

Science: Biology

Mentor Handbook

2003 – 2004

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Key Dates in the PGCE Year

PGCE Starts:	September 15 th
Briefing Date:	September 18 th
School A Visit 1:	October 15 th (Wednesday)
School A Visit 2:	October 22 nd (Wednesday)
School Practice 1:	November 3 rd to December 5 th (Note Students back at University on Friday pm each week)
Mentor Meeting:	December 15 th (Monday)
School B Visit:	December 16 th (Tuesday)
School Practice 2:	January 5 th to April 2 nd
Mentor Meeting:	March 29 th (Monday)
Mentor Meeting:	May 18 th (Tuesday)
School A Visit:	May 19 th (Wednesday)
School Practice 3:	June 7 th to July 2 nd
PGCE Ends:	July 9 th

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INTRODUCTION

Basic Principles within the Broad Framework

- Nothing we have developed is perfect. We are always open to new ideas and suggestions and the fruits in this handbook are a testimony to our partnership.
- All animals are equal, but science mentors are more equal than others.

What do Mentors do?

The details are all in the school placement handbook (green in your pack). We have evolved this to:

Being the **warm and welcoming**, friendly person, particularly on early visits and weeks who helps to make them feel at home as new members of the department

Sorting out a timetable

Holding a weekly tutorial

Providing weekly written feedback and debrief

The Warm and Welcoming Mentor

Being supportive, positive and encouraging is VITAL to the success of students. Ideally they should see you as a friendly supporter. We should, in return, expect them to accept the responsibilities that come with being a professional teacher and to work hard and enthusiastically towards that goal. (If they don't do this let Roger know right away and he will 'kick ass').

Mentors help students to learn what being a professional teacher means (a long task that is often not fully complete by the end of the course).

The ABC of science: biology mentoring is about:

- Being positive and supportive, warm and welcoming
- Having high expectations, making them clear and (quickly) achievable
- Celebrating success and setting new targets
- Never being satisfied i.e. there is always more to work on
... but if you are worried or concerned about rates of progress call Roger (0121 414 4825 or at home 0121 745 7432, R.J.Lock@bham.ac.uk).

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What's new?

As a team we have our whole approach to the initial training of science:biology under review on a year by year basis.

Some of the changes we have made in recent years include:

2001

- Developing the SP3 tutorial programme to include the numeracy and literacy strategy
- Reviewing the approach to lesson planning

2002

- Moving to loose leaf format in a folder
- Including information on some student audits

2003

- Including possible readings based on a book supplied in 2002 (directly linked to Ofsted suggestion). Second book to follow in 2003. Ties in with change of course assessment to Masters' level criteria
- Revisit all resources for Term 2 and made changes in content and ideas for tasks as well as Tutorial Record Form (to include Ideas and Evidence plus pupils' ideas as suggested by Ofsted)
- Information on purpose of Roger's visits
- Further audit information
- SP3 tutorials to incorporate an element of the KS3 Science Strategy

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SCHOOL PRACTICE 1 (SP1)

KEY TASKS FOR MENTORS

Before students arrive

Sort out:

- Timetable with weekly mentor meeting (see following pages)
- Activities and observations (see following pages and booklets in appendices)
- Briefing day visits

During

- 1 written lesson appraisal a week plus debrief
- 1 meeting (as trio) per week

Last week

- Assessment form/review (individual)

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TIMETABLE – GENERAL POINTS

Principles

- each student has $\frac{1}{2}$ timetable
- $\frac{1}{2}$ of each student's timetable is common/shared

For example

Periods Per Week	Solo	Pair	Team (2 students + teacher)	Total Per Student
30	8 8	4	2/3	15
25	6 6	3/4	2	12

This is the number of lessons that students are present in BUT they do not teach all of these lessons until 4/5 weeks into Term 2. They build up to teach this half timetable in term 2 but still follow the same timetable, observing/helping in the early weeks. (See following pages)

Ideally the timetable has:

- a balance of ability and motivation
- Post 16 work if you are 11-18 (see following pages)
- a balance of KS3/KS4/Post 16
- an opportunity to teach Sc1, (strands 1 and 2), Sc2, Sc3 and Sc4
- vocational and academic Post 16 (if applicable)
- attachment to a form group and PS(HM)E or citizenship
- a chance for students to negotiate this.
- No classes which are very difficult

This is not prescriptive and you have freedom to do what suits you, your department and your school i.e. these are guidelines.

However, Post 16 experience is a critical part of the teaching if you are an 11-18 school.

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TERM 1 (5 WEEKS)

- Although students follow $\frac{1}{2}$ a timetable with $\frac{1}{2}$ in common the actual teaching they do should build as follows:

(Based on 30 period week)

Week	Solo	Pair	Team (2 students + teacher)	Total Taught
1	1	-	2	1
2	2/3	-	2	2/3
3/4/5	3/4	2	2	5/6

- This means that they build towards teaching $\frac{1}{4}$ of a timetable – the rest of the lessons they observe and help (see later section on what this may involve).
- To help gain confidence they should start with 'easy' classes first (i.e. for their solo lesson in week 1).
- It is ideal if they teach the last lesson of the solo group in week 1 and then, if it goes well, teach all lessons of that class in week 2 and onwards.
- In Week 3 they take on a second class solo and possibly a third one for which the pair are responsible.
- The 'TEAM' lesson, where 2 students and a teacher are present, is a way in which students can get experience of a very challenging class but WITHOUT being responsible for the lesson planning or discipline (i.e. as observers/helpers/classroom support).
- In 'PAIR' lessons the students are jointly responsible for the class. In the ideal situation, they work well together in planning and running the lessons, but you can suggest that one leads and the other supports, with both taking a fair share of each role, if that appears more effective.
- Some mentors have found advantages from having the same timetable for School Practices 1 and 3.

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TERM 2 (12 WEEKS)

Principles

- Again we should aim to build up through the early weeks, teaching the $\frac{1}{2}$ timetable about Week 4 onwards.
- To help build confidence, again it is best to start with easier classes.

(Based on 30 period week)

Week	Solo	Pair	Team (2 students + teacher)	Total Taught
1	1	-	2	1
2	2/3	1	2	3/4
3	4	3	2	7
4 to 11	8	4	2	12

- The TEAM class, if a very challenging one, should remain under the normal teacher's control but when students are fully confident, say in the second half of the term, the students could take over.
- Really high flyers could add to this if they/you wish, an issue for the half term review.
- Some students do a professional option or just want to have a go at teaching another subject. If you approve, these could be added too. (1/2 periods max)

It is useful for you if the 'lion's share' of lessons taken by students are yours. Why?

- It's easier for you to supervise
- You get some 'pay back' for your hard work when they quickly become competent.

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Activities for Early Weeks of School Practice 1 and 2

Some of these activities may be organised by your Senior Mentor. They take up at least a half-day (and ideally a day) so need fitting into the timetable when the student is not teaching (but it may mean taking the student off observation).

- **Pupil pursuit/form pursuit** (possibly more than 1 with classes/pupils of different ability and motivation). There are support materials in the Pupil Shadowing pack in appendices.
- **Working with technician** (activities on the "Things we thought students might find out about" sheet).
- **Teacher pursuit** (especially teachers of other subjects who are teaching classes that the students teach or will teach).
- **Teacher work shadow** (pastoral, year head, SENCO etc) to get a view of the variety in teaching.

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How Can Students Observe and Help?

In early weeks of Terms 1 and 2 when students are observing, there are a range of support materials to use.

- **Observation schedules** (see pack in appendix) – these should only be used with your and the observed teacher's permission. Students could feedback at the tutorial what they have learned from this.
- **Pupil shadowing materials** (see pack) – if not used in pupil pursuit.

We find that students learn more if there is a **clear focus** to their observation rather than a general brief. You can add things for them to do e.g. pupil attitude and behaviour survey from the KS3 Strategy audit.

Ways of **helping** are outlined below and these MAINLY apply to the team teaching lessons.

