content is probably irrelevant to this conclusion and discussions with our engineering colleagues, who use a student-centred approach in their introductory studies, support our observations. Problems in initial student-centred learning courses indicate problems overall. Clearly a problem that has to be addressed is how to deal with the individual student difficulties and motivate these students to develop the necessary study skills.

## References

'Flashpoint', Longman Training.

'COSHH And The Chemist', University of London Audio-Visual Centre.

*Professor Malcolm Fox is the Kuwait Petroleum Professor of Lubrication Technology and Dr Roger Latham is Deputy Head of the Department of Chemistry at De Montfort University, Leicester. Both authors acknowledge the support of the Enterprise Learning Initiative and the help of David Shulbrook in the preparation of the learning materials.*

## NOTES FOR CONTRIBUTORS

*A.N. Author*

The title of the article should be typed at the top of the first page of the article and the name(s) of the author(s) should then follow. If using a printer which gives type size options use at least 12 point type. Your manuscript should be double spaced: it helps us to make changes without having to bother you for 'clean copy'.

We welcome material which is clearly written and relevant to teaching and learning within Higher Education. Your contribution should be short, ideally 500-1000 words, and it should avoid discipline jargon.

All paragraphs should be separated by an extra line spacing. You can also:

- use bullet points
- with the main items listed
- in a simple and appealing form.

(If your typewriter or word processor won't produce a bullet point •, use an asterisk \* instead.) In the above example, there's an extra line space above and below the list.

Now onto the headings: please feel free to use them but keep them short. Keep a double line space between the end of the last paragraph and the next heading. *The New Academic* is devoted to shorter topical articles, so complex heading hierarchies should be avoided. Try to keep to one level of heading only.

### **This is a heading**

Put the heading in bold type or underline it, using lower case except for the capital first letter. Keep a line space between the heading and the start of the next piece of text. Sometimes our authors give references which should be numbered in brackets [1] while the full reference goes at the end of the article. Also, you might want to include a quote [2]:

*Any quotation over 25 words should be presented as a separate paragraph and indented so it clearly stands out from the main body of your narrative. Shorter quotations should be incorporated in the text, using single quotation marks ( ' ' ).*

Any tables, figures or diagrams should be on separate sheets with an indication of whereabouts in the text you would like to have them placed. For example, insert the instruction:

[table 1 about here]

We will usually reset tables, but you should provide 'camera ready copy' for diagrams etc (please contact the Editor to discuss any questions you may have). We welcome photographs and cartoons, so please send them in and again say whereabouts in the text you want them placed. Finally, on a separate sheet of paper, please say a few things about yourself and include an address for correspondence with interested readers. We do not want long autobiographies - just a couple of sentences!

**If your article has been prepared on a word processor, please send a copy of the file on disk. We can handle all Macintosh and most IBM-compatible PC word processor programs.**

## References

[1] Jones I and Davies D (1984) 'This is the title of an article' *Journal of Something or Other* 16 234-236

[2] Bevan B, Thomas L, Reed H, and Evans C (1986) *This is the title of a book* Kogan Page, London

**Please send material to:**  
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# PRODUCTIVE WRITING

*Mark Griffiths*

Writing is an activity which takes up a sizeable proportion of time in the education system. It is also an activity which for many students and their tutors is avoided unless absolutely necessary (for example an assessment deadline is approaching). Given these two assertions it is surprising how little time is spent discussing the issues concerning writing—particularly on the question of how to make writing more creative and/or productive. Students may, for instance, get advice on ‘How to write an essay’ but this is usually more concerned with structure, not on the process of writing itself. This article therefore contains some discussion points that can be used either in a tutorial setting or form part of a ‘writing workshop’. The two aims of this article are (i) to equip the reader with tips for managing the writing process and (ii) to dispel the ‘myths’ about writing.

Nodine [1] asserts there is no one proven effective method above all others for teaching students to become better writers – merely a range. It is also her contention that writing is a process that can be learned and can aid learning i.e. a skill learned through opportunities to write and from instructional feedback. In the USA, this is obviously a popular contention because the ‘writing across the curriculum’ movement is becoming more popular and has led to the introduction of writing programmes on college and university courses [2]. To understand writing it has to be realized that:

1. The act of composing written text is a complex intellectual process
2. Writing is a mode of learning as well as communication
3. People have trouble writing for a variety of reasons and that no ‘quick fixes’ will solve everybody’s problem [3].

Although there are no ‘quick fixes’ to becoming a better writer, the next section gives some general tips on how to make you or your students’ writing more productive.

