

Feedback from AMET webinar

NB: 'trainees' refers to ITE students and 'university' refers to places of ITE instruction; 'pupils' refers to learners in school and 'classroom' refers to places of pupil instruction

Trainee needs:

Resources: university-created resource packs sent out to trainees, or trainees asked to create resources (eg manipulatives) before the course starts (collect bottle tops or coins), or asked to work with online versions like MathsBot (limitations). Other virtual manipulatives at Brainiaccamp and Mathies. <https://mathsbot.com/#Manipulatives>

<https://mathsframe.co.uk/en/resources/category/586/ITPs>

<https://www.mathlearningcenter.org/resources/apps>

<https://toytheater.com/category/teacher-tools/>

<https://www.teacherled.com/manipulatives/>

<https://www.didax.com/math/virtual-manipulatives.html>

<https://mathies.ca/apps.php#gsc.tab=0>

<https://mathsstarters.net/dice/>

<https://pcmathoer.wordpress.com/vm/>

Child-friendly numerals font at <https://www.topmarks.co.uk/topmarks-fonts>

Helpful if NCETM or AMET created online repository of downloadable, printable manipulatives.

Community: Need to maintain an authentic classroom relationship, building a community will be different. We need to build relationship with trainees before they will trust enough to share – ice breaker activities:

<https://symondsresearch.com/icebreakers-for-online-teaching/>

<https://sites.google.com/site/adultonlineteachingstrategies/virtualicebreakers/adult-virtual-icebreakers>

<https://adjunctworld.com/blog/5-creative-icebreakers-assignments-for-the-online-classroom/>

<https://conceptboard.com/blog/icebreakers-in-virtual-teams/>

<http://www.onlineteachingtips.org/icebreakers.html>

<https://esllibrary.com/blog/virtual-icebreakers>

Technology: Advise investment in ethernet cable and visualiser (home-made – see below)

Experience: many trainees will not have been in school since they were pupils themselves. September starters will have nothing to build on, unlike the last cohort who had some experience when lockdown hit.

ITE course content:

Best practice: Maintain focus on best practice, don't allow focus on classroom remote learning or university remote learning to dominate. Ensure trainees are aware that the didactic approach utilised in narrated ppts, HegartyMaths, MathsWatch etc is not necessarily the best approach for the classroom. Fear of EYFS practice becoming formal and losing play/exploration.

Subject knowledge: new core content framework – what does it mean re subject knowledge.

Simulating practical experience: In the absence of school experience, videos allow analysis of shared experience (NCETM PD videos, KQ videos). Creating virtual classrooms to simulate a school classroom for trainees

Specific inclusion on university curriculum:

- Remote teaching: need to prepare trainees for working remotely as well as normal, but different schools will have different ways of remote teaching. Tips in remote instruction eg thick black felt tip rather than biro to show up on screen
- Technology: need to include instruction in using Autograph and Desmos and different VLE. Use of mobile phones as visualisers (instructions for home-made visualisers: <http://www.elearning.fse.manchester.ac.uk/blog/2020/03/19/online-teaching-creating-a-diy-online-visualiser/>) Imaginative use of ppt tools to create spinners for number games. Use of shared whiteboard in Blackboard Collaborate Ultra or Smart Notebook.
- Need to develop ways of getting trainees to understand how children learn maths with research-informed tasks and interrogation of pupils' responses to the tasks
- Difficulty of finding suitable online teaching material – varying quality. Desire to share resources.
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Course structure for 20/21:

Balance between F2F and remote: any of unchanged face to face, entirely remote or combination of face to face and remote teaching. Ongoing process of identifying which sessions are suitable for which means of delivery. Cohort split into groups for face to face sessions, whole cohort taught remotely – may be a good model for the future.

Balance between school placement and university attendance: Some plan to alter structure to change days in university/days in school, eg using university space before undergraduates return. Some frontloading university input allowing delayed start of school placement until later in year, others have earlier start for placement.

