
Maths in 2015

Report of a discussion with heads of maths

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Maths in 2015: Summary

Discussion with heads of maths - 7 October 2015

Awarding body choice

Maths departments are not sticking with previous awarding bodies necessarily, having generally looked around at the various specifications on offer. They have not all even necessarily settled on a particular awarding body despite having already started teaching the new GCSE.

Major uncertainties seem to define current thinking about GCSE, as schools have not yet seen real exam papers and tend to distrust specimens. Some say they will not settle on a particular awarding body until they have seen the cohort through the first round of exams.

AQA seems to be gaining ground in maths, as its some papers seem to be more accessible, simple and up-to-date. Its provision of alternative to year and three year schemes of work also seems popular and, among these HoDs, there is a feeling that AQA offers excellent support.

GCSE maths delivery

In the modular exam system, maths departments commonly used the option of multiple entries by starting GCSE in Y9, while the new KS3 could be seen to encourage five-year courses. Half of these schools are now using the "intended" two-year option while the others use either three-year or five-year courses. The reduction of supplementary maths GCSEs, such as statistics is also leading to changes in the KS3-4 split.

Maths departments do not seem to have been given additional teaching time or budget to introduce the

new GCSE and have contrived a range of different options for meeting the additional demands of the new GCSE. HoDs seem quite phlegmatic about this and are uncomplaining, suggesting that they are either content that they need little extra time or that it's too soon to tell whether this is the case.

Resourcing the new GCSE

While few of these departments have bought new textbooks, it does not appear to be because they do not want them, but because they either have no budget or because they need to know more about the new exams. Given that some say they will not settle to a new specifications until the first exams have been taken and that they prefer textbooks that have been endorsed by the chosen awarding body, it may be that they do not choose a new textbook for another two years or more.

While the content of maths is very similar, different awarding bodies may examine in different ways and for this reason maths teachers prefer texts to be endorsed. This partly explains a delay in purchasing new texts: HoDs need to feel settled about the new specs before purchasing and they won't be settled until they've experienced the new exams first hand. Budgets are also a concern.

Revision

When it comes to purchasing revision resources, heads of maths prefer those that include hints, exam tips and graded questions over awarding body endorsement. However they do not seem to anticipate major

purchases in this area with students attending to buy their own. Revision seems to be seen largely as an ongoing remediation activity targeted at particular groups of students, though there is still time set-aside at the end of the course for revision purposes.

KS3

There is some indication that key stage three is even more now seen as preparation for GCSE, since it seems to have lost its identity somewhat in the revision. This is exacerbated by the lack of any common assessment framework. While there is some interest in the mastery approach it has not yet gained purchase among these heads of maths.

Assessment

Assessment throughout KS3 and KS4 seems to have taken rather a retrograde step in that maths departments seem to be largely setting effectively mock exams and using percentages and rankings. Some teachers feel liberated by the removal of levels at KS3, however a high degree of uncertainty prevails, especially since the "levelness" of the new GCSE grade system is not yet understood. It is this uncertainty that is causing stagnation in developing assessment systems to meet the needs of Progress 8 and the new KS3 curriculum.

Progress 8

The new P8 measure has not yet left to any major initiatives in any of these maths departments. HoDs say that they and their colleagues feel under additional pressure as a result of the double weighting, but they

remain focused on achieving the best grades they can for the students. It does though seem to compound the demand for a reliable assessment and monitoring system throughout KS3 and KS4.

P8 does seem to have led to the reduction in offerings of some supplementary maths courses already, largely to free up curriculum time for other P8 subjects rather than because of the effect of these supplementary maths courses.

6th form maths

At this stage heads of maths seem quite unconcerned about the new A-level maths courses; they seem to think that they will not be very different from current ones and they intend to carry on offering AS maths co-taught with a level as has been the case for many years. There is clearly a feeling that they need to come to terms with the new GCSEs before worrying about the new A-levels. However there is some concern for the students currently in Y10 who are currently facing two years of uncertainty to be followed by another two.

The new core maths has not found purchase in any of these schools and it is seen negatively as a possible replacement for AS maths, which departments do not want to give up. Maths is already the most popular subject and sixth forms and it may be that the core maths qualification has arrived too late to be useful.

Participants' GCSE maths profiles

Chris: Has noticed a drop in performance since modular GCSE maths was scrapped: caused mainly by the loss of multiple entry. Level 2 certificates are used in his department for "those who love maths", mainly to help with retention in the face of strong completion from the local 6th form college. He has some timetabling problems with offering GCSE statistics in a department that is already offering additional maths.

Dawn: Girls grammar. The department has not chosen a spec for Y10, but the head requires this by end of this autumn term. All current Y11 students are entered for higher tier Edexcel. 50% of them also take additional maths, but the department is not offering this to the current Y10 – largely down to increase in demand on curriculum from other subjects. They will decide which awarding body to choose mainly by looking at SAMs, probably following trials with the current Y11, and following more research into what each awarding body offers in the way of supporting resources and training.

