

The Stakeholders' Perceptions of Mentoring in Initial Teacher Training (ITT) of Science Teachers in University of Limerick

Etain Kiely and Dr. George McClelland,
Physics Department,
University of Limerick, Ireland

Overview of the Presentation

- Science Teaching in the University of Limerick
- Overview of the Lucent Science Teacher Initiative Project
- Importance of Mentoring
- Collaborative Model of Initial Teacher Training
- Research Methodology
- Limitations of Study
- Findings and Discussion
- Suggestions for Improving Practice

Science Teaching in the University of Limerick

Concurrent Model : 4 year Honours Degree combining academic and professional studies

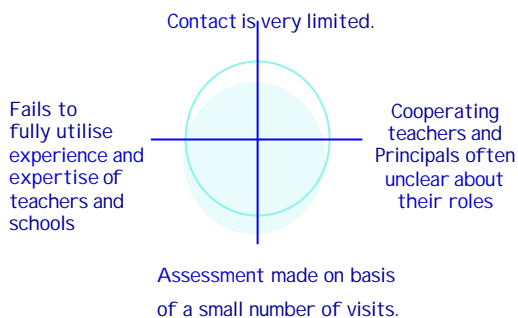
<u>BSc(Ed) Biological Science</u> <u>LM092</u>	Running for 23 years 30 - 40 graduates per year
<u>BSc(Ed) Physical Science</u> <u>LM096</u>	New course running for 4 years 5 - 10 graduates per year

- ♦ Joint Programmes – College of Science and College of Education

Teaching Practice placements in schools

- ♦ 16 weeks in total
- ♦ 6 weeks in 2nd year (semester 5)
 - 15 class periods per week
 - teach to Junior Certificate level
- ♦ 10 weeks in 4th year (semester 7)
 - 15 class periods per week
 - teach to Leaving Certificate level

Shortcomings of Current Model



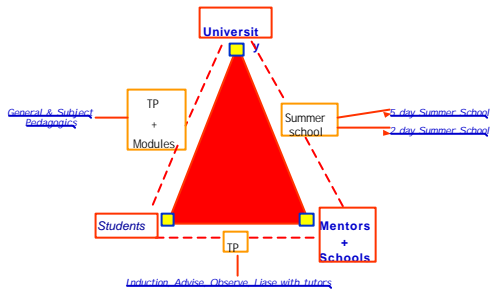
Overview of L.S.T.I.

A pilot programme established in November 2000 called: '**Lucent Science Teacher Initiative (LSTI)**'.

The project aims: to develop, initiate and evaluate new models for the professional training of teachers of science in Ireland.



Overview of Lucent Science Teacher Initiative



Importance of Mentoring

➤ The term mentoring describes 'the support given by one (usually more experienced) person for the growth and learning of another, and for their integration into and acceptance by a specific community (Malderez, 2001,).

➤ In the context of initial teacher training (ITT) Tomlinson (1995) defines mentoring as 'assisting student-teachers to learn how to teach in school-based settings'.

➤ Miller & Taylor (1993) in a study of Teacher Education in the European community see supervision and practice of teaching as the most significant aspect of most trainees experience but the least prepared for in terms of preparation of experienced teachers as mentors.

Collaborative Model of Initial Teacher Training

➤ The Collaborative model takes the form of a partnership with a school to provide training and support for the trainee teacher.

➤ The school as the critical site for teaching and assessment for teacher education is a key principle of this model.

➤ The 'mentor' within the 'practicum' provides the crucial link that mediates the beginning knowledge and skills of the teacher with the practical experience in schools. (Moon, 1996).

Research Methodology

- Questionnaires were distributed to mentors and mentored student science teachers on Autumn 2002, 2003 and Spring 2004 teaching practice experience.
- A total of 60 questionnaires were returned (18 mentors and 17 mentees pre-exposure and 14 mentors and 11 mentee post exposure) which represented an overall response rate of 56%.
- Numbers of responses vary in questions as some questions were added in Autumn 2003 and Spring 2004.

