RESEARCH ARTICLE

The Impact of COVID-19 on Year 13 A level Mathematics Students: findings of a small-scale survey

Charlotte Price, **sigma**, Coventry University, Coventry, UK. Email: ad5778@coventry.ac.uk
Alun Owen, **sigma**, Coventry University, Coventry, UK. Email: aa5845@coventry.ac.uk
Duncan Lawson, **sigma**, Coventry University, Coventry, UK. Email: mtx047@coventry.ac.uk

Abstract

In England, students who were awarded A levels in the summer of 2021 experienced disruption in their education during Years 12 and 13 (i.e., throughout the whole of their A level studies) due to the COVID-19 pandemic. National examinations were cancelled in 2021 (as in 2020) and students were given Teacher-Assessed Grades (TAGs). In determining these grades, teachers were instructed to judge students' achievements in relation to the material that had been covered during Years 12 and 13 rather than against the complete A level syllabus. This small-scale study investigated potential impacts of the unusual experience of Year 13 A level mathematics students on factors including topics covered, confidence in mathematics, post-A level intentions and readiness for higher education, with a view to considering challenges around the transition to higher education. Data were gathered using student and teacher questionnaires. In total, 174 students and 27 teachers from 19 schools/colleges across the country (including one college in Wales) completed the questionnaires. This paper gives a high-level overview of the main messages emerging from the questionnaire responses. It is intended to undertake a more in-depth analysis of the data at a later date and report the findings from the more detailed analysis in subsequent papers.

Keywords: Impact of COVID-19, A level mathematics, syllabus coverage, mathematics confidence.

1. Introduction

The cohort of students in England that began studying for A levels (aged 16+) in September 2019 experienced two years of study vastly different to previous cohorts. The 2019-20 academic year began as usual, but concerns around COVID-19 were increasingly reported in the news. By March 2020, England had gone into 'lockdown' (ONS, 2021). This included the closure of schools and colleges to all but the children of key-workers and, in a very short space of time, education moved primarily online. From mid-June 2020 this cohort of students was permitted to return for some face-to-face teaching. From this time, the A level experience for the majority of these students was a mixture of online learning and in-class teaching in bubbles. Recent evidence suggests a decline in both the quality and quantity of learning during the period March 2020 to March 2021 (Howard et al, 2021).

It was quickly recognised that the disruption caused by the pandemic meant that, in some institutions at least, it would not be possible to cover the complete A level syllabus in the same depth as usual and, indeed, that some topics may not be covered at all. Guidance issued to teachers by the Joint Council for Qualifications in March 2021 openly acknowledged this, advising teachers that the process of determining grades for their students should:

"*Look at the specification that has been taught to consider:*
- *what content has been taught?*
- *what content has not been taught to this cohort because of the impact of the pandemic?*
- *has the content that has been taught been covered deeply or superficially?*

The evidence used to make judgements must only include the appropriate assessment of content that has been taught' (JCQ, 2021a, p. 20)

While there were good reasons to assess students only on topics taught, the possibility of gaps in content learned, alongside the general disruption to education, poses potential problems for students transitioning to higher education as well as for the higher education providers themselves. With a view to exploring the issue of transition to university following the disruption caused by the pandemic, this study focused on three main themes: content covered in year 13 A level mathematics programmes during the academic year 2020-21, confidence in mathematics and post-18 intentions.

2. Methodology and Respondent Demographics

The group of interest for this study is Year 13 A level maths students in England from the academic year 2020-21. The researchers developed two questionnaires to investigate a range of issues related to learning in mathematics and the potential impact of the Covid-19 pandemic on the learning experience: one for students and one for teachers. The full questionnaires can be found in the Appendix. In this paper, we will focus on issues relating to the coverage of the A level syllabus, the impact on students' mathematical confidence and on their intentions following their A level studies, and readiness for higher education study. Additional and deeper analyses will be presented in subsequent publications.

It was expected that students would answer their questionnaire based on their own individual experiences but that teachers would reflect on the experiences of their classes as a whole. As such, in addition to providing triangulation, it was anticipated that some of the potential bias that might result from the self-selecting nature of the student respondents could be offset by the more holistic assessment of the teachers.

