Initial Teacher Education
Secondary PGCE
Partnership

Institute of Education
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IT PGCE
Subject Co-Tutors Handbook

2001/2002

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Contents

Appendix

IT PGCE Subject Co-Tutors Handbook

Introduction

Welcome to the 2001-2002 Information Technology PGCE course. Subject Co-tutors play a vital role in helping the development of Beginning Teachers towards achieving the Standards for Award of Qualified Teacher Status and the purpose of this Handbook is to help you fulfil that role. The guidance in this handbook is based on the experience of IT SCTs in previous years and also draws on the experience of the Mathematics and Science PGCE courses. Thanks is due to the Mathematics and Science PGCE teams for permission to reproduce and adapt sections of their SCT Handbooks.

The first parts of this Handbook give outline guidance on the content and timing of the weekly meeting with your BT, and on lesson observations. In the following sections this guidance is explicated in two ways: week-by-week and theme-by theme. The purpose of the first of these is to help you plan your work with your BT thoughout the placement, and the second is designed to help you address issues with arise in each of the three main subject-related aspects of the Standards for Award of QTS: Subject knowledge; Lesson planning and management; and Monitoring, assessment, reporting, recording and accountability. Finally there is an appendix which contains copies of the forms BTs should use for structured observations of experienced teachers; a checklist for them to record the teaching strategies they have used; and an exemplification of the Standards for QTS for lesson planning.

None of this guidance is meant to be prescriptive or constraining, but SCTs (especially those new to mentoring) have found the booklet a useful to guide to the things they could be discussing with their BTs in the weekly meeting and the kind of tasks they could be setting.

The content of this booklet will be reviewed in the summer term meeting of IT SCTs and suggestions for ways in which it can be improved are welcome throughout the year.

This booklet makes extensive reference to the Standards for Award of Qualified Teacher Status, which are the (government set) criteria against which BTs' progress is mentored and monitored. Schools and BTs have been given copies of the Standards, which can also be downloaded from the 'Assessment' section of the IT PGCE 'Course Material' web-page.

Two important features of the IT PGCE course are its web site and its conferencing system:
The course web-site: is at http://www.ioe.ac.uk/scitech/Courses/ITPGCE/index.htm
and is the major Institute-based resource for the BTs. The password protected areas (your BT will give you the log-in and password) contains resource material for all the Institute-based curriculum sessions; downloadable copies of all PTE-related forms (and this booklet); resources for the teaching of the National Curriculum and external examinations; and tutorials and other resources for various pieces of software. I would be grateful to receive suggestions for any additional resources you feel should be placed on the web-site. The site also contains pages each BTs has produced to introduce themselves to you and links to the pages of partner schools. (Please let me know the URL of your school if it is not included.)

The course conferencing system: this year the course will be using think.com (http://www.think.com) as its conferencing system, both to share work completed during Institute-based curriculum sessions and to share experiences while on PTE. A number of partner schools already use this system, and SCTs from these schools will easily be able to join the IT PGCE community. If your school does not use think.com and you wish to join the community, please let Tim Brosnan know.

Guidance for SCTs on weekly meetings and other activities

The purpose of this guidance is to help you plan your work with BTs. It is not meant to be prescriptive but to provide a framework for helping BTs' professional development by indicating when various activities (e.g. lesson observations by BTs, formal observations of BTs by SCTs and other colleagues) should take place, and what the content of these could be.

The weekly meeting: is an essential part of the relationship between an SCT and their BT and should be a time for sharing thoughts about teaching, supporting the BT, and setting and monitoring targets relating to the Standards for Award of QTS. *Agendas for these meetings should be planned jointly by SCTs and BTs.* Ideally this meetings should take place once a week at a regular time and in a place where it is unlikely to be interrupted. Many Subject Co- Tutors have a designated period in their timetable for this purpose or have a 'protected' non-contact period. If you are finding it difficult to find an appropriate time to meet, you should discuss this with your School Professional Tutor. Part of the weekly developmental meeting will be devoted to reviewing what has happened during the previous week and making plans for the week to come.

A suggested agenda for the weekly developmental meeting:
✓ review progress towards targets set previously
✓ discuss issues arising during the week
✓ discuss plans for teaching in the coming week
✓ check progress on School Based Tasks and future plans
✓ review topics for discussion between SCT and BT - and plan to address those not already covered
✓ set targets as appropriate
✓ record issues discussed, actions and targets agreed

At regular intervals it is also important to:
✓ check the BT's Practical Teaching File
✓ review the breadth of the ET's experience and make plans as appropriate
✓ review the Assessment Record File and progress towards the Standards for QTS

Record of meetings: *BTs* are required to complete a brief record of the weekly meetings, indicating which of the Standards for Award of QTS are currently being targeted and what progress has been made on those targeted in the previous week. They should keep copies of these records in their ARF – and in the first term bring a copy to the Institute each Monday. The form for this is downloadable from the course web site.