The normal class teacher plans the lessons and is responsible for the management/discipline the students **help** by

- a) Working with individuals (students can develop materials)
 - helping a recent absentee to cover missed lessons
 - working 1:1 with a disruptive pupil
 - special needs support
- b) Working with small groups
 - support one bench/group for practical work
 - teach part of a lesson with a small group
 - take the group for a whole lesson
- c) Working with the whole group for part of the lesson
 - do a 'guest spot'
 - do a demo
 - run a Q/A session
 - collect in results
 - discuss results

For TEAM lessons with challenging classes this can build to taking the whole group – after half term in school placement 2

- d) Working with the whole group for the whole lesson
 - the time at which students reach this point varies depending on their confidence and competence (typically half term in term 2)
 - for some this might be the last 2/3 weeks of the second term

Where students are observing classes that they will actually teach, they should draw up a **plan** and **learn names** as well as **lab plan** noting gas, electric and water main switches.

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What Can Students do when they are not on Timetable?

- plan lessons
- prepare resources
- try out experiments
- reflect on lessons/evaluate lessons
- prepare for weekly tutorials
- mark pupils' work
- set up/maintain record assessment (mark book)
- prepare for sessions back at the university
- collect evidence for assignments
- prepare/update their personal profile
- display pupils' work

There is never a dull moment and they are rarely short of something to do. Please add suggestions to this list.

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How Can Students Work with A level/post 16 Groups?

In some schools there may be a reluctance to let students teach A level groups. However, mentors who do arrange this are rarely disappointed with the quality of work that students do.

There are other options (especially suitable in the second half of the second term) which includes working with 6th form students in non contact time to:

- revise a topic
- discuss a model answer to an A level question
- set, mark and feedback to students on a test
- produce and use a key factors revision sheet
- help an absent pupil catch up
- go over a topic that pupils request

Some of these activities are suitable for individuals, small groups or whole classes. All of these are good experiences for students.

As our course is training students to teach up to A level it is critical that they get teaching experience of whole AS/A2 classes where possible.

Possible Activities for Preliminary Visits

Things we thought students might find out about before starting to teach lessons

We decided that mentors could (if they wished) make their own lists from this sheet and give students the tasks of finding the answers and reporting back to mentors at an early tutorial. We also suggested that these tasks could be started on the two preliminary visits.

Department Organisation

- Do you know the names and the roles/responsibilities of science staff including the technicians? Who would you ask for advice?
- How would you requisition (order!) equipment/resources for your lesson?
- How is the curriculum organised for each Key Stage and year group?
- Are classes setted, banded, mixed ability?
- Have you got the schemes of work for all classes you are teaching?
- Homework arrangements for different year groups?

Resources

- What happens if a pupil's book is full/missing?
- Do you understand the reprographics system? Can you use the photocopy machine?
- Are you familiar with the library system?
- How would you find a worksheet for a topic you were teaching?
- What text books are available – what do you think of them?
- Have you made arrangements for your refreshments? How much? Do you need a mug?
- Keys?
- Access to computers and the internet

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General Issues

- What are the internal communications systems in the school (daily notices, briefings, memo, pigeon holes etc.)?
- When do staff meetings/working groups etc take place? Which of these should you attend?
- How are pupils with SEN catered for?

Pastoral

- How is the pastoral system organised? Who would you refer to if there was a problem with an individual pupil/group of pupils?
- Are you familiar with the registers?
- What should you do if a pupil is ill/needs toilet?
- What reward/sanctions systems are used?

Staffing

- What is the staff structure?
(Who does what?)
- What are the roles/responsibilities of ancillary staff? What ancillary staff are there?
- What should you do if you're ill/away? (What do students do when they're ill?)
- What happens if you want to make a phone call?
- Is there an end of day routine?
- What are the break/lunchtime arrangements?
- Arrangements for pupils in detention?
- Fire drill arrangements?
- Moving pupils in and out of Classroom – routine?
- Seating arrangements?

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Safety

- What are the risk assessment procedures?
- Where are the HAZCARDS?
- Breakages - what are the procedures?
- How do you turn off the gas/water on/off?
- What basic equipment is stored in classrooms/labs?
- What happens if pupils do not have pen/pencil etc.

School Information

- Have you read the latest Ofsted report?
- What is the cultural/gender mix of the school? Why is it like this?
- What has the department audit for the KS3 Strategy shown about overall trends, % of pupils achieving level 5 and 6?
- What are the short, medium and long-term departmental plans/action plans?
- What are the pupil assessment targets? (especially important for those classes that the student is teaching).
- Collect schemes of work, class lists and draw up seating plans for groups that the students will be teaching.

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TUTORIALS

General Principles

- Regular (i.e. one per week)
- Timetabled
- Protected time
- Agenda (known in advance at the end of previous meeting)
- Topic of the week (see below)
- Students report on preparation tasks
- Discussion
- Review targets/set new targets
- Student tasks (for the following tutorial)
- Student issues (known in advance to mentor)
- Meeting record (made by student – copy to mentor and tutor)

Topic of the Week (Term 1)

Week 1 a) Things we thought students might find out about before starting to take lessons (unless this has already been completed on the two preliminary visits).

- b) Lesson planning and evaluation (Science: Biology mentors have produced a sheet of ideas on this topic) – plus what you expect re. equipment list to technicians, planned how far ahead?, who do they show it to? When?

Week 2 Classroom management/discipline (Science: Biology mentors have produced a sheet of ideas on this topic) – plus the rewards/punishment systems in your school that students should follow.

Week 3 Assessment, recording, reporting (Science: Biology mentors have produced a sheet of ideas on this topic). They need to know what to do with marks + how, i.e. your school system.

Week 4/5 Equal opportunities (There is a sheet of ideas here too). Students have completed an assignment on this topic before coming to school – it would be good for them to know your policy, ask individual teachers what they do i.e. how is policy implemented?)

Week 5/4 Review of progress (Individual tutorial)
Mentors could:

- get all colleagues to fill in the form
- get students to fill in the form
- look closely at the teaching practice file
- get students to show them evidence of their progress where there is disagreement about progress

We should all look at the student profile.

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Lesson Planning and Evaluation – Tutorial Ideas

a) Students should already have covered

Before they come to SP1 students should have:

- A format for plans to show you based on our notes (see following sheet)
- Lesson plan for lessons they have taught in Small Heath School and have then evaluated.
- A lesson plan commented on by Roger
- Worked through the booklet on lesson planning (see your pack).

b) Tasks in preparation for the tutorial

- Bring a lesson planned for later that week
- What are the key points you are working on after teaching 2 lessons?
- Come prepared to explain how you evaluate a lesson
- Prepare 3 different plenary sessions for one lesson

c) Mentor input

- You could start the tutorial by getting them to tell you where they are at or by asking them to come to the tutorial with a list of questions about lesson plans
- Good to use this tutorial to make clear what you want and by when i.e. if you want to see their plans and how far in advance of lessons
- Prepare a lesson together. (i.e. show them how you plan)
- Students prepare a lesson for the mentor to teach including resources
- Students observe and write comments on this lesson. (Could be a task)
- How to conduct a good question/answer session
- What else do they evaluate apart from class control/management?
- Are objectives achieved? How do they know?
- What have the pupils learned? How do they know?

For the lesson planning tutorial in SP2

Before they come to SP2 students will have:

- Revised their lesson plan
- Reviewed their lesson planning skills – they should show you their review
- Resolved to focus more on pupil learning in evaluations
- Have audited the teaching and learning styles used in School Practice 1

Term 2 tutorials should focus more on evaluation of pupil learning. They should have a longer term target of reducing the size of a lesson plan and the time taken to plan it, without loss of structure (i.e. more like one an NQT should use).

Development of Medium Term Planning

Before starting to teach any topic now they should have drawn up a topic web – they could come to the tutorial prepared to share this with you for a topic they are teaching next week. This is a key strand in their medium term planning.

