# **IOP** Institute of Physics

# Institute of Physics submission to the Department for Education consultation on strengthening qualified teacher status and improving career progression for teachers

9 March 2018

# Q1: Do you think that QTS should be awarded after a period of sustained professional practice rather than the end of ITT?

Yes.

Requiring a two year progression to achieve Qualified Teacher Status (QTS) would be an effective way of embedding a culture of professional development. Central to this culture should be "preparedness to teach", and the longer term aim must be to ensure that teachers are properly prepared, throughout their careers, to teach the lessons with which they are tasked. The proposals contained with the consultation document are overall very positive and mark a significant step towards further raising the prestige of the teaching profession.

As the document notes, a hallmark of a profession is continuous professional development (CPD); the notion that no one is "the finished article". A programme that embeds such an approach in teaching will likely have the effect of beginning to both address the current problems with teacher retention and morale, and also improve the overall quality of teaching. Such changes will take time and investment, but will ultimately create significant benefits for learners and the UK as a whole.

The Institute of Physics (IOP) has experience of leading more than 10 000 teacher hours of physics-based CPD a year, in part through government contracts. The IOP also administers the physics teacher training scholarships<sup>1</sup> working with more than 500 applicants a year and ultimately award around 100 scholarships. In this role we have expertise in providing mentoring to early career teachers.

# Q2: Do you agree that a core early career content framework and CPD offer for new teachers should be fundamental to a strengthened QTS?

Yes.

The structure that can be derived from a core content framework could significantly strengthen QTS if designed correctly. We agree with the approach of the proposals, that the aim should be to ensure that the core enables effective teaching in both the general sense – teaching-specific and school-specific competencies – and in the sense of specific subject knowledge and the ability to teach subjects in the most effective way.

Such a core would greatly strengthen QTS as an articulation of preparedness to teach different subjects in the most effective way. It would have the additional benefit of creating a uniform approach to CPD across different kinds of schools in different areas which would support both teacher mobility and retention.

<sup>1</sup> http://www.iop.org/education/teach/itts/page 52632.html

# Q3: What core competencies, knowledge areas or particular skills do you think should be developed in a structured way during the induction period?

The core should include the essential elements of making a good and effective teacher. it should have two areas of focus: general teaching (including school-specific) competencies and subject-specific competencies.

The general teaching competencies should be the features that develop an effective teacher in practice, such as behaviour management, supporting children with special educational needs and disabilities (SEND) and engagement with the evidence base for good teaching. These will include school-specific competencies, such as the use of marking policies, parental engagement approaches, disciplinary procedures, which schools should be allowed to decide on.

The subject-specific competencies should include both subject knowledge and subject-specific pedagogic content knowledge (again, with reference to evidence-based teaching). For such subject specific CPD, providers (both external and in-school providers) should be able to demonstrate a track record in both the discipline and in leading CPD.

There will be necessary overlaps between the general teaching and subject specific elements of the core, for example, the pedagogy of specific practical elements will need to take into account approaches to SEND. In addition, there is research evidence<sup>2</sup> to support the benefits of addressing subject specific pedagogy with reference to the context in which the teacher actually teaches.

The IOP, alongside a number of other scientific learned societies, has commissioned RAND to examine initial teacher education across 12 countries, focusing on subject-specific content and pedagogy components. The research will cover science and mathematics qualifications across primary, lower and upper secondary education and it is due to report in May 2018.

#### Q4: To achieve these objectives, do you think we should extend the induction period?

Yes.

The fixed core content should be matched by an expanded fixed term for achieving QTS. It should take two years, and at the end of this period, the teacher should be assessed. This should, as far as is possible, be standardised across all schools to reflect a uniform standard of qualification across all schools.

# Q5: We have used the names QTS(P) and QTS throughout this document. Do you think that these terms are appropriate?

No.

The qualifier "provisional" implies that the status is not permanent or validated and sends the wrong message to both teachers (who may feel less valued) and parents (who may misunderstand the level of training of the teachers). We prefer the term "QTS initial" to convey the message that development is ongoing, that the teacher is entering the profession and has a visible career path.