Guidelines for the timetable: BTs should have an approximately 50% teaching timetable. In term 1 BTs should have 50% of three and a half days timetable and in terms 2 & 3, 50% of four and a half day's timetable. It is important that *over the two periods of PTE*, BTs should experience teaching IT to as wide a range of pupils as possible and in a variety of contexts. This includes teaching classes at KS3, GCSE and +16 and through both discrete and cross-curricular modes of delivery. This does *not* mean that they need to teach this range in each PTE school, but it does have implications for second school placements – and their timetables in these.

Guidelines for SCTs and teachers observing lessons

Formally, lesson observations have two purposes:
1. For all BTs, they provide a record of their development towards the Standards for QTS – and demonstrate that it is the Standards which have been the focus of lesson observations and reviews. In this they complement and inform the weekly meeting's review of progress.
2. For the minority of BTs who are in danger of failing the course, they provide a clear record of when the BT's problems were brought to their attention and how their subsequent progress (or lack of it) has been monitored.

These two purposes determine both the timing and content of 'formal' lesson observations. In particular they mean that:
1. Formal lesson observations need to take place regularly throughout the period of PTE – and not all be lumped together at the end. For good BTs this is a way of recording their progress and it is even more important for failing BTs since, almost without exception, these claim that 'no-one told' them about their problems. If all written observations are completed at the end of the PTE, there would be no record of the advice and warnings given at earlier stages.
2. Feedback needs to indicate which Standards is/are the focus of that observation and how the BT is performing in relation to them. This complements the weekly review meeting; identifies areas of strength of strong BTs; and in the case of failing BTs, identifies those of the Standards which they are failing to meet.
3. Lesson observation records are not the same as Records of Achievement! In a Record of Achievement only positive things are reported – a lesson observation needs to strike a balance between positive comment and indicating areas that need work. Again, while this is important for all BTs it is crucial in the case of poor ones, who invariably point to lesson observations containing only comments as evidence that they are not failing.
4. Although much of the advice given to a BT is of necessity non-subject specific, (i.e. it could be given to almost any BT in any subject), it is important that as classroom organisation and management become less of an issue, and the focus of observations moves to pupils learning and its assessment, subject-specific observations are made – for example on the teaching or assessment of a particular aspect of ICT capability.

Some useful practices
1. Following the weekly meeting, the BT could be asked to list the Standards targeted that week and leave it in a folder in the departmental office. When teachers observe, they collect the current sheet and can then automatically provide feedback on the agreed targets.
2. SCTs frequently use the blank sheet of paper for lesson observation, noting times at which events occur; a practice which has proved useful to BTs. The descriptive commentary can be used as the basis of discussion between the SCT and BT. The structured sheet in the ARF can be completed afterwards using the notes and discussion as a basis. Both the commentary notes and the structured notes should be retained in the ARF
3. Even if time is very short it is important to give oral feedback immediately after an observation. While discussion of the written report can wait until later, BTs are usually (and understandably) nervous when being observed and *some* immediate feedback is welcomed.
4. It is important to review the lesson plan before observing and to give feedback on this.

In the following sections, ways in which you can give feedback to BTs on their progress towards different aspects of the Standards for award of QTS are outlined in more detail.

Week-by-week exemplification: term 1

Weeks 5 & 6   Induction weeks: Wed. - Fri. 8-12 Oct. & Tue. - Fri. 16 - 19 Oct.

The responsibility for organising induction and observation is divided between school professional tutors (SPTs) and subject co-tutors (SCTs) and varies from school to school. During these weeks it is important for BTs to:

- feel at home in the department and meet all IT teachers and support staff;
- discuss their letter of introduction and CV with you;
- learn about the department's procedures, particularly with respect to technical support;
- receive some guidance on observing lessons (see the observation schedules starting at page 13 of this booklet) and undertake some observations;
- work with a small group of students in your own class;
- shadow a pupil for a day;
- collect their timetable and relevant sections of schemes of work;
- know when their weekly meeting with you will be held and how long it will last;
- leave with a clear idea of what will be expected of them when they return.

In addition it would be useful to discuss what your BT has already learned on the course. The course web-site (see above) contains a 'curriculum session timetable' which links to pages describing the tasks BTs have been set and the resources they should be familiar with.

Weeks 8 and 9   Tue. - Fri. 1-4 Nov., Tue. - Fri. 6-9 Nov.

BTs need to observe the classes they will be teaching, to discuss with teachers the relevant programmes of work and possibly start team-teaching the classes. They will also be preparing lessons 'for real' for the first time, so that they are ready to take over classes in week 10. In the weekly meeting it would be useful to:

- support lesson planning for weeks 9 and 10. Plans must be done on the Institute's pro-forma (see *Secondary PGCE Subject Course Notes*). BTs have had an introduction to lesson planning at the IOE - but this was only a start;
- discuss lesson observations which your BT has made. There will be lots of questions about the classes they will be teaching;
- select (jointly with your BT) appropriate observations and experiences for week 9;
- organise times and resources when your BT can try out software to be used in week 10;
- check lesson plans for good management strategies;
- check preparation, especially whether all computer-based activities have been tried out in advance.