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Reading: Parkinson, J. (2002) Planning your teaching. Chapter 2. In Reflective Teaching of Science 11-18. Continuum, London.

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LESSON PLANNING

1. Find out relevant information about:
 - a) Pupils - Age, ability, number, sex, names
 - b) Site of lesson and facilities available - Does school have a technician? Equipment? Is the lesson in a laboratory or classroom?
 - c) Length of lesson - Allow at least 5 minutes for entry/exit and admin.
 - d) Content/Scheme of work - School workscheme or specification and the exact point in the National Curriculum complete with the level (e.g. Sc2b/6).
 - e) Previous knowledge - From KS2 or 3 or general knowledge
 - f) Teaching aids - Text books, videos, models, ICT etc.
 - g) Teaching styles - How familiar are pupils with certain ways of working e.g. groupwork?
 - h) Conventions/routines - What patterns are they expected to follow? What are your routines?
2. According to chosen topic consider previous work or general knowledge related to it. What have they/should they have learned at the previous key stage?
3. Work out objectives (educational as well as biological - process and content) and express them in terms of **pupil activity**. Most pupils will be able to ... / Some will have made more progress ...
4. Lesson start (PART 1) - choose a suitable opening to lesson aimed at capturing interest. (SHORT, SHARP START). This could include a review of previous lessons and **MUST** involve sharing the lesson aims.
5. Lesson middle (PART 2) - plan the body of the lesson bearing in mind:
 - a) sequence of ideas
 - b) **variety** of ingredients
 - c) details of organisation and practical work + RISK ANALYSIS (what will you say to pupils about this)
 - d) method of recording by pupils
 - e) quick workers - extension work (not more of the same)
 - f) reinforcement of main ideas
 - g) means of knowing if pupils have achieved what you had hoped for (assessment) although this may be in part 3
 - h) use of A.V. aids/books etc.
 - i) back up work (if you go too fast!)

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- j) most able pupils - differentiation.
6. Lesson end (PART 3) - find an appropriate conclusion to round lesson off. This must involve checking that your objectives have been achieved/revisiting main ideas/and getting a quantitative feel for pupil learning.
 7. Sort out what comes next, homework or next lesson.
 8. Look through your plan and see if it is likely to fulfil your desired objectives. How will you know? Ask questions, set quiz, test, mark written work etc i.e. assessment.
 9. Check on any factual information about which you are doubtful, writing down good sources.
 10. Does the technician have a list of your requirements?
 11. Have a box for a constructive criticism when you have performed it to help next time. This is where you reflect on your lesson and evaluate it. What went well? What was the main weakness? What action will you take next lesson to improve this? What did the pupils learn? How do you know?
 12. Your plan should include these headings/boxes:
 - Aims/Objectives – and for each one, how you plan to assess achievement
 - National Curriculum Reference/Level
 - Previous Knowledge – with NC reference
 - Main Plan with Teacher Activity and Student Activity clearly identified + clock times
 - Lesson start/Lesson Middle/Lesson end
 - Assessment – linked to aims/objectives
 - Risk Assessment
 - Evaluation
 - Equipment/Resources

Classroom Management/Discipline

a) Students have already covered

- Linked issues in a whole school issues session
- A drama presentation by Year 7s on linked issues
- Advice from 2 recently qualified teachers
- Their own ideas based on 2 lessons' experience
- Observations in a primary school and on serial practice

b) Tasks in preparation for the tutorial

- Interview colleagues about their approach
- Be familiar with school reward/sanction system
- A list of questions they would like you to address

It is good to make sure that students have worked out their own list of step-by-step responses from a glance, a stare, use name and verbal through to detention, refer to teacher etc.

Their scale might include: i) look, ii) stare, iii) stare + name, iv) stare + name + sanction threat/warning, v) sanction low level e.g. move, etc through refer to class teacher and on to suspension etc (i.e. they have a clear view of the scale + a similar view of rewards through praise → merit → certificates etc).

Students need to work out **exactly** what they can and cannot do.

c) Mentor input

For this tutorial it is critical to build on, rather than repeat, work covered earlier. There is no harm in reinforcing.

- high expectations
- detailed preparation – objectives clear and stated in pupil terms
- 'No Magic Bullet'
- flexible
- appropriate work (not too easy, not too hard)
- differentiation!!
- Variety of approaches
- Challenging instances of inappropriate behaviour?
- What if – pupils swear, touches your bum? (it does happen!)

The key point is that they leave the tutorial being clear about:

- a) their personal systems
- b) what they can and cannot do in your school
- c) confident that you/colleagues will support them

For the tutorial term 2

- Use the student profile document from term 1 and get them to explain their targets
- Be sure they know the new school expectations
- Most will have resolved to be 'firmer' than in term 1 so how will they expect you to notice this in the early lessons that you will be observing?

Reading: Parkinson, J. (2002) Getting to grips with teaching. Chapter 4 in Reflective Teaching of Science 11-18 Continuum, London.

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ASSESSMENT, RECORDING AND REPORTING

a) Students have already covered

Before coming to school on SP1 students will have considered what is assessed, why and how at a very basic level as well as considering why assessment matters. They have also marked one piece of coursework and considered the principles that apply to marking.

b) Tasks in preparation for the tutorial and mentor input

- What is school/department marking policy? How should I mark books? How often?
- How are pupils assessed? (KS3/4)
- What central records are kept? How are they used?
- How do staff keep their own records? How do they use them?
- How is the progress of pupils monitored?
- Individual pupil targets (for SATs + GCSE) and how assessment is matched to this.
- What sort of guides are there for presentation of pupils' work?
- Organising own mark book by looking at colleagues mark books.
- As form tutors they will also need to know about keeping - running a register.
- Do you know procedures for notes, parents letters etc?

For the Assessment, Recording and Reporting Tutorial in SP2

In Term 2 we could extend this further through the following content or tasks:

- Sc1 assessment at KS3 and coursework assessment for GCSE/VGCE/AS/A2 levels.
- Write draft reports of your own, looking at previous ones (Term 2).
- Being able to prepare draft comments for parents' evening (Term 2).
- Mark test using a mark scheme – this is linked to an assignment where they set tests or tasks before teaching and after to demonstrate if progress has been made.
- Devise purposeful learning to monitor strengths and weaknesses of pupils.
- They could also investigate achievement of pupils in the school they are looking at.
- Grade distributions in SATS/GCSE/A level last year? - how does this relate to the national average?
- Deciding before teaching a topic what you think a child operating at a particular level should be able to do/demonstrate etc.
- Using the Autumn package.
- PANDAs
- YELLIS

Reading: Black, P. (2002) Formative assessment: raising standards inside the classroom. In Amos, P. and Boohan, R. (eds) Teaching Science in Secondary Schools Routledge Falmer, London.

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Equal Opportunities - Tutorial Ideas

a) Students have already covered

- When students come to you they will have had one general introduction and tutorial raising awareness of issues related to Gender, Race, and Class. The issues will also have been raised in science sessions.
- They should have read at least one paper on each of the topics.
- They will have completed an assignment on equal opportunities where the final section was drawing out the implications for their practice. Showing you this could provide a good starting point to the tutorial. What progress have they made?
- There will have been 'drip feed' in other sessions too - this is often a high profile issue and students think that they have got it licked!

b) Tasks in preparation for the tutorial and mentor input

- Get students to explain what they see as the issues.
- Get them to bring the implications from their assignment and their targets.
- Get them to show you how they plan to/have meet their targets in lessons of the last/next week.
- Get them to read your policies.
- Get them to talk to colleagues about what they do.
- Look at/comment on departmental resources.
- Make classroom observation of - question distribution
 - question type
 - teacher time
 - pupil activity and report back to you on their observations (no names)
- Look at departmental statistics re male/female achievement and curriculum choice
- Plan a lesson to include equal opportunities / or modify an existing lesson to include this aspect.

Gender, race/culture and ability are often the easiest. What about class?

