

#mathscpdchat 14 March 2023

How do you help additional adults, such as Teaching Assistants, maximise the engagement of pupils/students in lessons?

Hosted by [Tazreen Kassim-Lowe](#)

This is a summary of the discussion – to see all the tweets, follow the hashtag #mathscpdchat in Twitter



The graphic features a large green hashtag #mathscpdchat at the top left. To its right, the text 'Today' is in a yellow box, followed by 'Tuesday, 14 March, 7-8pm'. Below this, there are two photographs: one showing two women working at a table with papers and a cup, and another circular inset showing a woman interacting with a young child. The central text asks, 'How do you help additional adults, such as Teaching Assistants, maximise the engagement of pupils/students in lessons?'. At the bottom, it says 'Hosted by Tazreen Kassim-Lowe @tershanah' and 'ncetm.org.uk/mathscpdchat'. A small version of the NCETM logo is in the bottom right corner.

The links shared during this discussion were:

[Specialist Knowledge for Teaching Mathematics - Primary Teaching Assistants](#) which is a Maths Hubs project from the NCETM. The programmes are designed for primary teaching assistants who would like to develop their specialist knowledge for teaching maths. It was shared by [Tazreen Kassim-Lowe](#)

[Research and Innovation in the Maths Hubs Network](#) which is an article on the NCETM website. It shows how smaller CPD projects are part of, and enhance, the Maths Hubs Programme and give teachers opportunities to pursue special interests. A programme for Teaching Assistants is offered as a Research and Innovation Work Group by some Maths Hubs. It was shared by [Tazreen Kassim-Lowe](#)

[Primary Video Lessons](#) which are short (15 to 20 minutes) NCETM videos. They were originally produced to provide primary school pupils with interactive lessons while they were learning at home during the lockdowns. It was shared by [Tazreen Kassim-Lowe](#)

[Exemplification of Ready-to-Progress Criteria](#) which are 79 PowerPoints from the NCETM, each one focusing on one of the ready-to-progress criteria in the DfE maths guidance for KS1 and KS2. It was shared by [Tazreen Kassim-Lowe](#)

[Diagnostic Questions](#) which is a website containing multiple-choice questions. For each question three wrong answers, each of which reveals a different specific misconception, and one right answer, are provided. You can create your own questions and build a quiz. It was shared by [Tazreen Kassim-Lowe](#)

[Teachers' Experiences of Using NRICH](#) which is a collection of articles by NRICH describing various ways in which teachers have used NRICH tasks and other resources effectively. It was shared by [Mary Pardoe](#)

[Primary Subject Knowledge Audit](#) which is part of the suite of mastery PD materials from the NCETM. Teachers can use them to assess their confidence in teaching the content of the KS1 and KS2 maths curriculum. It was shared by [Mary Pardoe](#)

[Secondary Subject Knowledge Audit](#) which is part of the suite of mastery PD materials from the NCETM. Teachers can use them to assess their confidence in teaching the content of the KS3 maths curriculum. It was shared by [Mary Pardoe](#)

An illustrated summary of the discussions in this #mathsCPDchat follows.

The host tweeted this reminder a few minutes before the discussion began:



Tazreen Tershanah @tershanah · 1m

It is nearly that time for [#mathscpdchat](#). 5 minutes to go. Grab yourself a drink and keep warm. Looking forward to mediating our discussion about how you utilise additional adults to maximise learner engagement.



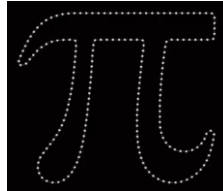
This welcoming message was the host's opening invitation to join the chat ...



Tazreen Tershanah @tershanah · 16h

Happy Pi day and thanks for joining this [#mathscpdchat](#): How do you help additional adults, such as Teaching Assistants, maximise the engagement of pupils/students in maths lessons?
Don't forget to use the hashtag: [#mathscpdchat](#)

I will do my best to respond to posts and comments.



... and then her first main question ...






Tazreen Tershanah @tershanah · 16h

Here is the starting question.

Question 1. Who are the additional adults in your setting? What is their role? [#mathscpdchat](#)



... was followed by a brief discussion about the 'kinds of adult other than a teacher' who are likely to be in maths lessons ...