The study began late in the academic year in April 2021. Recognising the challenge of securing student responses to the questionnaire at this time, it was determined to distribute the questionnaires as widely as possible. Participants were primarily sought through mailings to relevant teacher networks, such as the MEI (https://mei.org.uk/) and the Royal Society's ACME Contact Groups for A Level Mathematics and Post-16 Pathways (https://royalsociety.org/about-us/committees/). In addition, colleagues within Higher Education networks, such as the **sigma** Network, were asked to share the invitation to participate with their teacher contacts. These mailings provided a brief description of the study and asked interested teachers to contact one of the researchers. The two questionnaires were made available using JISC Online Surveys (https://www.onlinesurveys.ac.uk). Once a teacher had indicated their willingness to complete the teacher survey and to distribute the questionnaire to their students, they were sent the appropriate links. The survey links were unique to each institution, thus enabling us to distinguish responses across the institutions. As such, although the initial step of asking teachers to contact the researchers may have hindered uptake of the survey, it was a crucial step in the process. Teachers and students were provided with a detailed information sheet and gave informed consent to participate in the study. All participants, including the student respondents, were aged 18 years or over at the time of completing the surveys, and ethics approval for the study was obtained from the Coventry University Research Ethics Committee.

A total of 18 schools and colleges participated in the research from across England and 1 college in Wales. Although the focus is on England, we decided to include the latter to maximise data usage and because lockdown restrictions were similarly imposed in Wales in March 2020 (Senedd Research, 2021). In summer 2021 there were 90,047 A level mathematics entries in England (JCQ, 2021b, p.12).

Our sample is therefore small relative to this population and also clearly self-selecting. We therefore make no claim that the sample is representative of the overall population.

Not all schools provided both student and teacher data and we obtained responses from 174 students across 17 institutions and 27 teachers across 16 institutions. The mean number of student responses per school was 10, with a minimum of just one response and a maximum of 21. The demographics of the student respondents are summarised in Table 1. It can be seen that a little over half of the respondents were male (54.6%) and the respondents were predominantly White (74.7%). Since we did not ask schools for a breakdown of their cohorts, it is unclear whether this breakdown of gender and ethnicity is representative of the participating schools.

The respondents were overwhelmingly high achievers in GCSE mathematics with 69.0% obtaining a grade 8 or 9 (A*). According to the MEI, "Most schools and colleges require at least a grade 6 for entry to an A level Mathematics course" (MEI, 2021). However, the respondents had almost all achieved grade 7 (A) or higher (90.8%).

Table 1: Demographics of student respondents (n = 174).

Characteristic	Count	Percent
Gender:		
Female	76	43.7
Male	95	54.6
Other/not stated	3	1.7
Ethnicity:		
White	130	74.7
Asian	27	15.5
Other/not stated	17	9.8
Attainment in GCSE Maths		
Grade 8, 9 or A*	120	69.0
Grade 7 or A	38	21.8
Grade 6 or B	12	6.9
Did not study GCSE maths	3	1.7
Not stated	1	0.6

3. Coverage of Syllabus

In order to ascertain how well the A level mathematics syllabus had been covered, we asked both students and teachers to comment on the coverage of twelve advanced mathematics topics, primarily focusing on pure maths. The majority of the A level Mathematics syllabus is pure mathematics (approximately two thirds) with the remaining content being mechanics and statistics - see DfE (2016) for full details. In the teacher questionnaire, they were asked to respond relative to their usual coverage of these topics (Q10, Appendix). Teachers were also asked more generally if they had covered the A level maths syllabus as completely as usual (Q9, Appendix), and both questionnaires included space for free text comments for further elaboration.

