

# PGCE Science - Mentor Handbook

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## INTRODUCTION

We would like to thank you for working with us this year with one or more trainee science teachers. Mentoring can be a challenging experience but is rewarding and worthwhile for all involved.

This handbook sets out some important details about your work within the school/college – university partnership so that the different roles and responsibilities of your trainee and university tutors are clearly defined. This should assist us to ensure that each trainee in our care receives the support and advice that they need at an individual level so that they successfully gain QTS and PGCE at the end of the course.

We are very aware that being a mentor can add considerably to your workload – what we do want to ensure is that any demands on your time are both realistic and worthwhile. We hope that this handbook sets out details and advice about how you may work most effectively with your trainee.

One important piece of advice is to make sure that you contact a tutor as soon as any problem or potential problem surfaces. It is our experience that the sooner problems are identified the more likely it is that we can identify a satisfactory course of action. Our contact details are given below. Please don't hesitate to get in touch. Email is quite often the best method as we do find it difficult getting through to mentors in school by phone due to your teaching commitments.

Once again, we would like to take this opportunity of thanking you in advance for your work – feedback from trainees is almost always without exception highly complimentary about the contribution that our mentors make to their progress.

You can contact the university tutors at:

Zahra Alijah	<a href="mailto:zahra.aliyah@manchester.ac.uk">zahra.aliyah@manchester.ac.uk</a>	0161 275 3200
Andy Howes	<a href="mailto:andrew.j.howes@manchester.ac.uk">andrew.j.howes@manchester.ac.uk</a>	0161 275 3444
Robert Buck	<a href="mailto:robert.buck@manchester.ac.uk">robert.buck@manchester.ac.uk</a>	0161 275 3284

Associate University Tutors:

Naina Kotecha	<a href="mailto:naina.kotcha@manchester.ac.uk">naina.kotcha@manchester.ac.uk</a>	0161 275 8472
Gerry Peat	<a href="mailto:peatg@hotmail.co.uk">peatg@hotmail.co.uk</a>	
Mark Williams	<a href="mailto:mark.williams-6@manchester.ac.uk">mark.williams-6@manchester.ac.uk</a>	

PGCE Office	<a href="mailto:c.burton@manchester.ac.uk">c.burton@manchester.ac.uk</a>	0161 275 8472
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An electronic copy of this Handbook plus Word templates for all documentation required by mentors for the course is available on our mentor. Your PM will be given login details.

# 1 THE ROLE OF THE MENTOR

As mentor you should have oversight of everything that the trainee does in the school though the Professional Mentor may assume responsibility for whole-school issues. The training needs of each trainee are different; however, most require support and guidance in:

- enhancing their subject knowledge, particularly when teaching outside their subject specialism;
- planning and evaluating lessons;
- classroom management;
- marking and assessing students' work.

You need to ensure that the trainee is planning and evaluating lessons properly and you will need to give considerable guidance in the early days. Trainees must produce a lesson plan and evaluate every lesson taught; proformas are provided on the mentor website.

Please support the trainee informally and frequently, and also ensure that a formal discussion with feedback and target setting takes place at least once per week for approximately an hour. This formal discussion should take place on a one to one basis in confidence.

In the case of absence or lateness that they must contact the school according to the school's policy on such matters, please keep a record of the trainee's absences and any times late. If this is an area which causes you concern, please contact the trainee's University tutor as soon as possible.

## 2 LESSON OBSERVATION AND FEEDBACK

Please formally observe a lesson taught by the trainee at least once per week and record your observations on the University's observation form. The results of this formal observation will form part of your weekly discussion. Please provide the trainee with a copy of each observation and keep a copy for your records. Where possible, encourage all staff working with the trainee to provide feedback for every lesson they teach.

### ***Teaching progress and target-setting***

Lesson observations provide a focus for discussion on the trainee's development as a teacher. An important aspect of this discussion will be to focus it onto things that the trainee can do to improve weaker aspects of their teaching. However, support for the trainee clearly needs to be positive and strong aspects of the observed teaching should always be noted and praised.

Both the lesson observation form and the RoAD include space for mentors to set targets for trainees. The purpose of the space on the observation form is to note down possible targets while you are observing. Once targets have been discussed and agreed in the mentoring meeting they should be recorded in the RoAD. This allows a record of target setting and achievement to be kept in one place and allows University tutors to monitor trainees progress.

### ***Problems or Trainees Making Insufficient Progress***

Problems of all kinds are minimised if they are identified and tackled early. If you are worried about any aspect of a trainee's progress, please contact the University tutor immediately.

