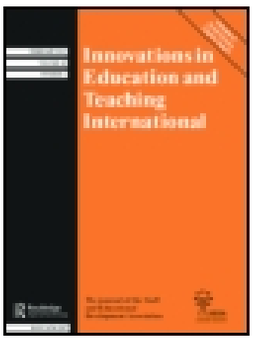

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Developing Higher Education Teaching Skills Through Peer Observation and Collaborative Reflection

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SUMMARY

This paper considers an action-based approach to the development of teaching skills in higher education through peer observation and collaborative reflection. The central features of a three-phase process model are described and explored and the preliminary results of a pilot scheme are reported. From this investigation it is suggested that models of development that are firmly based in existing practice can directly benefit the individual teacher, can enhance colleagiality and can have a significant effect on changing departmental culture. It is acknowledged that insights into personal practice are gained both from the act of observing as well as from being observed.

INTRODUCTION

Through the observation of teaching and joint reflection with colleagues, teaching skills can be refined and developed in supportive collaboration. The person observed benefits from feedback which is focused and context specific while the observer refines an ability to define and identify attributes that promote a quality experience for the students (Wankat and Oreovicz, 1993, p 338). The strategy has the further advantage of developing interpersonal skills and the ability to benefit from a collegiate approach to professional practice. Additionally, it provides staff with the opportunity to 'acclimatize' themselves to observation by external assessors such as members of Teaching Quality Assessment teams (Sharp, 1995; HEFCE, 1996).

What university teachers know about teaching has often been learnt from an informal approach gained through their experience as students (McKeachie, 1997), through trial and error as teaching assistants and from contact with colleagues (Dunkin, 1995). Often discussions with discipline peers are centred on the content of teaching rather than pedagogical knowledge and structural procedures. These exchanges have only a loose contextual focus and are often easily diverted to subject specific issues of mutual interest. Boice (1991) concludes that new teachers often equate good teaching with good content and the statistical analysis of Gow and Kember (1993) resulting from surveys of higher education teachers identifies 'knowledge transmission' as one of two orientations to teaching. Gibbs (1995a, p 15) suggests that 'lecturers are usually happier to accept that there are problems with courses rather than problems with themselves and are happier to work at the level of changing strategy and method rather than changing themselves'.

The framework suggested here is intended to help higher education teachers to cope with the widening needs of the contemporary student and to facilitate 'a change of emphasis from that predominantly on subject knowledge or curriculum content to an equal emphasis on the process skills involved in supporting learning' (Bocock, 1994, p 120).

CONTEXT

Interacting directly with classroom practice is a powerful way of focusing attention on the process of teaching (Beaty and McGill, 1995; Pennington, 1994). The resulting analysis is based on specific incidents

which have been shared, but from importantly different perspectives. The observer might have the responsibility for highlighting the presence and significance of certain behaviour while the observed is uniquely in a position to indicate how typical it is of their general practice.

The relationship between observed and observer can be kept positive and productive by this strong emphasis on the context-specific nature of subsequent reflection. However, direct intervention in the practice of teaching will always rely on mutual respect and a degree of tact. Millis (1992) found a distinct nervousness among teachers who were to be observed and Gibbs (1995b) has noted how academics show a marked reluctance to the peer review of their teaching even though this is fully accepted for research.

Observation of practice is a necessary feature of initial professional development in many fields eg, health professions, social services, etc, and is an essential component of the development of school teachers (Jones, 1993; Martin, 1996). However, although such approaches to the development of professional practice are similar they are fundamentally different from those discussed here, which have the characteristics of what Wilkerson (1988) differentiates as 'collaborative observation'. A peer-reflection approach assumes that each party may make an equal contribution and that the process does not lead to a judgmental report. Working with a partner should enable a free exchange of views based on the shared understanding of a teaching intention made real through the actual experience. Through analysing and discussing the performance of others it is possible to attain otherwise largely inaccessible levels of self awareness.

