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## **Case Study on Mentoring in Initial Teacher Training of Science Teachers in Ireland**

### **1. Who is the mentor**

The mentor is an experienced science school teacher in a partner school linked to the University of Limerick (UL). The teachers are trained in the University in two consecutive summer schools where upon completion they graduate as Lucent Mentor Teachers (LMTs). The mentor is assigned a student teacher during the mentees' teaching practice placement (dictated by the geographic preferences for schools indicated by students). Continuous evaluation of the mentoring programme indicates the mentors play a key role in the training of the student teachers by guiding, coaching, challenging, planning and reflecting with their mentee during their placement.

### **2. Setting within the teacher education system/organization**

The concept of a 'mentor' is still relatively new in Irish teacher education. In the past the informal mentoring relationships between aspirants to the teaching profession and experienced colleagues were on a completely voluntary basis. Teacher training courses are offered by Irish university departments of education and by colleges of education, which are autonomous but linked with a university that validates their programmes. The need for more structured partnerships between Irish schools and the training institutions is highlighted by the increased emphasis on school-based experience and the acknowledgement that teachers in schools are a rich resource in the development of student teachers, a resource that previously was not utilized in Ireland. In recent years a more formalised system was developed in the University of Limerick. This pilot-mentoring programme is called the Lucent Science Teacher Initiative (LSTI). The LSTI, which was established in November 2000, involves collaboration between the Colleges of Science and

Education in the University of Limerick and twenty-five second level schools. The overall aim of the LSTI project is to develop, initiate, and evaluate new models for the professional training of teachers of science at second level in Ireland.

### **3. Roles and tasks of a mentor**

#### **3.1. Recruitment and Training**

Recruitment and appointment of the LMT is achieved by inviting selected schools to nominate a science teacher as a participant in the programme. Schools are selected on the basis of their record of excellence in the teaching of science and their past involvement with UL in the training of science teachers. The training and qualification system that the LSTI implements is:

- Attendance at and participation in a 5-day Summer School.
- A probation period of 1 year during which each teacher will mentor at least one student in cooperation with university tutors.
- Attendance at a second 2-day Summer School.
- Submission of an assignment given during the 2-day Summer School.

The initial 5-day Summer School has three main themes:

- 1.** Professional mentoring, focusing on Mentoring Theory and Practice, Mentoring Models, Issues in Mentoring, and the Role of the Science Mentor.
- 2.** Theory of Education, General and Subject Pedagogies as taught in UL, the organisation of Teaching Practice in UL and the student's preparation for TP.
- 3.** Subject-specific in-service support for LMTs.

Below are pictures taken of Lucent Mentor Teachers. **Figure 1.** Physics laboratory session during the 2002 5-day LMT Summer School. **Figure 2.** The graduating class of Lucent Mentor Teachers 2004.



**Figure 1.**

**Figure 2.**

The follow-on 2-day Summer School has enabled the successful graduation of Lucent Mentor Teachers in June 2002, 2003 and 2004. To date a total of 55 student teachers have been mentored by qualified Lucent Mentor Teachers in the school system.

### **3.2 The mentor's role**

The LMT is given a specific list of tasks associated with pre and during practice.

#### Pre Practice (student visits the assigned second-level school)

- (i) Introduction of student to:
  - School building
  - Administrative structure
  - Pastoral structure

- Disciplinary system
  - Profile of pupils
  - Science laboratories
  - Rules and safety in laboratories
- (ii) Consult with Principal and cooperating teachers on student's timetable.
- (iii) Advise student on preparation of schemes of work and lesson plans.
- (iv) Liase with TP office and UL tutors.

#### During Practice

- (i) Induction of student into Practice.
- (ii) Help and advise the student in the planning and preparation of lessons, including experimental work. The responsibility for planning and preparation is the student's. The role of the LMT is advisory.
- (iii) Observation of a fixed number of student-taught classes; this involves completing the Lesson Appraisal Guide (LAG) and conducting a post-lesson tutorial.
- (iv) The provision of feedback and advice to the student on a regular basis.
- (v) Liaison with UL tutors during school visits and provision of feedback.

### **3.3 Benefit and pay-off to the mentors**

The functions of the LMT are additional to the teacher's normal duties and do not involve a reduction in teaching or other workload. In recognition of this LMTs are paid an honorarium by the LSTI in respect of each student teacher for which they act as mentor.

## **4. Roles and tasks of the mentee**

### **4.1 What kind of results are expected from the perspective of the mentees?**

The mentee expects a greater level of support and assistance than the traditional system offered in which the student didn't have an assigned teacher. The mentee expects the mentor to facilitate with the mentees induction into the new environment by introducing the school ethos, rules, staff and school resources.