Eddy: 63 different languages are spoken at this school; very low reading ages and the school in a very deprived area. There has been a general decrease in performance in GCSE maths in recent years so the school has adopted a different strategy: this year's Y11 being entered with Edexcel (bottom two sets) or AQA (top three sets). All students also do statistics and a few do further maths GCSE. 5.5 hours of maths timetabled per week.

Marnie: small, "very middle class" 11-16 village school. Y11 currently does Edexcel but Marnie is "losing faith" – having had previous experience with AQA in another school, she is moving her department to them. She values the support and resources provided by AQA, mentioning the provision of free webinars, assessments being already available, flexibility in schemes of work (especially the options of two- or three-year courses,

and the clarity of information available. Previously all students have also taken GCSE statistics but this year, as a result of the increased content of GCSE maths, only the top sets are taking statistics.

Mary: comprehensive, good maths results. Until this year, GCSE statistics was taught to all students, but this has stopped for this year's Y10 order to focus on GCSE maths, owing to the uncertainties about the examinations and performance measures. The department is continuing with Edexcel but is probably entering the current Y11 foundation tier students via OCR. The main reason for sticking with Edexcel is familiarity, even though Mary says that the support offered by AQA is probably better.

Wayne: Small SEN school – 50% of students are autistic spectrum. The department uses AQA for entry-level certification, and a "reasonable proportion" aim for Grade C at GCSE – for some, by the age of 19. The department is still deciding about which AB to choose at GCSE and for level 1. They bought in textbooks for Edexcel GCSE maths, but this doesn't appear to incline them to follow that specification, necessarily. Wayne is very interested in any exam board that would offer online examination

New specifications

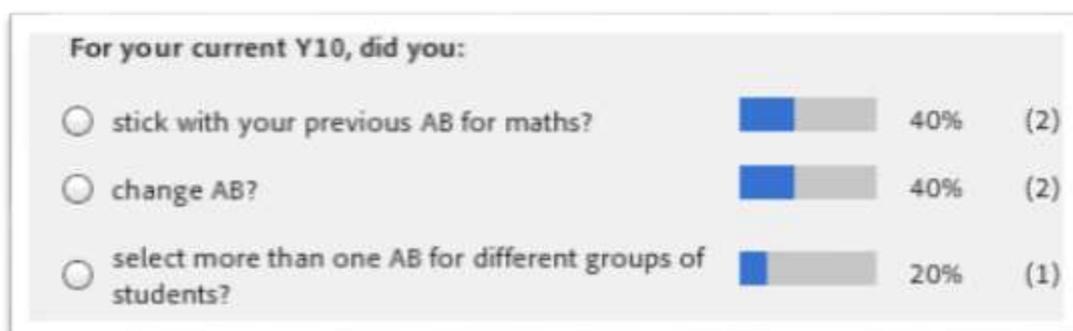
- Maths departments have considered the various specifications widely and have largely found one to work towards, but there is a feeling that this could be a temporary measure because decisions may be remade after real exams have been taken.
- Despite the simultaneous review of all specifications, some departments are continuing with their previous awarding body owing to familiarity with the systems. Others have been tempted to switch largely because of benefits such as greater flexibility or perceived better levels of support, since spec content is more uniform.
- There are signs that some maths GCSE subjects are likely to decline in number: statistics in particular seems to be struggling to maintain its foothold under pressure from P8 and the loss of module tests within a three year GCSE.

Awarding body choice

Although all these heads of department have looked extensively at different awarding bodies' sample materials and specifications, they still feel that they are unsure about the extent and impact of the changes to GCSE, and will remain so until the first round of formal examinations have taken place in 2017. They feel as if they are very much "flying blind".

There is certainly an element of sticking with what they know, but the reforms have led maths departments to consider everything from scratch. It appears that there

may be a narrower range of supplementary maths GCSE being offered, with several of the schools dropping or reducing access to statistics, for example. This may incline schools to switch AB to some extent, since the benefits obtained by using the same AB across different specifications would then be lost. Some schools seem to be experimenting with using different ABs for different ability groups, while others simply haven't made a choice yet, so there likely to be a high degree of fluctuation in the first few years,



Awarding body associations

Heads of maths were asked about what kinds of associations they had with each awarding body: they have all recently re-examined the ABs maths offerings.

AQA – a strong positive is that the levels of literacy required are not excessive, making AQA maths more accessible. Some HoDs also said that they valued the good levels of support offered.

AQA associations:	
Attendee	Answer
*Dawn . 2	none really.
*Wayne	Less literacy in the questions familiarity with ELC
*Mary .	Good support.
*Eddy	less wordy and focus more on application
*Marnie .	AQA because of the extreme support for us going into the unknown new GCSE. The team really liked what was on offer for us. Edexcel haven't really seemed to offer very much in comparison. less wordy
*Chris	Often one of the pair of papers was considered to be the "hard one" and the other considered "easy"

Edexcel – some maths HoDs consider that both the specifications and exam papers appear old-fashioned, complicated, or wordy. One commented that the new style is very similar to the previous versions, so teachers

felt familiar with it. The new Edexcel sample assessment materials suggest that the papers will be more difficult than for AQA, which has put some schools off – several HoDs agreed.

