

Optionality: A briefing paper

Research findings relevant to the potential use of optionality in examinations in 2021.

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This briefing sets out evidence on the pros and cons of optionality and draws on Ofqual's latest research paper, An investigation of the comparability of scores between optional questions in GCSE English literature, GCSE history and A level sociology ([He & Black, 2020](#)).

Definition

Optionality is when students sitting the same qualification can answer different questions in an examination.

Traditionally, there have been two broad types of optionality:

- 1) Optional questions or sections within an examination paper (within-paper optionality)
- 2) Optional papers within an assessment component (between-paper optionality)

For clarity, this briefing paper will simply talk about optionality where the points relate to both within-paper optionality and between-paper optionality. If we are talking about a particular kind of optionality, we will specify which kind.

Some stakeholders have recently called for a new form of optionality in which whole assessment components are dropped. We will also set out some of the difficulties of such a move.

Summary

Students sitting examinations in summer 2021 will have studied variable amounts of the curriculum. Some stakeholders have suggested that, to be fair to students, optionality should be introduced/expanded for 2021 examinations. This would enable students to select particular topics and/or particular questions within topics, so that those who had not covered all the content would not be disadvantaged.

There is a substantial evidence-base of research relating to optionality. Our [most recent research](#) indicates that introducing/expanding optionality could result in unfairness to students. In summary, the report sets out that:

- where there is optionality between questions within papers, the format of the questions, the mark scheme and marking processes aim to make sure it is no easier or harder to get marks in one question than another
- where optionality is currently present, exam boards have in place procedures to try to ensure that no option is more difficult than another
- where there is optionality between exam papers, procedures around the setting of grade boundaries should help ensure that getting a particular grade on one paper is no more difficult than getting the same grade on another
- however, despite these processes and exam boards' best endeavours, there is evidence that some questions/options are easier than others
- evidence from a range of qualifications shows that students who took the easiest options could achieve up to a grade higher than students who took the most difficult options
- higher ability students and students from less deprived backgrounds are more

likely to choose easier options than less able students and students with higher levels of deprivation

- introducing/expanding optionality in specifications and examinations which do not currently have it, and doing so at pace, risks disadvantaging students

Introducing more optionality might seem to be a good way of supporting students who have not covered all the specification content. Research suggests, however, that the differences in difficulty between options and challenges with grading different options fairly may result in unfairness to students and might exacerbate the attainment gap between advantaged and disadvantaged students.

The form of optionality in which whole components are dropped was not a focus of our research. Currently this only happens when students are inadvertently prevented from attending an examination. They have studied to sit the exam but through no fault of their own are unable to attend. In these circumstances, a process of special consideration is applied in which the student's performance on a component is scaled so as to award them a qualification grade.

To use this approach at scale would create problems:

- The 4 exam boards' specifications are structured differently so dropping a paper can have a differential impact depending on the exam board. That creates an uneven playing field and is simply not fair
- Relying on significantly less assessment than in normal years will reduce the reliability of grading, particularly in those subjects with more subjective marking or where quite different skills are assessed in each component
- Most importantly, in a summer when we might expect more students than usual to miss one of their papers due to illness or self-isolation, it increases the risk that a student might miss all papers in a subject

Other methods of mitigating learning loss, such as forewarning teachers and students of the examination content do not have these downsides.

Context

Some stakeholders have suggested that, if examinations are to go ahead in summer 2021, given the impact of the coronavirus (COVID19) pandemic on teaching and learning, exam boards should introduce or increase the amount of optionality in those examination papers. Ofqual has built up an evidence base of information relating to optionality. This includes published research papers and reports/papers generated by assessment agencies and regulated awarding bodies. Our own programme of research focuses on refining our understanding of optionality, identifying its impact on validity, reliability, manageability and fairness and developing optimal analytical methodologies.

The argument for introducing/increasing optionality in summer 2021

Examination papers sample broadly from the subject content. In a particular year, some content will be tested, but other content will not. This is normal practice when students are reasonably expected to have been taught all the content, but we cannot

expect this of all students for summer 2021. There is a risk that, in the examination, some students might be presented with questions on content they have not covered or have covered in less detail. Optionality might mitigate this risk, because it could mean that students can select and answer questions on content they have covered and there is no doubt that this argument is intuitively appealing.

Latest evidence

Our latest research, ([He & Black 2020](#)) is an up-to-date analysis of the impact of optionality, based on both GCSE and A level qualifications. The data comes from 2018 and 2019. Their findings are directly relevant to thinking about summer 2021 examinations.

The specifications analysed (GCSE English literature, GCSE history and A level sociology) have interestingly different approaches to optionality.

Three of the reasons He & Black give to support use of optionality are of interest for summer 2021.