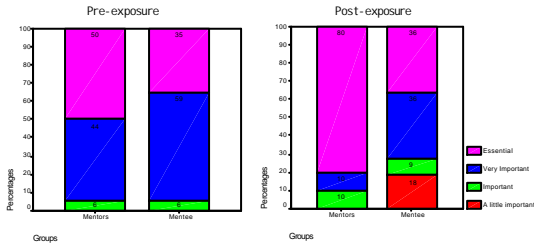
Research Methodology

- Quantitative data was coded and analysed using SPSS.
- Frequency counts were made; means, standard deviations and medians were calculated where necessary.
- Qualitative data was coded using Nvivo.

Limitations of Study

- Every effort made to ensure validity in both the collection and analysis of data. Small numbers surveyed and interviewed. How representative are their views?
- No claims are or should be made to make generalisations from the findings.

How important is school based mentoring during T.P.?



Rank in order of importance most useful resource on T.P.

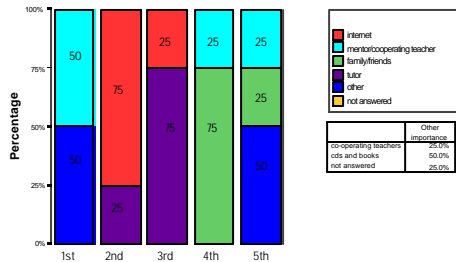
Table 1.

	Order of importance 1st	Order of importance 2nd	Order of importance 3rd	Order of importance 4th	Order of importance 5th
	%	%	%	%	%
Internet		75.0%	25.0%		
Mentor Teacher	50.0%			25.0%	25.0%
Family/friends				75.0%	25.0%
Tutor		25.0%	75.0%		
other	50.0%				50.0%
not answered					

Table 2

	Other importance %
co-operating teachers	25.0%
cds and books	50.0%
not answered	25.0%

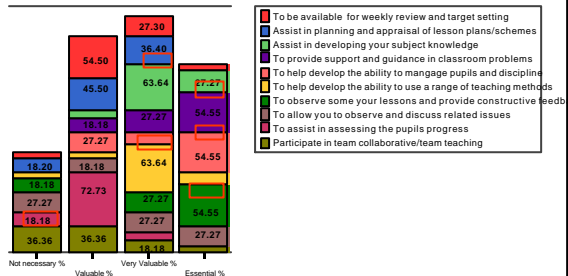
Rank in order of importance most useful resource on T.P.



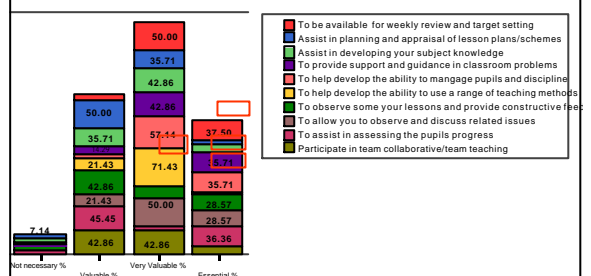
How valuable is the mentors role in the following categories?