Pearson Edexcel associations::	
Attendee	Answer
Dawn . 2	wordy questions but quite predictable questions - although i don't think that's the case anymore.
Wayne	familiarity and edexcel specific resources already placed
Mary .	More familiar paper style for teachers.
Eddy	more suitable for EAL learners
Marnie .	becoming extremely complicated with a lack of clarity
Chris	Mistakes. Old fashioned looking

WJEC and OCR – there was less familiarity with these ABs among this group.

WJEC associations:	
Attendee	Answer
*Dawn . 2	none really
*Wayne	none
*Mary .	Long exams.
*Eddy	no association
*Marnie .	none
*Chris	Predictable but with the odd question worth lots of marks

OCR associations:	
Attendee	Answer
*Dawn . 2	good challenging questions that make students think
*Wayne	none
*Mary .	New GCSEs appear more abstract/involved questions. Current foundation tier quite accessible.
*Eddy	no association
*Marnie .	none
*Chris	none

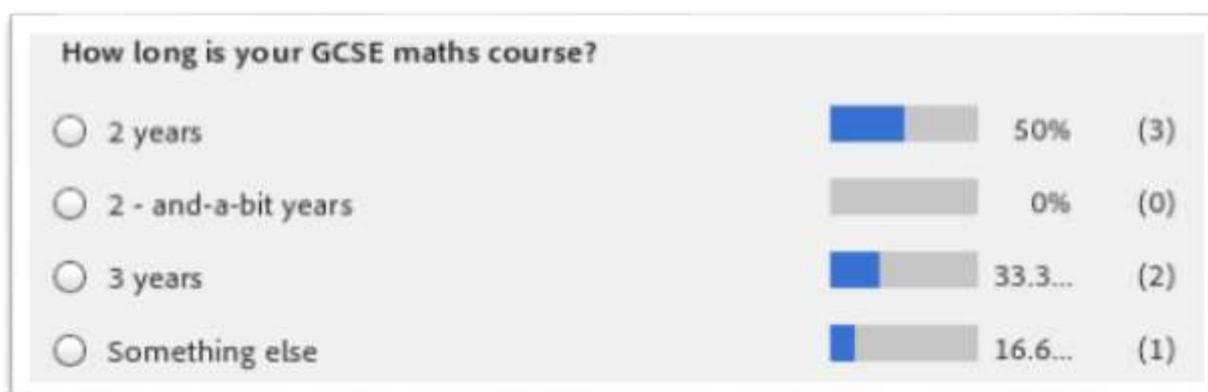
Teaching the new GCSE

- While some schools are moving to, or have adopted a five year GCSE model, most seem to be sticking with a two- or three-year approach, despite observations that KS3 has lost its character and is rather nebulous.
- There doesn't seem to be a great deal of additional time being made available to maths departments to support the delivery of the increased content GCSEs, but they seem to be coping with the demand so far, though there are concerns for the less able GCSE students. There are few concerns about any lack of maths specialists either.
- The lack of clarity associated with assessment seems to dominate thinking, with some departments unwilling to commit to substantial resource purchasing until there is better understanding of the new GCSE grades.

GCSE maths delivery

AQA has produced two-year and three-year route maps to GCSE, which some of these participants have found useful in planning their GCSE maths delivery. Chris, for example, said that his school is following the three-year route, although they effectively they use a five-year model, with accompanying assessment scheme (provided by the LA), using new GCSE grades throughout.

Among these departments, maths seems to be structured into either two, three or five year courses: none start GCSE part way through Y9, which has been a fairly common model in previous years. This may be a reflection of the re-trenching to GCSE maths or of the uncertainty surrounding new exams, as well as of the removal of early entry options already in place.



The provision of additional GCSE statistics complicates the three-year delivery mechanism somewhat, in some schools: it's easier to deliver it when a three-year course is run for all students, but not when only some will follow it.

The amount of time allocated to formal teaching of maths in current Y10 varies from around 3.5 to 5.5 hours

per week, with some schools also providing additional tutorial time, either throughout the year or to fill the curriculum gap left when other provision has finished, e.g. college applications. One HoD mentioned that science was giving some of their time to maths to cope with the additional maths content of science GCSEs, but in general schools do not seem to have been given

any additional teaching time to allow for the extra content in new maths GCSE specifications. It seems likely that this will have a negative effect on the lower ability range pupils, HoDs say.

“ The type of pupil who will be doing foundation are the ones I think we will run out of time for ”

Schools with sixth forms will still offer re-sits but these do not seem to be particularly high priority for schools – there seems to be little interest in specific resources for them and these HoDs had little to say on the subject.

It seems that much the same approach will pertain as in previous years, as far as GCSE delivery is concerned, with no immediate, dramatic changes, as departments take tentative steps in the uncertain environment that prevails.



