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Insights on trends in AS Levels, the EPQ and Core Maths: summary report

Research Report

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Introduction

At Cambridge Assessment's Research Division, we recently conducted interview research about Key Stage 5 provision among education providers (centres) in England, which complements survey research conducted in the division (Vitello & Williamson, 2017; Williamson & Vitello, 2018a). The aforementioned surveys investigated trends in, and reasoning behind, the provision of AS Levels, Core Maths and the Extended Project Qualification (EPQ) as a result of reforms. Our interviews explored centres' reasoning behind Key Stage 5 provision in greater detail, adding depth and context to the survey findings. This report is a summary of how the interview findings illustrate wider trends and perceptions elucidated by the survey research.

We conducted semi-structured interviews with 11 employees of senior status across different types of centres in England who were involved in decisions about Key Stage 5 provision. To gather a diversity of views, we deliberately interviewed participants who represented different centres, including comprehensive schools, academies, and sixth-form colleges. The centres had students with a range of socio-economic statuses and levels of attainment. The centres had a range of different offerings, from offering only academic qualifications to a mixture of academic and vocational qualifications in differing ratios. We investigated participants' reasoning behind their Key Stage 5 provision choices, particularly focusing on AS Levels, the Extended Project Qualification (EPQ) and Core Maths.

The quotations from participants reported here serve to add depth and context to key findings from the survey research on each of these qualifications. Please note that the quotations presented here are individual opinions which do not represent generalisable reactions to the reforms, but serve to explain possible reasons behind the broader trends found using survey methodology. Furthermore, the quotations do not show the actual reasons underlying the survey responses, since the survey research used a different sample of participants. For the full results of the survey in [2017](#), and [2018](#), please follow the respective links. The full results of the interview research are forthcoming.

AS Levels

Since the decoupling of the AS and A Levels, centres have reacted with a variety of different opinions and provision decisions (Vitello & Williamson, 2017), with a general trend away from AS Levels (Williamson & Vitello, 2018a). In their survey research in 2017, Vitello and

Williamson found a mixture of positive and negative responses, but the majority of Heads of Departments (HODs) disagreed with statements that the AS Levels had value. In particular, they generally disagreed with statements that there was parent and student demand for AS Levels, and that they were useful for university.

There was also a mixture of positive and negative responses found in the interviews, but the overall picture about reformed AS Levels was largely negative. Quotations from the interview transcripts illustrate these views. For example, a Head of Vocational Qualifications at a secondary school and sixth-form college said:

I would be surprised if ASs stuck around to be honest. I think they're ... I think most places are finding that they're pretty pointless.

The next quotation, from the same participant, shows a lack of interest in and demand for AS Levels on the part of students. The participant said:

Yeah, nobody's bothered at all. We've never, to my knowledge, we've never had a kid who's said, 'No, I desperately want to do ASs'.

A Vice-Principal from a sixth-form college had valued the AS Levels when they were coupled with A Levels, but since the decoupling, they no longer found them as valuable. The participant said:

We argued very strongly that they [the AS Levels] were a really important part of the curriculum. But as soon as they stopped counting towards the A Level, they lost all of their value for us.

Illustrating a reason that AS Levels were not seen as useful for university, or other forms of progression, a Deputy Headteacher (Curriculum) from a comprehensive school said:

Well up until now the purpose of doing an AS Level was as it's part of the A Level and the marks and grades for those units are combined in the overall grade for the A Level. But now as they're not, and that isn't used towards the end of course assessment, having that as a standalone qualification, if they then do the A Level it's kind of ... it's ... it doesn't add anything for UCAS purposes. It doesn't add anything for future employment.

Another possible issue with the decoupled AS Levels is co-teachability. Vitello and Williamson (2017) found that perceptions of co-teachability of AS Levels varied. For some centres in the interviews, a perceived lack of co-teachability was a factor contributing to their decisions to discontinue some, or all, AS Levels. The next two quotations highlight this. A Head of Vocational Qualifications at a secondary school and sixth-form college said:

... and then part of it was just that the ASs don't embed into the A Levels very well. We were always told that they would and they just don't.

Providing some further elaboration about co-teachability, an Associate Assistant Headteacher from a comprehensive school said:

The only subjects where we don't offer AS Levels are Art and English literature, because in English literature there is so much divergence between the AS and the A2, and the Art because the workload requirement between the AS and the A2 is so large.

The quotation above indicates that issues with co-teachability may vary according to different subjects. This aligns with a related piece of quantitative research, which explored whether there were any differences in the A Level grades achieved by students who did the AS and A Level for the same subject, compared with those who did only the A Level (Williamson & Vitello, 2018b). It was found that there was no statistically significant relationship between A Level outcomes of the two groups for the subjects of Fine Art and English Literature.