Some 63.0% of teachers (n=17) stated that some parts of the syllabus that are usually covered had not been covered since the pandemic started, with a further 6 teachers (22.2%) indicating that the

syllabus had been covered but some parts had not been covered as thoroughly as usual. Only 4 teachers from 3 schools stated that the syllabus had been covered as thoroughly as usual. A Director of Mathematics from one of the sixth form colleges responding to the survey provided the following insight:

> "*We focused on covering pure content as thoroughly as possible. This meant that we ran out of time to cover all of the Year 13 Applied topics. We factored this into our final TAG* [Teacher Assessment Grades] *assessment papers which were heavily skewed towards Pure."*

This statement supports a larger-scale survey by the Joint Mathematical Council for the UK (2020) which found that, "More than half of A level mathematics teachers changed the Scheme of Work this academic year in order to accommodate students' learning gaps and requirements for blended learning".

With regard to the coverage of the twelve advanced mathematics topics, Table 2 shows the percentage of teacher respondents who indicated that they had covered (taught) these topics as completely as usual and the percentage of student respondents who said that they had definitely covered (been taught) the topic.

Table 2: Percentage of teachers indicating "covered as thoroughly as usual" and percentage of students indicating "definitely covered" on 12 advanced pure mathematics topics.

Topic	Teachers % (n=27)	Students % (n=174)
Proof by contradiction	63.0	65.5
Partial fractions	92.6	82.2
Parametric equations	70.4	82.2
Arithmetic sequences and series	77.8	83.3
Geometric sequences and series	77.8	87.4
Secant, cosecant, cotangent	88.9	69.5
Formulae sin(A+B), cos(A+B), tan(A+B)	85.2	92.0
Points of inflection	77.8	78.7
Chain rule for differentiation	92.6	93.1
Parametric differentiation	81.5	73.0
Integration by substitution	74.1	81.0
Integration using partial fractions	74.1	75.3

The results in Table 2 show that, from the teacher perspective, there has been a reduction in the thoroughness of the coverage of these topics during the pandemic compared to usual practice. In particular, there are seven topics where fewer than 80% of teachers felt that they had covered the topic as thoroughly as usual, with proof by contradiction standing out as a particular weak spot (63.0%).

Since the students could not compare with previous years, they were simply asked to indicate if they felt that they had covered the topics. Even with this lower threshold, there were still five topics where fewer than 80% of students indicated that they had definitely covered the topic and only two where more than 90% were certain they had. Although the teachers' question and the students' question were not measuring precisely the same quantity, it is interesting to note that the topic that fewest students were sure had definitely been covered was proof by contradiction (65.5%), similar to the teachers' response.

Students were given the opportunity to comment on topics they felt they did or did not cover during their A Level Maths studies. The full list of comments is shown in the Appendix. Almost all these comments relate to topics not covered. There are a small number of comments that simply list topics with no further context. However, it seems reasonable to infer that these students meant these as topics not covered, since students would be unlikely to limit their response to just those topics if these were those that were covered. Figure 1 shows a word cloud of these responses for 25 students who made a comment. The size of each word reflects its frequency, with larger words occurring more frequently.

Figure 1: Word cloud from comments about topics the students did or did not cover during their A Level Maths studies.

Although based on a small number of comments, the word cloud helps to corroborate the previous statement from the Director of Mathematics at one of the sixth form colleges, which suggested that emphasis was placed on pure topics at the expense of applied topics. From Figure 1, the words Mechanics, Vectors, Numerical Methods and Stats stand out, with terms such as Normal, Distribution and Applied also visible in the background.

4. Mathematics Confidence

We asked both students and teachers to comment on confidence in mathematics, with an emphasis on changes over the past year (Q12 student and Q11 teacher respectively, Appendix). Students were asked to reflect on their own confidence levels and also how they had found the experience of learning mathematics since the first COVID-19 lockdown. Teachers were asked to reflect on the confidence levels of their students, thus taking a view across the whole cohort. Table 3 shows changes in confidence level against the experience of learning mathematics during the pandemic for the students (Q14, Appendix), and Table 4 shows the correlation between them, broken down by school, assessed using Spearman's correlation coefficient. Table 5 summarises the teacher perspective on the students' confidence in mathematics as compared to previous cohorts.