Only Mary mentioned a shortage of maths specialists in any of these departments – she has five specialists out of eight – two are only deployed at KS3, the other only takes bottom sets at GCSE – being strong on discipline.

The department has a relatively high teaching time allowance, perhaps to reflect the shortage of specialist teaching.

Resourcing the new GCSE

Marnie’s department has previously found that digital textbooks have been successful in supporting GCSE statistics, and the department is moving over to this format for maths GCSE from this year. She said that it’s easier to spread the financial burden with this format and it works well alongside their existing practices for setting online homework and access to a maths website. However, she was adamant that it is still too

soon to be able to settle on any particular resources because of uncertainties surrounding the new GCSE.

Chris was in a similarly uncertain position.

“Text books are safety nets” as one HoD put it, but when so much remains unclear, it’s very difficult for schools to put their trust in them.

“ Nothing seems very solid at the minute. I’m going to hold on to my budget until we know what kind of animal we are looking at ”

This feeling came across several times during the discussion of GCSEs. The panel had been convened specifically because there was a feeling among Schoolzone clients that the market seemed rather opaque and it seems that this is also the case from schools’ point of view. The lack of certainty is much more acute than following previous GCSE reforms because of the concomitant removal of a KS3 assessment framework (with no alternative), the pressure and uncertainty (given that it’s based on new assessment criteria) of P8 and the forthcoming review of A-level maths, which will extend the period of uncertainty.



Dawn has been told that there is no budget for new textbooks because “maths is maths”, however she would value a new textbook largely in order to give an indication of what the new exam questions will look like – particularly in terms of style and difficulty, and for this reason would prefer one which was endorsed by an exam board.

Mary’s department has bought a couple of sets of MyMaths texts for classroom use (citing budget constraints as an explanation for why students don’t have their own copies), but is mainly using digital resources for better access. She commented, however, that using the textbooks has changed their teaching style because they see that the students do not have the skills to answer the new “wordy” style of questions that are illustrated in the books. She admitted, though,

that did not really know how accurate a representation these questions were.

“ We use textbooks all the time because projecting (digital resources) is difficult and not so useful for differentiation unless you fall back on photocopying ”

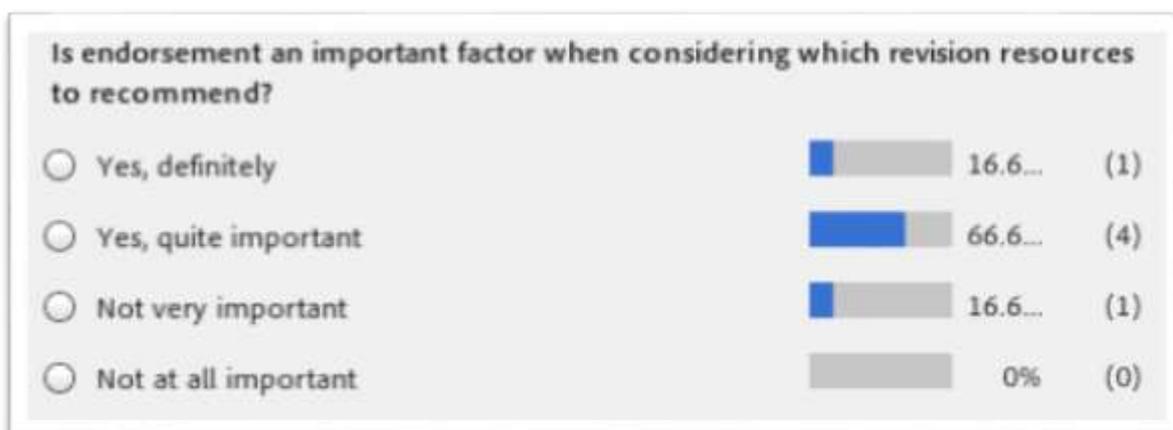
3a. What GCSE maths resources have you settled on - and why?

Back to Poll Edit End Poll

Attendee	Answer
'Wayne	edexcel endorsed text books from pearson and mymaths site licence
'Mary .	Edexcel - mymaths based books from Oxford (printed 35 copies of each higher and foundation. Digital copy but difficult to use in class.
'Eddy	we have bought the online pearson book
'Marnie .	we will buy digital
'Dawn .	none as yet
'Chris	Not bought any yet. use some free stuff

Eddy's department has bought endorsed textbooks – he also has the view that *maths is maths*, but comments that different awarding bodies will assess maths differently, and commented that the attraction of textbooks was largely the exam preparation aspect: helping teachers and students to understand the exam requirements. He thought the Collins books had good coverage and were appropriately sized.

Given several comments that textbooks are useful for exam preparation, in the current environment of uncertainty, it's perhaps unsurprising that most of these HoDs thought that endorsement was important, though clearly other factors are in play. It's possible that the attraction of endorsement will diminish with greater familiarity with (real) exams, though exam prep clearly isn't the only factor involved in choosing resources.