### ***The online RoAD***

The RoAD is a vital document which records the trainee's achievement of all the Standards required by the NCTL. The responsibility for completing the RoAD is the trainee's, but please check regularly that this is being done. This is now an online set of files; your trainee will share a link with you so that you can access them.

When setting targets remember that they should be:

- *specific*, e.g. 'ensure the class is silent when you are talking' rather than 'improve classroom management'.
- *Measurable*, the trainee must clearly see what they have to do in order to achieve the target.
- *Achievable*, the target should not be set so high that the trainee is discouraged from attempting to achieve it.
- *relevant* to the trainee's needs and the available support.

- *timed*, such that the trainee can achieve the target in a reasonable time and that time scale noted when the target is set.

At the end of each school placement you are required to:

- produce a Progress Report for the trainee, keeping a copy for your records and providing the trainee with a copy for the RoAD;
- provided formative comments relating to each area of the Standards.

### **3 TRAINEE INDUCTION INTO SCHOOL**

#### ***School Experiences***

School Experiences for full-time PGCE trainees usually follow an ABA scheme - the trainee is placed in one school/college in the Autumn and Summer Terms and in a different school/college in the Spring Term. The two establishments are chosen to complement one another, providing different experiences for the trainee. The trainees are assigned to schools and colleges by the tutors who take into consideration:

- Trainee training needs;
- School requests for specific subject disciplines; and
- Trainee travelling time.

### **4 THE UNIVERSITY TUTOR VISIT**

The University tutor will normally visit a trainee once in each school placement. If a trainee is giving cause for concern more visits will be arranged. Ideally, the mentor and the tutor will observe the lesson together to allow them to discuss the trainee's progress and to provide joint feedback. If it is not possible for you to attend the lesson, you should attend the post-observation feedback.

Trainees are *normally* observed by the tutor in the last four weeks of the placement. Visits will be arranged in negotiation with the mentor (usually via the trainee), the trainee will then inform the Professional Mentor to provide them with the opportunity to feed their evaluation of progress into the discussions and target setting. Trainees and mentors will have at least a week's notice of the visit and, if it is not your class, cover should be arranged to allow the mentor to observe the lesson (where possible).

Following the lesson observation, the tutor will join the mentor in providing feedback. This joint debriefing has proved invaluable to all parties in the past. The tutor will also give the trainee formal written feedback. We suggest you allow 45 minutes for this joint feedback.

## 5 EXPECTATIONS OF TRAINEES

### ***Professionalism***

The trainee is both a guest in your school and a co-professional. As such you should expect the trainee to act in the full professional role of teacher throughout their placement with you. This includes them being thoroughly prepared for their teaching, carrying out regular assessments, maintaining appropriate relationships with adults and pupils within the school, adhering to the dress code for staff, being responsible in punctuality and attendance, and behaving in a manner consistent with school policies and practices. If the trainee falls below the professional standards expected of other members of staff, despite being clearly informed of this, then inform the university of this serious matter.

### ***The RoAD***

The RoAD (Record of Achievement and Development) is the key evidence document which indexes a trainee's achievement of the Standards. Maintaining it is largely the responsibility of the trainee, but you are requested to check it periodically and to encourage the trainee to keep it up to date. It also contains electronic copies of documents which you will need to complete.

The trainees' teaching is assessed against the NCTL's Teachers' Standards. The trainee has the responsibility of maintaining a record in the RoAD which demonstrates her/his achievement of each standard and sub-section. This is revised at the end of each placement and submitted for inspection and assessment by the university tutor as part of the RoAD. The RoAD forms part of the final assessment, and will need to be made available to external examiners or OfSTED inspectors on request.

The Progress Matrix within the RoAD should be used jointly by mentor and trainee in full in week 3 of the placement and in the penultimate week. However, this does not prevent you and the trainee from using it as a reflective document throughout the placement.

### ***Teaching Load for Trainees***

During the first school placement, the trainee should be eased in to their full teaching load over the induction period through activities such as small group teaching; team teaching; teaching part of lessons, etc. This is flexible based on your experiences of each trainee; however, as a general guide, they should be on their full timetable on or as soon after the 2<sup>nd</sup> of November (start of week 3) as possible. In placements 2 and 3 there will also be some level of induction required, though we would expect trainees to be teaching as soon as realistically possible.