Solomonides and Swannell (1996) describe an approach to peer-observation in the Engineering Department of Nottingham Trent University where a small group of experienced tutors act in pairs to observe colleagues. Their aim is to provide 'feedback to individual lecturers on style, content and appropriateness of their teaching' (p 107). While the approach has many advantages, not least the identification of significant trends within the department, it could be argued that colleagues are missing the very real self-learning which comes from the act of observing others.

For a collaborative approach to be successful there needs to be a clearly defined process and agreed behavioural norms. The process will be usefully informed by pedagogical knowledge and prior experience, but as the intention is to expose significant issues within a shared event which is already established (lecturers are employed to teach whether or not they are trained!), the detailed exploration of individual or discipline specific values and beliefs need not be a pre-requisite. This action model should ensure that such fundamental considerations arise as a natural consequence of the observation and can, therefore, be considered within the context of a shared experience.

This approach is in many ways consistent with the learning models suggested by Schön (1983) and Kolb (1984), and presents a situation where pedagogical knowledge is sought out and becomes relevant because of its usefulness to discipline-specific action. To some educationalists this may not seem to be an ideal model but it is one that is pragmatic, being based on ongoing practice, and as such may have an enhanced chance of success. Approaches that are based on initial courses of teaching methods have their place and in some circumstances eg, for those new to teaching and those who wish to take a detailed look at their practice, may indeed be preferable. However, they generally fail to make contact with, let alone have an impact upon, those academics whose classroom practice has evolved as coping strategies and who have priorities elsewhere.

The aims of a peer observation experience can be expressed as follows:

- To extend and enhance an understanding of personal approaches to curriculum delivery.
- To develop and refine curriculum planning skills in collaboration with a colleague.
- To enhance and extend teaching techniques and styles of presentation through collaborative practice.
- To engage in and refine interpersonal skills through the exchange of insights relating to the review of a specific teaching performance.
- To identify areas of subject understanding and teaching activity which have particular merit or are in need of further development.
- To develop personal skills of evaluation and self-appraisal.

Further, this collaborative approach can develop a range of personal and professional competencies. These might include:

- A growing ability to plan teaching/learning activities which cater for the needs of an increasingly diverse student body within the requirements of a particular discipline provision.

- A developing confidence to effectively employ a range of teaching strategies appropriate to the learning needs of this broad group.
- An ability to deliver teaching programmes which are at a level of challenge and pace appropriate to individual students, have regard for their developing understanding, and result in student work of high quality.
- An increasing capacity to enhance the learning experience of students and effectively exploit the resources of the institution eg, Information and Communication Technology, and resource-based learning.
- A growing awareness of the importance of personal reflection and peer review.
- A greater ability to collaborate actively in a shared approach to curriculum delivery and renewal.

THE PROCESS OF PEER OBSERVATION AND COLLABORATIVE REFLECTION

It is important to remember that teaching takes place within a particular milieu which is jointly created by the teacher and the students. With less than satisfactory situations McKeachie (1997) has observed a 'collusive fit between teachers who feel that it is simply their job to present the content of their discipline and students beliefs that their job is to memorize what the teacher says and repeat it back on tests' (p 72). If observations are to be useful those involved must seek to understand the two-way nature of this interaction. It is necessary to be fully aware of the group even when observing a teacher-dominated session.

If the peer-observation and collaborative reflection process is to have any real meaning it too must be conducted in such a way that proper regard is taken of the relationships of the colleagues involved. The model defined in Figure 1 can help to define and moderate these interactions through a staged process of pre-observation meeting, the observation itself and a subsequent feedback session.

The pre-observation meeting

The purpose of this meeting is to enable the observed person to brief the observer on the specific nature of the event to be shared. The observer must be clear about the teaching programme so far, the learning intentions for that particular session and the teaching strategies to be adopted. There is a viewpoint that it might be better for the observer to 'go in cold' and so experience the session in the way that the students do. However, this would only be modelling the student experience in the very first session as in all subsequent sessions the student would be bringing prior knowledge and experience which was denied the observer.