Press coverage in recent years has suggested that Ofsted took a dim view of text book use, but then had, perhaps, reversed their views on this matter. However, participants generally agreed that Ofsted comments

had no influence over their decisions about whether to use textbooks or not.

Training can be used to address major changes to specifications as an alternative to buying in new

resources and there can be competition for budgets as a result. However, there seems to be little competition

for maths departments' CPD and resource budgets as they are generally allocated separately.

4. What percentage of your departmental budget is allocated...	
Attendee	Answer
*Wayne	budget is flexible ask if needed bid for pupil premium funding
*Mary .	Additional £2500 for resources for the new GCSE. Had to be used buy by July last year so had to rush a decision.
*Eddy	CPD comes out of a different budget
*Marnie .	it is a different budget for us not from the maths budget
*Dawn .	i don't use my budget for CPD

Maths hubs and teaching schools do not seem to have impacted on CPD provision in any of the schools.

In general the use of free maths resources dominates over paid for resources, owing to budgetary restrictions and while some of these departments have bought new

textbooks to support the new GCSEs, most seem to be relying heavily on free ones. A common balance of use was 80% free: 20% paid for.

Revision

Before modular exams were introduced, a typical model for revision was that schools would finish the course early and then spend the last few weeks revising as a whole class activity. It might be expected that schools would have returned to this since the modular exams were scrapped, but the most common approach among these schools is that revision continues to be integrated throughout the course and is often seen as a remedial intervention activity, with specific students being targeted via regular review meetings in some schools. There is a prevalence of out-of-lesson activity.

Strategies described:

Marnie: small targeted revision groups in school time and after and weekends/holidays sometimes

Wayne: intervention club at lunchtime and after school from October open to all GCSE students Offer extra sessions in holiday time if wanted. We are expected to track pupil premium, and CLA students in particular

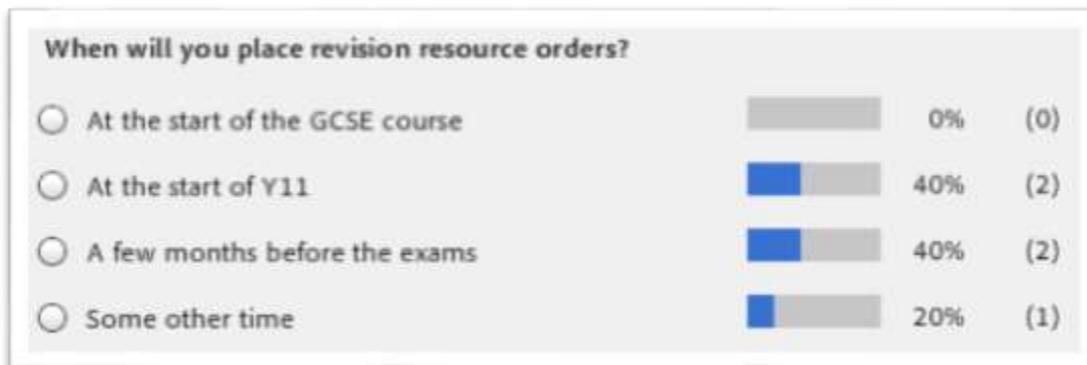
Eddy: after school classes and half term revision. Lots of intervention

Chris: Fairly frequent revisiting in class (at start or end of a lesson, sometimes the main part of the lesson leads on from it, sometimes not. After school sessions. (If allowed) one of maths days.

Mary: Ongoing after school revision (poor turn out though!). A few revision lessons each half term but 6 weeks at the end of the course. Some targeted revision in form time.

Dawn: hopefully the course will finish early and then we can revise fully in class. Revision also takes place throughout the year. We will put revision sessions on around Easter and in study leave.

None of these maths departments have bought revision materials for use throughout the course, perhaps reflecting the diverse range of activities within each school. Where resources are needed, HoDs tend to say that they will buy them in Y11 or nearer the final exams.



While there was general preference for textbooks to be endorsed, heads of maths seem to place greater importance on exam prep within revision materials: exam hints and graded questions seem to be more important than endorsement, though clearly the exam prep needs to be appropriate. This difference perhaps suggests that teachers tend to relate endorsement to content rather than skills.

Students in all these schools tend to buy their own revision guides, though Chris's school sells them on to students and then offers to buy them back again.

Impact on KS3

Discussion about this key stage was focused on its use in preparation for GCSE and the impact of GCSE reforms upon it.

Dawn's department is seeing GCSE as a five-year course, as KS3 is simply a preparation for GCSE and there is very little to distinguish KS3 as a separate entity since there is no formal assessment. There seemed to be some agreement with this view, though only two HoDs said that they were adopting the five-year approach to GCSE.

Marnie mentioned that AQA are promoting maths mastery: she is quite interested in finding out more about this for key stage three, as it would encourage

development of problem solving techniques. Mary's department is following a similar approach to mastery, partly to move away from the notion of levels – life without levels is liberating.

For others, mastery approaches didn't seem particularly interesting or new: other maths leaders have told us that it's really only a repackaging of what already goes on in departments across the country, especially those which have focused on problem solving in recent years.