<sup>&</sup>lt;sup>2</sup> Cordingley P, Bell M, Thomason S, Firth A (2003) The impact of collaborative continuing professional development (CPD) on classroom teaching and learning. Review: How do collaborative and sustained CPD and sustained but not collaborative CPD affect teaching and learning? In: Research Evidence in Education Library. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London <a href="http://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/CPD\_rv1.pdf?ver=2006-02-27-231004-323">http://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/CPD\_rv1.pdf?ver=2006-02-27-231004-323</a>

## Q6: Which of these proposals do you think would help improve the quality and quantity of mentoring for all new teachers?

We are in favour of pursuing all of the options outlined.

On point 2, there is an increasing body of evidence<sup>3</sup> for what is the most effective way of maximising the benefits of mentoring for both mentors and mentees. In particular there is good evidence for the need to clearly separate the assessment and evaluation roles from the role of a true mentor. This is something that presents specific challenges in disciplines that have an overall shortage of specialist teachers, such as physics; to have two separate roles will likely require interschool arrangements.

#### Q7: How else can we improve the quality and quantity of mentoring for all new teachers?

We endorse the work by Hobson et al (2016) that outlines best practise in mentoring; that it should be:

- offline and non-hierarchical;
- non-judgemental and non-evaluative;
- supportive of mentees' psycho-social needs and wellbeing;
- individualised:
- developmental and growth oriented;
- empowering.

For mentoring to be effective in practice it is essential that adequate time is available to enable both mentor and mentee to benefit properly from the interaction. As such, schools should be adequately resourced to enable timetabling which will need to accommodate both mentors and mentees.

Mentoring should be seen as a central feature of the teaching profession rather than an additional extra or a burden placed on some teachers. Being a mentor should form part of an experienced teacher's responsibilities, and be rewarded accordingly. However it should not be the case that experienced teachers are automatically mentors. Mentoring requires specific skillsets and abilities, and training, and mentors should be carefully selected against specific criteria.

Further, to be most effective, mentoring should be subject specific, and mentors should be able to demonstrate subject expertise. Mentor's subject expertise could be demonstrated through external qualification such as holding chartered status in their discipline.

As outlined by Hobson<sup>3</sup> to be most effective this subject specific mentoring should be outside the chain of line management i.e. mentors should not line manage their mentees (and the process should be separate from evaluations). In subjects such as physics, where there are overall low numbers of teachers, schools will often have a small number of subject specialists and there may be a need for additional support for inter-school mentoring relationships and broader subject-specific communities to better enable support. There is value in exploring models for subject-specific local or regional communities for mentors to provide mutual professional support and maintain good practice.

<sup>&</sup>lt;sup>3</sup> For example, Hobson, A.J. (2016) Judgementoring and how to avert it: Introducing ONSIDE Mentoring for beginning teachers. International Journal of Mentoring and Coaching in Education, 5(2), 87-110

# Q8: How should we ensure that new teachers get sufficient time to focus on their professional development?

We agree that addressing barriers to teachers undertaking CPD must be central to any strategy to strengthen QTS.

The major barrier to CPD is space within school timetabling and this must be addressed. The simplest answer would be additional resourcing for schools to provide teaching cover and relief from non-classroom duties for both providers and participants.

The current intention for new teachers to be able to dedicate 10% of their time to benefit from CPD and mentoring is the right level of commitment, but it is not clear that it is currently available to all NQTs. To benefit from CPD and mentoring teachers at early stages in their careers, schools must be resourced to provide lesson cover and release from pastoral and other duties. This approach should not just be for new teachers. The overall school ethos needs to be amenable to professional development if teaching is to become fully professionalised.

The consultation document proposes confining different teachers to specific year groups as a means to relieve time pressures. In subjects such as physics it is often the spread of disciplines rather than year groups which creates time pressures i.e. physics specialist teachers required to teach other sciences. If there is an option to relieve timetable pressure, we would prefer that it is to match new teachers to their specific subject specialism, rather than to specific year groups.<sup>4</sup>

In addition to creating time for teachers through timetabling changes, there may also be opportunities to create space in the workday through strengthening a culture of sharing and collaboration on teaching and other resources.

# Q9: Do you agree that the QTS assessment should be conducted internally and be independently verified by an appropriate body?

Yes.