	Not necessary %	Valuable %	Very Valuable %	Essential %
Mentors				
To provide support and guidance in classroom problems	5.9%	44.4%	44.4%	50.0%
To help develop the ability to manage pupils and discipline	11.8%	47.1%	41.2%	41.2%
To help develop the ability to use a range of teaching methods	16.7%	51.1%	22.2%	22.2%
To observe some your lessons and provide constructive feedback	16.7%	44.4%	38.9%	38.9%
To allow you to observe and discuss related issues	5.9%	22.2%	53.3%	38.9%
To assist in assessing the pupils progress	16.7%	25.0%	50.0%	8.3%
Participate in team collaborative/team teaching	27.8%	27.8%	33.3%	11.1%
Introduce you to the school ethos, rules and environment		27.8%	27.8%	44.4%
To be available for weekly review and target setting		72.2%	11.1%	5.6%
Assist in planning and appraisal of lesson plans/schemes	11.1%	27.8%	25.6%	33.5%
Assist in developing your subject knowledge	16.7%	5.9%	29.4%	64.7%
Mentee				
To help develop the ability to manage pupils and discipline	17.6%	41.2%	41.2%	41.2%
To help develop the ability to use a range of teaching methods	5.9%	70.6%	23.5%	23.5%
To observe some your lessons and provide constructive feedback	23.5%	23.5%	52.9%	52.9%
To allow you to observe and discuss related issues	35.3%	29.4%	35.3%	35.3%
To assist in assessing the pupils progress	8.3%	58.3%	25.0%	8.3%
Participate in team collaborative/team teaching	11.8%	41.2%	41.2%	5.9%
Introduce you to the school ethos, rules and environment		11.8%	29.4%	41.2%
To be available for weekly review and target setting		11.8%	70.6%	11.8%
Assist in planning and appraisal of lesson plans/schemes	11.8%	70.6%	11.8%	5.9%
Assist in developing your subject knowledge	5.9%	17.6%	64.7%	11.8%

Mentee Post - Exposure how valuable is the mentors role in the following categories



Mentor Post - Exposure how valuable is the mentors role in the following categories



Summary of Graphs

Essential

- To provide support and guidance in classroom problems
Mentee - 54.44% and Mentor 35.71%
- To develop the ability to manage pupils and maintain discipline
Mentee - 54.44% and Mentor 35.71%
- To observe some lessons and provide constructive feedback
Mentee - 54.44% and Mentor 28.57%

Very Valuable

- To help to develop the ability to use a range of teaching methods effectively
Mentee – 63.64% and Mentor 71.43%

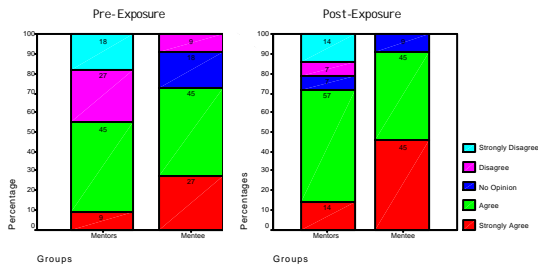
Not Necessary

- To participate in collaborative/team teaching
Mentee – 36.36% and Mentor 0%

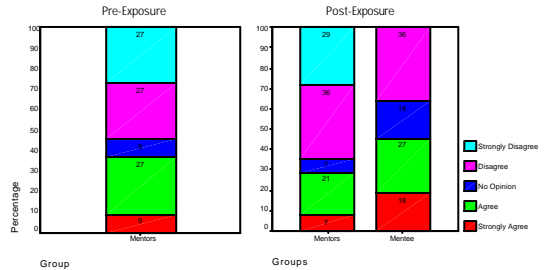
What was the focus the mentor/student teacher interaction?

		never	sometimes	frequently
		%	%	%
Mentors	curriculum topics		42.9%	57.1%
	pedagogical topics	8.3%	50.0%	41.7%
	assessment topics	15.4%	61.5%	23.1%
	management topics		35.7%	64.3%
	other topics		60.0%	40.0%
Mentee	curriculum topics		45.5%	54.5%
	pedagogical topics	9.1%	36.4%	54.5%
	assessment topics	27.3%	72.7%	
	management topics	9.1%	27.3%	63.6%
	other topics		62.5%	37.5%

Should the mentor contribute an informed opinion towards the student teachers' grade?



Should the mentor be formally involved in grading (officially take part in the grading process)?



Should your mentor be involved in your student teacher's assessment?

'Strongly agree: they are working with you everyday in comparison to tutors who see you four times, which is very minimal and not sufficient. They would really know you better, it would give tutors a more grounded knowledge of you and confirm their true grade of you.'