## Managing writing

Studies of academic writers [2,4] show that brief, daily regimens produce more (and better) writing than does the popular practice of bingeing. Other strategies for improving writing productivity outlined by these authors include:

1. Establishing one (or a few) regular place(s) where all serious writing is done
2. Removing all temptations and distractions from the writing site (for example, magazines and TV).
3. Leaving other activities (for example, washing up and making the dinner) until after writing
4. Limiting potential interruptions (for example, putting ‘Do not disturb’ sign on the door, unplugging the telephone)
5. Finding another writer to share writing space for mutual quiet periods of work
6. Making the writing site as comfortable as possible
7. Making regular recurrent activity (for example, telephone calls, coffee making) dependent upon minimum periods of writing first
8. Writing while feeling ‘fresh’ and leaving mentally untaxing activities until later in the day
9. Planning beyond daily goals and being realistic about what can be written in the time available
10. Scheduling writing tasks into manageable units (i.e. making rough plans)
11. Completing one section of writing at a time if the writing is in sections
12. Using a word processor (if possible) to make drafting easier
13. Revising and redrafting at least twice
14. Sharing writing with a supportive, constructive colleague as people are more helpful, judgemental and critical on ‘unfinished’ drafts

However, the problem with a prescriptive list such as this is that not every suggestion will work for everyone. Some individuals know their own limitations and will devise schemes to help them write. For example, some people cannot write in silence and utilize ‘background’ music, others cannot work in pairs without talking. Other constraints may be imposed. For instance, students might have to write in binges towards the end of term when assignments have to be in while academics might have to binge during the summer vacation because it may be the only time they get to write up their research. Accepting these limitations, some (if not all) the tips provided above should be of help to some readers.

## The Myths of writing

There are also a number of writing myths. These



myths perhaps explain why many student (and their tutors) do not like writing. Many of these myths are outlined and dispelled by Boice [2,5] and include the following:

- **Myth One** Writing is inherently difficult: Like speaking, writing does not need to be perfect to be effective and satisfying although it offers a unique chance to 'see how you think' which in turn clarifies thinking.
- **Myth Two** Good writing must be original: Little, if any, of what we write is truly original (and this article is no exception!) What makes our ideas worthwhile communicating is the novel way we can present them. Fitzgerald [6] went as far as saying there is no good writing - only good re-writing.
- **Myth Three** Good writing must be perfect preferably in a single draft: In general, the more successful writers are more likely to revise manuscripts.
- **Myth Four** Good writing must be spontaneous: This is the misbelief that writing should await inspiration. In fact, the most productive and satisfying way to write is habitually, regardless of mood or inspiration. Writers who overvalue spontaneity tend to postpone writing, and if they write at all, they write in binges which they associate with fatigue.
- **Myth Five** Good writing must proceed quickly: Procrastination goes hand in hand with impatience. Those writers who often delay writing suppose that writing must proceed quickly and effortlessly. However, good writing can often proceed at a slow pace over a lengthy period of time.
- **Myth Six** Good writing is delayed until the right mood with big blocks of uninterrupted time available: Good writing can take place in any mood at any time. As mentioned above, it is better to write habitually in short periods every day rather than in binges.
- **Myth Seven** Good writers are born not made: good writing is a process that can be learned like any other behaviour.
- **Myth Eight** Good writers do not share their writing until it is finished and perfect: although some writers are independent, many writers share

their ideas and plans at an early stage and then get colleagues to read over their early drafts for comments and ideas.

Even when the myths of writing are dispelled, students (and their tutors) still have problems putting pen to paper. Insights about writing only slowly translate into actions [5]. There are countless books and chapters on how to write essays, research reports, answer exam questions etc. but few of them inspire students into writing. For most students, writing is only done out of necessity, for example, taking notes for an assignment deadline. This produces a feeling of 'having to write' rather than 'wanting to write' and it can lead to boredom and/or anxiety.

Most people view writing as a private act in which their problems are unique and embarrassing. People do not like having their work on 'display' Boice [5] suggests strategies for overcoming this including (i) criticising your own work before going 'public', (ii) sharing initial plans and ideas, and (iii) practising reviewing other people's work.

By reading this article you will not become better writers overnight. However, it has hopefully equipped readers with some tips and discussion points that may help in facilitating better writing not only amongst your students but maybe even yourselves.

## References

1. Nodine, B.F. (1990). 'Psychologists Teach Writing'. *Teaching of Psychology*, 17, 4.
2. Boice, R. (1987). 'Is Released Time an Effective Component of Faculty Development Programs?' *Research in Higher Education*, 26, pp.311-326.
3. Fulwiler, T. (1986). 'The Argument for Writing Across the Curriculum'. in A. Young & T. Fulwiler (Eds.) *Research Into Practice*, pp.21-32. Montclair, NJ: Boynton/Cook
4. Hartley, J. & Branthwaite, A. (1989). 'The Psychologist as Wordsmith: A Questionnaire Study of the Writing Strategies of Productive British Psychologists.' *Higher Education*, 18, pp.423-452
5. Boice, R. (1990). 'Faculty Resistance to Writing Intensive Courses'. *Teaching of Psychology*, 17, pp.13-17.
6. Fitzgerald, J. (1987). 'Research on Revision in Writing'. *Review of Educational Research*, 57, pp.481-506

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## DILEMMAS OF CHANGE

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The management of student learning is now challenging the ingenuity of most lecturers in Higher Education. The speed and scope of recent changes have left many uncertain in their capacity to deliver an appropriate educational experience for the 1990s. The most pertinent of these changes are:

- the growth in the numbers of students within a diminishing unit of resource
- the widening of access with more diversity amongst learners within networked or distributed universities, colleges and courses
- the emergence of tensions between traditional subject knowledge and a demand for transferable skills
- new mechanisms for quality assurance and assessment in HE
- Controlling *vs* Independence

Various strategies have been proposed to deal with this. Graham Gibbs [1], for example, has identified two tendencies that characterise Higher Education in its attempts to respond to these changes. One represents a controlling strategy. This involves delivering lectures to large groups with tightly structured programmes. Course objectives are clearly defined and course materials and assessment are designed to achieve these objectives. The second strategy encourages independence. Students are expected to become self-managing learners. Course materials are designed to enable them to work at a distance and at their own pace. Skills of groupworking and self-management are integrated into the programme so that staff direction fades as students take over the learning process. This latter strategy underpins Phil Race's provocative suggestion that:

*if we look after the learning, the teaching will look after itself—whatever the staff-student ratios. [2]*

### A case study

The need to address these issues led to a research project linked to the transformation of a number of stand alone degrees in the Arts and Humanities into a semester based, modular programme from 1990.

The structure of the Degree Scheme offers a wide variety of courses designed to address the needs of today's students who will enter a market where the ability to transfer and adapt their learning is crucial.

Over 1600 full and part-time students are able to put together an individual programme. However this opportunity of choice and flexibility is also recognised as a potential threat if students are unable to manage their routes of learning and their study patterns. Modularity's strength in diversity can also be its weakness in fragmentation. The analysis of the tensions created by modularity and 'fitness for purpose' issues led to one of the first initiatives on the Degree Scheme, the compulsory first year course, Communication and Professional Studies. This course was developed to provide students with the skills and knowledge to assist them in managing their own learning on the Degree Scheme and to prepare them for future working practices.

The 'core' skills that this course offers were chosen from the range of work-related skills being suggested by bodies such as the CBI [3]. These are: communication, both oral and written, problem-solving, planning and time-management, computer literacy awareness, interpersonal and group work. These are embedded in a number of ways throughout the course, culminating in a major research-based project and presentation.

### Recommendations

We employed a combination of questionnaires and group and individual interviews with staff and students in completing the research. The project was in three stages encompassing:

- a broad curriculum audit
- a more specific study of student responses to the compulsory, Communication and Professional Studies Level 1 course
- the production of student study materials and a staff development programme

#### 1. Recognise the mixed constituencies of staff and students

The research indicated that the richness and diversity of student experience can be best served by retaining a variety of teaching and learning experiences. A comparison of 'traditional' post A-level entrants and mature students found that whilst the former were anxious about the prospects of open or self-directed learning they felt confident about their study skills which had been legitimated by their A-level success.

# CONTROL VS INDEPENDENCE

By contrast the mature group registered concern about their study skills but could see advantages in more flexible learning approaches.

The key for deliverers will be to target and support these needs combining elements of the controlling or independence strategies as appropriate.

## 2. Develop interactive approaches

Students expressed a preference to learn in a context of practical, applied situations rather than lectures, (although there was support for active lectures, termed 'seminars' by one member of staff). It appears that whilst lectures retain an important symbolic function, especially for lecturers—the instrumental function is less clear. This raises important fitness for purpose issues.

As a result of the project a number of supported self-study packages were produced. These have been generally welcomed by students but they still feel the need for more support if there are further moves towards more autonomous, less lecture based forms of learning. In particular, students wanted to retain regular contact with staff and to develop their own self-management skills.

## 3. Keep core skills ... but how?

Certain 'key' competences, required by all learners, were identified by staff and students irrespective of subject area. These included presentation and research skills as well as information technology and word processing expertise. The more complex issue is to ensure their delivery and progression in a modular degree which encourages choice and diversity.

There are tensions here between 'separatist' (identifiable course) and 'integrationist' (embedded through subject) approaches but a more pervasive

issue is how to track and accredit core skills development throughout a large undergraduate modular programme.

## 4. Widening the staff agenda

If students need support to manage independent learning so too do staff. The project highlighted the following needs for staff development:

- managing learning and teaching in teams
- dialogue across subject areas about the role and content of core skills
- strategies for developing more interactive self-directed learning initiatives
- opportunities to review assessment practices in the light of changing patterns and relations of learning.

## 5. More research needed

This project has now come to an end, but we see the outcomes as formative rather than summative in the creation of new learning strategies. To ensure that the momentum of this initiative is not lost, the School of Arts and Humanities has now formed a teaching and learning group to maintain an ongoing programme of relevant research. These issues will not go away. In fact, available evidence suggests that they will come more to the fore under the aegis of the new quality assurance imperatives currently being introduced across higher education.

## References

1. Gibbs, G. (1992). *Problems and Course Design Strategies*, P.C.F.C. Project, Oxonian Rowley Press.
2. Race, P. (1992). *The New Academic*, 2(1), pp1-5.
3. C.B.I. (1992). *Towards a Skills Revolution*.

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