An important part of the preparation is to agree how the teaching will be recorded and when this record will be made available to the teacher. In most cases the time efficient form of recording will be note taking but the occasional use of video is to be recommended. There are various ways in which notes might be taken (see Brown *et al.* (1993) for copious examples and also HEFCE, 1996) but as the prime purpose is to compile evidence rather than offer judgements, a focused narrative approach might be preferable. This can involve writing a brief description of the activity at fixed intervals or writing full descriptions of significant points eg, the opening or a complex explanation, accompanied by jottings at other relevant points. The importance of the notes is that they should capture the essence of the process and form an accurate basis for subsequent reflection.

It may be agreed that any notes become the property of the teacher immediately after the session so that

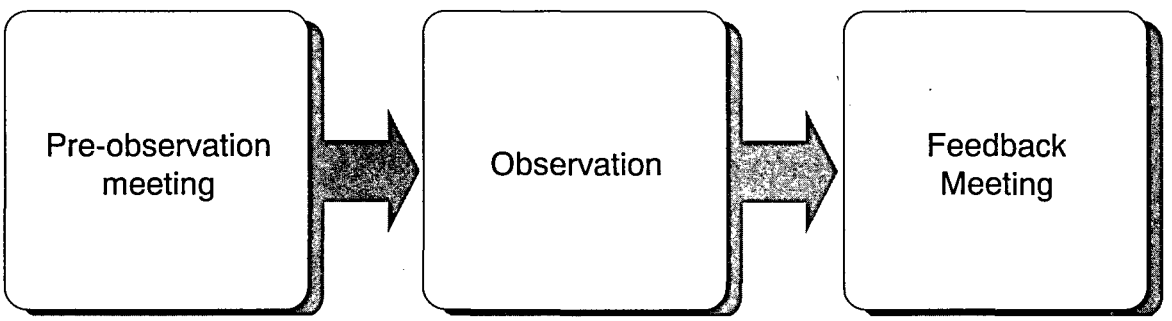

Figure 1 *Peer observation and collaborative reflection*

they might have time to think about the observations before the feedback meeting. Alternatively, if the purpose of the observation is to promote self-evaluation and reflection it may be more beneficial for the teacher to write their own brief notes for later comparison. Any concerns on ownership, confidentiality or the expressing of opinion should be thoroughly explored at this stage.

Prior consideration of the practical issues to do with the layout of the teaching room and the best place for the observer to sit can help to minimize the disruption of the event. It is also a good idea to discuss how the presence of the observer will be explained to the students in such a way that it does not adversely affect their behaviour.

The teacher of a session may wish to make their particular priority targets known to the observer in advance, eg, better use of summaries, more effective use of visual material, etc, or they may decide not to disclose this information but to probe these specific issues by careful questioning in the feedback session. Either method can prove to be effective with the latter having the additional advantage of not oversensitising peer observers to the specific issues.

The observation

The presence of the observer is bound to have an effect on a situation which is usually something of a private affair between the teacher and students. The observer should be involved in the experience without being drawn into dialogue or intellectual debate. Appropriate body language is very helpful in relaxing the teacher and the students, as a stiff inspectorial stance with a stern face does little to support normal interaction. A smile, a knowing look or an expression of appreciation will go a long way to putting a colleague at ease and so helping them to display their normal level of performance.

A systematic approach to the taking of observation notes at fixed intervals of say two or three minutes can be of particular value as it enables the teacher to later see the 'contours' of the event. At the same time it can ensure that the observer remains on task and in full contact with the session – this is not a time to catch up on paper work! To be effective the observations must be of both the teacher and the students, so dividing the page vertically can help to keep a clear record of both and to emphasize the importance of the interplay between teacher and student as mentioned earlier.

Beware the 'expert' in us all: It is a well known psychological phenomena that when a person is observed performing a familiar task, the observer can be inclined to take on the role of an expert irrespective of their actual level of competence (eg, consider the behaviour of a soccer crowd towards the referee!). Clearly this is to be guarded against in a collaborative situation if both observer and observed are to develop from access to useful self-knowledge and benefit professionally from the experience. As Gibbs (1995b, p 154) has suggested:

> Peer review is most useful as a formative process: recognising strengths and suggesting possible areas for attention or alternative approaches, rather than simply judging.