-  **Tazreen Tershanah** @tershanah · 16h ...
Replying to @tershanah
[#mathscpdchat](#) Additional adults could include Teaching assistants, 1-1 Learning support assistants, volunteers, student teachers (at the start of their journey), or even volunteers.
-  **Mary Pardoe** @PardoeMary · 16h ...
Replying to @tershanah
... or sometimes parents? I know that my niece supported some class teaching in her child's school when he was very young. [#mathscpdchat](#)
-  **Tazreen Tershanah** @tershanah · 16h ...
Replying to @PardoeMary
[#mathscpdchat](#) I have certainly had the pleasure of hosting parent volunteers but interestingly not often in maths. They have tended to help with reading, for example.

... and then this conversation about occasional helpful additional-adult support from a Teaching Assistant:

-  **Mr Mattock FCCT NPQSL** @MrMattock · 16h ...
Replying to @tershanah
We get a TA occasionally depending on the class and pupils.
-  **Tazreen Tershanah** @tershanah · 16h ...
Replying to @MrMattock
[#mathscpdchat](#) and how do you manage to communicate pupil needs and lesson content to an occasional TA? Any tips would be appreciated @MrMattock !
-  **Mr Mattock FCCT NPQSL** @MrMattock · 16h ...
Replying to @tershanah
Pupils needs - they often know them better than we do!
Lesson content - it is all centralised and at the beginning of the lesson.
[#mathscpdchat](#)
-  **Tazreen Tershanah** @tershanah · 16h ...
Replying to @MrMattock
[#mathscpdchat](#) That is so true. Their observations and feedback can be truly insightful. I am finding this as I am supporting Primary TAs this year. They really exemplify [#care](#) in mathematics.

In another conversation, the challenges teachers face in establishing effective ways of communicating adequately with the TAs who are supporting their teaching and their students' learning, were discussed:



Catherine Edwards @Edwards08C · 16h ...

Replying to @tershanah

In my maths classroom , we have a specific maths support (like a HLTA but not quite) then we have TAs from the SEND department



Tazreen Tershanah @tershanah · 16h ...

Replying to @Edwards08C

#mathscpdchat It sounds like you have the opportunity to work with multiple additional adults at once!



Catherine Edwards @Edwards08C · 16h ...

Replying to @tershanah

In my entry level y9 class I have between 1 and 3 additional adults. It does have multiple EHCPs and SEND K and K+ , plus significant EAL needs. But I'm really lucky with the staff I get to work with. #mathscpdchat

[Note: An EHCP is an Education, Health and Care Plan, which is a legal document describing a child or young person's special educational needs, the support they need, and the outcomes they would like to achieve. In 'SEND K' the letter 'K' indicates the kind of support needed.]



Tazreen Tershanah @tershanah · 16h ...

Replying to @Edwards08C

#mathscpdchat That is great to hear @Edwards08C how do you manage to communicate with them all in a busy teaching day?



Catherine Edwards @Edwards08C · 16h ...

Replying to @tershanah

Badly ! Logistics mean that I'm in the same location as one every morning so we often manage a quick catch up then. The other i usually manage to see when I'm on duties during the day, but it's very much as we're passing or snatched moments during the lesson. #mathscpdchat



Tazreen Tershanah @tershanah · 16h ...

Replying to @Edwards08C

#mathscpdchat Thanks for your honesty. I am sure a lot of teachers feel the same.



Maryse @AllThingsMaths · 16h ...


Replying to @Edwards08C and @tershanah

Same here although lesson resources are emailed to give time for translating to Braille. But we try to catch up for a couple of minutes each lesson.

#mathscpdchat

 **Tazreen Tershanah** @tershanah · 16h ...
Replying to @AllThingsMaths and @Edwards08C
[#mathscpdchat](#) Email is an interesting one. Is email a usual form of communication for any one else?

 **Maryse** @AllThingsMaths · 16h ...
Replying to @tershanah and @Edwards08C
Sadly yes. It's impossible to catch up face to face outside of lesson time. I add TAs to the relevant Teams channel and put stuff in there too such as an additional explanation on the "why we're doing it like this" but they're so time poor.

 **Tazreen Tershanah** @tershanah · 16h ...
Replying to @AllThingsMaths and @Edwards08C
[#mathscpdchat](#) 'Time poor'. So true. In high demand and often pulled away.