- What support is provided for pupil equipment?
- Do homework tasks consider space to work in (lunch time club with support) and resources demanded, e.g. ICT, web access, computers?
- Flexible implementation of dress code.
- School activities that require funding.

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Tutorial in term 2

In Term 2 the students should be monitoring what they do and collecting evidence for the second part of their assignment, which details what they have done about these issues. On the second full day at the University in Term 2 we refocus them on these issues. The second part of the assignment is done using evidence from Term 2, ready to hand in on the first day of term 3. Here they need to show that they have been proactive, for example on coversheets and resources they have produced and in their actions.

Readings:

Dennick, R. (2002) Analysing multi-cultural and anti-racist science education. In Amos, S. and Boohan, R. (eds) Teaching Science in Secondary Schools. Routledge-Falmer, London. pp 102-112

Murphy, P. (2002) Science Education; a gender perspective. In Amos, S. and Boohan, R. (eds) Teaching Science in Secondary Schools Routledge-Falmer, London pp 189-200

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Review of progress – Tutorial Ideas

General Principles

- Individual tutorial (30 minutes)
- Most students adequate (i.e. reach the line)
- Credit 'good' where evidence (i.e. to the right)
- Leave blank if no evidence and record 'no evidence' i.e. x
- Where 'significant weakness' record (i.e. to the left)
- Make comment in each section (positive with targets)
- Discuss with student 1:1 (tutorial 5?)
- Student comments
- Targets for SP2 in standards format

Mechanisms

- students complete one form
- colleagues complete one form
- give students the opportunity to show you evidence where their judgement is more positive than yours (is there enough evidence?)
- yours is the final version, amended in 'light of colleagues' and student's views if necessary

(Blank copies of the assessment form are included in the Green School Placement Handbook)

Send students back with 1 copy for Roger at the end of SP1
The senior mentor should also have one

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Record of Tutorials

Students should complete this form and provide you and Roger with a copy

Date:

Name:

Tutorial Topic:

1.
2.
3.
4.

Tasks for next tutorial:

1.
2.
3.

Targets for next week

1. Professional Values and Practice
2. Knowledge and Understanding (possibly including pupils ideas/common difficulties and Sc1.1 ideas and evidence)
3.1 Planning, Expectations and Targets
3.2. Monitoring and Assessment
3.3 Teaching and Class Management

Student agenda:

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Notes made on tutorial topics

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SCHOOL PRACTICE 2 (SP2)

KEY TASKS FOR MENTORS

Before students come

- Sort out timetable with weekly meeting
- Mentor meeting with SP1 mentor

During

- 1 written lesson appraisal a week plus debrief
- 1 meeting (as trio) per week
- Progress meeting (individual) Half Term Review

Last Week

- 1 Assessment/Review (individual) at end of term

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Term 2 Student/Mentor Tutorials

The following sheets provide ideas for running tutorials in Term 2. The ideas mainly come from previous experience of mentors in the group who have shared good practice.

The function of letting you know what students have clearly covered is so that we don't duplicate material they are already familiar with but rather **build on** and **extend** their knowledge, skills and experience.

Even though topics have been covered, students do not always remember or may not have assimilated them in the way, which was intended. A good starting point for a tutorial then, might be to ask students to come prepared to give you a **brief** synopsis of what they already know and understand so that you can build on this.

Tasks in preparation for the tutorial should be set the week before. There are too many tasks in the list, which is intended for you to select one or two from and give to the students. Students can have individual tasks that are different or they can be shared.

The mentor input reflects what colleagues have done in previous years.

This is the second revision after running the system for three years. We have evaluated the tutorials in the last two years by asking the following questions.

- Has this system been helpful and if so how?
- How have you used these materials?
- How have these topics been received by students? (we do have some idea of this)
- Are the topics in roughly the right place in the year?
- Are the topics appropriate?
- Are there key topics, which are missing?

Where we are at ?? was broadly satisfactory to all colleagues in 2003 but we are always keen to improve the level of support. All good ideas welcomed.

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Overall Tutorial Programme for Term 2

Week 1 Orientation at School B: Lesson planning and class management

Week 2 School B Policy: Assessment, recording and reporting, equal opportunities

This should mean they have the basics for your school by the end of two weeks and by making good use of the preliminary visit. They could get a lot of it from your handbook by reading it over the Christmas break.

Week 3 Developing Differentiation

Week 4 Sex Education – School Policy

Week 5 Evaluating Lessons More Effectively

Week 6 Half term review (Individual tutorial)

Students should update their profile and give you a copy. Students should look at the variety of teaching and learning styles that they have used (they have frequency check list on which to do this).

Mentors use Term 1 type practices + set targets for next half term.

Week 7 Planning and Running an Sc1 Investigation

Week 8 Parents' Evening and Writing Reports

If such a topic is not appropriate within the term then alternatives might be a review of teaching aids used and developing ideas for use in the student assignment or making an application linked to a mock interview.

Week 9 Developing a Scheme of Work

Week 10 Designing and Marking a Test
Also linked to a student assignment

Week 11 Review of Lesson Planning File and Resources

Week 12 Final review (Individual tutorial)

- Students should update their profile and give you a copy.
- Review of teaching/learning styles they have used (if not in Week 11).
- Audit of ICT experience and progress
- Mentors use Term 1/2 practices and set targets for practice in Term 3.

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The sheets that follow are attempts at trying to formalise the guidance we have used in previous years. As in Term 1 there are suggestions supporting these topics, which indicate a) what the students have already covered on this topic; b) suggested tasks for students in preparation for the tutorial or during it; and c) mentor input.

The topics are in a suggested order but you should treat this as flexible to meet the needs of your own school and student progress.

You may find that your favourite topic is not in this scheme. Those concerned that tutorials on "getting the science right" are not included might take heart from weekly target setting that is focused on developing knowledge and understanding (QTS standards in the knowledge and understanding section A; this means that students have a target each week to get some science right, preferably linked to topics they are teaching.

It is impossible to cover all tasks and they do not reflect an order of priority. You will have to make a judgement about the level of detail to which you should go; asking the students will give you a good guide.

As always you have the final say but let's give it a go.

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Weeks 1 & 2

Here we revisit all topics covered in Weeks 1-4 of SP1 but setting them in the new context of School B. There are notes on tasks and activities for SP2 in each of topics in the SP1 section.

Week 1

- a) Things we thought students might find out about (unless this has already been completed on the preliminary visit at the end of Term 1).
- b) Lesson planning and evaluation – Where are they at now? What progress have they made? Expectations of School B.
- c) Classroom management/discipline – Where are they at? What are the reward/sanction systems in School B? See the targets on their personal profiles.
- d) Progress report form – possibly a brief review of this in a 1:1 context. Where they are starting from.

Week 2

- a) Assessment, recording, reporting – What are the policies in your school? What records should/must they keep? Have they got a mark book set up? Weekly targets to be set on this area.
- b) Are they planning to record progress as well as attainment? How do they do this in your school?
- c) Equal opportunities + other policies for School B and how will they be productive and build evidence for an assignment?

Week 3

Developing Differentiation

- a) Students have already covered – what differentiation is and why it is important. They should have a wide range of strategies by which they can differentiate. Some students have this as an explicit part of their lesson plan (all should have considered this as an element of their plan).
- b) Tasks in preparation for the tutorial
- Get students to tell you what they already know about differentiation
 - Come prepared to show how they have differentiated.
 - Develop one worksheet for use with pupils of different abilities.
 - Explore the IEP for pupils they are teaching with suggested strategies for individuals in future weeks.
 - What are they doing for gifted and talented?
- c) Mentor input
- Extend student knowledge of approaches used in your school.
 - Suggest ways of managing classroom support – how to plan with assistants, working with assistants effectively.
 - Resources available and suitability for different pupils.

Reading: Parkinson, J. (2002) Supporting progression in learning. Chapter 9. In Reflective Teaching of Science 11-18. Continuum, London.