Awaiting decisions re management and organisation from leaders, putting 'head in the sand'. Difficult to plan until we know what we're planning for.

Primary school placement for secondary programmes: unlikely to be a physical placement

Remote instruction:

Opportunity for greater consistency of experience, more control over what the trainees learn

Timing and delivery: Live sessions are not always practicable. Limit the amount of time trainees are expected to be sitting at a screen. Advised that lectures should be limited to 15min chunks, broken up with activities. Comment that 30-45mins input, 2hrs independent work, 30-45mins roundup worked well. Awareness of need to break away from the screen sometimes eg outdoor learning

Technology: Jamboard = free online whiteboard from Google, Wacom = drawing pad allowing users to write on the screen, Padlet, mentimeter. Sharing screens, using virtual manipulatives etc have

potential to make lesson dynamic. Don't ignore potential of flip chart and home-made solutions eg holding mini whiteboard up to webcam. Use "chat" for questions.

Participation: Attendance and engagement better than expected. Give enough time to access and process the independent learning materials. Some feel it is easier to tell who is participating or not, others that it is easier for students to be overlooked. Give advance notice of questions so people are prepared to answer. AfL/relationships difficult when can't see trainees' faces or get non-verbal feedback, silence when you ask a question, hard to get discussion going around manipulatives.

Instruction: Narrated ppts need interactive follow-up (discussion board or coaching groups). Short videos with reflection task – something 'live' and something to pause or return to. Difficulty of modelling authentic problem solving. Online 'expert panel' discussing and questioning each other worked well.

Collaboration: breakout groups – random or specified membership, roles for group members, group size best at 3-8 + spokesperson to feedback to main group, ways of reporting back (eg chat, Padlet etc)

Learning: Making time for reflection.

ITE staff workload: Issue of feedback on individual contributions to Padlet/blogs etc – could be more onerous than live teaching. Encourage peer feedback (but needs training). Making blended learning materials is very time consuming.

Face to face instruction:

Safety issues eg disinfection of hands-on resources between groups

School issues:

Placements: Some schools not offering placements because of risk of contamination – school 'attachment' rather than placement. One longer placement instead of two. Challenges of training in restricted classrooms: no opportunity to develop classroom management of normal class size.

Mentors: Mentors too busy with their pupils to worry about trainee needs. Mentors more receptive to online portfolios of Teacher Standards evidence than previously. Virtual training for maths mentors: <https://www.futurelearn.com/courses/key-ideas-in-mentoring-mathematics-teachers>

Pupil needs: recognition of issues like anxiety, school-appropriate behaviour, self-esteem

Strategy issues:

Maths (and English and Science) is likely to get disproportionate attention by schools, impact on other subjects, but maths might be seen as something that can be done at home in contrast to art.

Share workload with university colleagues in different programmes to space out demands

Workload issues in new planning, potential cancelled face to face teaching, intensity of planning for front-loaded university sessions.

Refreshing to have to think outside the box

University involved with NQT support in September?

Opportunity to liaise with other ITT colleagues.

Lockdown response:

University input: most had finished, or used a mixture of small group online taught session, ppt with notes, narrated ppt, personally recorded videos, downloadable resources, ICT software, online Q&A, asynchronous task assignments with synchronous plenary. Helpful to give list of required tasks to be completed in own time. Increased online contact with trainees. Revision of Autumn term material. Feedback from self-reflection, peers, mentors and tutors. Tasks include video, articles, research. Focus on teacher standards – behaviour management most difficult. Additional university sessions offered focusing on other topics, or greater depth. Systemic experiences eg EAL. Virtual provision reported as successful. Problem for tutors not having access to their resources, the adequacy of their technology

School placement: different stages of placement – some at the start of 2nd placement. Some stayed in school others didn't.

Assignment alteration: focus on what's important, what's possible

Trainees reported more time to plan, improved reflection, impact on assignment

Problem in creating consistent and uniform material quickly (speed of response sometimes impacted on quality)

Particularly challenging where courses had already been hit by strike action