Week 10 (classes should be taken over by this week) Tue. - Fri. 13-16 Nov

This is likely to be the first week of teaching. In the meeting you could:

- provide time and space for your BT to talk through their first experiences of 'being in charge';
- support preparation for good management and organisation;
- help with aspects such as timing and how to close one part of a lesson and move to the next;
- discuss the organisation of your BT's mark book and show them how other teachers keep mark books.

Weeks 11 and 12   Tue. - Fri. 20 - 23 Nov., Tue. - Fri. 27-30 Nov.

In the meetings for these two weeks you could:
- discuss the organisation of your BT's teaching file;
- pick up on issues relating to the Standards concerning Subject Knowledge, Lesson Planning and Lesson Organisation which are emerging for your particular BT;
- explain how to set and mark students' work (classwork and homework); a joint marking activity will be useful;
- give feedback on one set of books which your BT has marked;
- explain how BTs can monitor progress from well kept records. Ensure that your BT has set up a sensible mark book system.

Please allow BTs to bring copies of three pieces of work which they have marked to IOE on Monday 26 November. (Three of different standards from one class.)

Please check that class teachers know that they should be giving <u>written</u>, as well as oral, feedback to BTs. Encourage use of the 'informal' observation sheets on a routine basis. Make sure that at least one person has completed the first of the 'formal' observation sheets in the ARF by the end of these two weeks and that two more 'formal' sheets are used before the end of term. Help in the completion of 'formal' observation sheets is given on p11 of this booklet.

Weeks 13-15   Tue. 3 Dec. – Fri. 21 Dec.

These are the last weeks before the winter vacation. In the meetings for these three weeks you could:
- continue your discussion of progress and target setting against the Standards, including targets for the start of the new term;
- discuss how the IT department supports high achievers and children with special needs;
- discuss progress on Assignment 1.1 - does your BT need help with the technical aspects of the task? Do they understand the nature and standard of the required supporting material?;
- check your BT has observed the new classes they will add to their timetables next term. Have they been able to talk with all relevant members of staff and collect the necessary schemes of work?;

Do contact me if you are particularly concerned that your BT is making slow progress.

It is important that by the end of term there should be several observations in the ARF, including three of the profiled ones.

BTs will be in school for five days a week after the vacation and will need an increased timetable. Have these been negotiated with other teachers?

Week-by-week exemplification: term 2

Weeks 16-17   Mon. 7 Jan. - Fri. 19 Jan

BTs should have completed a draft of two parts of Assignment 1.1 during the vacation and this should be posted to reach the Institute by Wednesday 9 January.

In the weekly meetings for these weeks you could:
- discuss what they have learned from the written assignment and how they will apply that learning in teaching;
- continue the joint review of your BT's professional development and setting of targets against the Standards;
- discuss a shift in evaluations so that the focus is clearly on the learning which pupils have achieved and not just on class management;
- encourage the widening of teaching and learning strategies;
- provide those BTs who have made rapid progress with plenty of challenge, especially in their use of formative assessment;
- encourage quality marking to ensure your BT is giving constructive feedback to pupils;
- check that five formal observations have been done and that evidence is in the ARF.

Since during this period SCTs have to move from formative assessment of BTs to providing an interim summative assessment, it is important to talk with other colleagues and with the BT about report form 1. The construction of the report is a joint activity**.**

Week 18   Mon. 21 - Fri. 25 Jan.

This is probably the week when the final report is written. The report will be used by the Institute Tutor and the next SCT to review progress and set initial targets. In writing reports please do not over-mark 'for encouragement'. Failing BTs use 'encouraging' interim reports as evidence that they 'were not told' about their problems.

It would be very useful to discuss the range of teaching strategies which BTs have used and highlight those which should be a priority for their second PTE.

Week 19   Mon. - Fri. 28 Jan. - 1 Feb.

This is the final week of placement 1. During this week there should be a joint review of the formal report of placement 1 and the targets set for placement 2 (see p 84 of green *Secondary PGCE 'Partnership in Training' Handbook, 2000/2001*.) Make sure that BTs have their own personal copy of the report form, so that they can share it with me. The report from placement 1 needs to be sent to the Institute of Education by 2nd February 2001.

Wednesday 6 February 2001   2.00 to 3.30 or 5.00 to 6.30
(tea and coffee available half an hour before meetings).
Meeting of IT SCTs at the Institute of Education Room 915

Placement 2 - Practical Teaching Experience

Week 22   Mon .- Fri. 25 Feb. - 1 Mar

'New' BTs arrive with their ARFs which contains profile task 4, which has targets set in collaboration with me in the light of the report from school 1. In the first meeting you could:
- settle BTs into the second placement. BTs are not starting from scratch but are unfamiliar with your context and its routines so much of the induction which was done at the start of the year will need to be repeated;
- discuss targets and professional development needs.;
- agree a timetable – including where possible post-16 experience;
- indicate any parents' evenings which your BT can attend, and take part in.

