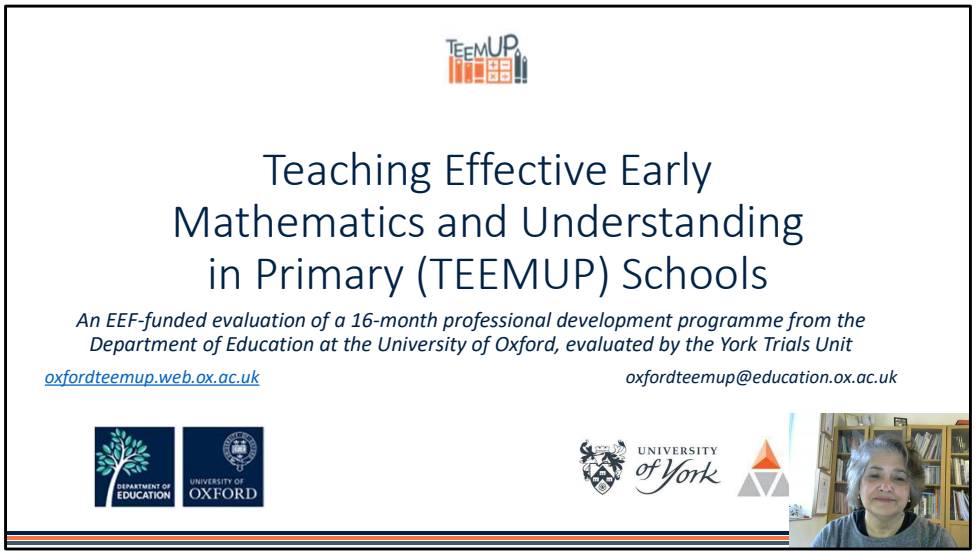
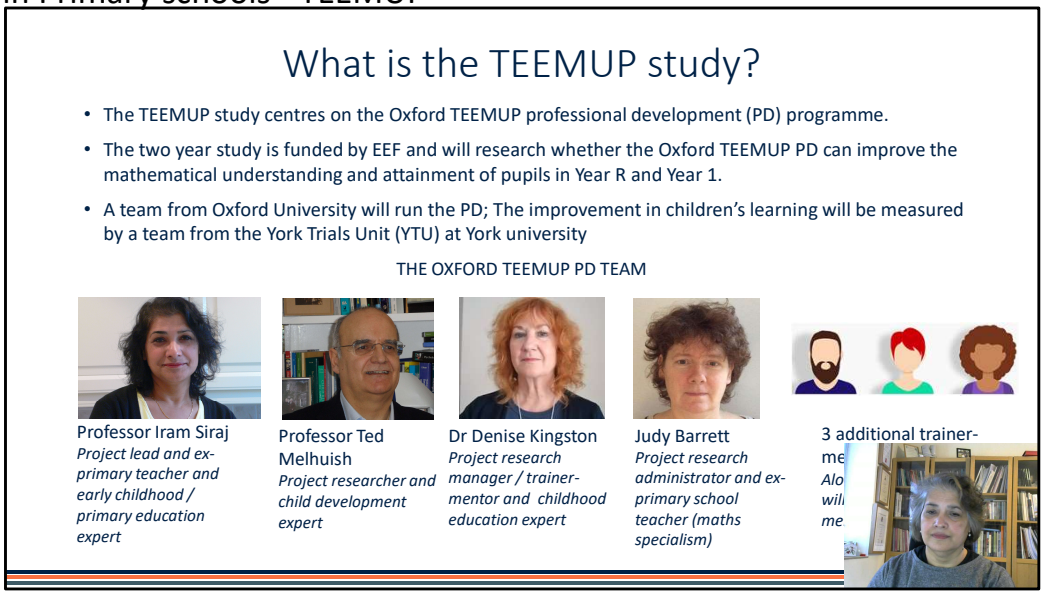


Slide 1 – Welcome from Professor Iram Siraj.

Hello and welcome to our overview of the Teaching Effective Early Mathematics and Understanding in Primary Schools study, known as the TEEMUP study. Further details of the study can be found on our website oxfordteemup.web.ox.ac.uk. Here you will also be able to re-watch this presentation and download its accompanying notes.