The feedback meeting

If peer observation and reflection are to be productive, discussion must be honest and constructive. The feedback meeting should be held soon after the session so that its nuances are still fresh in the mind. Both parties should take time to refresh their memories of the observed session, read their notes and prepare the significant issues to be explored.

This meeting is a very important part of the process and should take place in comfortable surroundings protected from interruption and distraction. It may begin by the participants reminding themselves of the learning intentions of the observed session and for collaborative reflection to start with the teacher reviewing the things which went as planned or particularly well. Take time to acknowledge and praise areas of evident competence and try to develop an understanding of why a particular situation was perceived to have produced a valuable learning experience.

Discussion of features which were less successful might be more appropriately introduced in the first instance by the teacher. The observer should be prepared to offer a particular perspective and to engage in speculation on how things might be improved but always recognizing that there is likely to be more than one desirable alternative. It is important for the observer to be an effective listener at this point and not to try to impose their interpretation of events. Reflective questions such as: Why do you think that happened? What would you do next time? How did you feel at this point? or What led you to that view?, will be of particular value. Discussions on situations

which were observed to display significant problems should not be considered to be concluded until alternative strategies have been explored and appropriate but modest development targets have been considered.

The feedback session should also embrace some evaluation of the role and behaviour of the observer: How much did the presence of the observer affect the situation? Did the activities of the observer have an affect on the behaviour of the students? In what way was the teaching/learning influenced by the observation? How could this be improved next time?

This whole process is cyclical in nature (see Figure 2) and the benefits are proportional to the number of purposeful journeys taken around the loop. Repetition of the process will expose more experience for analysis and highlight areas which need to be informed by pedagogical knowledge, while at the same time refining the sophistication of the collaboration. To be effective in developmental terms and to catch the intellectual attention of the participants, the process must be continually enriched by new ideas and strategies (Beaty and McGill, 1995).

THE PILOT SCHEME

The peer observation scheme in the Department of Chemical Engineering was initiated to provide a mechanism for academic staff to receive feedback on their teaching in order to further improve the quality of teaching and learning, and as a preparation for a forthcoming Teaching Quality Assessment visit. As the emphasis was on enabling teachers to connect with their own teaching practices rather than become expert teachers (Elton and Partington, 1993), there was seen to be little need for extensive pedagogical preparation. Formal peer observation of teaching had not been conducted prior to this pilot scheme although opportunities had existed for staff to exchange views on aspects of their teaching performance through:

- observation as part of the induction programme for new academics;
- team teaching in example classes, laboratories and drawing classes;
- Teaching on Continuing Education courses sponsored by the Institution of Chemical Engineers, where the quality of teaching is closely controlled by both peer observation and feedback questionnaires.