Weeks 23 - 25   Mon. 4 Mar – Fri. 22 Mar.

In these weeks the BT will move from observing their new classes, to working alongside the class teacher, to teaching the classes themselves.

By now BTs should be good at identifying areas they need to work on, and areas where they need to seek new challenges. Some BTs may still need support for planning lessons; do not assume that because they have been planning for some time, they have learned all there is to learn about it. In particular, the weaker BTs will still focus their lesson planning and evaluation on management issues rather than pupils learning. One indication of this is where they set 'learning objectives' that are lists of things the pupils should **do** in the lesson rather than things they should have **learnt**. It is important that where this is the case the shift to the planning for and evaluation of pupil learning is made quickly. For this reason it would be useful if the weekly meetings during these two weeks could focus on this aspect of lesson planning and evaluation.

If your weekly review of the BT's progress towards achieving the Standards for Award of QTS suggests that they are making slower than expected progress, do not hesitate to complete a 'cause for concern' note and send it to the Institute. It is helpful to BTs for this to be done in time for extra help to be given. BTs must have a copy of the note before it is sent and it must be discussed with them. If, following the sending of a 'cause for concern' note, progress does not improve, you need to consider whether you need to complete the form 'In danger of failing'. If you feel this is the case, again please do not delay. As before, it **must** be discussed with the relevant BTs and they must have a copy of the completed form.

It is probable that by the end of this term we will need to send predictive grades for all the BTs to the Ofsted inspector.

Week-by-week exemplification: term 3

Week 26 - 27   Mon. 8 April – Fri. 19 April

If your BT is making normal progress, classroom management should not now be a significant problem and the focus of the weekly meetings needs to move to setting and monitoring targets concerned with pupil learning, its formal and informal assessment, and the use of this assessment in planning teaching. If this is the case, your weekly meetings could:

• discuss the subject knowledge profile of your BT and set targets to address gaps;
• discuss marking routines and ensure that mark books and marking are up to date;
• discuss how your BT is addressing the learning of all the pupils in their classes. Do formative assessment strategies need to be developed further? How will this be done? How can they use the results of informal assessment in their lesson planning?;
• encourage BTs to extend their range of teaching strategies and try new ideas – especially if their teaching is becoming rather 'routine'. Focussed observations of the lessons of other teachers (to see additional strategies in action) can help here.

Weeks 28 - 30   Mon. 22 April - Fri. 10 May

In these weeks, which lead up to the completion of the final report, the focus of the weekly meetings needs to move firmly to those Standards to do with assessment and reporting. There may be lots of new activities which BTs can be involved in with during this time, including for example the running of revision classes. It is important to make sure that your BT learns as much as possible about assessment and examination preparation and administration, including, where possible, attendance at coursework moderation meetings. Additionally, there may be resources which your BT has produced which would be useful to the department.

In completing the final report with the BT it is important to identify those areas where, although they have met the Standards, they would benefit from further development as these will be included in the BT's Career Entry Profile.

Institute tutors will be planning the visits of the external examiner/and or the Ofsted inspector for weeks 30-31. Please note that you may receive a request at short notice for such a visit. These visits are an important part of the quality control of the course.

Week 31   Mon. - Fri. 13 May - 17 May

External examiners visit about 15-20% of BTs during this week. This includes all BTs who have been identified as being at risk of failing and a sample of the others. Should your BT have such a visit (for either reason) details of the arrangements will be discussed and agreed with you.

Week 32   Mon. - Fri. 20 May - 24 May

This is the last week BTs are in school for their second placement. In this week it is important to identify any areas of weakness in both subject knowledge and +16 teaching which were not specified in the final report so that action can be taken on these in the remaining weeks of the course. Also it is worth setting upset up the formal handing over of marked books, class records, notes for the next teacher. Have all school documents and keys been returned? Have formal farewells and thanks been given to teachers and technicians. Has your BT said goodbye to their classes? etc.

Wednesday 3rd July 10.00 am to 3.30 pm
(tea and coffee available throughout the day)
Meeting of IT SCTs at Institute of Education.

Thematic exemplification: Developing BTs subject knowledge

The BTs on the IT PGCE course come from a wide variety of backgrounds, including web-design, business studies, network management and database professionals. An increasing number (mainly the younger ones) have IT as at least part of their degree but many others will have gained their experience of IT though work, not through university study. Although all BTs have demonstrated good subject knowledge at interview, there will invariably be gaps which they need to address. These gaps are of two distinct kinds:

1   in the concepts and ideas of the IT National Curriculum and examination courses
2   in their software skills in specific applications.

Early in the course, BTs' knowledge, understanding and skills will be audited against an 'A' level syllabus. This is indented to identify those areas of IT in which they need to develop their subject knowledge. To aid this process, some additional 'subject knowledge' sessions will be provided at the Institute during the Autumn term and there is also the opportunity for BTs to address any remaining areas in the summer term. In addition, the first part of the curriculum assignment (Assignment 1.1) requires that the BTs complete the equivalent of an 'A' level 'minor project' with spreadsheet, web-design and database-based tasks and their pedagogic subject knowledge and understanding of progression in IT capability form an important focus of the second part of Assignment 1. (See the Assessment section of the course web site and/or the IT PGCE Subject Course notes for further details of these.)