 **Catherine Edwards** @Edwards08C · 16h ...
Replying to @tershanah and @AllThingsMaths
I share the medium term plan by email, but our SEND TAs have limited access to email so I don't think it would work well as a daily communication method [#mathscpdchat](#)

The next comment (made as a quote-retweet of the host's first question) prompted the host to share the links to some available free support currently available for Teaching Assistants:

 **Joanne Green** ✓ @MsJoanneGreen · 16h ...
[@tershanah](#) [#mathscpdchat](#) Additional adults include the Heads of Year and Head of subjects who have duties during lesson time to patrol the corridors to seek and return in school truanting pupils to class. They also ask the class what the sanctions are for doing that.

 **Tazreen Tershanah** @tershanah · 16h ...
Replying to @MsJoanneGreen
[@NCETM](#) Offer a free Primary Teaching assistant Specialist knowledge for Teaching Mathematics programme. Ask your local maths hub for more details ncetm.org.uk/maths-hubs-pro.. [#mathscpdchat](#)



ncetm.org.uk
Specialist Knowledge for Teaching Mathematics ...
Information about the Specialist Knowledge for Teaching Mathematics Primary Teaching ...



Tazreen Tershanah @tershanah · 16h



Replying to @tershanah @MsJoanneGreen and @NCETM

#mathscpdchat I believe a Secondary TA Programme is offered as a Research Innovation Work Group at some hubs:
ncetm.org.uk/features/resea... @NCETMsecondary



ncetm.org.uk
Research and innovation in the Maths Hubs Netw...
How smaller CPD projects refine, innovate and improve the Maths Hubs Programme and give ...

Tazreen's second main question ...



Tazreen Tershanah @tershanah · 18h



Please continue to share more about what roles your additional adults play!

This has been touched upon already in the #mathscpdchat

Question 2. What are some effective communication strategies between you and your additional adults?



... prompted the sharing of more observations about modes of communication between teachers and additional adults ...



Catherine Edwards @Edwards08C · 18h



Replying to @tershanah

Often it's a quick chat while the class do their do now. sometimes we manage to catch up before the lesson. We do all have particular students who are our "go to". I also do a lot of narration "miss x is going to work with a,b,c doing E,f,g" during the lesson #mathscpdchat



Catherine Edwards @Edwards08C · 18h

...

Replying to @Edwards08C and @tershanah

It makes a huge difference that 2 of the adults are regularly in my lesson (and I've worked with them for 3 years) it's really noticeable when I occasionally get a different adult how much we all just work with each other and the kids without talking about it. #mathscpdchat



Tazreen Tershanah @tershanah · 18h

...

Replying to @Edwards08C

#mathscpdchat Thanks for this @Edwards08C it reminds me how adaptable TAs have to be and what excellent communicators teachers have to be too!

... and this positive report from a Teaching Assistant:



Joanne Green ✓ @MsJoanneGreen · 18h

...

Q2) #mathscpdchat @tershanah We model behaviour we want from pupils. We give lots of praise, including to each other in front of the pupils. We let each other know why we think the pupils are doing well and let them know why they should receive rewards



Tazreen Tershanah @tershanah · 18h

...

Replying to @MsJoanneGreen

#mathscpdchat Love the idea of considering an additional adult as an 'additional role model' of mathematical behaviours in the classroom.

The following conversation, about communication between teachers and TAs, was in response to Tazreen's second question even though it started from a comment that was not a direct reply to that question:



Maryse @AllThingsMaths · 18h ...

I work consistently with 2 TAs in my Y10 class who support 2 VI students. It's been an amazing experience so far.

[#mathscpdchat](#)



Maryse @AllThingsMaths · 18h ...

Replying to [@AllThingsMaths](#)

Send the work in advance. Catch up in the lesson and reflect afterwards on how the resources have worked. We use foam, straws, pin boards etc. to present the work for touch.

[#mathscpdchat](#)



Maryse @AllThingsMaths · 18h ...

We've set a few things between us. E.g. if I need silence from all then I say "I need everyone listening" so TAs understand they need to pause too. Otherwise they can talk through me.

[#mathscpdchat](#)



Maryse @AllThingsMaths · 18h ...

I also say if something must be done using my model on the board so TAs know their parameters.

[#mathscpdchat](#)



Tazreen Tershanah @tershanah · 18h ...

