



# Carter Review of Initial Teacher Training (England): Call for Evidence

SCORE's response to the Department for Education's consultation

22 September 2014

## **About SCORE**

SCORE is a partnership of organisations, which aims to improve science education in UK schools and colleges by supporting the development and implementation of effective education policy. The partnership is currently chaired by Professor Julia Buckingham and comprises the Association for Science Education, Institute of Physics, Royal Society, Royal Society of Chemistry and Society of Biology.

## **Summary**

1. All courses should provide instruction on learning, assessment, classroom management and pedagogy. This instruction should be informed by research and taught by appropriately trained and resourced staff. Student teachers should be appropriately assessed and supported and there should be clear procedures in place to deal with those who are not meeting agreed standards and expectations.
2. Student teachers should have the opportunity to develop their own classroom practice based on evidence and should be encouraged to take a critical and thoughtful approach to their use of research and good practice. This practice should be developed during monitored school placements, during which they are supported by a trained mentor.
3. Decisions about entry to teacher education should be made using common and transparent standards. Those given places on courses should have already demonstrated an appropriate knowledge base for learning to teach their specialist subject. They should be provided with opportunities to extend and develop this knowledge to support learning in the classroom.
4. Subject Knowledge Enhancement (SKE) courses should play an important role in preparing student teachers to teach biology, chemistry and physics.
5. Each student teacher should be expected and entitled to pursue general and subject-specific continuing professional development beyond their initial teacher education. A new model for early career development should be created in consultation with teacher educators.

## **General comments**

6. Initial teacher education is vital in order to produce a skilled and confident teaching workforce. It has a key role in making teaching a profession that more people aspire to join, and securing teachers' status.
7. All initial teacher education courses should be focused on developing high quality subject-specialist teachers and good knowledge of the subject area is an essential feature of specialist status. To be considered a subject specialist at secondary level the teacher must have at least one of the following: a relevant degree; sufficient experience in the subject through employment; or a qualification from a 24-week Subject Knowledge Enhancement (SKE) course. The teacher must then gain a teaching qualification in the specialist subject.
8. There should be a common and transparent standard of entry to teacher education between different models, including a common standard of subject knowledge. Sufficient time must be allowed for recruiting student teachers, including adequate opportunity for marketing. All routes into teaching should benefit from equitable access to marketing and funding.

9. Success criteria used for the inspection of teacher education should be equitable across different routes into teaching and institutions and use broader measures than just observation. There should be recognition that different routes into teaching entail different amounts of time spent on teaching practice, which explains differences at the point of entry into the profession.
10. All institutions offering teacher education should have their courses accredited and inspected – including at subject level - regularly, with appropriate measures to ensure quality of output. Measuring the quality of output should include collecting a range of types of evidence, for example employment data, and not just judgements about the teaching of a small sample of student teachers. Care should be taken to ensure that criteria used to judge courses lead to genuine improvements in quality.
11. Ofsted and other relevant organisations, such as professional bodies and learned societies, should have a role in accreditation and inspection. Inspection teams should include members who have recent and relevant experience of educating new teachers by the mode of initial teacher education being inspected.
12. There should be a transparent model for the allocation of initial teacher education course places by subject, on both a regional and national basis. There should be incentives and an emphasis on encouraging all modes of initial teacher education to make a proportionate contribution to recruiting teachers to shortage subject routes, such as physics and chemistry.
13. National planning should allow adequate opportunity for staffing and course development on each route. The School Workforce Census and other data should be used to track teachers over a period of time to enable long-term comparisons of retention from different routes into teaching. Allocations of teacher education places should be made for a longer term period than is currently the case so that there is greater stability in all modes of initial teacher education. Institutions should be able to plan student numbers and course structures two to three years in advance.
14. Funding for all initial teacher education routes should reflect robust costings of the contributions of all partners providing initial teacher education, so that expectations are reasonable in light of financial constraints, and so that courses are sustainable. Any systemic changes should be thoroughly budgeted and piloted before being rolled out nationally in order to ensure that they can be delivered.

**The strategies, models and practices ITT providers and schools should deploy to equip trainees with the skills and knowledge to become outstanding teachers**

15. All courses should provide instruction on learning, assessment, classroom management and pedagogy. This instruction should be informed by research in those fields. In the context of their specialist subject, students should develop sound subject knowledge and Pedagogic Content Knowledge (PCK) in their specialist subject; a comprehensive set of skills for assessing learners' understanding, progress and development; experience of teaching gained through more than one school placement; a clear understanding of the needs of all students, whatever their background, and of the theories relating to how children learn; skills in appraising different approaches to pedagogy and to become a consumer of research and an appreciation of the importance of continuing professional development.
16. The performance of individuals should be assessed against the Department for Education's Teachers' Standards, including subject knowledge and pedagogy. Since student teachers develop at different rates, any teacher education route must include

opportunities for reviewing progress at several points in the course and their performance must be judged using the context of the type of course they are studying. There should be an acknowledgement that students will not have reached full competence by the end of their initial teacher education, and their progress against the standards should be monitored throughout their careers, and supported by developmental targets.