BTs are responsible for updating their own subject .knowledge and will be advised to work to familiarise themselves with the requirements of the National Curriculum and post-16 courses, but there are aspects of the knowledge required for teaching that they will not find in any text book and that they will need help to develop at the Institute and in school. At the Institute, BTs will have opportunities to work on a selection of IT topics: analysing pre-requisite knowledge and progression within the topic; considering likely pupil difficulties; researching different approaches to teaching the topic and applications in the 'real world'. They will, however, need to work independently and with their SCTs' help to develop their knowledge across a broader range of topics as they prepare to teach them - and with the tasks in Assignment 1.

Below are listed some of the ways in which BTs may be encouraged and supported to develop their subject knowledge during their Practical Teaching Experience. A number of these are already being used in partnership schools.

Knowledge of the curriculum and of progression
- Encourage the BT to work through Key Stage 3 tests, GCSE and A Level papers. Provide them with the papers and mark schemes, where available
- Provide the BT with copies of schemes of work for ~ years and levels
- Expect the BT to research the topics they are going to teach across the whole of KS3 and KS4, looking at progression in the learning objectives and in the resources available

Examination level work
- Timetable the BT to work with a Higher level GCSE group and with an A Level and or GVNQ group -this may be supporting or team teaching pupils for public examinations
- Arrange for the BT to teach a single topic to a small group of Yll or Y12 pupils (perhaps as a 'one-off lesson or once a week). Making this a 'special event' gives the BT time and incentive to prepare extra thoroughly
- Arrange for the BT to help in revision lessons.

- Encourage the BT to run 'help' sessions for GCSE and/or A Level/GVVQ pupils at lunchtime or after school

Planning lessons and schemes of work for a topic
- Expect the BT to look at several textbooks and other resources before planning their own teaching
- Discuss the problems that pupils may have with the topic and the key things that may go wrong
- Discuss what you would expect pupils to know about the topic already
- Suggest that the BT plan exactly what they are going to say, including especially their use of mathematical language, and rehearse it mentally
- Expect the BT to include in their lesson plans full description of all the examples they intend to use, annotated to show which aspects of each example they will stress

Observing and giving feedback on teaching
These are some of the subject knowledge related issues that you may pay attention to when observing the BT teach and discuss with them after the lesson:
- using specialist (or non-specialist) language
- stressing the key points in the topic
- explaining the same thing in several different ways
- using helpful imagery
- allowing pupils opportunities to explain
- making connections with other topics in IT and with applications
- listening and responding to pupils' contributions
- responding constructively to pupils' questions

It is helpful to make specific comments related to subject knowledge on the lesson observation form, providing evidence of the standard the BT is achieving (perhaps referring to some of the issues listed above).

Thematic exemplification: Developing BTs lesson planning

Although BTs are introduced to lesson planning during Institute-based curriculum sessions in the Autumn term, and are required to produce plans to teach a variety of aspects of the National Curriculum and share these with other BTs through the course conferencing system, the crunch comes when they have to put these plans into practice in the classroom. SCTs therefore play a very significant role in helping BTs to understand what makes an effective plan.

When thinking through the plans for their lessons, many BTs have difficulty in one or more of the following:
1   thinking primarily about what they want the pupils to *learn* in a lesson rather than focussing exclusively on what they want the pupils to *do*
2   thinking the lesson through from the *pupils'* point of view rather than focussing on their *own* activities
3   linking the content of a lesson plan to the strands and (particularly levels) of the National Curriculum - i.e. thinking about the development of *capability* rather than (just) the acquisition of *software skills.*

Ideas for the ways in which you might help BTs with the 'subject knowledge' and 'monitoring, assessment, recording, reporting, and accountability' aspects of lesson planning are included in the following two sections, and the appendix includes an exemplification of the Standards for lesson planning.

Electronic versions of the lesson planning and evaluation pro-formas can be downloaded from the IT PGCE course web site, and BTs are encouraged to use these, although if your school has its own versions which you wish to be used, BTs have been told to follow this advice. BTs will be told that they are expected to plan and evaluate all the lessons they teach on the appropriate forms.

In addition to thinking about their own lessons, BTs can learn a great deal about lesson learning and classroom organisation from structured observations of experienced teachers - you and your colleagues. To help this, a series of pro-forms designed to aid observation of different kinds of lessons - and of the same lesson from different points of view - are included in the appendix to this booklet. While these will primarily be of use in the early stages of PTE, it is also useful for BTs to 'revisit' these topics at later stages, when they have more experience.