“ Life without levels is liberating, but where it gets complicated is when you try to track progress in a unified approach ”

“ Our KS3 is really a bit of a boded together thing to prepare them for the new GCSE exams which we don't even know what they will look like yet. ”

It seems to be too soon to tell whether the revised KS2 curriculum will prepare children any better for KS3 maths. Marnie mentioned that there is already a very wide difference in preparedness among students coming up from different primary schools.

“ It's a very dark space at the moment, and talking to our feeder primaries, they feel the same ”

Assessment and accountability

- The new accountability measure's focus on progress suggests that schools need to monitor it carefully throughout secondary school, but so far this does not appear to be happening in maths departments.
- NC levels are embedded in the culture and, with no viable alternative, schools are reluctant to leave them, at least until the new GCSE grades are better understood, so that KS3 assessment can be aligned.
- Maths departments seem to feel little direct pressure from P8: they still need to pursue the best grades they can for all students; the biggest impact seems likely to be a reduction in choice of maths GCSE subjects.

Assessment

None of these participants felt that the department had a good replacement for levels, with some returning to a simple test and percentage score, approximate GCSE level, or ranking system for students. Wayne commented that schools have been using levels for 20 years so it's not going to be easy to move away from them immediately.

Mary's school has moved to setting general tests for the entire year group which has resulted in some students not being able to demonstrate any attainment against the new KS3 curriculum and they are having to modify the curriculum to meet their needs. However, other HoDs seemed to be of the view that this approach was adequate to their needs and was generally simpler.

Chris mentioned that the new assessment system provided by his LA, correlated old NC levels with new GCSE grades and expressed progress in terms of the new GCSE grades. He thinks that this system is very complicated to implement and interpret.

Wayne laments the loss of intermediate level (as, later, did Chris) and also feels that the new exams seemed to offer the opportunity to stretch the upper end of the ability range, but instead it appears simply to disadvantage the lower, at least on the basis of current experience: the foundation level seems very difficult. Y6 students who achieved level 6 in their SATs do not appear really to be at level 6, so strategies for adding

two/three levels of progress seem doomed to failure for these students, Wayne said.

None of the participants felt that they had developed any viable alternative to levels. As with the new GCSEs, there remains a high degree of uncertainty surrounding assessment: the liberation from levels might be welcome, but there is certainly a feeling that no-one really knows how well anyone is doing in maths at the moment, beyond internal comparisons, which are based on uncertain assessments.

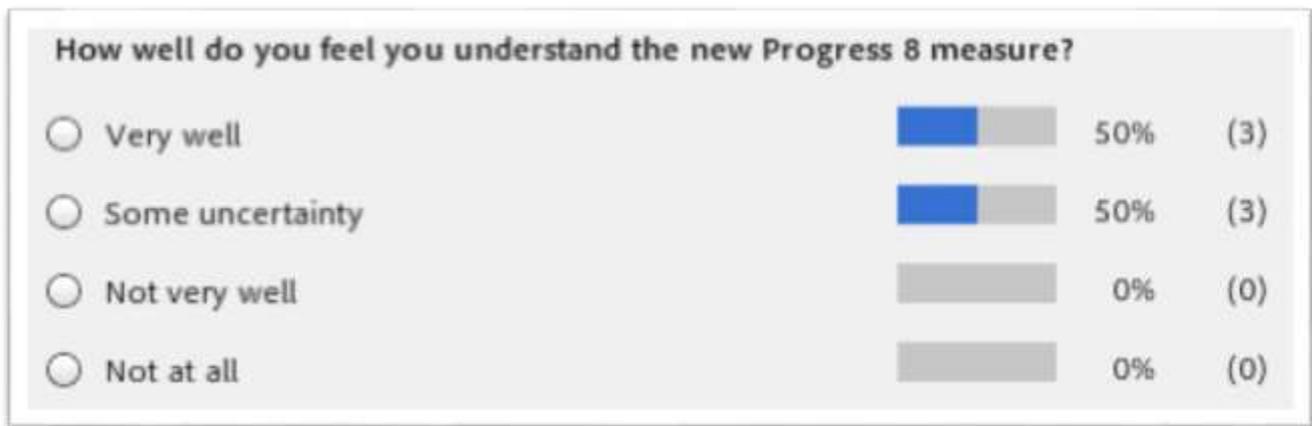
A major difficulty to developing an alternative to levels is the uncertainty associated with the new GCSE grades. Heads of maths cannot see how these will be awarded or know how that would translate to formative assessments at this stage. They look forward to developing a better understanding of the new exams, which needs to be based on putting students through real exams (not simply looking at specimen papers) and then being able to work backwards to develop reliable assessment regimes for KS3 and 4.

Wayne said that the main demand for assessment materials is for those that would help students to see what they were aiming for in the formal assessment, i.e. realistic specimen assessments. Mary added that these would be really useful if they were structured to support diagnosis of skills associated with the main three types of question: recall, use & apply and problem-solving.

