

An account of experiential learning in the classroom

Introduction

This article describes the experience of a design and technology student on the Post Graduate Certificate of Education Course at Middlesex University. The author is a mid-career student with a background in architectural practice.

This account looks back at a brief first experience of the teaching/learning process undergone during an initial teacher training placement at a London Borough of Barnet comprehensive school. Within the Middlesex University Initial Teacher Training (ITT) partnership scheme my training has been shared between the university and one of its placement schools. The school based component is allocated 68% of training time. In my placement school, I was fortunate in the range of experience offered, and the admirably high standard of work in my subject area provided by the school. I found the insight into the environment and ethos of teaching and learning both useful and interesting. It differed from my own experience of education, both due to the lapse of time since my own school days and the location and type of schools. I appreciated the cohesiveness of pedagogy which sprang from both the philosophy of the staff and the strong links with Middlesex University. All of this, supported by the partnership scheme, has given me a sense of consistent educational theory and philosophy which is reassuring and supportive to the novice in the teaching profession.

In order to gain a broader insight for this article, I have interviewed a number of people who are part of the partnership scheme. These 'expert witnesses' have included academics at Middlesex University and members of the partnership scheme both at the university and at my placement school. They have been able to give me their view of the history and development of the present method of ITT. They have been able to point out the strengths and weaknesses of the scheme as it now exists at Middlesex University. It was the view of most of those whom I interviewed that the partnership scheme instigated in 1992 was initially the product of 'unwilling partners' (Shiple, P. interview 1996). However, they are united in their general approval of the scheme in practice.

In a personal account of embarkation upon ITT in the subject of design and technology, it is tempting for the mid-career student to dwell upon self-perceived shortcomings. The student wonders at his or her lack of specific hands-on skills, weaknesses in theoretical knowledge and bemoans the apparently insurmountable range of techniques and knowledge to be mastered in the nine short months of the PGCE course. I assume the readers' awareness of these issues. Whilst acknowledging these as some of the prime concerns of the design and technology ITT student, this article addresses a more fundamental issue. It is a reflective account of the specific experience of the three-way collaboration in the learning process in which the players are the student teacher, the school placement mentor and the college tutor.

The development of the student on a PGCE course from professional designer or technologist to design and technology teacher must be fast and complex. This process is achieved by a system which has undergone a major change of emphasis in the past four years. The current system requires collaboration and understanding from all sides. The educational method combines the apprenticeship model with the collegiate. At Middlesex University, considered stimuli have been developed to complement and enhance the school-based experience. An example is the reflective journal, compulsory during the first term, and marked on a pass/fail basis. This strengthens the link between school and college in the student's mind, and encourages school-based research on college lecture topics. The school based component of the training is centred around the formalised role of a designated mentor or supervisor.

A problem specific to design and technology ITT is the multifaceted subject matter and the diversity of background of the student intake. ITT now allocates more student time to school-based experience than to college based study. In this way, a bias towards the study of educational theory and practice is implied and the problems of subject knowledge seem to be of lower priority. Where other subject areas will have a common base degree intake, design and technology recruits from a broad range of

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backgrounds (DATA Working Group 1995). Middlesex University has an 'open door' policy to recruitment. A wide range of first degree, work experience and practical competence can be found amongst the students. Although some time and resources in the university-based programme are devoted to improving on students' weak areas of subject knowledge, it is often necessary for students to put in a lot of additional time and effort on them. This inevitably includes an additional demand for support in subject knowledge on the school-based design and technology mentor. The scale of this demand has even in a few cases caused the withdrawal of schools from the Middlesex partnership scheme (Shipley, P. interview 1996).

Areas of knowledge

The ITT student is confronted by a complex range of needs. McNamara (1991, cited in Bull 1995) categorises the knowledge to be mastered by the trainee into four areas:

- Subject knowledge
- School subject teaching knowledge
- Pedagogical knowledge
- Curricular knowledge

These might be explained thus:

- Subject knowledge, "How to make a dovetail joint"
- School subject teaching knowledge, "when pupils might use a dovetail joint"
- Pedagogical knowledge, "how to teach a class of children to make a dovetail joint" (Schulman's pedagogical content knowledge)
- Curricular knowledge, "when it would be appropriate to include the making of a dovetail joint in the scheme of work with reference to key stage or exam syllabus".