Reason 1: Optionality can give teachers greater freedom to teach a smaller number of sections of the broad subject area and give individual students greater freedom to pursue their specific interests.

Reason 2: Optionality allows students to select contexts or topics that appear to be attractive to them during an examination. This can give students a sense of control and increase their motivation.

Reason 3: Use of optional questions could allow students to demonstrate their best work because they will select questions which they believe they can give their best performance.

It is important to note that these reasons for optionality refer to situations in which exam boards have built optionality into specifications and examinations, so have made considerable efforts to put processes in place to aim to make sure that different options are of equal difficulty. This may not be the case for summer 2021, as optionality would be introduced/expanded at pace. Ad hoc modifications and late changes to examination papers increase the risk of errors, which disadvantage students. When faced with unfamiliar question paper layouts, students also risk making mistakes, such as answering the wrong questions or combinations of questions.

Students in 2021 will have had more varied experiences than in 'normal' years. Some might have covered most (and possibly even all) of the subject content, so are in a similar position to previous years. For these students, Reasons 2 and 3 are relevant. Others might have covered less of the specification and, given different patterns of teaching and learning across centres, different groups of students (or even different students) are likely to have covered different content. The position of these students is analogous to that covered in Reason 1, not because of choice, but through necessity.

So the first challenge around optionality is that, within the cohort of students for each examination, there will be some who are in (broadly) the same position as they would have been in previous years and others in a different position. Optionality will impact on them differently.

Three challenges directly pertinent to summer 2021

Challenge 1: It is extremely challenging for exam boards to develop optional questions/papers which are equivalent in difficulty.

Challenge 2: When students are given choice around which optional questions to answer, they often make sub-optimal or even poor choices

Challenge 3: Optionality makes it difficult for exam boards to set grade boundaries which are fair to all students

In relation to Challenge 1, it would not be fair to students if one set of optional questions/papers was inadvertently substantially more difficult than another set. Students can be discouraged or prevented from accessing questions they perceive as particularly difficult, so are disadvantaged by a more difficult optional route. He & Black found clear evidence of Challenge 1; there was substantial variability in difficulty between the optional questions/sections of the examination papers studied.

He & Black found mixed evidence relating to Challenge 2. In the majority of cases (though not always), more able students and students with lower levels of deprivation were better able to spot and choose optimal (easier) options than less able students, or students with high levels of deprivation. Optionality does not necessarily help students; some might be helped, but others will be disadvantaged.

For summer 2021, students might not be choosing between questions, but looking for the questions on content they have been taught. There is no relevant research on this, but it is plausible to suppose that, in the pressure of an examination, some students might struggle to do this, in the same way that they struggle to identify optimal questions. Signposting might help, but given the variation in student experience, doing this clearly for all students at all centres would be challenging.

Challenge 3 now becomes relevant. If one optional paper is more difficult than another, an exam board can slightly lower the grade boundaries on the more difficult paper, to compensate. We know the research shows that this can be challenging for exam boards to sufficiently compensate. Where there are optional routes within a paper, because grade boundaries are set for a paper overall, it is also difficult to have the right mechanisms in place to compensate for more difficult routes and students can be disadvantaged.

He & Black compared student outcomes on the easiest and most difficult questions. The biggest difference was in GCSE history, where the difference in average score between optional papers was 35% of the average score. The smallest effect was found in A level sociology, where the difference was 6% of the average score. These differences in difficulty were not stable over time.

This is an important point. Attempting to help students in summer 2021 by simply introducing/expanding the choice of questions within a topic, to allow for differential specification content coverage, would be optionality within a paper. Differences in difficulty between questions here could not be compensated for at grading, so there would be a risk of unfairness.

He & Black found evidence that the difficulty of achieving a particular grade depended on the optional route the student had taken. Qualification level differences are most important for students. The optional route taken made a difference of about one grade at grade 7 and three-quarters of a grade at grade 4.

Conclusion

Ofqual recognises public concerns and the desire to ensure fairness to students in summer 2021. Introducing/increasing optionality might, at first sight, be a solution to the challenges faced in designing assessments which are fair for students whose learning has been disrupted by the coronavirus (COVID19) pandemic, but it is important to note that students' experiences have been variable and not all groups of students will benefit from optionality. The findings from our research suggests that introducing/increasing optionality might well further disadvantage the groups that it would be intended to help.

There are a number of well-researched challenges which optionality brings to assessment, with the key ones being issues around the relative difficulty of options and the difficulty of awarding grades fairly. Were greater optionality to be introduced (whether within or between papers), these risks would need to be weighed against the expected benefits. It is not the case that introducing/increasing optionality is a risk-free way of ensuring safe delivery of the summer 2021 examination series.



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