Thematic exemplification: Developing BTs monitoring, assessment. recording, reporting and accountability

This is recognised as an area where IT BTs often underachieve and in which almost all will be dependent on regular discussion with you, revisiting issues throughout the Practical Teaching Experience. Most BTs will require consistent support in several key areas, in particular in assessing pupils against the *levels* of the National Curriculum. While there are Institute-based curriculum sessions devoted to this area in the Autumn term, it is addressed most strongly in the break between the two periods of PTE, when there are sessions devoted to aspects of assessing in IT at Key Stage 3, GCSE, GVVQ and 'A' level. However, your role in developing this aspect of the BTs teaching is particularly vital, especially on PTE 2 when they should have a good grasp of lesson organisation and planning and the need is to move them strongly to thinking about planning for and assessing pupils learning.

Lesson planning and evaluation

While they are planning their lessons, BTs need to be considering how they will know whether pupils are achieving their intended learning objectives. Their plans should make clear when and how they intend to monitor pupil progress. Things you can do with BTs and expect from them include:

- Expect assessment opportunities to be highlighted in lesson plans.
- Discuss with the BT ways of building assessment opportunities into lessons, for example: planning for lots of active pupil participation in the lesson; asking questions that will reveal pupils' thinking; identifying individual pupils to ask differentiated questions; asking review questions at the beginning or end of the lesson.
- Discuss with the BT what action they will take if their in-lesson assessment reveals that some or all pupils are having difficulties with the work.

When BTs evaluate their lessons they should be clear about how well learning objectives for the pupils have been achieved and how they will use this information to plan future lessons, to set targets for pupil learning, and to improve specific aspects of their teaching. Things you can expect from BTs and do with them include:

- Expect lesson evaluations to include: specific evidence of achievement of learning objectives; details of errors and pupil difficulties; comments on individual pupils' achievements
- Discuss the targets the BT is setting for individual pupils and for the class as a whole.
- Review sequences of lessons with the BT, considering how the evaluations have influenced planning for whole classes and for individuals.

Recording

BTs' recording is often confined to homework marks and test results and neither adequately represents their knowledge about pupils not provides an adequate basis for planning or setting targets for individual pupils' learning. They need to be helped to think about what records need to be used for and to develop forms of recording that will serve useful purposes. Part of Assignment 1.1 involves the BT building a spreadsheet-based coursework recording system and you could usefully discuss with them how this might best be used and adapted.

National Curriculum, GCSE and Post 16 Assessment

BTs need to learn to make judgements about pupils' attainment in terms of the National Curriculum levels - and for many this is a very difficult task. There is also much for the BT to learn and understand about assessment at KS4 and 5, much of which is taken for granted by experienced teachers. It is important for BTs to understand the GCSE, GVQV and 'A' level

systems and how decisions are made about tiers of entry. Some things you could do to help BTs develop their knowledge of assessment at all key stages are:

- Attach the BT to a Y9 class and encourage them to make judgements about the NC levels achieved by the pupils. Discuss how these judgements are made.
- Involve the BT in departmental moderation of KS3 teacher assessment.
- Arrange for the BT to work with pupils at all levels in KS4. This may be in a support capacity.
- Involve the BT in assessing GCSE coursework alongside experienced teachers.
- Expect the BT to attend departmental meetings where issues such as entries to GCSE are discussed
- Arrange for the BT to observe and/or support a post-16 IT classes.

Accountability and Reporting

BTs are expected to know their legal responsibilities and those of the school in reporting pupil achievement. They also need to know how to make use of the information that is in the public domain in order to set appropriately high expectations for all pupils. They thus need to be familiar with local and national benchmarks, with the school's performance in public tests and examinations, and with the factors affecting the performance of individual pupils. Two things you could do to help develop this aspect of the Standards are:

- Ensure that the BT is familiar with departmental and school procedures for communicating with parents and for keeping them informed about their children's progress.
- Expect the BT to attend parents' evenings alongside the class teacher. D Expect the BT to contribute to the writing of reports to parents.

Appendix: Classroom observation forms; teaching strategy checklist; and an exemplification of the Standards for lesson planning

Introduction
The series of observation sheets which follow are designed to help you focus on different aspects of teaching and learning IT. <u>Making the observations is not the whole task</u> - for each one you are asked to reflect on what you have learnt and to share in discussion with your subject co-tutor.

Remember to discuss what you will be doing with the teacher concerned before the lesson and seek permission. You must share your observations with the teacher as soon as possible after the lesson.

Combining observations with teaching
Your ability to make significant observations will increase immensely the more you work with pupils and take over teaching. You will start the observations early in your PTE, but should continue with them as your own teaching skills develop.

You will find it helpful to make a few copies of each observation sheet. Date and file completed observation sheets and your reflections on them.

Tailoring observations to fit your professional development
Once you have been teaching for a while, you will find that you need to focus your observations to match your development. Discuss this with your subject co-tutor. Here are three examples of focused observations from a previous group:

BT1 was having difficulty introducing topics and 'talking round' a subject. He tended to tell classes what to do, but not why they were doing it. He therefore focused observation on the start of lessons and watched teachers who were good at making the introductions interesting and at involving pupils in the discussion.