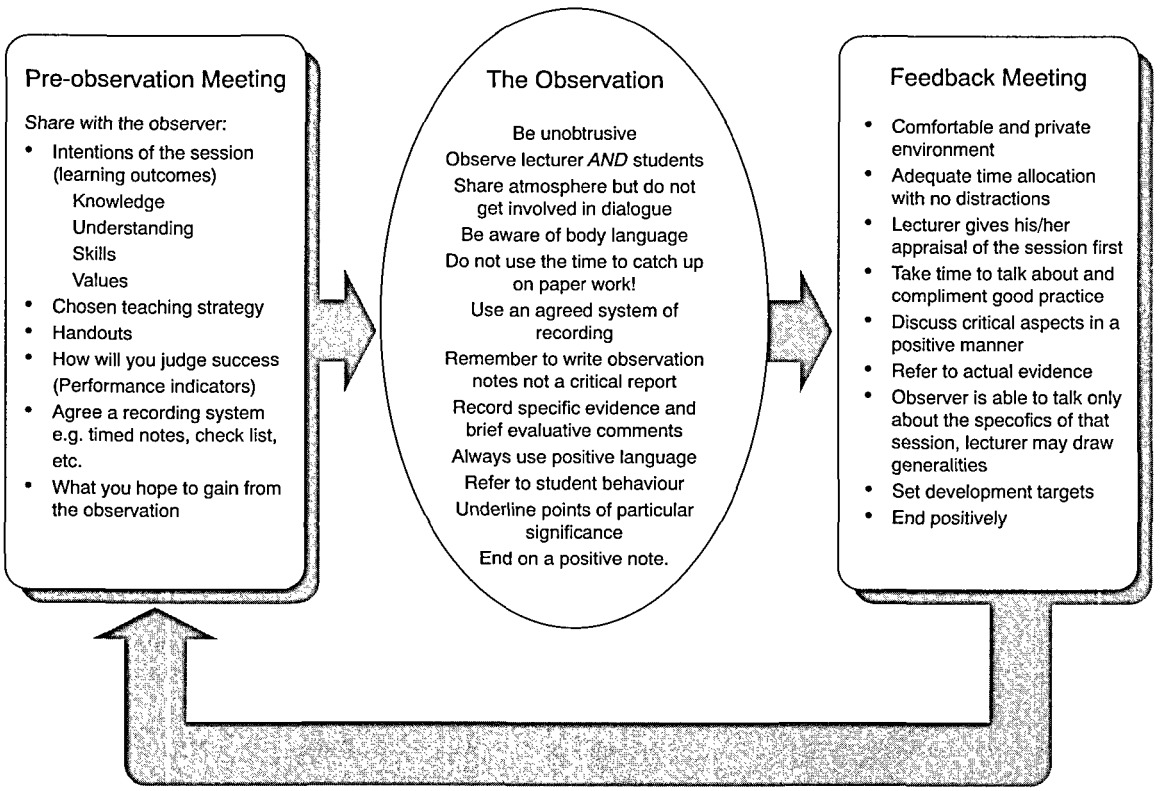

Figure 2 *A process model for peer observation and collaborative reflection on teaching*

Although the majority of the lecturers were experienced teachers they were somewhat nervous about being observed in class. The pilot scheme was structured to try to minimize this anxiety as the greatest benefit would be obtained if colleagues enthusiastically and confidently subscribed to the peer observation process.

In view of the above the pilot scheme had the following key features:

- It had to be flexible and responsive to varying perceptions of teaching quality and collaborative reflection.
- It had to be capable of modification in the light of experience.
- The process had to facilitate the evolution of a model which could be considered for permanent implementation.
- The initiative had to be workable with minimal preparation and training.
- Colleagues were to be given a free choice of partner for the peer observation process as it was felt that the greatest benefit could be gained if the teacher trusted and respected the opinions of the observer.
- Pairings of teachers would make iterative observations.
- The particular sessions to be observed were chosen by the teacher.
- Collaborations were structured using the previously described three-phase model.
- The feedback session was a private meeting between the teacher and observer, the discussion was confidential to the two people involved and written feedback was the property of the person observed.
- Notification that an observation has taken place plus brief comments on the process would be given to the person responsible for monitoring the progress of the pilot scheme, in this case the Department's Teaching Liaison Officer.

IMPLEMENTATION AND FINDINGS

The scheme was formally launched early in the summer term of 1995. A brief training session, presented by the University's Teaching Quality Adviser, prepared the way for observations in the summer and autumn terms. Self-selection of partners was likely to mean that the pairs shared many perceptions of the discipline field and of higher education teaching in general and these factors were felt to have supported the smooth implementation of the scheme.

As the scheme took shape it was necessary for the Teaching Liaison Officer to provide further guidance on the application of the process as well as ongoing support and encouragement. The latter often took the form of coffee break progress reports and discussions. Although the department made a collective decision that all staff should be involved in the pilot scheme, only about two-thirds were actually observed. Older and more experienced staff tended to be wary of the observation process (Harkin and Davis, 1996) while younger colleagues were more matter-of-fact or just resigned to the experience. Typical reasons for getting involved were:

- it seemed necessary and inevitable;
- I thought it was important because of the teaching quality assessment exercise, and to have a practice so that any obvious faults could be eradicated or improvements made;
- I thought we had to;
- it seemed like a good idea at the time;
- I feel this is one of several ways of improving your communication skills.