Replying to [@AllThingsMaths](#)

[#mathscpdchat](#) Thank you. You've highlighted the importance of ongoing communication whilst the learning is actually happening moment to moment which is tricky because it is quite public!



Maryse @AllThingsMaths · 18h ...

Replying to [@tershanah](#)

I'm lucky that the TAs I've worked with will ask if unsure. One supports for medical reasons in Y11 and was saying something. I caught her eye and shook my head slightly then gave her a scribbled down explanation. She was super about it.

[#mathscpdchat](#)



Joanne Green ✓ @MsJoanneGreen · 19h

...

[#mathscpdchat](#) [@AllThingsMaths](#) [@tershanah](#) In primary school, teaching assistants are expected to continue chatting when working with one pupil, yet not in high school.



Maryse @AllThingsMaths · 19h

...

Replying to [@MsJoanneGreen](#) and [@tershanah](#)

In my experience it varies wildly. It depends on the context.

Tazreen's third main question ...



Tazreen Tershanah @tershanah · 19h

...

Feel free to continue posting about effective teacher-TA communication.

Here is another question to think about:

Question 3. How do you support your additional adults specialist and pedagogical knowledge and access Professional development?

[#mathscpdchat](#)



... generated more replies and discussion than any of her others. The following conversation focussed on ways of supporting and enhancing the work of TAs without undermining anyone's confidence ...



Catherine Edwards @Edwards08C · 19h

...

Replying to @tershanah

This one is so tricky, when you have consistent support they can see and learn the models along with the students. it can be hard when incorrect information or techniques are passed from TA to student. Correcting it without undermining #mathscpdchat



Tazreen Tershanah @tershanah · 19h

...

Replying to @Edwards08C

#mathscpdchat such a fine balance. Any tips on correcting it without undermining TAs (open to anyone)?



Maryse @AllThingsMaths · 19h

...

Replying to @tershanah and @Edwards08C

I try to cover it in the discussion when we cover misconceptions. E.g. Place value not zeroes when working with powers of 10.

Don't always get it right though.

#mathscpdchat



Catherine Edwards @Edwards08C · 19h

...

Replying to @AllThingsMaths and @tershanah

IT's often prior knowledge or things not specifically in the lesson. I had a supply TA misnaming a hexagon the other day. Mostly catch and correct but sometimes it slips through... #mathscpdchat

... and links to resources that can build-on/increase the knowledge and expertise of TAs, and therefore build up their confidence, were shared during the following thread:



Mary Pardoe @PardoeMary · 19h

...

Replying to @tershanah

NCETM have some useful resources ... such as their Primary Subject Knowledge Audit, here: ncetm.org.uk/classroom-reso.. and a similar resource for Secondary, here: ncetm.org.uk/classroom-reso

...

#mathscpdchat

MASTERY PD MATERIALS

PRIMARY SUBJECT KNOWLEDGE AUDIT

Assess your confidence in teaching the content of the KS1 and KS2 maths curriculum

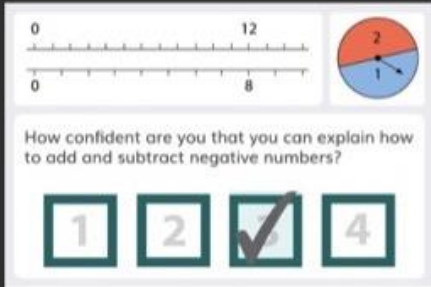


The preview shows various mathematical concepts: a division problem $4 \overline{) 40}$ with a remainder of 1, a bar model with 10 units, a number line with 6 and 5, a number line with 5 and 6, a tree diagram, and a bar model with 9 and 8.

MASTERY PD MATERIALS

SECONDARY SUBJECT KNOWLEDGE AUDIT

Assess your confidence in teaching the content of the KS3 maths curriculum



The preview shows a number line from 0 to 12, a pie chart with 2 and 1, and a question: "How confident are you that you can explain how to add and subtract negative numbers?" with four response options: 1, 2, 3 (checked), and 4.



Mary Pardoe @PardoeMary · 19h

Replying to @PardoeMary and @tershanah

This gives an idea of how the Secondary audit may help? [#mathscpdchat](#)

Effective subject knowledge of maths underpins high-quality teaching. For any teachers in training, those new to the profession or the subject, or anyone simply wanting to find out more about the core concepts taught at KS3, these subject audits can help.