Student teachers have outlined that they expect a good mentor to be approachable, offer constructive feedback and treat them as a colleague.

#### **4.2 What impact does the mentoring relationship have on the mentee?**

Student teachers benefit from the programme by becoming involved with practicing teachers. The presence in each school of a Lucent Mentor Teacher provides the student with an accessible source of advice and the ongoing support of a professional who has been trained and qualified by the University. They experience all aspects of the profession, from planning lessons, managing a classroom to teaching students with the support and guidance of a mentor teacher. Currently student teachers have little contact with schools before going on placement. As a result, they are unsure of what they will find when they arrive. This mentoring programme ensures greater uniformity of experience for students and while differences between individual schools cannot be removed, it ensures that all participating schools are in agreement on what is expected from students and what they are expected to do for each student.

Qualitative research has revealed that the experience of all participants has been in all respects beneficial. Students who have been placed with LMTs, especially those who have had an earlier placement under the traditional system, generally report benefits, which fall into four broad categories:

- The LMT provides a source of practical advice on such critical matters as teaching methods, experimental work, pupil background and ability. In comparison with the traditional system, students find that the LSTI model makes this advice much more readily available.
- The LMT constitutes a source of ongoing feedback on the student's progress. Students find this extremely useful and in marked contrast with the traditional system where feedback from co-operating teachers is very variable in quantity and quality.
- The relationship between the student and LMT is different in kind to that between the student and UL tutors. The latter relationship is more distant and formal, and is dominated by the student's concerns about grades; the relationship with the LMT is more relaxed and tutorial in nature.

- Students placed with LMTs are much more comfortable and feel more accepted in the school than is generally the case under the traditional system. The TP placement is, therefore, a more positive and enjoyable experience.

## **5. Supporting structures in the professional context**

As a result of participation in this project, schools have a greater influence on the training of their prospective science teachers than in the past. They also have access to the academic and professional knowledge within the University Departments with benefits for their current staff. Individual teachers gain experience and status, and are given a valuable avenue of professional development.

In Ireland the LSTI programme is a genuine partnership in that the school and mentor has a role and responsibilities in all aspects of the course except assessment. Characteristics peculiar to the Irish second-level school system and the training of teachers in UL necessitated the development of an original mentoring model rather than simply applying a pre-existing UK or European model. Teachers in Ireland play only a limited role in the formal assessment of their students. They are equally reluctant to become involved in the assessment of student teachers assigned to their schools. This characteristic is not unique to the Irish system. In Ireland, however, resistance to assessment by teachers is particularly marked. In the LSTI model, therefore, the school-based LMT works in parallel with the UL tutors who retain responsibility for assessment and grading. However, in most systems the advice or general views of mentors are elicited and are borne in mind by the evaluators. At present the LSTI model avoids even this limited contribution.

### **4.1 In-service support for mentors?**

The second 2-day Summer School, which occurs after a period of one year of probation, provides the LMT with an opportunity to reflect on their experience of mentoring under the guidance of professionals and to continue to develop their mentoring skills. The focus during this Summer School is entirely on mentoring. A teacher who successfully completes this process is awarded a Certificate of

Completion and is entitled, thereby, to certain credits and/or exemptions in UL Master Degree courses.

#### **4.2 Is the learning partnership embedded in a system of development and research?**

Schools are provided with increased access to the findings of current educational research, and to information on University Degree programmes and their relevance to careers. As such no policy exists exist to the quality of mentoring, however, feedback is continuously being updated through surveys and interviews as part of PhD research which involves an evaluation of the LSTI pilot programme for the mentoring of student teachers of science using a critical analysis of the international perspective. In order to bring the education and training of teachers in Ireland into line with international practice, school-based mentoring programmes, designed specifically for the Irish system, are required.

#### **4.3 Are mentors responsible to a teacher education institution?**

The University of Limerick organizes the mentors training and awards the Lucent Mentor Teacher qualification. The University can call upon the experience of schools in preparing students for Teaching Practice and through greater interaction with the second level, maintain and enhance the relevance of its pedagogical courses.

#### **Perspectives of current development**

Suggestions for improvement would require funding by central government for regular training for mentors. Currently in Ireland there is no institutionalized training or in-service training for either mentors or supervisors, which could help establish a framework for cooperation. Central government would also have to acknowledge mentoring as an integral part of the teacher's professional role and as part of the Education System.

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