The Joint Mathematical Council of the United Kingdom

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The Rt Hon Damian Hinds MP
Secretary of State for Education
Department for Education
Sanctuary Buildings
Great Smith Street
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Dear Secretary of State

Early Career Teacher Professional Development Framework

The JMC welcomed the Department for Education's consultation earlier this year on an early career professional development framework for teachers in England and this letter is in response to the Department's response to that consultation *Strengthening Qualified Teacher Status and Improving career progression for Teachers. Government consultation response* (DfE, May 2018).

The English context is dominated by concerns around recruitment/retention, and around quality of teaching: we are pleased that the Government response acknowledges that the two are linked. In order to improve the quality of mathematics education and the related outcomes for young people, the JMC urges the developers of the Early Career Framework to consider:

- **drawing on the expertise of JMC members as part of the 'small group of experts'** (17 p8)**.** It is essential that experts, including subject education experts, within HEIs and subject associations are explicitly included in the development of this policy in collaboration with the profession. JMC would wish to contribute to the work of the group in the next stage of the development of the framework. Further, it would support transparency and potential effectiveness if the names of the 'group of experts' were in the public domain.
- **the need for high quality, research evidenced, early professional development in the teaching of mathematics.** As the foreword to the response recognises, the motivation for new teachers to enter the profession is the desire to improve outcomes for young people[1] and it is this motivation that the ECF should foster. Rather than consisting of bureaucratic hoops to jump through, an ECF needs to inspire and be of recognised value to teachers as well as supporting learners' progress[2]. For teacher development in mathematics, the JMC suggests that rather than using accreditation schemes such as kite marking, there should be a long-term goal that professional development providers should be educated to at least Masters level in subject-specific education (e.g. MA Educational Practice in Mathematics), or equivalent, to ensure that robust mathematics education research is engaged with and translation into practice is understood[3]. The DfE's development of *a*

[1] Cordingley, P., Higgins, S., Greany, T., Buckler, N., Coles-Jordan, D., Crisp, B., Saunders, L., Coe, R. (2015) *Developing Great Teaching: Lessons from the international reviews into effective professional development.* Teacher Development Trust. https://tdtrust.org/wp-content/uploads/2015/10/DGT-Full-report.pdf

[2] Furlong, J. & Maynard, T. (1995) Mentoring student teachers. Oxon: Routledge

[3] Zeichner, K. & Liston, D. (2013) Reflective Teaching. An Introduction. NewYork: Routledge

Standard for teachers' professional development in 2016 is not widely referred to and is too vague and under-resourced to have any meaningful impact.

- **that there are already excellent existing resources** for mathematics teacher professional development that need signposting within the new framework. Teachers benefit from weekly development time to collaborate to develop the use of these resources at the site of learning.
- **the fundamental importance for early career teachers of support by subject specialist mentors.** It is important that early career teachers of mathematics in both Primary and Secondary phases are supported by mentors who are mathematics specialists in order to develop specific subject and curricular knowledge. Mentors of Newly Qualified Teachers (NQTs) need to be able to support and coach in a way that will promote deep conceptual understanding of appropriate mathematics and of subject-specific pedagogy. JMC agrees with the Government's response that subject specific mentor development needs to begin immediately: compared with the highest-performing jurisdictions, our teachers of mathematics across all phases generally enter teaching with very limited subject-specific preparation for teaching[4].
- **in-career recognition of advanced skills in mathematics subject knowledge and evidence-informed practice.** JMC welcomes proposals for more flexible career paths, particularly for teachers who wish to develop as excellent teachers of mathematics in the classroom. There is strong evidence of the link between secure pedagogical and subject knowledge and job satisfaction (and therefore retention).[5] In the most successful jurisdictions, teachers enjoy a high degree of professional autonomy and prestige and have access to substantial ongoing authentic professional development[4].
- **the necessity for flexibility of the ECF**: The ECF will need to be flexible according to context. We acknowledge that this can be complex when teachers decide to change schools at the end of their probation year but personalization needs to be built into the NQT year(s) as all emerging teachers have different strengths and needs. This is entirely consistent with the evidence base around effectiveness of professional development[6].
- **the importance of adequate funding for the ECF.** Unless provision for the ECF is adequately funded it will not succeed. This cannot merely mean additional funding in the second year to cover the cost of the 10% timetable reduction: such time is too often needed purely for evidence gathering for assessment of early teacher progress and so does not necessarily impact on improving outcomes for young people. Funding for, and entitlement to[7], expertly led professional development is critical. For the ECF to achieve its intended outcomes this will include subject-specific input as well as peer observation and related in-depth discussion with mentors.

The JMC is pleased the government acknowledges that an Early Career Framework will not be a 'quick fix' for the profound issues within the teaching profession, and that effective development and implementation will take time. Members of the JMC are keen to support this process.

Yours sincerely

Andrew J Noyes.

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[4] Ingvarson, L., Schwille, J., Tatto, M.T., Rowley, G., Peck, R. & Senk, S.L. (2013) *An Analysis of Teacher Education Context, Structure, and Quality-Assurance Arrangements in TEDS-M Countries Findings from the IEA Teacher Education and Development Study in Mathematics (TEDS-M)* IEA, Amsterdam.

[5] Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). *Effective Teacher Professional Development*. Palo Alto, CA: Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf

[6] Back, J., Hirst, C., de Geest, E., Joubert, M. & Sutherland, R. (2009). *Final report: researching effective CPD in mathematics education (RECME).* NCETM, London https://www.ncetm.org.uk/public/files/387088/NCETM+RECME+Final+Report.pdf

[7] ACME (2013) *Empowering teachers: success for learners*. Royal Society, London. http://www.acme-uk.org/media/19381/empowering%20teachers%20report.pdf