Maths in Progress 8

Heads of maths are aware of the P8 measure and generally seem confident that they understand the system. In some schools, much has been made of the

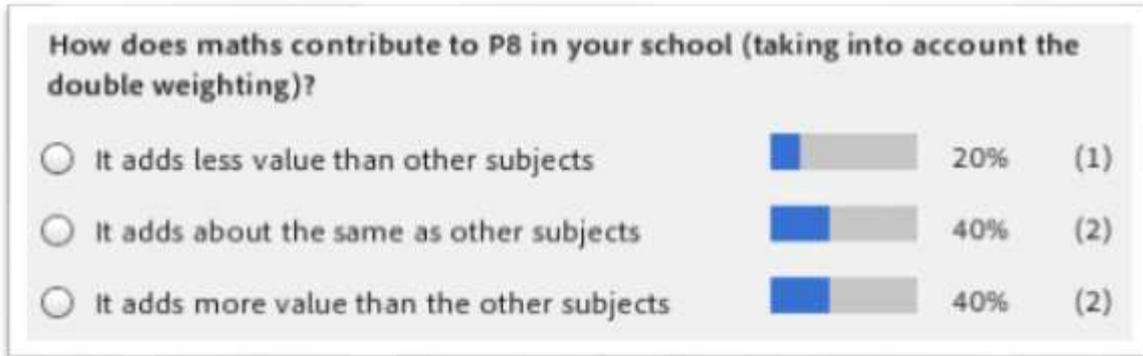
new measures, with both teachers and students being made aware of it via assemblies and INSET. Others are learning about it as a result of management pressure.



The double weighting of maths in P8 suggests that this subject would feel the effect of the introduction of the new measure than perhaps other included subjects (other than English) would. This could be positive, elevating the importance of maths in the curriculum, as well as negative, increasing the importance of student progress in maths.

Dawn said there is an advantage in that senior leaders are more likely to listen to heads of maths who say that additional interventions are needed, but that it also creates some additional demands. There was general agreement that P8 increased the influence of the maths department, but also increased pressure on maths teachers: in most of the schools represented, maths is a net contributor to whole school performance.

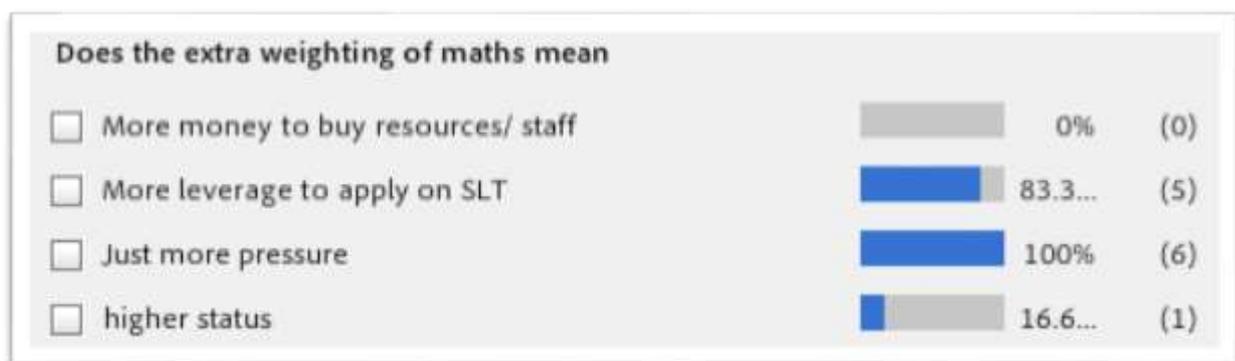
“ I feel that I’m getting more pressure from my headteacher than I have done in recent years ”



“ I think it’s great for the students but we now have two try to intervene at every single grade boundary... there is only a certain amount of time – and money – available ”

One of the DfE’s intentions in moving to the P8 measure was to persuade teachers to broaden their attention away from the C/D borderline and there are indications from HoDs that this is likely to happen. One gave the example that, for example a previous G student would maybe have been left, but now they might be supported towards an F. It seems likely that it’s at the lower end of attainment where this is likely to be felt, especially as these students lose out more as a result of other aspects of the reforms.

All teachers thought that P8 increased the pressure on maths teachers, but would not impact on maths’ already high status and – importantly, will not result in increased maths budgets.



In general, P8 has not yet had much impact – expected progress is still more important and teachers understandably still focus their attention on getting the best grades for their students. This is not enhanced by the implementation of the P8 strategy. However, Dawn mentioned that P8 has a very high profile in her

grammar school, where possibly the leadership is nervous that while the school would have performed well in attainment, it may do less well in progress measures.

The implementation of P8 suggests that schools will pay more attention to monitoring progress throughout KS3 and 4, since the floor standard requires that schools add value to the predicted progress and since students of all abilities (apart from those restricted by the top grade ceiling, perhaps) can contribute equally to progress measures. However, as yet, there is little evidence of a unified approach to assessment throughout both KS3 and 4 to support monitoring progress to support P8 – Marnie again pointed out that it's still too soon to know what would be reliable so is not in a position to adopt any new assessment system.