My name is Iram Siraj and I am a professor of Child Development and Education at the University of Oxford

Teaching Effective Early Mathematics in Primary schools - TEEMUP



Slide 2 – Study Overview - Professor Iram Siraj

Let me start by explaining what the TEEMUP study is. At Oxford University, we have developed a 16-month professional development (or PD) programme for Reception and Y1 teachers. The Oxford TEEMUP PD is evidence-based on rigorous research and we believe that it has the real potential to improve children's mathematical understanding and achievement.

We have received funding from the Education Endowment Foundation (EEF) to run what is called an 'efficacy trial' of the Oxford TEEMUP PD. This means that, over a two-year period, starting September 2021, we will be working with 100 primary schools to evaluate whether children's mathematical attainment improves as a result of their teachers undertaking the Oxford TEEMUP PD.

The efficacy trial will involve our team at Oxford who will deliver the PD alongside a team from York Trials Unit who will independently measure the gain in children's mathematical attainment. The study is going to span two academic years – from autumn 2021 to summer 2023.

I will quickly run through the Oxford PD team and our roles in the professional development element of the study (so this is introducing ourselves on the Oxford side)

As I said before, I am Professor Iram Siraj and I have overall responsibility as the overall lead for the professional development intervention of TEEMUP study.

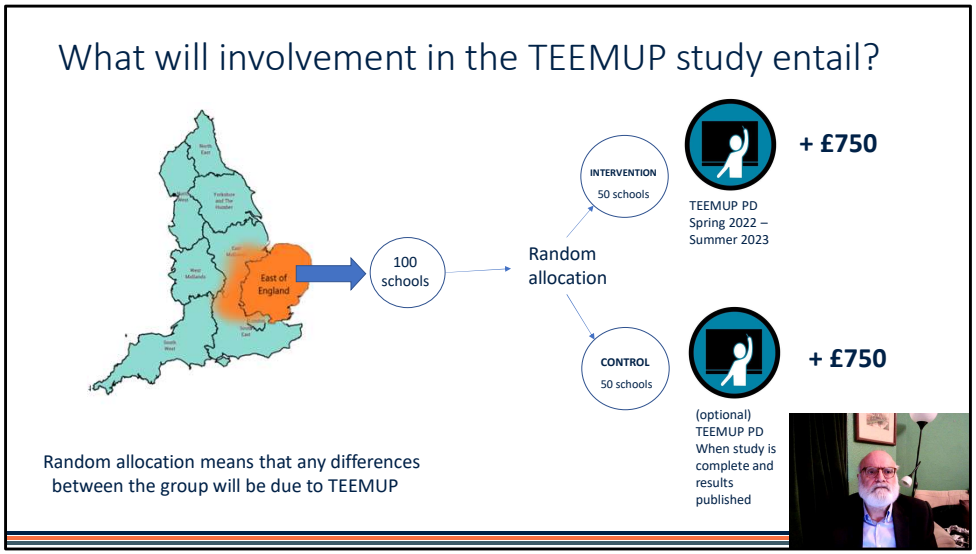
We also have Professor Ted Melhuish, who is a childhood development expert.

Dr Denise Kingston is the project manager, researcher and a specialist trainer and mentor. Denise will be leading the PD and is the main contact for the content and overall implementation of the professional development.

Our colleague Judy Barrett is the project research administrator. Judy will be the day-to-day administrative schools' contact for the TEEMUP study, so an query is going to come to Judy.

