

Derek Buchanan's Responses to NESA Survey Questions at <https://www.surveymonkey.com/r/ZTTHGLS>

Further consultation on Stage 6 Mathematics Advanced and Extension syllabuses

Targeted syllabus questions and responses

Question: Comment on the appropriateness of the three calculus-based syllabuses, that they build on Stage 5, and prepare for post-school pathways

Response: It would prepare them better if matrices were put back in

Question: Comment on the reduction in content to provide greater opportunities for deeper learning and application of knowledge and skills.

Response: Matrices should not have been removed. Also the cross product was removed and dot product remains. Cross product should be put back in.

Question: Comment on the integration of geometry and proof across a range of topics in the three syllabuses

Response: Use of Maclaurin series to prove Euler's formula is inappropriate unless a more rigorous approach to Maclaurin's series is used.

Question: Comment on the inclusion of statistics in Mathematics Advanced and Extension 1

Response: The inclusion of statistics should not be at the expense of removing matrices. When asked why matrices was being considered for inclusion Anna Wethereld said that it is because it is in the national curriculum. So to remove it now means NESA has no intention of following the national curriculum - despite referring to it throughout the syllabus. In fact matrices are a very big part of the national curriculum. So to not have any at all in NESA's syllabus would put NSW students at a disadvantage.

Question: Comment on the integration and use of technology

Response: This will be inequitable as it always has been with richer schools having a lot more than the poorer schools. So the syllabus needs to be careful not to be too prescriptive. Technology changes much more quickly than syllabus changes and that is another reason for the syllabus to not be too prescriptive with technology.

Question: Please provide any additional comments on the final drafts of the three syllabuses

Response: Removal of a lot of the Extension 2 material will mean it will be deemed as having been dumbed down.

March 14, 2017