Those who did not take part tended to cite practical reasons such as 'lack of time' or 'failure to find a partner'. Additionally, two lecturers felt that the informal feedback obtained from team teaching was sufficient, and were not convinced of the extra benefits of a more structured observation process.

As a result of the training session, most staff were intellectually comfortable with their role but several were less comfortable emotionally. For instance, colleagues reported feeling 'uncomfortable', 'apprehensive' or 'slightly nervous'. In complete contrast, one lecturer reported:

> I was very confident about it as I regularly get student comments on my teaching performance which are always pretty good and my teaching is also regularly reviewed by teaching on post-experience courses.

Not all staff were quite so positive about the experience. One colleague thought that there had been an element of compulsion about the whole exercise and that this was quite unhelpful to peer-review, while another reported a 'feeling of intrusion'

The feelings of staff with regard to their observer role were also varied. Most were reasonably happy about the responsibility, one person felt 'neutral', while another was 'awkward and ill at ease'. It was anticipated that staff in either role would feel more comfortable about their part in the process on

subsequent occasions, and indeed this had already been the experience of the few members of staff who had prior experience of peer-observation.

Some lecturers observed that even well prepared observations affected the conduct of the session:

- Heisenberg was right! Observation influences what is going on between lecturer and class.
- Russell* was very discreet but I was not able to overlook the fact that he was there. This made me slightly nervous but I found this to be an advantage, similar to my experience of major research meetings, and the lecture was the better for it.
- Gareth was unobtrusive in the class but I was conscious of his presence; this did not alter my style in any way.
- It was clear that my presence [as an observer] made him nervous . . .

(* All names are fictitious)

The presence of an observer was reported to sometimes make the students a little quieter than usual and less inclined to interact with the teacher, an interesting observation given the frequency with which Teaching Quality Assessors seem to report passivity in students. One colleague offered the explanation that, 'students do not want to participate in discussions in front of a stranger, they do not want to show their weaknesses'. This interruption of the normal teaching process may be expected to diminish as staff and students become used to a series of observations.

When asked to review the whole process, staff were generally positive in their views, offering comments like:

- helpful. Confirmed my own evaluation of my teaching;
- useful feedback from Mark;
- as Ian has been very positive and helpful in his comments the end result is confidence building;
- I think all staff would benefit by this, and peer observation should be carried out on a regular basis.

Other evaluations referred to the benefits to the observer. Being given the chance to share a colleague's teaching process was clearly appreciated by many colleagues:

- I found it useful to watch somebody else teach; it gave me ideas for my own teaching.
- I learned something about presentation of a particular topic in mass transfer.

Two comments expressed strong reservations about the scheme:

- It is a helpful procedure but mustn't be allowed to mushroom;
- A real problem with difficult colleagues.

Clearly the first opinion displays a particular scale of priorities not altogether unusual in a university. While all academics would want to provide their students with a quality learning experience, for some this has to be done within a strict time scale in order that research and other duties can be pursued at a high level. The second comment points to the real difficulty of collaborating with colleagues who see teaching as a very personal act and are therefore somewhat unwilling to engage in shared analysis and critical review. The three-phase model described earlier (Fig 2) and, in particular, the suggested approach to feedback meetings, should offer some structure and support. However, some colleagues will need particular reassurance, the opportunity for additional training which involves giving and receiving critical evaluations, and the pairing with a sensitive partner. Despite some real difficulties the general feeling of the Department was succinctly expressed by one member of staff as – 'better to have it than not'.

CONCLUSIONS

Issues to be addressed

This innovation represented a significant shift in the culture of this particular department and was designed to go along with rather than against 'the culture and values to achieve new goals' and to build on 'skills and processes people can already use' (Gibbs, 1995a, p 17). Although there have been few negative comments from those who took part, some participants went along with peer observation as a sort of obligation, rather than from enthusiasm for the prospect of re-examining their teaching. One staff member made the not unrepresentative comment that the initiative places extra demands on an already heavy and increasing workload (Martin, 1997). Not surprisingly those who were more committed got more out of the process and held the most positive views about their experience.