In addition, there will be a further three trainer-mentors to work alongside the schools and Denise, implementing the PD programme. They will be recruited in Autumn 2021 to start giving the training in January 2022

Teaching Effective Early Mathematics in Primary schools - TEEMUP



Slide 3 – TEEMUP Study Design – Professor Ted Melhuish

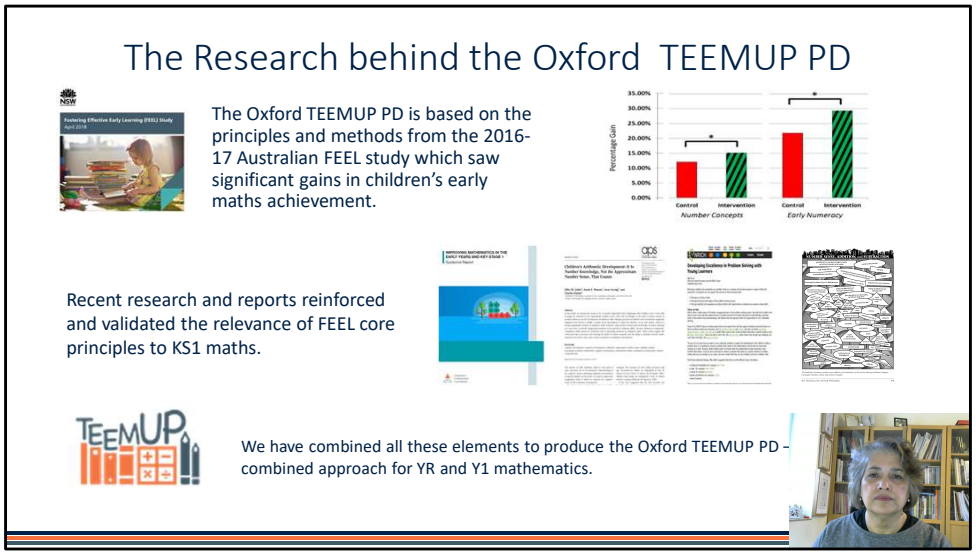
We are looking for 100 schools to 'TEEMUP' with us. The Education Endowment Foundation requested that we focus on the East of England as shown here.

In the randomised control trial, the 100 schools will be randomly allocated - 50 to an 'intervention' group and 50 to a 'control' group. York Trials Unit will measure the children's level of maths attainments in all schools at the start and end of the study so that they can compare learning across the two groups.

The INTERVENTION SCHOOLS will receive the TEEMUP professional development, from Spring 2022 to summer 2023

The CONTROL SCHOOLS will do 'business as usual during the study, and then, after the study, will be eligible to receive the professional development, at a greatly reduced cost.

All schools, regardless of the group to which they are allocated, will receive £750 to spend as they wish.



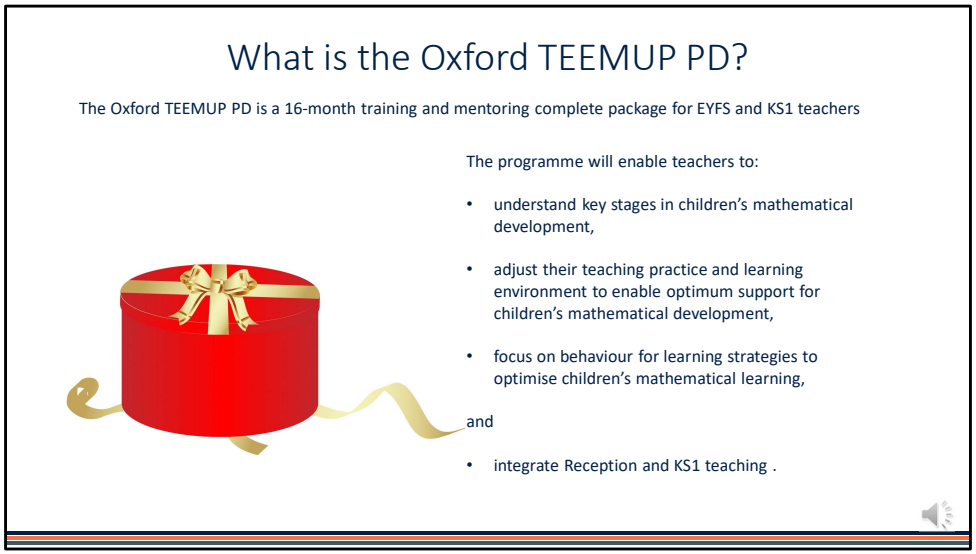
Slide 4 – The Underpinning Research – Professor Iram Siraj

In 2016, Ted, myself and Denise were all involved in the Fostering Effective Early Learning (FEEL) Study in New South Wales, Australia. The study was to evaluate the efficacy of a PD programme for foundation stage teachers and covered several curriculum and pedagogical areas. It involved 90 settings with over 1300 children, assessed pre- and post-implementation.