There are 17 audit documents in total, with each one based on one of the core concepts from the **NCETM Secondary Mastery Professional Development Materials**. Each document contains audit questions with tick boxes you can select to show how confident you are, exemplifications and explanations, and further support links. At the end of each document there is space to type notes, including reflections and targets. The document can then be saved for your records.

You can find further resources to support with your KS3 teaching on the **17 core concept webpages**. And if you are a non-specialist teaching maths, you can take part in the **Secondary Non-specialist SKTM** programme with your local Maths Hub.

The zip folder below allows you to download all the audit documents together.



Mary Pardoe @PardoeMary · 19h

...

Replying to @PardoeMary and @tershanah

... and this shows a bit about the Primary audit materials ...
[#mathscpdchat](#)

The materials are divided into four mathematical areas with up to twelve 'question documents' in each area, all drawing heavily on the **NCETM Primary Mastery Professional Development materials**.

Each document starts by asking you how confident you are in supporting children's learning in a specific area of maths. Examples are provided to prompt your initial thinking, which you can then refer to while reading detailed notes on how this area might be taught in a primary classroom. Additional guidance then points to possible pupil errors. You can download and personalise each question document, to support you in meeting the standards in the early career framework (ECF). The question documents are also available to download as a single zip file within each area. Some questions are supplemented by a series of short videos giving advice on how a topic might be handled in the classroom.



Tazreen Tershanah @tershanah · 19h

...

Replying to @PardoeMary

[#mathscpdchat](#) Thanks for these @Marypardoe. Great to seek out before starting a new unit of work. There is also the primary video lessons which are usually short and great for our 'time poor' TAs.



ncetm.org.uk

Primary video lessons

Primary video lessons, developed for use during school closures, that will also be useful for Covid ...

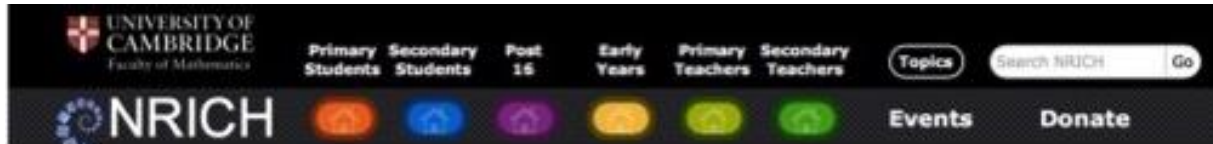


Mary Pardoe @PardoeMary · 19h



Replying to @tershanah

NRICH also have some lovely material that additional adults supporting maths-learning may find very helpful ... and enjoy?! For example this rich.maths.org/6537 #mathscpdchat



Teachers' Experiences of Using NRICH

Age 7 to 18
Challenge Level ★

Teachers Using NRICH - Engaging Mathematics For All Learners

The following four articles talk about some of the findings that teachers involved in the NRICH work on the [Engaging Mathematics for all Learners Project](#) wanted to share.

[Changing Perceptions](#)

The teachers involved in the Engaging Mathematics Project were keen to challenge common perceptions of mathematics and of teaching and learning mathematics. In this article, the teachers share what they are doing to change perceptions in their schools.

[Optimising Input - Maximising Output](#)

The teachers involved in the Engaging Mathematics Project decided that they needed to address the (im)balance between teacher and student activity in their classrooms. In this article they share the issues they identified and what they have been doing to address them.

[Using Rich Tasks in an Objective Led Culture](#)

As teachers, we appreciate the need to have clear objectives at the start of lessons but have been aware of the limitations this sometimes seems to place on our ability to get the most out of using rich tasks. Through our case study we tried to address two issues:

- Objectives that are seen as a strait-jacket, restricting the teachers' room for manoeuvre. These can be a barrier to teachers responding appropriately to the students they are working with, not allowing them to 'go with the flow' of a lesson.
- Objectives that are solely about content and do not recognise the mathematical process skills that we want students to develop.

[Using Rich Tasks for the First Time](#)

The teachers involved in the Engaging Mathematics Project wanted to embed rich tasks from the NRICH website into their curriculum for all KS3 and KS4 students. In this article, the teachers share the issues they needed to consider and what they are doing to address them.