To this might be added school organisational knowledge ("knowing who should teach the making of a dovetail joint and how he or she will obtain materials."). Each student will bring to the course different strengths. In order to bridge the

gaps between the areas of knowledge the student is supported by the mentor scheme.

Mentorship

From recent research (Bull, R 1995) it would appear that some students perceive a conflict between school and college. This is not only in the area of pedagogy, where the school's contribution is considered to be practical and the college input as theoretical, but is more importantly felt to be in the school's role in control of assessment. In the period of the survey, this was particularly significant when assessment and observation was carried out by the placement school. At that time degree classification was related to schools' assessments. In some cases, for fear of criticism and loss of credit, the student was reluctant to reveal and discuss weaknesses at the placement school. This resulted in lost opportunities and suppressed problems. Through experience and research, Middlesex has developed a core of college based input in parallel with a scheme of evaluating and marking students on a pro forma basis in the school placements. The assessment method, on a pass/fail basis, is intended to encourage and support a relationship of trust and openness between mentor and student.

Within the role of the mentor, there is inevitably conflict between the stance of critical friend on the one hand and judgmental assessor on the other. The words 'honesty', 'trust', 'hypocrisy' and 'tension' arise in literature concerning the subject. Naturally, this relationship is dependent upon the capacity for detachment of the individuals concerned. Discussion of perceived weaknesses and problems must take place in order that self-critical or expert observations may be used and acted upon to the benefit of the student. Indeed, my own experience as a participant in the process of learning through mentorship differed from the fears expressed by some respondents in research, in that my relationship with my mentor was one of trust, and I felt sure that my personal observations and self-criticism would be recognised as the first step towards resolving my problems and weaknesses.

The question may arise: "when is a student being mentored and when is he being assessed?" This is dependent upon the clarity of the relationship. Clear distinction between the two activities is important. In simple analysis, mentorship is a two way process which is not judgmental, whereas assessment is a one way process which is entirely so.

Assessment

Prior to 1992, a conflict may have been perceived between learning and assessment where advice on classroom management and subject-based teaching originated in schools, but judgement on student performance was vested in higher education institutions (HEIs). In the revised system, the onus for assessment was to be taken from HEIs and vested in the teachers, thus deferring the judgement of performance of students during relevant experience from 'theoreticians' to 'practitioners'.

Although it appears that there was initial resistance to this, recent research (Bull, R 1995: Introduction) shows that many ITT lecturers now feel that marking students in the classroom situation is a more equitable method of assessment. Among other advantages, the school sees the context and can observe the student over a longer period. A control is established by visits from a university based link tutor. In the present system at Middlesex University, the college judges subject content, which in design and technology requires evidence of good practice in the products of set coursework assignments.

Conversely, Shipley reports (interview 1996) that the schools themselves were initially reluctant to take on the assessment role. It was felt that proximity and almost daily personal contact with the student might lead to difficulties in giving an honest assessment, particularly if the student was failing. It was feared that personality might interfere with the assessment process. It is odd that the teaching profession should have been reticent in judging its own beginners, since the professional detachment which is a daily necessity in school is all that is required to allow an impartial judgement without embarrassment. Prior to the adoption of a clear structure,

assessment was inevitably subjective, based on an impression of effectiveness rather than knowledge of best practice.

Roles and titles

My research revealed a minor problem in communication due to the lack of standardisation of terminology. The names or titles of the participants in the ITT process vary from institution to institution. Given the amount of prescription in the government requirements, it seems surprising that this too was not regularised. At Middlesex, the university based contact is called the Link Tutor. The school based contacts are called the Coordinating Mentor and the Subject Mentor. The Coordinating Mentor is defined in the course handbook as "a senior member of staff..... responsible for the development and delivery of a school based professional studies programme", the second marker of the student's work, and "responsible for quality assurance at individual school level". The Subject Mentor is defined as "a successful experienced teacher", whose duties include the negotiation of a suitable teaching timetable, support and assessment of the student.

