

## #mathscpdchat 10 September 2019

### 2019 GCSE exams and results: what have you learnt from them?

Hosted by [Kathryn Darwin](#)

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



Some of the questions asked and areas where discussion focussed were:

- **how teachers ‘felt generally’** about the exam papers from the different exam boards ... did they think they were fair, too hard, too easy, too ...?
- that different teachers **perceived differently the demands and ‘fairness’ of questions;**
- some teachers, and their pupils, regarded all three papers from one particular exam board as fair ... the teachers thought that the **results truly reflected their pupils’ potential and the work they had done during Key Stage 4** ... that such consistency is a **key factor in teachers’ choice of exam board;**

- some teachers **'had some issues' with a few questions** on the papers from one exam board ... they were also **unhappy about how pupils' responses to those questions were marked**;
- some teachers thought that **raising Foundation-tier grade boundaries** had resulted in **fair reflections** of work done by pupils ... however some other teachers were **'genuinely upset' for pupils** who they had predicted would be awarded Grade 5 but who **marginally missed achieving it**;
- that many pupils taking Foundation tier exams **struggled with problem-solving involving lower-demand content** ... the need to improve the problem-solving skills of such pupils;
- with **which paper (1, 2 or 3)** were pupils generally 'most comfortable'?
- in terms of raw scores, of the three papers from one particular exam board, **paper 3 was the best and paper 1 was the worst**;
- strategies for **securing the allocation of pupils to tiers (Foundation or Higher) by the end of Year 10**, so that the 'tiering' of pupils stays the same throughout Year 11, and so there are no 'attainment surprises' in the 'mock' exams ... this year in one school any pupils who were kept on the Higher tier **after the 'mock' exams had raised concern about their progress** were 'targeted' for appropriate 'interventions';
- that the 'new' GCSE specifications **have caused some teachers to change** their policies about **tier-entry-decisions for borderline Higher/Foundation pupils** ... instead of entering such pupils for the Higher-tier exams on the off-chance that they might achieve a better grade, they are now entering them for the Foundation exams ... although this year at least one school kept on the Higher tier **those borderline F/H pupils who were well-motivated and hard-working** ... 'snowballing gains towards the end made it worthwhile!';
- concerns that **if a trend continues towards a greater and greater percentage of all candidates sitting Foundation-tier papers**, those **pupils who previously might have achieved a Grade 4 will not then do so** (owing to the number of marks required to achieve a Grade 4 shifting ever upwards);
- in one school, by the end of the school-year, Y11 **Foundation-tier groups each contained only 15 pupils while the one Higher-tier group had 34 pupils**;
- that the **literacy demands of the Foundation-tier** exams vary from one exam board to another ... and that (particularly for teachers with pupils of below average literacy skills) this is an **important factor when choosing exam boards**;
- concerns that teachers are **adapting their teaching to 'fit' the style of the papers from particular exam boards**;

- some schools used an **exam board for Higher-tier** candidates that was **different to the exam board they used for Foundation-tier** pupils;
- advantages/disadvantages of **switching from using exam board X for both tiers (Foundation AND Higher) to using exam board Y for Higher-tier candidates only** (staying with exam board X for Foundation-tier pupils) after seeing that the **Higher-tier grade boundaries set this year by exam board Y were lower than those of exam board X ...** and after seeing also that in the Higher-tier papers **more marks were allocated to 'equivalent-difficulty-questions' in exam board Y's papers** than in exam board X's papers ... and after 'observing' that **exam board Y's Higher-tier questions 'seemed a lot friendlier'** than exam board X's questions;
- some teachers thought that exam board X's **Higher-tier questions were insufficiently challenging**, and so pupils who 'worked-towards' them **would not be adequately prepared for work at A level**;
- that some teachers/schools prepare pupils **who are aiming to study maths at A level for Level 2 Further Maths as well as for Higher-tier GCSE**;
- **challenging an SLT policy of removing from maths lessons** those Y11 students who have **achieved grade 9 in 'mock' exams** in order for them to work on other subjects in which they achieved a lower 'Mock' grade;
- in schools **where pupils on the Foundation tier achieved poor results in 2018**, some teachers **this year focussed on 'exam techniques'** ... including identification of 'command words', and **helping pupils learn how to identify and describe what is being worked on at each stage of the solution of a problem**;
- when **pupils with many gaps in their understanding/knowledge join a new school in Y11** it is no longer possible to 'get by' using a 'sticking-plaster approach', concentrating only on a few topics ... the **teaching now has to 'dig deeply' into pupils' thinking** ... for example by teaching 'across topics' (eg using topics such as 'All about triangles'), using 'Goal free' problems, and providing lots of opportunities for pupils to reason out loud ... such strategies have increased the **confidence of students in tackling questions when they cannot at first 'see all the way to the answer'**;
- that **Chief Examiners' reports** are very useful for identifying topics that were poorly answered ... particularly when supporting pupils who intend to re-sit GCSE exams;
- **teachers' intentions** to ... improve resources for learning in KS4, particularly for statistics and probability ... look more closely at exam-style questions before planning the teaching of a topic that you have not taught before ... do more explicit 'how-to-use-a-calculator' work this year ... focus more intensely on use of ruler/protractor/compass use, telling-the-time/timetables,

fractions/decimals/percentages, estimation, ... confusions such as mean/median/mode and area/perimeter;

