Products for Multiply What Works Strand Randomised Controlled Trials

Summary

As part of the Multiply Programme, DfE is running randomised controlled trials and quasi-experimental trials to improve understanding of what works in improving adult numeracy. DfE requires products/approaches to be developed for up to 5 trials which form part of the first Tranche of trials. These products/approaches need to be developed to a sufficiently high standard that they can be robustly tested. This may involve investigating the market and producing something from scratch or refining existing products/approaches. Together with the products/approaches, DfE requires detailed handover documentation and working with relevant suppliers to ensure that the products/approaches are implemented effectively, as well as technical documentation explaining how the optimal design for each product was arrived at.

We will be holding two virtual market engagement events from 13:00 - 14:00 and 15:00 - 16:00 on Thursday 30 March to provide more information and answer questions. We would like to invite you to one of these market engagement events.

What is the Multiply Programme?

The Multiply Programme is the first priority of the new UK Shared Prosperity Fund (UKSPF) and is designed to boost existing efforts to address low levels of adult (19+) numeracy, up to and including Level 2. The Programme has up to £559 million of funding available. The overarching objectives for Multiply are to increase the levels of functional numeracy in the adult population across the UK and improve labour market outcomes, such as increased employment and higher wages.

The What Works Strand of the Multiply Programme

An important part of Multiply is the What Works strand, designed to strengthen the evidence base around what works in the successful delivery of adult numeracy programmes and to share this with practitioners, in order to inform local delivery and to increase positive outcomes.

The 'What Works' programme is split into three projects:

- A Systematic Review, which will improve our understanding of the target learner base, assess
 the effectiveness of adult numeracy approaches, and outline the wider impact of various adult
 numeracy policy interventions in the UK.
- A Programme Evaluation, which will assess the impact and value of the Multiply programme, understand how effectively those involved in Multiply think it is being delivered and could be improved, and summarise lessons learned and best practice
- A series of Randomised Controlled Trials (RCTs) and Quasi-Experimental trials, which will
 robustly test promising approaches to improving adult numeracy. This part of the What Works
 strand is the focus of this note.

The Randomised Controlled Trials and Quasi-Experimental Trials

The majority of trials will be RCTs, which are the gold standard research design to establish causal relationships and identify what is and is not effective. The trials aim to:

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- **fill existing and emerging evidence gaps**. This will include approaches that are widely used but where the evidence base for impact is patchy or contraindicative.
- directly support Multiply local delivery and improve its effectiveness, through providing an
 evidence base to underpin decisions around all aspects of the learner cycle. The trials
 undertaken in Year 2 of the Multiply programme will inform its delivery in Year 3, including
 supporting decisions around which interventions are most effective, which communications
 messages and channels to use to encourage learner take up, and which approaches to learner
 support, teaching and content provision are the most effective.
- support broader efforts to ensure the value for money of DfE spend in adult education, by
 ensuring funding flows towards approaches underpinned by a good quality evidence base.
 Where it tests established practice, the RCT programme will help evaluate this spend and the
 extent to which it provides good value for money. The programme will also test promising
 approaches that may not currently be widely used with adult learners, identifying areas where
 spend could be focused instead.

The trials will be divided between two tranches, with up to a total of 20 trials in Tranche 1 and up to 10 in Tranche 2. Trials in Tranche 1, which this note refers to, will happen in England only. Thus, there is no requirement for the products being commissioned through this exercise to reflect the different skills systems and curriculums in Scotland, Wales and Northern Ireland and nor do the materials developed need to be translated into Welsh.

The Requirement: Products for the Randomised Controlled Trials

DfE requires products/approaches for up to 5 trials which form part of Tranche 1. These products/approaches need to be developed to a sufficiently high standard that they can be robustly tested through Randomised Controlled Trials and other trials. The development process may involve investigating the market and producing something from scratch or refining existing products/approaches to a suitable standard to be used in the RCTs. Together with the products/approaches, DfE requires detailed handover documentation and effective working with suppliers to ensure that the products/approaches are implemented to a sufficiently high standard for the trials, as well as technical documentation explaining how the optimal design for each product was arrived at. This needs to include any issues encountered with either the process or the final design that suppliers consider may affect the trials. This technical document may be published as part of the Implementation and Process Evaluation of the associated trial and as such should be written in the DfE house style.

Suppliers will also be required to deliver training to practitioners to ensure the correct implementation of their products. The exact nature and extent of the training will be decided at Intervention Design and Evaluation Approach meetings held with the Product Supplier, Managed Services Supplier & RCT Evaluation Supplier. It could range from in-person training sessions to detailed guidance and availability to answer queries from practitioners. However, training will need to be sufficient to enable practitioners to implement the products in the correct way.

The products/approaches have been split into 3 contracts depending on the expertise which they require. Suppliers will be able to bid for as many or as few contracts as they wish.

Contract 1: Maths Mastery (1) and Maths Mastery (2)

This contract is for 2 products with an anticipated budget of £100,000. The two products are:

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- Maths Mastery (1): General: We want to test if a mastery approach to the teaching of maths
 to adults, such as that developed by the Centres for Excellence in Mathematics (CFEM) and
 others for pupils in primary and secondary schools, could lead to improved adult learner
 outcomes, including improved numeracy skills and attainment compared to those not
 receiving maths mastery teaching.
- Maths Mastery (2): Bar Models: This will seek to test if the use of specific thinking tools, such as emergent ratio tables and bar model approaches, can give students the confidence to tackle maths problems. The trial would create and test a bank of contextualised maths resources.

Contract 2: Contextualised Curriculum and Maths by Stealth

This contract is for 2 products and has an anticipated budget of £100,000. The two products are:

- Contextualised Curriculum (1): Real World Examples: A number of local investment plans referred to contextualised and/or applied approaches to teaching and practising maths e.g. baking cakes, visiting shops. However, it is not clear whether courses that include real world, practical application of maths in a supported way has a greater impact on maths skills than others. We'd like to test whether maths skills improved at a greater rate for learners taught using contextualised approaches or not, for learners doing Level 1 courses.
- Maths by Stealth (Vocational Courses): Some local areas have suggested embedding maths
 content into vocational courses would be a successful way to introduce concepts, build skills
 and confidence and encourage progression onto a maths course. We want to test this
 hypothesis, and to understand any wider impacts.

Contract 3: Bite-sized Learning

This contract is for 1 product and has an anticipated budget of £50,000. The product is:

Bite-sized numeracy: We want to test if short (20 mins) maths sessions, delivered for low-paid staff in certain workplaces e.g. cleaners, healthcare assistants, have any impact on learner numeracy skills or wider outcomes such as progression onto more formalised maths courses.

What kind of organisation are we looking for?

We would like our supplier to have:

- Understanding of the policy and operating environment for the project
- Expertise in maths education
- Experience of developing educational resources of high quality to tight timescales
- Experience in producing detailed documentation for products for their correct implementation
- Experience in delivering in person training to educational practitioners