In my case, the role of Coordinating Mentor was split between two individuals. The first was the Deputy Head of my placement school and the second was the Head of Department (Design and Technology). I saw very little of the first named Coordinating Mentor. I felt that as a busy deputy head, her contribution might be called for in case of a problem or complication rather than on a day to day pedagogical basis. However, the formalisation of the student's entitlement to mentorship allows a clear expectation and may provide a 'port in a storm' (Bull, R 1995: p.55).

A more important figure in my case was the second named Co-ordinating Mentor. Accessible and interested, but often too much in demand in his role as head of department to give constant advice, my contact took place during, before and after twice weekly lessons and through departmental staff meetings. My day to day care devolved onto my Subject Mentor. An experienced and confident teacher, yet concerned and willing to involve herself in observation and discussion, she was able to

give comment and advice with a professional detachment although she was sympathetic and sensitive. I also identified a voluntary mentor in the department. In research into mentorship, Bull stated that "voluntary relationships foster ideal learning situations" (Bull, R 1995: p20). The voluntary mentor tends to be selected through his ability to give time to the student, a sympathetic personality and compatible teaching style.

In my experience, the formal introduction into the placement school was of key importance. Despite recommended pre-course visits to both primary and secondary schools, which gave a useful update, day to day involvement with a placement school requires a swift insight into the ethos, geography, timetable, and detailed organisation of the establishment. Personal contact with an accessible and sympathetic member of staff is vital to give a rapid overview and to ease integration. I appreciated that my timetable was carefully thought out to give a full range of age groups and members of the department. From a student's point of view it is important that the timetable is full, but not so demanding that evaluation, reflection and preparation for future lessons is impossible. I felt that demands on me were flexible and responsive. As a student at the school, I was given a basic structure and allowed a degree of self-determination. It is important that staff are sensitive to the willingness and ability of the student to become involved in the teaching process. No doubt this varies with the individual student, with a need for encouragement for some personalities and a need for restraint in others. Observation of different personalities and teaching methods in school was of great value to me. I was interested to note that not only did the style vary from one teacher to another, but also that the same teacher might vary his or her delivery in response to different age groups, class character and even time of day.

Studies seem to suggest that best practice for marking and assessment purposes involves 'democratic mentorship'. This has the advantage of shared responsibility and a more complete feedback on the students' performance. A variety of input and expertise with a large staff minimises

subjective and personality judgement. In the abstract of his thesis, Bull states that "Summative assessment procedures significantly affect the mentor/mentee relationship" (Bull, R 1995 abstract p.1).

Conclusion

Education has been through a time of great changes since the late 1970s. In overview, the general perception seems to be one of considerable improvements. The structure of initial teacher training has been formalised and the focus is firmly on professional practice in schools. School based teacher training revolves around the mentorship scheme. This is naturally reliant on the personal acumen and the abilities of the people involved. Since teaching concerns communication and relationships, this should not, in theory, constitute a problem. The vital role of the mentor is in demonstration, or 'modelling the expert'. The principal challenge to the mentor is to have the insight to recognise the content and makeup of her own knowledge and experience and her ability to externalise and express it. For the student's part, the observation of proceedings and methods in schools, supported with theoretical input and reflection on experience should lead to efficient learning. The school placement offers an opportunity to play an active part in school. Although the trainee cannot match the quality and ability of the seasoned professional and is "not expert in every area" (Bull, R 1996: p57), he can bring recent experience from industry, up to date information, and above all enthusiasm. Writing as an insider, as a participant in the process of learning through mentorship, it is my impression that, given good levels of communication and conscientious approach of all parties, a healthy system has evolved.

Summary

The massive upheaval which teaching in general and initial teacher training in particular has undergone in recent years has resulted in a clarification and formalisation of procedures, methods and roles. Although the process of change has undeniably put additional pressure on teachers, the result seems to be improved communication, and clearer definition of roles leading to fair and reasonable expectations of students. It is too soon for

me to draw forthright conclusions from a single placement experience. However, it seems to me that it is inevitable that school-based learning is heavily dependent on the personalities involved. On the part of the school based trainer, tolerance and willingness to share is required. On the part of the student teacher, diligence and willingness to learn coupled with robust self-confidence and a certain amount of opportunism seems to gain the best results. The special problem of ITT in design and technology is the extreme pressure on time and resources arising from the need for the student teacher to produce creditable evidence of practical capability in design and technology, both in school and in college in the range of materials and processes demanded.

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