The scheme as implemented was experimental and temporary. The positive feedback from the staff who took part outweighed the evident difficulties and a permanent scheme has now been adopted by the

department. From this experience it is evident that the following issues need to be considered in order to facilitate the effective exploitation of peer-observation and collaborative reflection.

Benefits and limitations

Colleagues need to be familiar and comfortable with the intentions of peer-observation. In the case study described the intended benefits were modest but of considerable potential. Participants were presented with an opportunity to revisit their teaching from a shared perspective and to gain experience of the heightened emotional tension which often accompanies being observed.

This particular strategy placed a high premium on recognizing and exploring elements which were indicative of high quality performance. Colleagues were reliant on their own experience and value judgements as there was no formal input on educational theory or innovative practice. Clearly any permanent scheme should have a clear and necessary link to supportive theory and innovative approaches at appropriate points in the process.

It was appreciated that the observation process provided a valuable insight but when viewed as a summate evaluation of teaching performance, it was only a snapshot of a much wider picture (Keig and Waggoner, 1994; Brew and Boud, 1996). To be of even more value it needs to be linked to other quality assurance measures such as student questionnaires, student examination performance, external examiners reports, etc, (Ramsden, 1992).

Preparation and Training

Training in the application of this particular three-phase model of peer-observation directly supported the introduction of the scheme. This particular format gave the process a defined and shared structure (see Figure 2) and helped to keep the experience positive and constructive. The majority of participants felt comfortable with the process even though they were often a little apprehensive about parts of their role.

However, the process could have been enriched by a slightly extended training phase with activities eg, video examples, designed to expose shared and conflicting values. Also, there would be advantage in offering occasional short sessions to draw together the accumulating benefits of the ongoing practice and to link this to pedagogical theory.

Involvement

Participants, although stretched by other commitments and deadlines, often had a personal as well as professional commitment to their partners and in this situation pairing was easy. Although this pilot project was designed to gain maximum participation and to make minimal extra demands on time, it proved impossible to get everyone involved. Enticing reluctant colleagues to take part is difficult, but the positive experiences of the pilot scheme has helped to create a more conducive environment.

OVERVIEW

This paper describes a pragmatic approach to the introduction of peer-observation and collaborative reflection. The choice of this strategy was due to the existing culture of the institution as well as an acknowledgement that the participants were practitioners already. Through this approach it was hoped to raise an awareness of teaching and learning issues within the context of the discipline. The authors anticipated that the approach had a high possibility of success in these specific circumstances and that in itself, starting from the practice is a sound developmental model. However, if the innovation was to lead to enhanced quality it was recognized that:

- participants had to be willing to explore and share their views on what they thought to be 'good teaching';
- teaching had to be seen as problematic and intellectually stimulating;
- the shared practice needed to be informed and challenged by educational ideas;
- teaching and learning issues needed to be approached with the same rigour as discipline research.

The process model described has much to commend it as a method of focusing and structuring a collegiate approach to improving the quality of teaching and learning. In the pilot scheme staff were largely unused to sharing their teaching environments with colleagues or collaborating in joint reflection on the quality and effectiveness of their efforts. Nevertheless, the model provided a way of defining activity while at the same time giving some reassurance regarding an exercise which was potentially challenging if not threatening.

It is interesting to note how the innovation reported here exemplifies the pre-requisites for a successful

peer observation scheme stated by Blackwell and McLean (1996). Although their paper was published after our pilot scheme had been implemented, they too advocate the key features as; a process which takes place 'between colleagues in an established academic unit', clear and agreed intentions which 'relate to improving teaching through reflection', and an approach which is 'structured and organised and includes implementation training' (p 158).

The three-phase process helped to ensure that the initial observation experience was positive and established an appropriate rapport for reciprocal collaboration. We believe our strategy went some small way towards developing what McKeachie (1997) has described as 'a community of learners about teaching, a community in which new teachers trust their peers and mentors, a community where they can seek feedback and help without evaluative threat.' (p 71)

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