Trainees will have approximately 30% (8 hours), 50% (10-12 hours) and 60% (14 hours) of a full timetable in their successive placements. The rest of the time in school should be spent in the following ways:

- observation of lessons in science and other subjects, most usefully in a targeted way as part of action to address areas for development. We recommend one or two lessons per week throughout the whole of the placement.
- preparation and evaluation of lessons.
- development of lesson resources, trialling practical activities.
- setting and marking homework and other professional duties.

Trainees are expected to remain on the premises for the same hours as teachers. If there are departmental or whole school meetings, parents' evenings, or open days please ask them to attend.

Trainees should have a balance of classes from across the years represented in the school. We understand that many schools prefer not to give trainees sole charge of Y11 or Y13 examination classes; however, a common strategy is to timetable trainees to such classes in addition to their main teaching timetable to support the class teacher. With some flexibility, trainees should be able to still gain a full range of teaching experiences at this level without jeopardising exam results; mentors who foresee a difficulty in providing this full range of experiences should speak to the Subject Leader (Rob Buck) with some urgency. Importantly, if you have post-16 provision, please ensure that the trainee gains experience of it. All Science trainees are on the 11-19 pathway and their time with you may provide their sole opportunity to work with these students.

You may give a trainee classes belonging to colleagues who are not trained mentors and they may take part in the observation and training of the trainee, we encourage you to share the workload in this way. You will remain responsible for the trainee, for formal feedback and for grading. Hence, you may like to undertake joint lesson observations with the class teacher to standardise the feedback.

## **6 MENTOR TERMLY CHECKLIST**

To help you plan your mentoring activities a termly checklist is provided by the school liaison officers via your Professional Mentor.

## **7 COHERENCE**

Coherence covers the match between the parts of the course taught in the University and those taught in school. To enable you be aware of the University-based training a day-to-day timetable is provided separately. Your Professional Mentor will oversee a programme of EPS (Educational and Professional Studies) which will build on the university sessions. We will be grateful if you will build in to your trainee's programme opportunities to obtain practical experience of matters covered in the university science programme.

## **8 QUALITY CONTROL**

The School Liaison Team and your Professional Mentor are responsible for checking on quality of training both between subjects in your school and between schools. To provide the necessary information during each school placement, please complete a mentor questionnaire and ask your trainee to independently complete a trainee questionnaire (see the mentor website). These should be given to your Professional Mentor. During the School Liaison Team's visit to the Professional Mentor these questionnaires will be discussed. They will also want to see the trainee's RoAD and your records (i.e. observations reports, progress reports and any additional information you have recorded about the trainee and their training).

To ensure quality of trainees on the course, Mentors are involved in the selection of trainees. If you wish to become part of the team of mentors who interview trainees please contact Carole Burton in the PGCE Office or Rob Buck directly.

## **APPENDIX - Examples of good practice in the initial training and education of science teachers**

Examples of good practice are contained in this section. These are now central to our provision and delivery of ITE and have been synthesised from 'Training Curricula' provided by partner schools and colleges during the last eight years.

### ***Induction into School/College***

- Share knowledge of background and ethos of school/college.
- Roles of senior staff, the Professional mentor and Science.
- Key policies e.g. - uniform, equal opportunities, homework, truancy, pastoral care, sanctions and rewards procedures.
- General organisation – e.g. staff meetings and briefings, departments, timing of the school day.
- Health and safety issues.
- Expectations of staff – appearance, conduct, absences.
- School facilities – staff room, library, reprographics, ancillary support.
- Other issues, special to your school or college that you may wish to include.

### ***Induction into Department***

- Staff and their roles.
- Schemes of work for the National Curriculum, GCSE, 'A' Level, BTEC etc.
- Resources access and availability – written material and practical equipment.
- Human resources - specialist teacher skill and technical skill and support.
- Facilities available – ICT, video, specialised rooms and laboratories, library.
- Departmental policies on: pupil achievement and target setting, classroom teaching, safety, assessment, homework, marking, record keeping and access, differentiation processes.
- Policy on SEN – the identification and education of pupils with learning difficulties and disabilities and the identification and education of the able and talented.
- Department meetings – expectations of trainees
- Other issues you may wish to include.

### ***Liaison with staff in the School/College and University***

- Trainees should attend the programme of meetings outlined by the Professional mentor and Science Mentor.
- Confirm school/college provision in the completion of Independent Study Packs (ISP). Facilitate work on the Independent Study Packs.
- Build professional relationships through subject and extra curricular activities with pupils and staff.
- Ensure Departmental staff are kept informed of the aims of the ITE programme and the attaching literature and procedures.
- Facilitate ICT provision.
- Share mentoring experiences with other relevant staff.
- Liaise with University tutors
- Provide feedback on school/college experiences and matters of personal progression and support during teaching practice
- Other activities you may wish to include.