It makes sense for a school to conduct the assessment, given that school-specific competencies should form a core part of the teacher's development. Assessment of the subject-specific elements however should be externally accredited by the College of Teaching in association with any relevant discipline-specific professional body.

#### Q10: How do you think we should strengthen the independent verification of QTS accreditation?

No comment.

#### Q11: What role do you think ITT providers could play in the assessment and accreditation of QTS?

No comment.

Q12: Do you think we should maintain the limitation on how long a teacher can teach on a supply basis without completing QTS?

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<sup>4</sup> The Price of Misassignment: The Role of Teaching Assignments in Teach For America Teachers' Exit From Low-Income Schools and the Teaching Profession. Morgaen L. Donaldson, Susan Moore Johnson. Educational Evaluation and Policy Analysis. Vol 32, Issue 2, pp. 299 – 323 <a href="https://www.nctq.org/docs/Donaldson\_Johnson.EEPA.pdf">https://www.nctq.org/docs/Donaldson\_Johnson.EEPA.pdf</a>

It should not be an option for either school or teacher to defer achieving QTS indefinitely.

There should be a provision for teachers to be able to achieve QTS while teaching supply, with a clearly signposted route and perhaps an adapted approach to the core competencies.

## Q13: What impact do you think this model of a strengthened QTS would have on post-ITT teachers in terms of teaching practice, retention, and morale?

A model of increased, and targeted, CPD and mentoring should have a significant positive effect on the quality of teaching, teacher retention and teacher morale. It will engrain a culture of CPD from the very start of a teacher's career, creating an expectation of continuous improvement.

# Q14: What impact would this model of a strengthened QTS have on the wider school system?

The long term effect will be a benefit to the school system, with more engaged teachers operating in a school culture that places a high value on CPD. <sup>5,6</sup>

In the short term, the transition to the culture of CPD will require that the time that teachers will need to be taken out of regular timetabling to be accounted for. This would be a significant change for many schools and to be successful would require a careful assessment of the additional resource required by schools.

# Q15: Are there any other implications that we should consider, and what are your suggestions for addressing them?

No comment.

Q16: Do you think that there is a market for specialist NPQs – or similar – for teachers who aspire to other forms of leadership within the school system?

Yes.

Q17: What specialisms should be prioritised?

No comment.

Q18: Do you think there is a market for non-leadership NPQs – or similar – aimed at further developing subject expertise? How should they differ between primary and secondary phases?

Yes.

We believe that there is a strong demand for subject-based NPQs for classroom teachers focusing on subject knowledge, using evidence informed practice, employing subject-specific teaching methods, and enabling teachers to keep up with the latest developments in their subject. This route would create teachers able to play a role both within and outside their school (perhaps locally or regionally) as a leader in discipline specific teaching.

# Q19: What additional support should be offered for teachers who work in more challenging schools to undertake further professional qualifications?

<sup>&</sup>lt;sup>5</sup> Improving Science Teacher Retention: do National STEM Learning Network professional development courses keep science teachers in the classroom? Dr. Rebecca Allen & Sam Sims. Education Datalab 2017 <a href="https://wellcome.ac.uk/sites/default/files/science-teacher-retention.pdf">https://wellcome.ac.uk/sites/default/files/science-teacher-retention.pdf</a>
<sup>6</sup> Rapid Evidence Review of Subject Specific Continuing Professional Development in the UK. Philippa Cordingley, Toby Greany, Bart Crisp,Sarah Seleznyov, Megan Bradbury and Tom Perry. Wellcome Trust 2018 <a href="https://wellcome.ac.uk/sites/default/files/developing-great-subject-teaching.pdf">https://wellcome.ac.uk/sites/default/files/developing-great-subject-teaching.pdf</a>

The measure to address the barriers to teachers undertaking additional professional development – time pressures, school cultures – will be common to all schools; though additional support will be needed for schools where teaching load is already under additional strain.

# 20: Do you agree that a CPD badging scheme is something that should be developed? What organisations might be best placed to deliver this service?

Yes.

There is a requirement to monitor and assure the quality and effectiveness of CPD. It is the case that much CPD will be provided 'in house' within schools and the badging system must be able to account for this.