[Teachers Using NRICH - Key Stage 3](#)



Tazreen Tershanah @tershanah · 19h



Replying to @PardoeMary

#mathscpdchat Also diagnosticquestions.com to support specialist knowledge around the kind of great mistakes learners make and why they might make them.



Mary Pardoe @PardoeMary · 19h

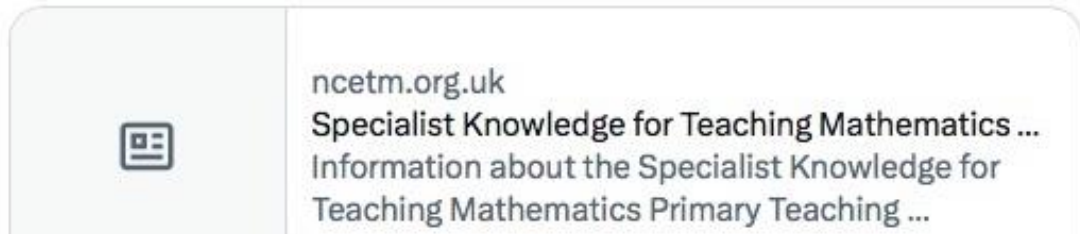
...

Replying to @tershanah

Have you shared this yet, Tazreen ... that you are involved in leading?

ncetm.org.uk/maths-hubs-pro..

[#mathscpdchat](#)



Tazreen Tershanah @tershanah · 18h

...

Replying to @PardoeMary

Yes, but worth sharing again as it is a very rewarding programme to be part of [#mathscpdchat](#)

Other ways of supporting Teaching Assistants, for example through in-school day-to-day organisation and interaction, were mentioned in this next conversation:



Maryse @AllThingsMaths · 19h

...

Replying to @tershanah

The benefit of having the same adults each lesson is them seeing how the learning builds. I provide fully worked solutions to some questions and students sit in groups to enable the student to continue the discussions with peers.

[#mathscpdchat](#)



Maryse @AllThingsMaths · 19h

...

Replying to @AllThingsMaths and @tershanah

However I'd like to see TAs given more prep time, along with better salaries.

[#mathscpdchat](#)



Tazreen Tershanah @tershanah · 19h

...

Replying to @AllThingsMaths

[#mathscpdchat](#) Wonderful. So they are experiencing a coherent series of learning and observing you use good pedagogy.

 **Maryse** @AllThingsMaths · 19h ...
Replying to @tershanah
I hope so to the latter 🙌

Our TAs are amazing professionals and we all contribute our bit for the students to learn. My bit is the maths. I always check in and ask for their input and respect their expertise for their role.

[#mathscpdchat](#)

 **Maryse** @AllThingsMaths · 19h ...
Replying to @AllThingsMaths and @tershanah

The culture in the classroom is that if I need to explain again that's fine. If I've not been clear, or given enough examples etc then I go again. This extends to the adults who will let me know if students haven't quite got it. No egos.

[#mathscpdchat](#)

 **Tazreen Tershanah** @tershanah · 19h ...
Replying to @AllThingsMaths

[#mathscpdchat](#) sounds like a really positive classroom culture of which your additional adults are an integral part.

 **Maryse** @AllThingsMaths · 19h ...
Replying to @tershanah

They've taught me lots and I'm very grateful to have them.

This was a late comment:

 **Sarah Be** @sarahbe1971 · 19h ...
Replying to @tershanah and @PardoeMary

@HollyBayliss7 is designing and delivering a maths CPD program for our LSAs [#mathscpdchat](#)

 **Tazreen Tershanah** @tershanah · 19h ...
Replying to @sarahbe1971 @PardoeMary and @HollyBayliss7

[#mathscpdchat](#) Please take a look at the latest on this thread and the summary to follow for ideas if you would like them. Feel free to keep using the hashtag if you post any relevant thoughts or resources.

The next comment prompted the host to provide the link to another resource that can help develop the knowledge/practice/confidence of Teaching Assistants:

Joanne Green ✓ @MsJoanneGreen · 19h ...
Q3) [#mathscpdchat](#) @tershanah The teaching assistants do tutoring online for other orgs at school. Whereas I do my own self-learning and experiments, don't I? I let the schools know about all types of cpd such as @StellaAdlerNY @LaSalleEd , @NCETM, @TradewindUK, @WritersGuildF

Tazreen Tershanah @tershanah · 19h ...
Replying to @MsJoanneGreen @StellaAdlerNY and 4 others
[#mathscpdchat](#) Yes, I know a few TAs who also tutor afterschool as part of the National Tutoring Programme. Where can we direct them to support them with specialist knowledge (if necessary)?