### ***The Trainee's Progression***

- Use University audit and trainee's CV to plan a differentiated programme of training.
- Plan a systematic programme of school experience to develop the trainee's teaching competences, including less able and more able classes and a range of ages.
- Arrange for trainees to observe excellent practitioners.
- Ensure the trainee engages in teaching activities appropriate to their stage of development e.g. observation of lessons as teacher aide, teaching individual children (e.g. SEN or gifted), groups of children, team teaching, whole class teaching, differentiation.
- Help trainees construct lesson plans and develop and use schemes of work.
- Encourage the trainee to take increasing responsibility for improving his or her own subject knowledge and skills through empowerment.
- Encourage trainee to develop ever more appropriate expectations of pupils as experience builds through the training year.
- Ensure trainee shows more concern for children's learning and less for their own actions as the year proceeds.
- Use progress reports in RoAD to focus more sharply on individual trainee's needs as the year proceeds
- Develop increasing knowledge, skills and use of monitoring, assessment recording, reporting and accountability

- Encourage trainees to develop their own personal ICT skills and use ICT appropriately to provide motivating learning experiences for pupils.
- Regularly check the trainee's teaching file for quality of written lesson objectives, plans, trainee's evaluations and written resources.
- Write a minimum of one detailed formal lesson evaluations each week and ensure these go in the trainee's school file, and that you retain copies.
- Ensure that each trainee is taking increasingly greater responsibility for teaching activities through the year. The details should be determined by the mentor after an initial audit of the trainee's needs. The rule of thumb is:
  - 8 hours per week in placement 1.
  - 10-12 hours per week during placement 2.
  - 14 hours per week minimum contact time in placement 3.
- All trainees must demonstrate at some stage that they are competent to take sole charge of a classroom for a continuous period of four weeks on a minimum 14 hour timetable some time during the Summer term. This should be recorded in the RoAD.

### ***Coherence between the School/ College and the University Programme***

- Trainees should be able to appropriately apply relevant knowledge gained from the University programme when planning and delivering science lessons.
- Science Mentors should challenge trainees to demonstrate knowledge of both general and subject specific educational issues and processes contained in the University's study programme and monitor this in the RoAD.
- Trainees should have the opportunity to develop their professional practice in relation to science practical activities
- Other activities you may wish to include.

### ***Meeting with the Trainee***

- At the start of each teaching practice audit the trainee's experiences through their CV and other entries in the RoAD, agree a programme of work and set relevant targets.
- Make quality time available to obtain feedback from the trainee, a minimum of a lesson period per week is recommended. During this time encourage trainees to experiment, to be reflective and to analyse their experiences in their teaching files and in lesson evaluations.
- Encourage trainees to take a full part in school life and to observe lessons other than science.
- Provide frequent oral and weekly written feedback to trainees on their classroom and wider school experiences. Set targets and confirm achievements in the RoAD.

- Build trainee's confidence by use of appropriate support and challenge as practice progresses.
- Create opportunity for the trainee to extend and build professional relationships.
- Encourage trainees to use appropriate monitoring, assessment, recording procedures to inform both their future teaching and the pupils of their progress.
- Other activities you may wish to include.

### ***Achieving the Standards***

- Provide opportunities for the trainee to acquire the standards required by NCTL. These are specified in the RoAD.
- Give appropriate guidance and training, to enable trainees to improve or acquire all standards.
- Support the trainee in filling in the RoAD document showing where a standard has been demonstrated or acquired.
- Note significant absences of standards and set specific targets for action.
- Pay particular attention to the use of ICT, and the expanded requirements concerning trainees' abilities to use appropriate monitoring, assessment, recording, reporting and assessment procedures.
- Other activities you may wish to include.

### ***Assessment of the Trainee***

- Observe lessons formally at least once a week using the lesson observation pro-forma from the University.
- Engage in shared observation of trainee with Professional mentor and another relevant teachers at least once per placement to exchange professional opinions on trainee's progress.
- Engage in shared observation of the trainee with University tutor; debriefing trainee in presence of University tutor, discuss judgements with University tutor.
- Provide formative feedback based on the above.
- Know and apply appropriately the policy in this Handbook for dealing with trainees that are in difficulty or failing.
- Complete end of placement Progress Report in the RoAD.