The trial had very positive results in most areas but by far the greatest improvement was seen in mathematics. Children showed significant improvement over and above typical development. In addition to the demonstrable results in children's mathematics attainment, about half the PD participants also reported an increase in confidence and motivation alongside an increase in reflective practice.

Following on from the FEEL success and looking at current research and practice, we realised that the core principles of developing teachers' understanding of mathematical concepts and strategies for their effective teaching, such as high-quality interactions and planning and assessment, alongside a focus on behaviour for learning, was equally applicable to Reception and Key Stage 1 young children.

We have taken the strongest elements of the FEEL PD and have adapted them to produce a mathematics-focused PD for Reception and Year 1 teachers in primary schools in England.



Slide 5 – The Oxford TEEMUP Professional Development – Dr Denise Kingston

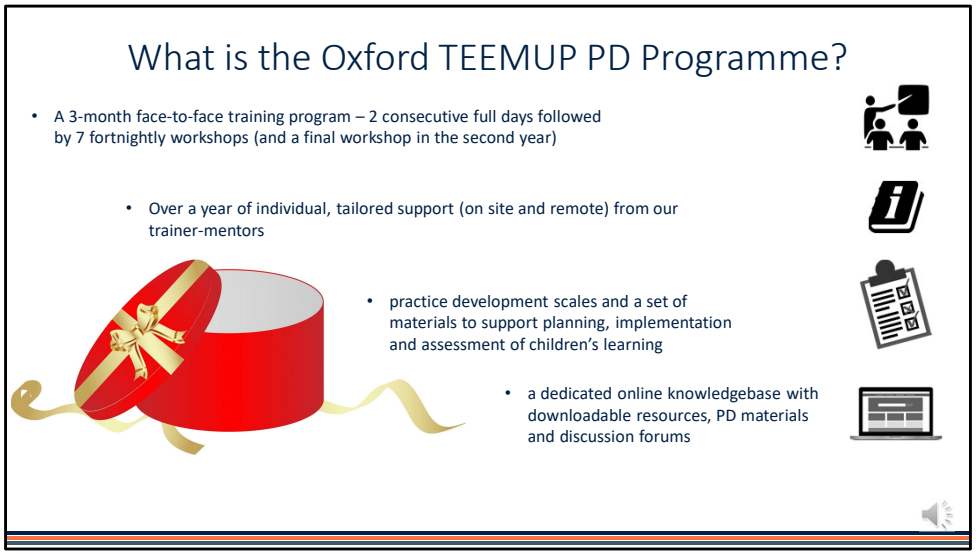
The first thing to emphasises is that the PD is a whole package of elements which together make up a 16-month training and mentoring programme

The primary emphasis is on enabling teachers to support learning by examining how early childhood mathematical understanding develops.

With a focus on children's mathematical development, the professional development will support teachers to review and adapt their current practices, schemes and environment. It is not a 'one size fits all' scheme – instead it is a training package with the emphasis on giving teachers the knowledge and confidence to evaluate and improve their current situation. The PD is equally applicable to schools who follow bought-in maths programmes, those who use school-defined lesson programmes, and those who follow mastery-based pedagogies. Whatever your situation, the fundamental knowledge and techniques of the TEEMUP professional development are equally applicable.

The training will also pay particular attention to developing a long-lasting behaviour for learning approach, ensuring that children not only learn and understand mathematical concepts but they also develop their individual self-regulation, enabling them to become effective lifelong problem solvers and resilient strategists.

The final element to draw your attention to is that the programme covers the EYFS-Key Stage 1 boundaries. It involves reception and Y1 teachers, and so should ease transition and support continuous mathematical learning throughout the first two stages of primary school.