17. There should be a more detailed definition of what is reasonably expected of a student teacher so assessment reflects accurately what they should be achieving during their initial teacher education.
18. There should be well-understood procedures for dealing with candidates who are not meeting the agreed standards and expectations. There should be clear procedures for all courses – including those led by schools - to resolve situations where a student disagrees with the judgement of teacher educators and takes legal action.
19. Student teachers should engage with, evaluate and use several sources of ideas, strategies and resources on how to teach topics within their subject. They should have the opportunity to develop their own classroom practice based on evidence from research and best practice. In science subjects, there should be a focus on teaching via practical work (see also paragraph 30), for example with student teachers being given training and support in designing experimental work and organising classrooms to undertake this. Responsible organisations, for example learned societies and professional bodies, should offer support and resources. All institutions offering teacher education must have a formal link to expert guidance on research and best practice in teaching, including information at the subject level.
20. Each student teacher should be required to pursue general and subject specific continuing professional development beyond their initial teacher education. They should be introduced to appropriate sources of professional development, as well as support material and evidence on best practice. The role of Subject Knowledge Enhancement courses should be incorporated into the national system from the outset. Access to these courses from all routes should be adequate and fair.
21. A sustainable model for early career development should be developed in consultation with teacher educators and others. It should address issues with the retention of teachers, and should clarify expectations around the roles of schools and other partners in supporting teachers in the early part of their careers. This should include robust models of costing and funding.
22. All teachers should be fully equipped to teach children from diverse backgrounds. The Department for Education's *Teacher Standards* require teachers to "set high expectations which inspire, motivate and challenge pupils", and specifically "set goals that stretch and challenge pupils of all backgrounds, abilities and dispositions." In order to achieve these it is important that student teachers receive appropriate training that enables them to understand the needs of different groups, including those with lower levels of achievement and those who are traditionally under-represented in science. This will enable them to have a sound understanding of the barriers to participation of different groups, and knowledge of effective strategies to support students to overcome these barriers.
23. Where student teachers are expected to teach physics, biology and chemistry in key stage 3 they should be supported to do so. There should be access to relevant pre-ITE SKE or post-ITE SKE for all science student teachers, of whatever specialism. Shorter SKE courses should also be reinstated for student teachers whose subject knowledge is 'rusty' rather than weak.

### **How ITT providers and schools should ensure that trainees gain the right experience in school placements and school based training to equip them to become outstanding teachers.**

24. All students should undertake teaching practice in more than one establishment for a continuous period. All entrants to initial teacher education should have already demonstrated an appropriate knowledge base for learning to teach their specialist subject. They should be provided with opportunities to extend and develop this knowledge to support learning in the classroom.
25. All institutions offering initial teacher education should have dedicated staff for that purpose; i.e. the staff involved in initial teacher education should be allocated sufficient time and resources for their role as teacher educators. They should also be given time and responsibility for their own development for the role.
26. Student teachers should have the opportunity to develop their own classroom practice based on evidence from research and best practice.
27. There should be procedures in place to review the teacher education experience provided by the school in which the classroom experience is taking place, and providers should have a process in place for dealing with any negative reviews. Institutions should be assessed based on the value added to their students' performance by their initial teacher education route. They should be held accountable in inspections only for those aspects of teacher education for which they are directly responsible in any partnership arrangements.
28. The provision of school placements should be made a national priority so that access to suitable placements is adequate and fair for all routes. There should be an appropriate balance of responsibility and funding for the placement between the school providing the placement and the institution supervising the student teacher.

### **Elements which create really effective mentoring**

29. Each student should have a subject specialist mentor who is independent of the school where the classroom experience is taking place. It is important that this mentor is trained to carry out this role. Mentors should take responsibility for helping student teachers to see the importance of their decision making both on the success of their own practice and their school and pupils. They should meet together regularly.
30. All staff involved in initial teacher education should be appropriately qualified and have a good knowledge of underlying research. This should include subject specific training as well as general pedagogy, educational issues and excellent subject knowledge. All initial teacher education courses should have a formal and rigorously applied timetable to allow student teachers to engage in such areas as PCK, classroom assessment and instruction in laboratory and classroom activities and field work.
31. Institutions should provide clear information at the start of the course on the purpose of each assessment point and its role in mapping their overall progress. An appropriate support system should be formulated to fit with the assessment system and be amenable to tailoring to fit individual needs. The inspections, reporting and allocations framework should be used to identify individual candidates' strengths and weaknesses. Institutions should take every opportunity to support and assist candidates who are struggling during initial teacher education.