BT2 was good at introducing subjects and getting pupils working, but often found it difficult to draw lessons to an end, both in terms of summarising the content with the class and in organising the clearing up smoothly, and dismissing the classes properly. He therefore went into other teachers' lessons for the last 15 or 20 minutes to pick up as many ideas as possible.

BT3 could organise routine 'instruction following' work but had difficulty in knowing how to handle open-ended activities where pupils were expected to make many of the decisions about design and procedure themselves. She focused her observations on lessons involving open ended work - making notes particularly of interventions teachers made, when they worked with groups and individuals.

Choosing how best to use observation time can be part of tutorials with your co-tutor.

Observing classrooms is a highly skilled operation. The more you know and understand, the more you will notice and this in turn raises more questions which necessitate more observations!

Observation of phases of lessons

Observe a lesson using the schedule to list the activities which occur.

Class_____ **Topic**_____ **No. of pupils** _____ **Date**_____

Time	Teacher activity	Pupil activity
0 -10 min		
10 -20 min		
20 - 30 min		
30 - 40 min		
40 - 50 min		
50 - 60 min		
60 -70 min		
70 - 80 min		
80 - 90 min		

Follow-up task: from your notes write a lesson plan for the lesson. Ask for critical comment on it from your subject co- tutor.

Observation of management strategies

Observe a lesson and concentrate on the teacher's management. The schedule below provides a framework for your observations; add extra categories if you wish.

Class_____ **Topic**_____ **No. of pupils**_____ **Date**_____

Management skill	Observation notes
Starting lesson i) settling class / registration ii) starting topic	
Materials/computers include position, distribution, completeness, working order and collection at end	
Changes of activity	
Awareness of whole of the class i) when talking to the whole class ii) when the class is working individually	
Involvement with pupils' work	
Response to behaviour issues	
Ending of lesson including i) room condition ii) content consolidation	
Setting homework	
Other	
Follow-up task: start a list of the ways in which teachers change from one activity to another. Add to this list through the year.	

Observation of a computer-based activity: teacher focus schedule

Focus	Observation
Setting the task How is the work set? Are there written instructions? Is a textbook used? One common task or variety of tasks? What guidance are pupils given about recording results?	
Purpose of activity Is the purpose clear? What is the point of the activities? e.g. developing skills / knowledge / understanding?	
Materials/books/worksheets How are these distributed? How are they collected up?	
Pupil management How are pupils grouped? How does the teacher use time during the activity? How is misbehaviour dealt with? What noise level is acceptable?	
Intervention Does the teacher have to stop the activity for any reason? Note reasons for intervention.	
Timing What proportion of the lesson is used for the activity? Is this enough / too much?	
Application How are pupils' results used? What consolidation/discussion follows?	
Follow-up task: BTs often think of 'working on the computer' as a single kind of activity, when it can have many purposes. Start a list of the variety of purposes of computer-based activities (e.g. developing skills, investigating, following instructions) and add to it during the year.	

Observation of a computer-based activity: pupil focus schedule

Focus	Observation
Setting the task In what ways do pupils find out what they have to do? Did they read any instructions?	
Purpose of activity Is the purpose clear to pupils? (Identify and note uncertainties) Are they able to apply prior knowledge? Do pupils work carefully? What writing is done **about** their activity?	
Materials/software Do pupils know where to get materials? Do pupils understand how to use the software? Note problems they experience	
Pupil grouping Are pupil groups collaborative? Do boys/girls share equally in tasks? Are some pupils passive passengers? Do pupils stay on task? What misbehaviour do you see?	
Intervention Do pupils seek teacher help? Do pupils seek peer help?	
Timing How much of the work do pupils complete?	
Application Do pupils obtain results? Are pupils able to interpret results? Are pupils engaged in consolidation / discussion ?	
Follow-up task: What ways to the teachers use to ensure that the pupils know **why** they are doing a specific activity – and what they have learnt during it?	

Observation of a demonstration

A demonstration normally occupies only a small part of a lesson but its importance may far exceed the time it takes. Watch the demonstration carefully and try to monitor both the teacher and pupils. Alternatively concentrate on the teacher on one occasion and on pupils on another.

The schedule is designed to give you some guidance but may need to be varied according to the nature of the demonstration.

Demonstration topic_____ Duration _____min. Date_____

Focus	Observations
Pupil positions Seated/standing Visibility of demonstration	
Safety How is safety ensured?	
Presentation by teacher Introduction Commentary	
Pupils' engagement/response Was interest aroused? Was interest maintained? Any expectancy/surprise?	

Pupil participation
 Are pupils spectators or participants?
 	
 Are pupils active through
    i) Q & A?
    ii) working at the computer?	

Place in lesson/topic
 How does the demonstration fit
    the rest of the lesson /
    topic?	