Tazreen Tershanah @tershanah · 19h ...
Replying to @tershanah @MsJoanneGreen and 5 others
[#mathscpdchat](#) I have found the ready to progress criteria gives a good indication of previous learning trajectories and can support which starts from the student's current understanding.



ncetm.org.uk

Exemplification of ready-to-progress criteria

79 PowerPoints, each one focusing on one of the ready-to-progress criteria in the new DfE maths ...


Tazreen Tershanah @tershanah · 19h ...
Replying to @tershanah @MsJoanneGreen and 5 others
[#mathscpdchat](#) Particularly useful for TAs who have spent a long time in one year group or phase and have moved out of that phase or TAs who go between phases/year groups.


Joanne Green ✓ @MsJoanneGreen · 20h ...
@tershanah I want to do some work in America [#mathscpdchat](#) during the summer holidays each year for about 10 years as I want to learn similarities and differences - any advice? @KumonUK and @WhiteRoseEd

Tazreen Tershanah @tershanah · 20h ...
Replying to @MsJoanneGreen @KumonUK and @WhiteRoseEd
Sorry @MsJoanneGreen don't know much about this area!

During the hour of this [#mathsCPDchat](#) this contributor, who has tweeted that she is both a 'Cover Supervisor' and a Teaching Assistant, made this comment, to which - although it was not a reply to any of the host's questions - the host responded:

 **Joanne Green** ✓ @MsJoanneGreen · 17h ...
@tershanah #mathscpdchat It depends upon what method the teaching assistant likes to use. Some like to sit with specific pupils, so I'll put others near who say they are struggling with the work, yet really it's their friends who disturb them, so they don't usually need help.

 **Tazreen Tershanah** @tershanah · 17h ...
Replying to @MsJoanneGreen
#mathscpdchat So it sounds like general teaching assistants who are used to boost confidence and generally support a conducive learning environment? Are they Maths Specific or do they support in multiple curriculum areas?


 **Joanne Green** ✓ @MsJoanneGreen · 18h ...
#mathscpdchat @tershanah They do intervention work for about 40 pupils each. They are subject specific and then go into other classes too. So, yes, Maths has I think it's 4 teaching assistants.

Towards the end of the chat the same contributor tweeted the following comments generally to the chat, one straight after the other in the order shown here:

 **Joanne Green** ✓ @MsJoanneGreen · 17h ...
#mathscpdchat @tershanah I like to let the pupils show the teaching assistant's methods on the board to help other pupils. For example < has smaller or less than written within the gap, and > has larger or greater than written within the gap.

 **Joanne Green** ✓ @MsJoanneGreen · 17h ...
@tershanah #mathscpdchat I like to chat with the teaching assistants. At the school I'm at, it's a job of the teaching assistants to help new staff. This means they help you travel to work, and will be on the bus on the way home. We sit together at lunch and break times too.

 **Joanne Green** ✓ @MsJoanneGreen · 17h ...
@tershanah #mathscpdchat Today, the teaching assistants were chatting about a student who won't engage with typing or writing. So, I suggested the IT package that records words. I said when the pupils see a few swear words typed in, that incentivises them!

 **Joanne Green** ✓ @MsJoanneGreen · 17h ...
@tershanah #mathscpdchat I didn't get time today, but I wanted the teaching assistants and SEN department to know about the reading pens that pupils use at other schools. Font must be 10 and above for the pens to read it accurately, so that could help the teaching assistants.

To the host last question ...



Tazreen Tershanah @tershanah · 20h
Final question to think about this evening.



Question 4. What difference can additional adults make on learner engagement in mathematics classrooms?#mathscpdchat



... there were no responses/replies.

The host, Tazreen Kassim-Lowe, closed this #mathsCPDchat by thanking the contributors to it, and providing a helpful summary:



Tazreen Tershanah @tershanah · 20h
Thank you so much for joining me for this #mathscpdchat. Today we have reflected on:

1. Who our additional adults are
2. How we communicate with them
3. How we support their specialist and pedagogical knowledge
4. What a difference they make!