“ until we've got concrete grade boundaries - which will probably change again next year until they've got them settled ”

Dawn said that they assess in the same way at KS3 and 4 – via standard tests which give a percentage, that they then “*make up a grade* to go with it and send that home”, so although they are using the same system, it's by no means reliable as a measure of progress.

However, this percentage-based approach seems to be approximately equivalent to the thinking behind the new GCSE exams, some HoDs thought, so there is some justification for using it, other than simplicity.

Wayne commented that despite the plethora of different assessment systems that had been used in recent years, the grade obtained via written exam at the end of the course is the final measure used, and so the pressure is on to monitor progress against that, suggesting that really the best way to monitor progress is via, effectively, a series of mock exams.

Of all the recent reforms, P8 seems to have had least impact in maths departments: little so far has changed in the way anything is done. Dawn doesn't think it ever will: attainment is still the main focus she says in her (grammar) school. As others mentioned: schools predominantly want to do best by their students. Chris said that P8 has to be at the back of the mind, but you need to keep the focus on getting the grades.

“ If you can manage [to keep a focus on the grades] it should take care of your share of the progress eight ”

Marnie commented that her senior leadership team keep on mentioning P8 to keep the pressure on staff. She also said that their focus on P8 had meant that it was very difficult to persuade them to allow the department to continue offering additional stats to some students. She sounded quite exasperated by the attention it was getting – it might be down to imminent Ofsted inspection, she thought.

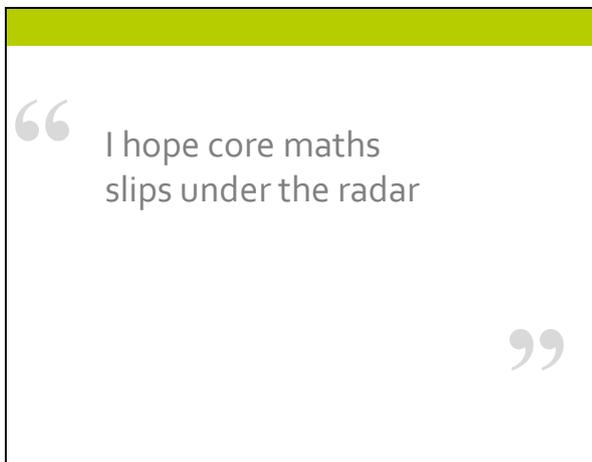
Mary noted again that focused intervention is now targeted at all grade boundaries, rather than C/D, but that's the only difference really.

If P8 has this little impact on maths, it seems unlikely to have much direct impact on any of the P8 subjects, other than to restrict option choices – as indeed it seems to be doing in maths already

Post 16 maths

- Core maths has found no foothold in any of these schools; rather it can be seen as a threat to AS maths.
- Departments envisage no real changes to their familiar offerings of AS in Y12 co-taught with A-level.
- Heads of maths seem relatively unconcerned with the reform of A-level maths content as yet: the main issue seems to be that there will be more uncertainty and that it will hit the same group of students who will have just worked their way through brand new GCSE.

None of these schools had adopted core maths – several were quite emphatic that would not and were generally disinterested in it. Only Mary’s said she’d like to introduce core maths – she likes the content – but doesn’t have the staff to deliver it. Eddy liked the sound of it for Grade C GCSE students but again can’t staff it. Chris hopes that it doesn’t attract any attention at his school because he sees it as a threat to AS-level, given that they too can’t staff it as an additional offering.



Regarding the imminent reform of A-level maths, Dawn and Mary expressed concern for the current Y10 students who had to face a more difficult GCSE, with teaching being delivered among a great deal of uncertainty and lack of confidence, and who when then go on to face exactly the same situation at A-level.

At present the uncertainty about the new A-level seems to inhibit serious consideration. There seems to be

awareness that the course will be generally more difficult, probably down to the style of exam questions more than the content. This might engender some different pedagogies or skills foci, but again the *maths is maths* view suggests that the changes will not present a major challenge to departments. Wayne (an A-level examiner) considered that the changes will probably be so slight that new resources probably won’t be needed in his department.

There was no concern that spending on new GCSEs would impact on A-level spending: Chris said they’d had no additional funding for GCSE – others generally agreed. The common approach was that they would be able to bid for extra funding if they found something suitable; one department was putting cash aside for this, in case they did need new resources for A-level.

All these maths departments are still co-teaching AS maths as before this year – there is a general assumption that they will carry on too, when the new A-level is introduced.

The general feeling was that in three years’ time, A-level maths offerings would largely be as they are now. None anticipated changing awarding body for the new A-levels, but it’s really too soon to say – especially given that they have started new GCSEs without knowing much about what the exams are like. They will compare ABs widely though, rather than simply sticking with the AB they are familiar with: at GCSE they have tended to stick with their previous AB, not so much because they are all similar as because they are equally unknown.

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