Week 4

Sex Education – School Policy

a) Students have already covered

- Sex Education and the Law
- Latest Government Guidance
- Content in Science and PS(HM)E or citizenship
- Selected teaching approaches to developing knowledge, skills and attitudes

b) Tasks in preparation for the tutorial

- Read your school policy
- Explore PS(HM)E session and come prepared to discuss and evaluate it.

c) Mentor input

- Interpretation of school policy – i.e. how the school policy impacts on what is covered in science lessons
- Resources linked to PS(HM)E lessons.
- Present scenarios for students to discuss – e.g. you see a boy pinching a girl's bum/trying to touch a breast, the girls objects/does not object. What action could you take?

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Week 5

Evaluating lessons more effectively

a) Students have already covered

- Describing strengths and limitations in their lessons.
- Identifying priorities for action. (The Action Cycle)
- Describing specific action to take in following lesson.
- Evaluating the success of specific action.

b) Task in preparation for the tutorial

- Take a lesson plan from Week 2 and Week 5 and show how evaluations have changed.
- What skills are developing well?
- What are current targets?
- Show how pupil exercise books reflect successful learning and understanding
- What strategies are they using (particularly at the ends of lessons) to get a quantitative feel for pupil learning?

c) Mentor input

- Move the focus from evaluation of the teacher to evaluation of pupils' learning.
- Are aims achieved?
- How does the student know this? Do they use plenaries to get a feel for how many pupils have achieved the aims?
- How can lessons/planning be developed to improve pupils' learning?
- By this stage each separate activity in the lesson plan should make a clear contribution to the aims and students should be able to say what this is.
- Against each aim in the lesson plan should be a clear indication of how the aim is to be assessed.

If this tutorial is carried out in Week 5 then students should prepare to revisit and revise their personal profile in preparation for the Half Term Review in the following week.

NB: If you are wanting students to develop part of a scheme of work for the Week 9 tutorial, now is the time to set the task.

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Week 6

Half Term Review

(Individual tutorial taking half the time of a full one). It is useful to read the strategies used in the Review of Progress tutorial from SP1.

a) Students have already covered

- Audit of knowledge of NC and of teaching and learning styles at the end of SP1.
- Lots of lesson appraisals they have already received.

b) Task in preparation for the tutorial

- Redraft their personal profile.
- Revisit their knowledge of NC audit.
- Revisit their audit of teaching and learning styles and ICT
- Draw up their list of agenda items to include what they hope to do and achieve in the second half of term.

c) Mentor input

- Where are the students up to on the SP2 assessment form?
- What are their targets for all areas in SP2 (i.e. to include 1, 2, 3.1, 3.2 and 3.3 standards).

This tutorial should NOT be delayed until after half term so that they go off for a hard earned rest feeling really positive about themselves and the progress they have made in the last 6 weeks.

If the student is in any danger of not passing now is the time to let Roger Lock know if he is not already aware.

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Week 7

Running and Planning Sc1 Investigations

a) Students have already covered

Very basic work on Sc1 – they have looked at the statement in the NC, they have been exposed to the level descriptors. They have carried out one Sc1 investigation at the end of Term 1. There has been a very limited focus on Strand 1. (Ideas and Evidence). Experience in School Practice 1 will be very varied – most have had no experience of Sc1 in the classroom and no experience of assessing them.

b) Tasks in preparation for the tutorial

- Organisation into four sub-strands (N.C.)
- Some idea of key marking points e.g. mark pupil work.
- knowledge of a few examples of department assessments.
- Continuity from KS2
- What does the KS3 strategy have to say?

c) Tasks during the tutorial

- For one example: how it is introduced to pupils e.g. how much help; similar exps...
- Having set the task, how are students guided? - prompt sheets?; method sheets?
- What needs to be checked in proposed methods? - Safety equipment, relevance, monitor individual input.

If, as a follow up to the tutorial, students teach a class with an Sc1 investigation, then during the investigation they need to be clear about the roles teachers play prompting pupils to achieve higher levels.

- e.g. repetitions, no. of factors...
- relevance of results
- time constraints.

d) Mentor Input

- Produce samples for comment and marking collaboratively with the students
- Use of writing frames

Reading: Wellington, J. (2002) Practical Work in Science: time for a reappraisal. In Amos, S. and Boohan, R. (eds) Teaching Science in Secondary Schools. Routledge Falmer, London.

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Week 8

Parents' evenings and writing Reports

a) Students have already covered

Nothing on this topic in Term 1 of the course but they should have developed and be running a detailed mark book (possibly electronically).

b) Tasks in preparation for the tutorial

- Find out about School Policy on recording achievement
- On reporting to parents
- Check departmental handbook guidance.
- Content of Report should include ... (i.e. structure)
- Write certain reports to bring to tutorial (4 or 5 for pupils they know well)
- Look at previous reports written by the mentor. What patterns do they find?

c) Tasks during the tutorial/input from the mentor

- Become familiar with school system
- List points they want to get across - on paper
- Role Play!!? Mentor as concerned parent
- How to start/end (How to move people on in time).

In an ideal world this tutorial comes immediately before a parents' evening of a class, which the students have been teaching. They can then:

- Draft potential reports for parents.
- Plan what points they would make verbally.
- Sit alongside the normal class teacher at the parents' evening.
- Contribute to the discussion?

Making an application/mock interview

There is significant input on this issue during the first review day of Term 2.

Topics addressed include:

- what to look for
- when and where to look
- CV construction
- application forms
- letter of application
- teaching a lesson at interview
- interview tasks
- interview questions
- pre interview visits
- the offer and how to handle
- the debrief and how to handle

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- withdrawal
- the salary
- questions you should know the answer to before accepting
- post acceptance tasks

However, there is always a lot of variation in systems and approaches so your practices would be helpful, as would a **Mock Interview**.

They will be asked to draft a letter of application and a CV following the first review day of Term 2 and they may have chosen to send these to Roger for comment.

In the last 3 years, schools have been appointing students to posts much earlier in the year. If you run a mock interview it may be best to do it earlier in Term 2.

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Week 9

Developing a Scheme of Work

a) Students have already covered

Little work on this issue in Term 1. They are familiar with the format used in schools A and B and with the QCA scheme of work. They have developed a topic web for Assignment B and should have done this for all topics they are involved in teaching in Term 2. In some schools a topic web is used as a precursor to developing the scheme of work.

b) Tasks in preparation for the tutorial

- a) Given a SoW, identify key factors in developing a structure for an SoW
- b) Given a specific topic, and students need to research information on resources etc to include in the SoW. (From topic web to SoW)

c) Mentor Input

- a) Blank SoW so that school format is clear.
- b) Lead students through the steps of developing a SoW.

Some mentors prefer this tutorial to come earlier in the term so that students can then develop a short SoW, which they implement in the second half of the term.

Week 10

Designing and Marking a Test

a) Students leave already covered

- What we assess, how and why?
- Marking of books
- Running a mark book
- Marking using a mark plan.
- They will also have varied experience in practice in SP1 and 2.

b) Tasks in preparation for the tutorial

- Start to design an end of unit test to include
 - assessment of process/content
 - assessment of knowledge/understanding and higher level skills
- Think about how pupils can use self assessment.
- How can pupils be involved in evaluating the unit and their experience of it? Student ideas as to how this could be approached.

c) Mentor input

This tutorial links with Assignment SSS 4.1 that students collect information for in Term 2 and then complete for Term 3.

They have to “set a task or test to assess pupils’ performance” and then “critically analyse pupils’ responses, the test and your teaching”.

There will have been discussion about this work on the second review day at the University. Mentors can guide and support as well as suggest the best context in which this work can be carried out.

- How will students include questions that test pupil misconceptions?
- How will their test discriminate?
- How will their test convert to levels?
- How will they use the results to explore pupil attainment and progress?
- How will the results be used formatively and summatively?