Where the CPD is discipline specific, the badging should also be at discipline level; someone offering themselves as a provider of physics-specific CPD should themselves be able to demonstrate a deep and relevant knowledge of the discipline. One mechanism for demonstrating this is through chartered status from the relevant disciplinary professional body. We recommend that providers of physics CPD should hold the Chartered Physicist designation.

# Q21: How should government incentivise effective professional development for teachers, particularly in the areas and schools where it is most needed?

There are a number of well-understood barriers to teachers taking up CPD. These include the unwillingness of teachers to remove themselves from classrooms at critical times, and challenges in arranging appropriate lesson cover (this is particularly relevant in teacher shortage subjects such as physics).

As such, setting out clear entitlements to CPD is an essential step, but will not alone be sufficient. It is likely the case that school pressures are a significant barrier to CPD, and these are not something that can be addressed with either entitlements or teacher incentives. Such system issues need to be addressed with school-level incentives and resources to ensure that teachers are able to access appropriate CPD.

The long-term route to addressing the barriers is to create a culture within the school where CPD it seen as an overwhelming positive, and essential to good teaching, rather than an interruption to the timetable.

# Q22: How can government best support the development of a genuine culture of mentoring in schools?

There is a strong evidence base for best practise in developing a mentoring culture within schools.<sup>8,9</sup> Essential elements have been shown to be:

- sufficient resources to create time for mentors and mentees;
- mentoring is seen as adding value and is pursued at all levels of the school;

<sup>7</sup> See <a href="http://www.iop.org/policy/consultations/file-66632.pdf">http://www.iop.org/policy/consultations/file-66632.pdf</a>;
<a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/430227/150319\_WCTP">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/430227/150319\_WCTP</a>
response.pdf

<sup>&</sup>lt;sup>8</sup> Hobson, A.J. (2016) Judgementoring and how to avert it: Introducing ONSIDE Mentoring for beginning teachers. International Journal of Mentoring and Coaching in Education, 5(2), 87-110 
<sup>9</sup> Hobson, A.J. (2017) The Terrors of Judgementoring and the Case for ONSIDE Mentoring for Early Career Teachers. In David A. Clutterbuck, Frances K. Kochan, Laura Lunsford, Nora Dominguez and Julie Haddock-Millar (Eds.), The SAGE Handbook of Mentoring, pp. 335-357. Los Angeles: SAGE Publications

- mentoring is promoted as non-judgmental and is separate from evaluation.

In addition to these elements, to promote a culture of subject specific mentoring and peer support, there must be the ability to access interschool professional communities. The overall shortage of specialist physics teachers means that to find a mentor in the same discipline, but outside the line management chain, mentees must necessarily look to teachers employed in other schools.

# Q23: Do you think that a fund to pilot sabbaticals would be a positive step for the profession?

Yes. There should be a focus on opportunities for sustained, smaller, commitments outside the classroom rather than extended sabbaticals. The greatest benefits may be accrued from creating an entitlement for experienced teachers to take time away to play a local or regional role as a discipline leader. These could include leading subject-specific CPD, working for an exam board, working on curriculum development or carrying out pedagogic research.

# Q24: What would the impact be for teachers and schools of enabling more teachers to take sabbaticals, providing they are related to their teaching practice?

Experienced and qualified teachers taking local, regional or national roles in leading subject-specific CPD, working for an exam board, working on curriculum development or carrying out pedagogic research would create benefits for the school system as a whole. These benefits would be both in terms of disseminating their knowledge and also giving experienced teachers a route to career advancement without removing them from the classroom completely which might aid long-term teacher retention.

#### **About the Institute of Physics**

The Institute of Physics is a leading scientific membership society working to advance physics for the benefit of all. We have a worldwide membership ranging from those early in their career or in academic or technical training to those at the top of their fields in academia, business, education and government. Our purpose is to gather, inspire, guide, represent and celebrate all who share a passion for physics. And, in our role as a charity, we aim to ensure that physics delivers on its exceptional potential to benefit society. Alongside professional support for our members, we engage with policymakers and the public to increase awareness and understanding of the value that physics holds for all of us. Our subsidiary company, IOP Publishing, is a world leader in scientific communications, publishing journals, eBooks, magazines and websites globally.

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