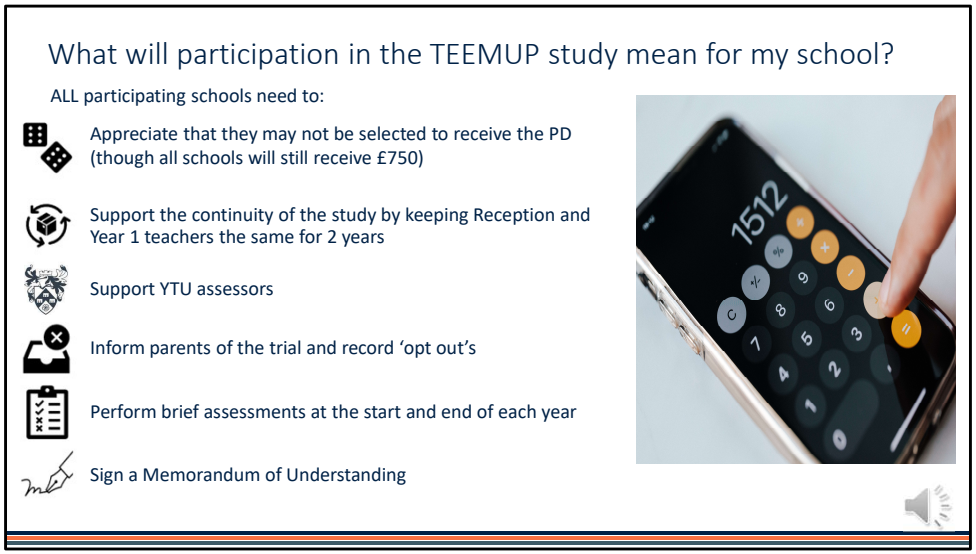
Slide 6 – The TEEMUP Professional Development Content

The first element of the programme is a series of 9 face-to-face sessions over a 3 month period. Schools will be grouped by location into cohorts of approx. 12 schools with 2 or 3 teachers from each school in the same cohort. Each cohort will have 2 consecutive full day trainings to introduce key concepts in schools. These will then be followed by a further 7 afternoon workshops at fortnightly intervals. There will also be a final half-day workshop a year later to exchange good practice.

After the 3 month training programme, every school will be assigned a mentor. This mentor will be one of the trainers who delivered the initial training, so will already know the teachers within the cohort. The mentor will then work with the participating Reception and year 1 teachers to help them objectively review and improve their practice and their teaching environment. Mentors will visit the school and will also be on hand to answer queries and give remote support as needed.

The professional development package also includes reflective scales which teachers can use to constructively assess and improve their own teaching practice. These scales examine key areas of both mathematical teaching and behaviour for learning. They include examples, practical suggestions and tips for improvement.
We will also provide a set of materials for planning, implementing, and assessment. This is a useful set of tools and techniques for assessing children's current mathematical understanding and identifying misconceptions and knowledge gaps.

The final element of the professional development will be access to a dedicated online knowledgebase. This will contain overviews of the core teaching, optional additional materials, and printable resources to use in the classroom and/or the home learning environment, together with an online discussion forum where cohorts can exchange ideas with each other and/or their mentors.



Slide 7 – Study Participation – Judy Barrett

Having looked at the professional development and what it entails, let me run through the commitment we will expect from schools who join us in the TEEMUP study.

The first thing that I need to remind you about is that only the schools allocated to the intervention group will receive the Oxford TEEMUP PD during the study timeframe. Schools allocated to the control group will be required to wait until after the study report is published. All schools will receive £750 as a thank you for their support, regardless of which group they are allocated to.