Reading: Parkinson, J. (2002) Using assessment effectively. Chapter 8. In Reflective teaching of Science 11-18. Continuum, London

Week 11

Review of lesson planning file and resources

a) Students have already covered

Expectations of the file contents and structure have been made clear to students. There should be a section for each class taught with a chronological sequence of lessons plans, evaluations and resources. (see following sheet)

b) Tasks in preparation for the tutorial

- Complete an audit of teaching and learning styles.
- Select resources developed to illustrate range of skills (i.e. those not already seen by you).
- Select evidence of where the 'action cycle' of evaluation has worked.
- Select evidence of evaluation of pupil learning in lessons.

c) Mentor input

This tutorial may be seen as preparation for the Final Review in that it offers students an opportunity to draw evidence to your attention. Some elements from the student coursework file could also be relevant here.

Keeping a Teaching Placement File

This file should help in the effective preparation of lessons and give a clear picture of the work undertaken in school. It will be the beginning of working files that you will want to keep and develop over your teaching career. The headings indicate areas where it is helpful for information to be collected together during the course of the practice. You will need to provide a comparable structure.

Section 1: static information – orientating you within the school

General School Details and Information

Handbook, policies, links with parents, OFSTED digest etc

Information for you:

Your timetable

Times of the school day – watch for odd timetables – week A/B etc

Overviews of schemes of work relevant to all classes, detailing how what you will be doing is embedded within the experience of a child moving through a school.

Section 2: Evolving information – records for each class

This should build up over the placement

General information

At the start you would expect to have data about the class and the appropriate scheme of work (SoW). As the placement proceeds so you will accumulate records about the progress of the class, also to be kept in this first section.

Records for the class could include

- Names, known difficulties and challenges for each pupil, seating plans
- Annotated mark lists, registers
- Brief accounts of previous work, individual education plans etc
- Schemes of Work / section of the syllabus for your lessons, related to the N.C. : PoS and Science Level Descriptors

Lesson plans in order

These will show how your teaching and pupil progress has evolved. The order also makes plain how evaluations of one lesson have influenced your practice in the following lesson. Interleaved with any lesson plans should be assessed material and learning resources used by you in the lessons (whether produced by you or others). Accurate references to books obviates the need to violate copyright laws – and ensures you can find it next time round. As confidence grows the need for elaborate lesson plans should decrease. Planning formally will be a requirement for all lessons and mentors and tutors will monitor and comment on this and its development throughout the course. The target is for you to be in a position where your planning is appropriate to an NQT teaching a first year teacher's timetable by the end of the School Placement. Mentors are likely to guide you here.

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Section 3: Mentor meetings

Keep an ordered record of these, and any notes arising from them, to document your increasing professional competence. (Copies to your mentor and tutor).

Rationale:

Good teaching comes from appropriate preparation, not from file keeping alone. A sensible approach to keeping records will help you in the classroom. Ultimately your file work will be of value to you as the teacher, and an aid to your development though the year, and afterwards.

You may need to draw on the file for evidence that you are meeting QTS standards and when reviewing progress or completing your personal profile.

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Week 12

Final Review (see notes from SP1 and Half Term Review Week 6)

a) Students have already covered

They have looked at the structure of the form and know that they should record their own comments including any points where their views of progress differ from the school's appraisal.

b) Tasks in preparation for the tutorial

- Students make their own appraisal using the assessment form.
- Students should have updated their personal profile and handed this to you before the tutorial (complete with targets for SP3).
- Students should have completed a knowledge audit, a teaching/learning style audit and ICT audit.

c) Mentor input

- Most mentors run this tutorial as a 1:1 discussion.
- Some mentors exchange completed forms with the students so that both parties know where there are discrepancies between judgements. In this way the student can be asked to come to the tutorial with evidence that relates to any contentious areas. Equally the mentor can have evidence to justify the position e.g. this is a consensus view from all colleagues whose lessons you have been teaching.
- Identify targets for SP3 with standards descriptors.

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SCHOOL PRACTICE 3

KEY TASKS FOR MENTORS

For 2004 Roger is proposing that we again hold a mentor meeting two weeks before Half Term to review our policy for approaching SP3. A key reason for this is that in 2003 the Key Stage 3 Strategy impacted on our literacy and numeracy tasks and we introduced new activities linked to Science Strategy materials.

However, guidance from 2003 is included so that new mentors can get a 'feel' for the structure.

For planning visit

- Negotiate timetable
- Decide on 'pay back' tasks

Before students come

- Sort out timetable (this may be the same as Term 1)
- Consult with Maths/English colleagues re student interviews for literacy, numeracy projects

During

- 1 meeting (as trio) per week to include feedback (to department on literacy/numeracy and KS3 strategy)

Last week

- Amend/Approve student report
- See CEPD content

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SP3 - Overview

- Timetable
- students teach between a quarter and half a timetable – negotiated to include a range of abilities. This can include classes taught on SP1 and post 16 work if possible
- KS3 Project
- Numeracy Project
- to be negotiated
- Literacy Project
- to be negotiated
- Student Requests
- including standards that they are still working on (see form) brought on preliminary visit)
- 'Pay-Back' Tasks
- identified by the mentor but not menial i.e. linked to standards and developing the student
- Strand 1 of Sc1
- Other activities e.g.
- work shadow
 - observation
 - SEN support

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Suggested Approach to Numeracy Project

Approach to Numeracy Project

Investigate

- **How** is the topic taught in maths and science? (interview colleagues, read documents)
- **Where** is the topic taught in maths and science? (examine PoS, SoW, exam specification)
- **Advice** on teaching the topic, from for example the QCA SoW, National Numeracy documentation, Framework for teaching mathematics)

Report back to your mentor/departmental meeting (week 2)

- Use the above structure for your report
- You should include activities i.e. avoid talking for 20 minutes
- Use ICT like Power Point

Report to your colleagues (final week of course)

- Teaching activities are essential here as there will be several presentations in each session

Resources

Available from the web DfES, QCA, Exam Boards, Key Stage 3 strategy materials

Maths teachers and maths students

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Numeracy Project – Topics With a KS3/4 focus

- Numerical awareness e.g. size of numbers, estimation of magnitude, appropriate degree of precision
- Ration and proportion e.g. surface area to volume ratio
- Rearrangements of simple formulae and their use to represent both properties and magnitudes of physical quantities
- Plotting and interpreting graphs including visual determination of lines of best fit
- Use of percentages
- Understanding probability
- Determining uncertainty
- Determining averages, modes and medians
- When it is NOT appropriate to use a calculator

With an AS/A2 focus

- Understanding the importance of chance and the principles of sampling
- Changing the subject of an equation and substituting numerical values into algebraic equations
- Translate information between graphical, numerical and algebraic forms and calculating rate of change from a graph showing a linear relationships.

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Literacy Work

We have done a lot of work on this topic and the handout with the six boxes of ideas gives an overview. The 'Literacy – key areas with support' handout shows where to go to extend your knowledge.