Besides issues with co-teachability, other perceived negative factors relating to offering AS Levels found by Williamson and Vitello were funding and the loss of teaching time (Vitello & Williamson, 2017; Williamson & Vitello, 2018a). These factors are illustrated by an Associate Assistant Headteacher from a comprehensive school, and by a Vice-Principal of a sixth-form college, respectively:

Finance, it's [AS Levels are] phenomenally expensive, yes.

For a college of our size the financial cost of offering AS Levels would have been prohibitive. They would have cost us about £200,000. It also would have meant that

we'd have had to have stopped our teaching timetable for a number of weeks whilst the AS Levels were taking place.

Many participants in the interviews had positive views about pre-reformed AS Levels, but not reformed AS Levels, and they lamented the loss caused by reform. A Vice-Principal from a sixth-form college, which offered AS Levels in only certain cases, said:

Oh they [the AS Levels] were fantastically important. They allowed ... well, firstly they gave students something to be really focused on during the first year of their sixth-form education. They allowed students opportunities of a resit, so they were far more forgiving from an assessment point of view. So if you made a mess of an exam it wasn't the end of the world because you could do it again. It allowed students to break up their studies and master a particular topic, and then take an exam and move on and do something else. So, it was a far more forgiving assessment method whereas the linear assessment method is much harsher. If you have one bad day then two years' work is gone.

Alongside the reduction in AS Levels and these negative views, the surveys found that a large minority of Heads of Department still had positive views about reformed AS Levels (Vitello & Williamson, 2017; Williamson & Vitello, 2018a). Participants in the survey reported offering AS Levels because they were perceived as advantageous in terms of exam practice and A Level decision making. A quotation from a Deputy Headteacher (Curriculum) from a comprehensive school illustrates the latter advantages. The quotation also highlights how centres may have seen themselves as in a period of transition, uncertain over how to navigate the reforms:

We haven't moved wholesale away from delivering AS Levels like some centres have, the main reason being that we wanted a bit of a smoother transition from the old system to the new one. We wanted to offer students who aren't going to continue the opportunity still to get something at the end, and we still wanted some nationally comparable assessment feedback in this time of transition upon which to base our judgements and our projections.

Another advantage of the AS Levels found in the interviews was a positive impact on student motivation. An Associate Assistant Headteacher from a comprehensive school, who had

retained AS Levels in the pre-reform model (four AS Levels in Year 12, followed by three A Levels in Year 13), said:

The main reason [for keeping AS Levels] is that end-of-year real exam element. You know, you can do every mock you want and say, 'Oh you've got a U or you've got an E'. And then come back from that is, 'Well yeah, but it's just a mock, it's not real. You know, it's not a real grade. In the real thing I'll pull it out of the bag'. And that's the same with students and parents as well. 'Oh it's not real. It's just a class test. It's not a real test. Oh, it was just a mock. It wasn't a real thing'. And trying to tell a parent, 'Your child will fail this subject', or the child, 'You will not get an A'. If we left that just for two years, just with the internal assessments, we would have much lower A Level results. Because that external thing is real, 'This is a proper A Level, this is what you've got', is a much, I won't say a bigger stick to beat them with, but they accept and understand, 'I've got a D'.

While the survey found that some centres had retained AS Levels in line with the pre-reform programme of study, others had incorporated AS Levels in a different way (Vitello & Williamson, 2017; Williamson & Vitello, 2018a), for example, to support low-attaining students. There were cases in the interviews that illustrated this, for example, a Vice-Principal and Sixth-Form Lead from an academy said:

Well we offer a small number of AS Levels and it's not like a blanket approach. What it is, it's like a form of protection for a small number of students who are, perhaps, at risk of leaving at the end of Year 12 who would otherwise leave with nothing. We identify those students who are at risk of leaving or not continuing into Year 13, and we offer them the option of taking an AS Level so at least they leave with a qualification. I guess, when you're looking at shadow data, it's best to have a student who, if they're going to leave, have left with a qualification. It generates points for the centre other than students who are leaving with nothing.

Positive and negative arguments aside, the decline in AS Levels creates an opportunity for other qualifications to fill the "fourth space". The fourth space refers to the possible gap in the programme of study for Year 13 students due to the loss of the AS Level in the traditional model of three A Levels and one AS Level. Both the survey research and the interviews asked teachers about their perceptions of Core Maths and the EPQ, which are options for this space. An interesting insight noted in the interviews was that the popularity of

the EPQ may be detrimental to Core Maths, since some centres offered students the option of either one or the other for the fourth space. Indeed, the survey research found that the EPQ was considered an option, but Core Maths was not (Vitello & Williamson, 2017).