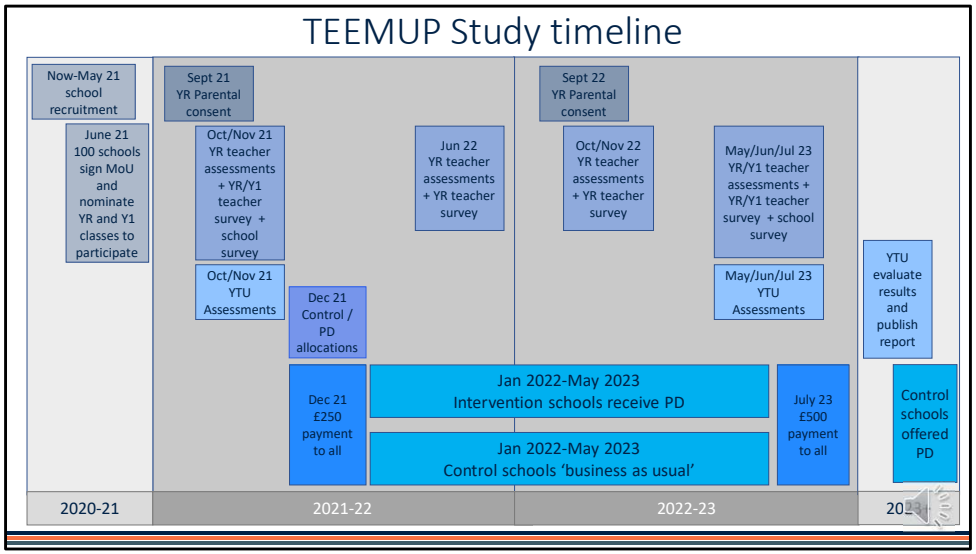
As this is a research study, it is important that schools do everything they can to ensure continuity within the Reception class and the Year 1 class participating in the study. (Note that, for multiform entry schools, the study will be of only one Reception and only one Year 1 class, which we call the 'nominated' classes)
In order to have a controlled, continuous measurement of the effects of the teachers' participation in the PD, it is important that the nominated Reception teacher and the nominated Year 1 teacher remain in the same class for the full two years of the study in all schools.
As we will be assessing the effects of the PD on the same children throughout the two years, we do ask the children being assessed move from the nominated Reception class into the nominated Year 1 class.

The next requirement is to support the York Trials Unit assessors who will be visiting your school for a day at the start and at the end of the study to individually assess the mathematical understanding of 15-20 children from each year group. The progress of the initial group of Reception children will be tracked throughout the study to the end of their Year 1.

Schools will also need to inform parents about the study. We will provide a letter for you to give to primary carers, which will include a form for them to complete should they wish their child to not be assessed. Schools will need to keep a record of any opt outs.

All schools will be required to collect assessment information at the start, mid-point and end of the study. We have tried to keep this to the very minimum and it should not prove a huge overhead to any school. There are two elements to this – short behavioural questionnaires for each of the 15-20 children being assessed and a brief survey about teacher confidence and school practices.

Finally, all schools will be required to sign a memorandum of understanding which formally commits the school to participating in the study and agreeing to the above points.



Slide 8 – The Study Timeline – Judy Barrett

Up to May this year, we will be accepting expressions of interest.

From late May and through June we will invite 100 schools to formally commit to the trial by signing the Memorandum of Understanding. If we are oversubscribed, we will select schools on a 'best fit' basis by looking at school location and school profiles. Our aim is to get a balanced representation of schools across 4 geographic clusters within the East of England and surrounds.

Once schools are officially signed up, the study will begin in September 2021. The first step will be for schools to inform Reception parents about the study and record any opt outs. The school will need to share information with to York Trials Unit who will randomly select 15-20 children from the Reception class – these will be the children whose progress will be assessed.

The school will then need to complete assessments for the Reception children identified by the York Trials Unit.

Trained assessors from the York Trials Unit will also visit the school and spend 5-10 minutes with each of the selected Reception children. The assessment will be designed to be fun and sensitive to each child's needs, and assessors will be prepared to stop at any point should the child become upset. A TA or another familiar adult should be present throughout the assessment to monitor the children's wellbeing.

Once the assessments have been submitted, randomisation of schools into intervention and control groups will be undertaken. This will not consider any assessment results; it will be purely random. Schools in the intervention group will be notified of their local training cohort and the dates, times, and locations of training sessions.

After randomisation, all schools will receive £250 as the first instalment of the £750 payment.

Then, in January 2022, the 16-month PD programme will begin for schools in the intervention group and those in the control group will continue with 'business as usual'

The final requirement for the 2021-22 academic year will be for the reception teacher to complete the assessments for the same children they assessed the start of YR, alongside the

teacher confidence survey.

