

Dear Ciarán,

I forwarded your letter from the Irish Mathematics Teachers' Association of Ireland to the Chief Examiner for Leaving Certificate Mathematics, who has asked me to issue the following response.

First, apologies for the delay in responding to your organisation's correspondence. Over the past number of weeks, an updated version of the Assessment Adjustments 2021 document has been prepared, containing some further detail on the adjustments for the Leaving Certificate examinations for particular subjects. The original Assessment Adjustments 2021 document was the result of a comprehensive collaborative process between the National Council for Curriculum and Assessment, the Department of Education and Skills, and the State Examinations Commission, and was published by the Department. The updated version of the Assessment Adjustments 2021 document is likewise the result of further collaboration between the NCCA, DES, and SEC relating to feedback from a number of sources in relation to the proposed adjustments. Noting that your letter was sent to all three organisations, we have also collaborated on this reply.

The purpose of the proposed changes to the 2021 Leaving Certificate Mathematics papers is "to take account of the disrupted learning experienced by students during the 2019/2020 school year, while leaving intact the familiar overall structure of the examinations. This is to be achieved by incorporating additional choice in the examination papers. As schools have significant autonomy in determining how to sequence and pace learning for students in their schools, no centrally prescribed adjustment of the curriculum and courses of study would be effective."

The current overall structure of the Leaving Certificate Mathematics papers is dictated by the current syllabuses at each level. Part of the stated aim of Leaving Certificate Mathematics (Syllabus page 6) is "to allow learners to see connections within mathematics, between mathematics and other subjects and between mathematics and its applications in real life." The syllabus overview (Syllabus page 8) states that, "where appropriate connections should be made within and across strands and with other areas of learning." The syllabus further states (Syllabus page 44) that "assessment for certification will be based on the aim, objectives and learning outcomes of the syllabus."

The current examination structure has been devised to adhere to these syllabus outcomes. The structure has been modelled in sample papers from 2010 to 2013 and in the examination papers since 2014. Teachers and learners are familiar with the layout and style of typical examination questions and have the resources of previous years for further reference in both examination papers and marking schemes. It is intended that this layout and style will be continued in the 2021 examinations but will incorporate an element of choice in Section A and Section B of each paper, i.e., given the rationale outlined above, it would not be appropriate to change the style or scope of questioning within the papers.

The proposed introduction of choice into the papers is to allow for disrupted learning. If the course of study is not completed, then this may well be because particular content will not have been covered (although we have no way of knowing which particular content will not have been covered by a particular student or class). As a result, it is expected that candidates would be choosing to avoid questions with content that they are less familiar with.

The 2021 exam papers will be designed with due cognisance to the fact that candidates will need to read all questions before deciding which to attempt, something they have not needed to do in the past. As a result, questions (and the paper overall) will be designed to allow for this within the allotted time. In order to allow time to facilitate the making of these choices, the questions in Section A of the paper will be similar in content and length to those that the candidates will be familiar with from previous years, but they will be required to attempt one less question.

In Section B, where candidates may choose to answer any 3 of the 4 questions presented (at Higher and Ordinary levels), it is intended that the amount of material presented in each question will be reduced somewhat from what might be typically expected in a 50-mark question. This will allow time for candidates to choose which questions to do based on the material they are most familiar with and time to attempt each of the chosen questions.

Since the introduction of the current syllabus, candidates have not known in advance what topic or topics were covered in a particular question; instead, one of the skills required in many questions is for candidates to themselves realise what mathematics is needed to complete the question. It is not proposed to change this for 2021 but, as stressed above, papers will be prepared in the knowledge that candidates will need to be given sufficient time to read all items, realise what mathematics is needed to solve a particular item (or realise that they do not know what mathematics is needed for a particular item), and choose accordingly.

Regarding the specific points you make, it is correct that, in the Leaving Certificate Mathematics papers, particular questions are not currently associated with particular areas of content and a question may cover a number of different topics – the latter applies in particular to the questions in Section B. This is related to the way that many topics in the syllabus are not defined in a stand-alone manner, as you note in your letter, with the boundaries between such topics often not being well-defined. As stated above, this is in line with the aims of the syllabus. However, this does not imply that the full course needs to be covered in the same level of depth and detail as is normally the case. Following a number of consultations, the SEC, NCCA, and DES representatives were satisfied that the level of choice proposed would make sufficient allowances for the disruption to learning suffered by students. Furthermore, the questions themselves are being designed with due cognisance of the disruption to teaching and learning caused by Covid-19.

In your letter, you acknowledge that it is impossible to know what plans each school followed with their fifth year cohort, and that this makes identifying a list of topics to omit problematic. However, even if the production of such a list was possible, “centrally prescribed adjustment[s] of the curriculum” are outside the scope of the overall policy with regard to the revised assessment arrangements. This also means that an effort to create internal choice within a question would inevitably lead to inequity where some candidates will already have studied both topics.

As part of the consultations between SEC, DES, and NCCA, the possibility of returning to a more restricted exam paper structure for 2021, in which very particular content areas were specified for particular questions was discussed. However, it was ultimately decided that this would undermine the aim of the current syllabus to have Mathematics taught (and assessed) as a fundamentally interconnected body of knowledge and skills, as well as the importance of candidates being able to identify for themselves the mathematics required to answer each particular question. It would represent a retrograde step, and a movement back to a style of paper from which there was a very conscious effort to move away with the introduction of the current syllabus, which teachers and candidates are now familiar with. Instead, it was decided that the inclusion of choice on the paper, allowing for time to make choices by the reduction of the amount of work expected for a given number of marks), and the careful crafting of the questions presented is in keeping with the principles underpinning the document on assessment arrangements for 2021.

Finally, in relation to the Junior Cycle Mathematics sample papers, these are now available for download from www.examinations.ie

Printed copies have also been sent out to all schools.

Kind Regards
Jackie Wade
Corporate affairs