Core Maths

While many HODs in the survey were not very familiar with Core Maths, those who did know about it were generally positive about its value (Williamson & Vitello, 2018a). Similarly, those whose centres offered it were positive about its pedagogical benefits, in the interview research. The following quotations provide examples of how Core Maths was used successfully in a programme of study in light of reforms. An Associate Head of an academy said:

We want all of our scientists to continue their study of maths beyond age 16. Particularly the reformed A Levels are much more mathematically based and they need to be mathematically competent. The only caveat is I don't think Core Maths is written specifically to support [Science], but on the other hand it is still mathematically useful. But we have added content in for those students to make it more appropriate for them.

Furthermore, an Assistant Headteacher (Post 16), from a comprehensive school, said:

I think maths, especially under reform, maths has become a harder A Level for lots of students to reach. It's become, it's excluding kids in that way and, like I said, there's not really a suitable vocational offer. There is not a BTEC course or a technical route that does the same thing ... Having the Core Maths course has allowed a maths route for kids that are passionate about maths, want to study maths, want to progress into maths related fields, but don't have the entry requirements at GCSE, giving us another option for those kids to be able us to extend that study of maths.

Unfortunately, the interview data provided a limited understanding of why centres may not be offering Core Maths, since most of the participants whose centres did not offer it did not know why. However, one participant, an Exams Officer from a comprehensive school, did know why, and this is what they said:

Well we're a STEM [Science, Technology, Engineering and Mathematics] school and we prefer to focus on the more traditional established qualifications such as A Levels, and, yeah, the teachers prefer to offer that level of course within the maths department. And part of it is also tradition. It's something we've always done. The core of the maths team has been, and is, very well established and branching out into other qualifications like this isn't something that they're interested in doing. They do seek out high-level maths students here for both maths and further maths, and sometimes statistics at A Level ... Because they're seeking to deliver a higher, or a perceived higher quality qualification in the A Level. We've also ... whether this is true or not, but there's no real perceived desire for Core Maths qualifications among our cohorts.

EPQ

There were also success stories for the EPQ in the interview research, and many examples of where it was perceived to be valuable for students. Such examples illustrate the potential benefits of the qualification. This complements the survey findings that the EPQ has perceived benefits such as enhancing non-subject-specific skills, and that it is valuable for university progression and applications (Vitello & Williamson, 2017; Williamson & Vitello, 2018a). An Assistant Headteacher (Post 16) from a comprehensive school reported on how they had used the EPQ to compensate for curriculum limitations:

There are some students for whom their passions or interests or skills might not fit neatly into our curriculum. For example, we haven't been able to run dance for the last two years. What we were able to do was to have a student this year who is doing his EPQ and he's done a dance composition and performance.

The value in terms of UCAS points was articulated by the same participant, who said:

The decision to run it [the EPQ] has been cemented under reform because it's worth half an A Level in points.

Another participant illustrated the perceived benefits of developing non-subject-specific skills and progressing to university. A Vice-Principal and Sixth-Form Lead from an academy said:

[The EPQ] provides skills that universities find advantageous ... in terms of research, referencing, all of those type of things. Because universities look on it favourably, we

have had students who have had their offers reduced if they've had EPQ. So that's quite a good reason why we offer it.

Similarly, an Assistant Headteacher (Post 16), from a comprehensive school, said:

What it teaches the kids to do around research, extended writing, evaluation for research; they're all critical skills for higher education and they're all skills, that, inevitably the HE [Higher Education] sector certainly criticises secondary schools for not preparing kids enough. Because there's so much of a demand about HE and the A Level courses are not independent, so this offers students, it's one of the options that we offer kids for doing something that's kind of got that dissertation model. So it gives them that sense of progression.

Lastly, a Vice-Principal from a sixth-form college said:

[We offer the EPQ] because we think it's helpful for students, it gives them something that's got a really high value in terms of progression to university, it develops their learning skills, it's really interesting for them, and it can be very motivating. It's a really good course.

Only one centre in the interview research did not offer the EPQ. This participant was a divergent case compared with the other participants in that they were a Director of a Further Education College with a strong vocational emphasis. They did not offer either the EPQ or Core Maths as they felt that the skills these qualifications provide should be embedded within the whole programme of study.

Bringing it all together

Data derived from interviews has been useful to illustrate and provide examples of wider trends in and perceptions of Key Stage 5 provision elucidated by survey research. The common thread behind this body of research is that centres are navigating a changing landscape in light of reforms, which involves making important decisions about their Key Stage 5 provision. Together, the results of the research show how the changing landscape has affected centres' prioritisation of different factors when making decisions. AS Levels appear to be on the decline in general, although they are still in use in different ways, and there are both positive and negative views about them. The EPQ and Core Maths were

implemented successfully in some centres, as highlighted by the interview research, and they were perceived to have pedagogical benefits for students. It will be interesting to monitor the impact of these reforms further as centres adapt to them.

References

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