Then, at the start of the 2022-23 academic year, the parental opt out and school assessment process will need to be repeated for the new Reception children, with York identifying the second cohort of 15-20 children to be assessed.

York will not visit the school at this time – only teacher assessments will be needed.

When the PD program has finished, in summer 2023, teachers in both Year 1 and Reception will need to repeat the assessment process and the York assessors will make their second visit to all schools to use the same tests on the same Reception and Year 1exactly as before.

Once all the assessment data has been gathered, schools will receive their second payments of £500. At this point, the study itself will be complete.

After the study data has been gathered, York Trials Unit will then review the assessment data and evaluate whether the PD has made a significant difference to children's maths attainment. A formal report will then be published on the EEF website.

If the trial has shown an improvement in children's maths attainment, control schools will then be offered the PD at a greatly-reduced price.

Slide 9 – Next Steps – Professor Ted Melhuish

The final piece of information is to let you know how to register your interest in participating. We very much hope that you will join us in making a difference to children's lives by helping every child fully develop their mathematical potential.

This slide recaps all the criteria previously covered during the presentation, and I will quickly run through them.

Firstly, you have to be a state funded primary school in the East of England

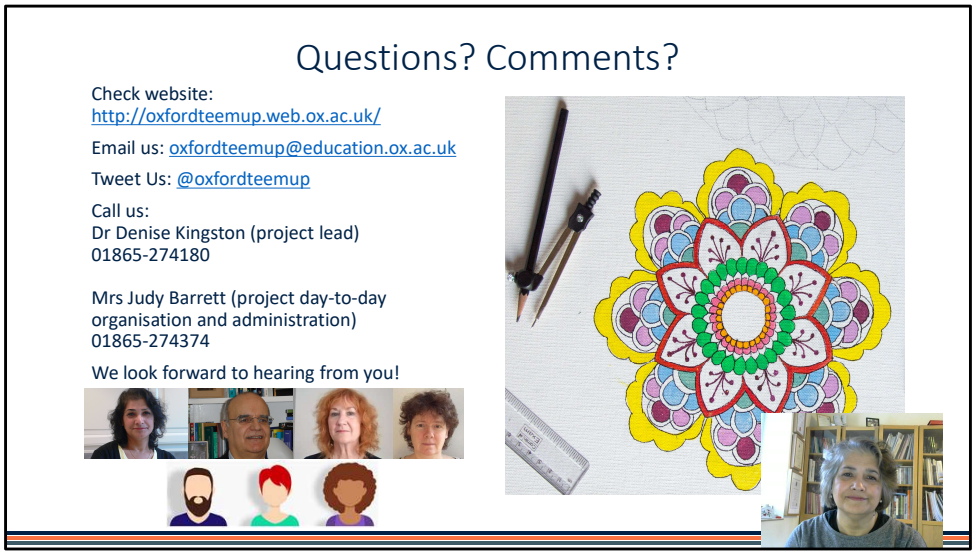
You shouldn't be participating in another maths research project

Finally, you need an intake of 15 children or more and have continuity of both children and staff during the study – namely, that your nominated staff will need to remain in Reception and Year 1 and the children taught by the nominated Reception teacher move to the nominated Year1 teacher

If you meet these criteria, then we would love you to register your school at our dedicated website, http://oxfordteemup.web.ox.ac.uk. The website also contains all the study information and more.

If you have questions or comments, there is a frequently asked questions section on the website, or just email us on oxfordteemup@education.ox.ac.uk

And finally, the small print – expressing your interest by completing our online form does not commit you to participation and vice versa! It is not until you sign the Memorandum of Understanding that you are committed to taking part in the study.



Slide 10 – Thank You – Professor Iram Siraj

I would like to finish by saying thank you for your interest in our exciting project which we believe will make a real difference to teachers' and children's learning and we hope you feel likewise and will join up in the TEEMUP study.

Please do get in touch with us via any of the methods shown in this presentation.

We look forward to hearing from you and, on behalf of the team, thank you for listening.