- Look at the QCA Scheme of Work and identify 2 units to work on (consult with your mentor – week 1)
- Fit literacy opportunities into these units e.g. taxonomy, reviewing words, DARTs, writing frames, discussion topics (you will not be able to do all of these for each unit)
- Incorporate literacy strategies that you have not used yet into the lessons you teach

In the last week in school

Discuss with your mentor (pass on the resources)

- Developments made in the 2 units
- New strategies you have used

In the final week at University

- Tell your colleagues what you did
- Involve them in the novel activities
- Share copies of your resources

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KS3 Strategy

(Week 4 tutorial + final week in Uni)

Booster Lessons

1. Read the materials pp 5-24 and prepare to brief your mentor
2. give a synopsis (involve activities) of 2 lessons

Lessons 1 & 11 Characteristics/sound

Lessons 2 & 10 Plant structure and magnetic field

Lessons 3 & 8 Human growth and electric circuits

Lessons 4 & 6 Feeding relationships and metals/non metals

Lessons 5 & 7 Physical changes and reactions

Lessons 9 & 12 Light and magnetic fields

Misconceptions

1. Do the pre-unit pupils task with either a year 7, 8 or 9 class. Collate and present the results.
2. Tease out and present the key features of
 - models and analogies
 - particles
 - cells
 - energy

Assessment (paired activity)

1. Prepare a short activity-based session for your mentor (40 minutes) that involves the key features of:
 - Sharing objectives with pupils
 - Pupils' self assessment
 - Developing effective questioning
 - Providing effective feedback

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Tutorials SP3 – Revised Approach 2003

Pre Practice Visit (May 14th 10 am)

- Negotiate timetable (quarter to half + meeting)
- Help identify units for literacy work
- Student requests
- School/mentor tasks (pay back)
- Student informs – numeracy task and KS3 strategy

Week 1 – Review and orientation

- SP2 progress report
- Personal profile
- Both above linked to forms A & B
- Contacts and support for literacy/numeracy/strategy work
- Make deadlines clear to students

Week 2 – Numeracy project

- Student led (max 20 mins per student) or this could be a report to a departmental meeting – it could be both with a shorter version for the latter

Week 3 – KS3 Strategy

- Student led (max 30 mins per student)

Week 4 – Literacy work and Review

- Students report on literacy work (10 mins max)
- Review of SP3
- Inspect/discuss/agree and sign student composed report on work done and targets still to meet

The final parts of this meeting should be done 1:1

Appendices

In years prior to 2001 all new mentors have had copies of the outcome of all developments suggested by mentors. This information is now in the handbook.

Some elements of the frequently asked questions section are still relevant and they are involved here although they may need updating.

Roger Lock
September 2002

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What should we look for in Teaching Practice Files?

What are the minimum expectations of what a teaching practice file should look like? There should be a clear section for each class taught and that within each section there should be lesson plans for each lesson arranged in a chronological sequence and other materials such as seating plan, class list, class register and record of attendance and work done/outcome of marking pupils' work.

There should also be an associated work scheme complete with an indication as to the part of the work scheme the student was covering. Each lesson plan should have clear aims (process aims and content aims) and a clear indication of the way in which the lesson was broken up into sections. The location of the work in the National Curriculum should be clearly indicated. The sections of the lesson should be perceived in terms of student activity, as distinct from what it was the teacher was doing.

It would be expected that the student had carried out a risk assessment for each lesson (unless this was already incorporated into the school's works scheme that the student was following) and a list of equipment ordered from the technician.

The student would also be expected to evaluate each lesson.

Clearly many students will do much more than the minimum requirement.

The kind of lesson plans that students produced at the beginning of their teaching experience will be expected to be very different from those which they are producing in the second half of the Spring term. We should be aiming to reach a position, by the end of the Spring term, where students can plan lessons in an economic space, say about a side, without losing a clear focus of the aims and the variety of activity that pupils will be engaged in within the lesson. That is, lesson plans by the end of the Spring term should be succinct and generally not exceeding more than a side in length. They should be like those you expect of a NQT colleague joining your department.

The rate at which students develop lesson planning skills varies and some will be able to teach successful lessons with less detailed plans at an earlier stage than others. There are some students who move to less detailed plans before their teaching competence merits such a move. It is difficult to provide hard and fast rules here as the planning needs tend to vary with individuals. There is a supplementary sheet with tutorial II in term 2.

How do tutor's visits work?

This means visits to the school by Roger Lock. I tried to explain that I had effectively handed over the responsibility for watching students teach to the mentors. This was one of the central pillars of our partnership scheme although we did note that not all University tutors had interpreted the scheme

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in quite this way. The way in which I had been working in the first term and in the first half of the Spring term was to try to do three things in the course of a visit:

- See the students and discuss their progress/work with them
- See the mentor and the students working together (in a tutorial if possible)
- See the mentor to discuss students' progress

This had been working out well to date and subject to your views on its success, would be the way which I would intend to work for the first two visits in future years.

On the second visits in the Spring term, which would come in the second half of the term, I hope we would spend some time both watching one student teach, spend some time discussing the student's progress with them and if possible, to spend a short time with you. On this visit I would aim to see the student teaching a class with which they thought they were being most successful. The purpose of this visit is one of the moderation. That is, it is the University's way of ensuring that they endorse and confirm the decisions of the mentor.

This has developed to a position where on the visits to see students teach (usually one to each student) we try to watch the student together, if we can, and then discuss together with the student.

I also meet briefly and talk with the student partner that I haven't come to see teach and to see the senior mentor on one visit.

In 2003 mentors were sent the following sheets which were also discussed with students.

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School Visit 1

Lesson Plans

Follow notes on individuals from Small Heath and from lesson planning evaluation Part 1. Plus:

- previous knowledge (progression KS2 to 3 and 3 to 4)
- aims in pupil terms
- process/content balance
- activities linked to aims
- structure of plan
- detail in plan
- 3 part lessons
- revisit of aims
- is assessment of aims clear?
- is assessment information used in future plans?
- seat plans
- risk analysis = action to take (shared with pupils in term 2)

Evaluations

- structure of comments
- action cycle

Assessment

- marking pupils' work
- record of attainment (progress and targets in term 2)

Targets

- X check with tutorial record
- across a broad front (1, 2, 3.1, 3.2, 3.3)
- how targets are set e.g. using appraisals and action cycle

Workload

- per night
- use of time in school
- prioritising

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Resources

- developing some of their own
- interactive
- variety of DARTs

Equal Opportunities

- being proactive?

Teaching/Learning Style

- variety?

Other Activities

- teacher pursuit
- pupil pursuit
- work with technician
- meetings etc

Form Tutor

- experience?
- administration
- PSHME/citizenship

Development of Topic Web

- medium term planning tool (linked to assignment)
- what difficulties do pupils have with this unit? (misconceptions)
- approaches to dealing with misconceptions

T.P. File

- 3 sections
- tutorial record

Friday pm Activities

- what was good?
- how can it improve?

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School Visit 2

(First half term of SP2)

- This will usually coincide with a tutorial and will also involve spending time with each student.
- In the time with each student I will explore how the issues raised in Visit 1, have developed.
- In addition will be looking at:

Progress

- evidence from tutorial records
- evidence for lesson appraisals
- other sources

Lesson Planning

- topic webs
- use of NC
- progression
- differentiation
- risk analysis
- plus individual issues

Evaluation

- action cycle
- more of a focus on pupil learning
- using assessment information in future planning

Assessment

- marking of pupil books
- mark book or computer record (attendance, coursework/homework, unit tests)
- attainment
- progress (pupils)
- targets (pupils)

Resources

- interaction for pupils
- variety

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- DARTs (up to 3⁺ per sheet)
- analysis DARTs as well as reconstruction DARTs

Equal Opportunities

- proactive
- class
- culture/race
- gender

Teaching and Learning Styles

- variety (follow on from term 1 audit)

Form Tutor

- experience
- PSHME/citizenship

Workload

- pacing yourself

Teaching Practice File

- as for visit 1

Jobs

- where are you up to?

Whole School Issues

- how are sessions going?
- What topics have you looked at?

Other Activities

- experience of life of school
- teacher pursuits etc
- extra curricular

Your Issues

- This is an ambitious list and some may be carried over to the third visit.

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- Depending on your progress, this visit may focus on selected areas where you want to make significant progress.

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What happens if a student is not making good progress?

We have discussed what would happen in the case of a student who was not competent and/or was not making adequate progress. It is clear to me that it is my responsibility to act and support you in all circumstances where this happens. It would be imperative that you let me know as soon as possible that a student was not performing as well as might be expected for the stage of the practice. I would then make more frequent visits and, when necessary, counsel the student to leave the course. Phone me at work or at home (0121 414 4825), home (7-10 pm) 0121 745 7432.