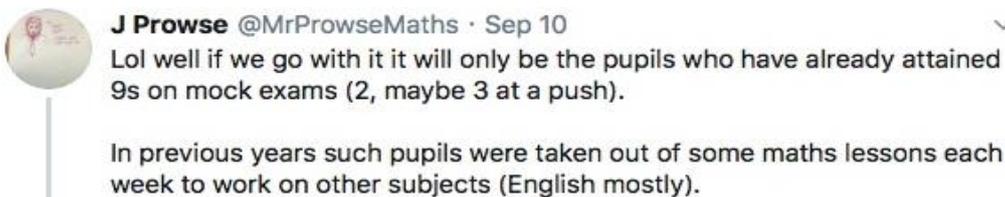
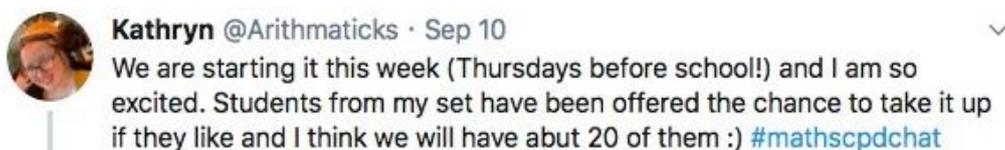
- whether teachers had looked-for or found **support for KS4 teaching ... for example from their nearest maths hub** ... that some maths departments are unaware of the existence of the maths hubs!

In what follows, click on any screenshot-of-a-tweet to go to that actual tweet on Twitter.

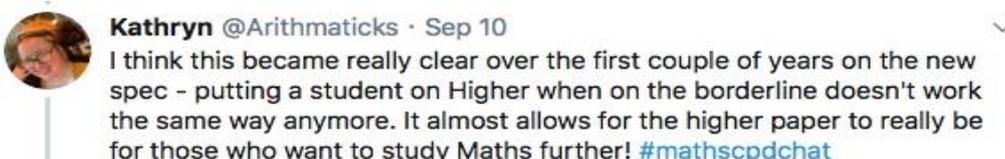
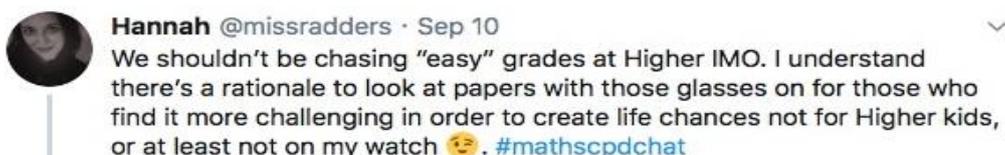
This is part of a 'conversation' of tweets, about preparing and entering high-attaining Year 11 pupils for Level 2 Further Maths as well as for Higher-tier GCSE Maths, and the possible consequences of schools entering a greater and greater percentage of their candidates for the Foundation-tier GCSE. The conversation was generated by this tweet from [J Prowse](#):



including these from [Kathryn Darwin](#) and [J Prowse](#):



these from [Hannah](#) and [Kathryn Darwin](#):



and these from [J Prowse](#) and [Kathryn Darwin](#):



**J Prowse** @MrProwseMaths · Sep 10

I think we're going to need to see a bit of a culture change in our school over the next few years.



**Kathryn** @Arithmaticks · Sep 10

Replying to @missradders @MrProwseMaths and @Just\_Maths

I feel like this will be a shift nationwide, though worry about how many may miss out on a pass with comparable outcomes etc. A small percentage change in pass rate could mean SO many more missing a 4 with more on Foundation. Hard balance. [#mathscpdchat](#)

(to read the discussion-sequence generated by any tweet look at the 'replies' to that tweet)

Among the links shared were:

[Teaching GCSE Mathematics](#) which is a four-day study course from MEI designed to develop confidence, subject knowledge and teaching skills. It was shared by [Mary Pardoe](#)

[Raising Confidence with Reasoning in the GCSE classroom](#) which is a one-day course from the AMSP focussing on the development of reasoning from KS2 through to GCSE. It was shared by [Mary Pardoe](#)

[The new maths GCSE: what the exam board markers found](#) which is an NCETM Maths Podcast about what the exam boards learnt when they marked students' responses to the 2017 GCSE exam papers. It was shared by [Mary Pardoe](#)

[GCSE Maths 9-1: How did it perform in its second summer?](#) which is an NCETM Maths Podcast in which representatives from England's three main exam boards share their thoughts on the questions set and how students performed in the 2018 GCSE Maths exams. It was shared by [Mary Pardoe](#)

[Addressing the Reasoning and Problem-Solving demands of the new GCSE](#) which is an article in the NCETM Secondary Magazine Issue 144 (September 2017). It was shared by [Mary Pardoe](#)