How is the demonstration followed up?	
What record of the demonstration did pupils make?	
Question for reflection: Was a demonstration the best teaching strategy for this aspect of IT? Summarise the reasons for your answer	

Observation of question and answer sequences

Observe and record your observations on question and answer sequences of lessons using the schedules to focus your observations. You may find it helpful to concentrate on different aspects on different occasions.

1. Open or closed questions

Question type	How many of these questions?
Closed (Pupils feel only one answer will be acceptable)	
Open (Pupils assume many answers are acceptable)	

2. Demand on the pupils
What kind of thinking is expected of the pupils?

Question type	Score each question	Total
Recall information (e.g. What is…)		
Make observations (e.g. What do you see on the screen when…)		
Apply reasoning / hypothesise (e.g. Explain…)		

3. Effect on pupils
Sometimes pupils reveal their feelings about the way their answer was received.

Effect	Score each question	Total
Pupil encouraged		
Pupil discouraged		
Effect not apparent		

4. Distribution of questions

i) by gender

It is often claimed that in mixed classes boys dominate the oral parts of a lesson. You may monitor the responses to questions by using the schedule below or you could score the first schedule under girl / boy headings.

Question answered by	Score	Total
Girl		
Boy		

ii) position in the room

It is easy for a teacher to concentrate more questions on a particular group of pupils. This may be intentional or an unconscious response to particular circumstances. Make a sketch of the seating arrangement and then monitor the teacher / pupil interactions by a simple mapping device such as the one below.

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B                          Teacher                          G
G                                                           B
B                                                           G
G                                                           B
B                                                           G
G                                                           B
B                                                           G
G                                                           B
B                                                           G
G                                                           B
B                                                           G
G        B         G         B         G         B         B
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Reflect on the pattern you find and consider making a second observation with the same teacher and class if there appears to be some special factor operating. With a difficult class you might consider plotting answers to questions on one classroom plan and plotting the teacher's speaking to pupils as part of their discipline and control on another.

Do these findings help to explain the questioning distribution?

Discuss the significant features of your findings with your co-tutor.

Follow-up task: in term 2, ask your co-tutor or a class teacher to use the schedules while observing your teaching, to give you information about your own questioning.

Teaching strategies checklist

Use this chart to keep a record of the teaching strategies that you have observed and tried.

Teaching Strategy / Task	Observed (Date and topic)	Tried (Date and topic)
Organising a computer-based activity - skills-based planning evaluating investigation problem solving other		
Organising a non computer-based activity planning evaluating investigating problem solving other		
Demonstrating using a projection screen/single monitor using an interactive whiteboard using the pupils' monitors (e.g. RM Tutor)		
Explaining - skills/procedures - concepts - capability - social aspects of IT		
Extended question and answer session		
Using a video		
Independent learning from book resources from computer-based resources from other resources		
Discussion whole class small group		
Role play		
Out of school activity – for example an IT-based visit to a local firm		
Lesson to develop IT capability in the context of another curriculum subject		

Lesson planning and the Standards

Aspect	QTS Standard	1: Very good with several outstanding features	2 Good with no significant weaknesses	3 Adequate but requires significant improvement	4 Poor quality. Does not meet standards
Learning objectives	A1i, iii, v B4ai, iv A1vii B4f B4ki,ii B4m	Clearly differentiated learning objectives set Learning outcomes are met and clearly show progression	Objectives set in terms of learning outcomes Learning outcomes are met in most lessons	Mix of learning and procedural objectives Learning outcomes usually but not consistently met	No learning objectives, only procedural ones Learning outcomes are not stated or not met - above or below level of members of the group
Key questions	B4kvi,viii	Key questions consistently match objectives and delivered by planned activities	Key questions consistently match objectives and usually delivered by planned activities	Key questions are appropriate	Key questions do not match objectives
Review of prior knowledge	A1vii, x, xi B4aiv B4kvii	Prior knowledge reviewed and used as a basis for lesson planning plus evidence of adaptation of lessons	Prior knowledge reviewed and used as a basis for lesson planning	Prior knowledge reviewed but not consistently used	Little or no review of students' previous knowledge
Evaluations	B4f B4n	Evaluations show critical reflection in terms of learning objectives with points for development	Evaluations distinguish between learning outcomes met and not met, with reasons	Evaluations assume learning has occurred	Evaluations show no evidence of focus on learning; no evidence of development or critical reflection
Differentiation/ SEN, gifted	B4av B4kxii	Differentiation clearly specified, acted on and effectiveness reviewed	Differentiation clearly specified and is not always by outcome alone	Differentiation limited to outcomes	Differentiation not apparent
Student activities	A1ix B4aii B4kiv,ix	Activities are challenging and demanding; mostly novel or adapted; wide variety of strategies used	Activities have high level demand; some novel; little copying; variety of strategies used	Activities show a mix of demand level; are taken only from the school SoW; limited range of strategies	Activities involve extensive or regular copying; limited range of strategies
Homework	B4aii B4kx	Evidence of extensive imagination and creativity in homework tasks	Homework demands matched to level(s) of pupils	Homework appropriate to level of most pupils but undemanding	Homework not set or not appropriate.