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Student Audits

At intervals throughout the course students audit:

- ICT skills (Term 1)
- Use of ICT personally and with pupils (Term 2)
- Science subject knowledge (Term 2)
- Teaching and learning approaches (2 audits) Term 1/2
- Lesson start activities (Term 2)
- Plenary activities (Term 2)

There are forms for all audits except lesson starts and plenaries and copies of these sheets follow.

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Teaching Methods - An Audit of your Progress to Date

Below is a list of potential teaching methods. Work out how often you have used these methods for the classes you have taught.

<u>Teaching Method</u>	<u>How frequently have you used them with each class</u>			
	Class	Class	Class	Class
Lecturing				
Practical Demonstration				
Dictation				
Board/OHP Copying				
Class Practical				
Sc1 Investigation				
Circus of Experiments				
'Design and Make'				
Concept Map or Spidergram				
Students Teach the Class				
Question and Answer				
Student Discussion				
Debate				
Poster Work				
Role Play				
Drama				
Reading				
Video				
Games				
Tests				
Models/Cut and stick				
Computer Simulation				
Data Logging				
Spreadsheets				
CD ROMs				
Whole Class Work				
Small Group Work				
Paired Work				
Individual Work				
Field Work				
Follow/Complete Worksheet				

Detail below the variety that you have used in your worksheets. (Remember the session on DARTS?).

What other methods have you used? (Include here activities in PSE).

Science: Biology ICT Audit

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Teaching Method	Frequency of use with different ability groups			
	High ability	Middle ability	Low ability	Mixed ability
<i>Teacher-Centred</i>				
Lecturing				
Practical demonstration				
Dictation				
Board/OHP copying				
Spider diagrams				
Question and answer				
Video				
Whole class work				
Teacher reading out-loud				
<i>Practical</i>				
Class practical				
Data logging				
Circus of experiments				
Games				
Models				
Cut-and-stick				
'Design and make'				
Student-bias				
Nominated reading out-loud				
Individual (quiet) reading				
Students teach class				
Pupil feedback to whole class				
Student discussion				
Debate (teacher guided)				
Role play/drama				
Small group work				
Individual work				
Field work				
Follow worksheet				
Pair/threes discussion				
Writing in own words				
Creative writing				
Pupil demonstration				
Competitions				
Research				
Reconstruction DART				

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<i>Text completion</i>				
<i>Sequencing</i>				
<i>Prediction</i>				
<i>Table completion</i>				
<i>Matching exercise</i>				
Analysis DART				
<i>Text marking</i>				
<i>Labelling</i>				
<i>Segmenting</i>				
<i>Table/diagram construction</i>				
<i>Pupil-generated questions</i>				
ICT				
<i>Computer simulation</i>				
<i>Spreadsheets</i>				
<i>CD-ROM</i>				
<i>Data logging</i>				
<i>Use of Internet/Intranet</i>				
<i>Pupil word processing</i>				

What other methods have you used?
Question loop, True/False, Millionaire?

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Name

Date

To meet the requirements of the Teacher Training Agency (TTA), and to help you develop and use the power of ICT in your teaching and professional life, we need to start with an audit of your skills. Against each ICT skill/resource below, please **circle one number to indicate the level of your experience** using the code below.

1	2	3	4	5
Lots of experience (used 10+ times)		Some experience (Used 5 times)		No experience (Not used)

Word processing

Text, styles

1 2 3 4 5 Inserting tables, images, diagrams 1 2 3 4 5

Spreadsheets

Pre-prepared

1 2 3 4 5 Creating, including formulae 1 2 3 4 5

Databases

Interrogating

1 2 3 4 5 Creating from scratch 1 2 3 4 5

Datalogging

Capturing data

1 2 3 4 5 On screen analysis: value, gradient 1 2 3 4 5

PowerPoint

Text & graphics

1 2 3 4 5 Sound, video, hyperlinks 1 2 3 4 5

Email

Send, receive & print

1 2 3 4 5 Use attachments & distribution lists 1 2 3 4 5

CDROMs

Structured use for learning

1 2 3 4 5

Internet/Intranet

Finding information

1 2 3 4 5 Making web pages 1 2 3 4 5

Effective management of files on a network

1 2 3 4 5

Video recorder

Record, playback frame by frame

1 2 3 4 5

Video camera

Record, edit & playback

1 2 3 4 5

Digital camera

Taking & downloading images

1 2 3 4 5

Flexicam

1 2 3 4 5

This audit should

1. be used to set targets for developing effective use of ICT as a teacher
2. contribute to your ICT portfolio that will need to be produced by the end of the course (i.e. collect evidence of your experience)
3. be updated at the end of SP1 and at half term in SP2 (different colour pens)
4. be replaced by the ICT audit – end of SP2

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ICT Audit – End of SP2

Name:

Date:

Things I have used with pupils

		Yes	No
• Pupil word processing	- homework	<input type="checkbox"/>	<input type="checkbox"/>
• Pupil word processing	- classwork	<input type="checkbox"/>	<input type="checkbox"/>
• Spreadsheets	- pupils use	<input type="checkbox"/>	<input type="checkbox"/>
	- teacher/pupil fills in	<input type="checkbox"/>	<input type="checkbox"/>
• Databases	- pupils interrogate	<input type="checkbox"/>	<input type="checkbox"/>
• Data logging	- pupils use in practical work	<input type="checkbox"/>	<input type="checkbox"/>
	- teacher uses as demo	<input type="checkbox"/>	<input type="checkbox"/>
• PowerPoint presentation	- pupils produce and present	<input type="checkbox"/>	<input type="checkbox"/>
	- teacher presentation	<input type="checkbox"/>	<input type="checkbox"/>
	- with videoclips	<input type="checkbox"/>	<input type="checkbox"/>
	- with graphics and sound	<input type="checkbox"/>	<input type="checkbox"/>
• Internet	- research	<input type="checkbox"/>	<input type="checkbox"/>
	- simulations/modelling	<input type="checkbox"/>	<input type="checkbox"/>

Things I have done with pupils

• E-mail	- used the PGCE bios distribution list	<input type="checkbox"/>	<input type="checkbox"/>
	- contributed to the PGCE bios list	<input type="checkbox"/>	<input type="checkbox"/>
• Intranet	- used the School of Education intranet	<input type="checkbox"/>	<input type="checkbox"/>
• Internet	- accessed – OfSTED reports	<input type="checkbox"/>	<input type="checkbox"/>
	- QCA scheme of work	<input type="checkbox"/>	<input type="checkbox"/>
	- Exam board specifications	<input type="checkbox"/>	<input type="checkbox"/>
	- TES jobs on line	<input type="checkbox"/>	<input type="checkbox"/>
• Spreadsheets	- used with school assessment data	<input type="checkbox"/>	<input type="checkbox"/>
• Used a digital camera		<input type="checkbox"/>	<input type="checkbox"/>
• Used a digital video		<input type="checkbox"/>	<input type="checkbox"/>

What super things have you done that are NOT here e.g. developed your own simulations (flash)

What are your targets for SP3?

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Aspects I Am Confident About

Aspects I Have Taught

Aspects I Would Need To Revise/Learn

Sc3 at KS 4

--	--	--

Sc4 at KS 4

--	--	--

Post 16 Biology (see Appendix 2, page 9)

Areas I Have Covered at Degree Level

Areas I Have Taught

--	--

**Post 16 Chemistry/Physics (see Web site) (Elements you have covered)
OPTIONAL**

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KNOWLEDGE AND UNDERSTANDING OF SCIENCE
(Topics you are confident to teach)

Sc1 at KS 3

Ideas and Evidence:

Investigative Skills:

Sc1 at KS 4

Ideas and Evidence:

Investigative Skills:

Sc2 at KS 3

Sc2 at KS 4

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Sc3 at KS 3

Sc3 at KS 4

Sc4 at KS 3

Sc4 at KS 4

Post 16 Biology (look at an AS/A2 specification on the web)

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**Post 16 Chemistry/Physics (if you feel confident to teach one of these)
or Psychology**

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