'I disagree with the mentor being officially involved with my assessment. I feel that if the LMT was involved it would change my relationship with her immediately. Instead of being someone I have to impress, my LMT is more so a support and guidance on a daily basis. This is very important, as even though I regard my tutors as a support and guidance, it is still in my mind that they are assessing me on four lessons and I do not really have the opportunity to talk to them about minor issues which I may encounter daily.'

Do you think that your mentor's presence and support improved your teaching practice experience?

100% of Mentees answered yes to this question

- 'It did improve my teaching practice, as the mentor teacher was very approachable and friendly and helpful it was good to know there was someone there if I need any help.'
- 'Yes: Definitely without a doubt. Having an individual teacher assigned to you makes the experience more enjoyable and put me at ease to know that there is someone I can ask the important questions.'
- 'Having someone other than your tutor observe your class and give feedback is an improvement. The opportunity to team-teach some lessons is an exciting and a great benefit. I know that, so far, a mentor's presence has definitely made my teaching-practice more enjoyable experience. I am delighted with the interaction and the ability to have someone to talk things through with on a daily basis.'

What benefits did you gain from working with a student teacher?

groups Mentors

	No Contribution	A Little Contribution	Satisfactory Contribution	Great Contribution
	%	%	%	%
reflective in planning	14.3%	28.6%	57.1%	14.3%
cognitive coaching	14.3%	35.7%	42.9%	7.1%
reassessing discipline	15.4%	46.2%	15.4%	23.1%
using technology	28.6%	21.4%	35.7%	14.3%
collaborating others	15.4%	30.8%	23.1%	30.8%

- 'Allowed me to reflect on my own strengths/weaknesses as a facilitator of learning and evaluate your own teaching'
- 'Sharing - brainstorming re-preparation of topics/approaches/appropriate lab practicals'
- 'Team - teaching sessions - playing to mentees and mentors strengths etc. more effective teaching and learning outcomes'
- 'Reduces classroom (laboratory) isolation'
- 'Keep up to date with fresh teaching ideas'
- 'Innovative ideas to approach subject matter, new and more exciting approaches to well worn topics'

Summary of findings

- Majority of mentors and mentees perceive mentoring in ITT as 'essential' or 'very valuable'

- Majority of mentees ranked most useful resource on TP

- No.1: Mentor
- No.2: Internet
- No.3: Tutor
- No.4: Family and friends

Mentor's role is perceived as 'Essential' by majority of mentees and mentors

- In providing support and guidance in classroom problems
 - In developing the ability to manage pupils and maintain discipline
 - In observing some lessons and providing constructive feedback
- which other studies have shown to be trainees' major concern (Tomlinson et al., 1996).

Mentor's role is perceived as 'Very Valuable' by majority of mentees and mentors

- In developing the ability to use a range of teaching methods effectively

Mentors role is perceived as 'Not Necessary' by over 1/3rd of mentees

- In participating in collaborative/team teaching

- Management topics were perceived to be the most frequently discussed topics in mentor/mentee interactions.

- Majority of mentors and mentees agreed that the mentor should contribute an informed opinion toward their grade
- Majority of mentors disagreed with the mentor officially contributing toward grade while the majority of mentees agreed or had no opinion.

Benefits for Mentees:

Majority of mentees said it improved their TP experience, having someone to interact with on a daily basis to ask questions and ask for help makes TP much more positive and enjoyable.

Benefits for Mentors:

Promotes useful reflection on LMT's own teaching. Leads to valuable skill acquisition and updating of knowledge base. Extremely valuable for professional development.

Ireland is out of line with International Practice

1. Mentoring should be recognised as a part of the Education System
2. Mentoring should be an integral part of the teacher's professional role

Suggestions for Improving Practice

- Allocate sufficient time for subject mentors
- Funding by central government for regular training for mentors.
- Further examination of the role of the mentor as a partner and informally involved in the student teachers' assessment.

Acknowledgement

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For further information go to our website:

<http://www.csn.ul.ie/~lsti>