Table 3: Student experience of learning mathematics against changes in confidence since the first COVID-19 lockdown in March 2020 (n=173)*. Percentages are shown across rows.

Q14: Since the first COVID-19 lockdown, I have found learning in mathematics:	Q12: Over the past year, my confidence in my mathematical abilities has:			
	Reduced	Stayed the same	Increased	Total
Easier	2 (7.4%)	4 (14.8%)	21 (77.8%)	27 (100%)
About the same	5 (9.4%)	25 (47.2%)	23 (43.4%)	53 (100%)
More difficult	62 (66.7%)	16 (17.2%)	15 (16.1%)	93 (100%)
Total	69 (39.9%)	45 (26.0%)	59 (34.1%)	173 (100%)

1 student with missing data

Table 4: Spearman's correlation coefficients between confidence in mathematical abilities (Q12) and experience of learning mathematics since the COVID-19 lockdown (Q14), broken down by school.

School*	Spearman's correlation	N
1	0.189	9
2	-0.066	7
3	-0.158	17
4	-0.408	5
5	-0.452	8
6	-0.504	21
7	-0.559	5
8	-0.621	8
9	-0.650	11
10	-0.667	18
11	-0.668	17
12	-0.717	9
13	-0.739	12
14	-0.794	11
15	-0.800	13

* Note: two schools did not contribute enough data to undertake this analysis

Table 5: Teacher perspective on students' confidence in A level mathematics compared to previous maths cohorts (n=27)

Confidence is…	Count	Percent
Lower	19	70.4
About the same	6	22.2
Higher	0	0.0
Not sure	2	7.4

Since the first COVID-19 lockdown in March 2020, 93 students (53.8%) found learning in mathematics more difficult and 69 students (39.9%) stated that their confidence in their mathematical abilities had reduced (Table 3). There is strong evidence of an association between the experience of learning mathematics during the pandemic and mathematics confidence; $\chi^2 = 74.6$, df=4, p < 0.001 (chi-squared test). From Table 3, we can see that 66.7% of those who found learning in mathematics more difficult since the first COVID-19 lockdown stated that their confidence in their mathematical abilities had reduced (62 out of 93). This contrasts with just 9.4% and 7.4% for those who had found learning in mathematics about the same (5 out of 53) or easier (2 out of 27) respectively. After digging a little deeper, we can see a moderate to strong negative association between maths confidence and learning experience in mathematics across nearly all of the schools separately (Table 4). In other words, a decrease in maths confidence correlates with finding learning in mathematics more difficult since the COVID-19 lockdown. From the teacher perspective, 70.4% of teachers (n=19) felt that their students' confidence in mathematics was lower compared to previous cohorts (Table 5).

There is a sense from this data, particularly from the teachers who have reflected on their full cohorts, that mathematics confidence has been negatively impacted during the pandemic. There are, of course, a number of considerations to bear in mind when interpreting this data, not least the fact that the student respondents were predominantly high achievers at GCSE and their responses may not be representative of the whole cohort. We also need to be mindful of the fact that mathematics confidence and learning experience may naturally change with the transition from Year 12 to Year 13, regardless of the pandemic conditions. However, if a sizeable number of these higher achieving students have experienced struggles in their learning with accompanying reduced confidence, it seems plausible to hypothesise that the cohort-level picture may look bleaker.

When asked about A level grade expectations (Q15, Appendix), 66 students (37.9%) felt that their A level grade in mathematics would be worse than before the pandemic, and 53 of these felt that their confidence in maths had reduced since the first lockdown. For those with lowered grade expectations, we asked them to comment on why they felt this way. From the free text comments, words/themes such as motivation, mental health, struggle and difficult stood out by their repetition. Comments included the following:

"*Just had difficulty with motivation, so I was not on top of the work*"

"*Overall my mental health worsened as a result of increased isolation and decrease in support during lockdown*"

"*I struggle to teach myself maths and I struggle to learn maths through a video call. I need a staff member with me to help me and consolidate things*"

When asked to comment on reasons for changes in student confidence, the teachers used words such as 'lack' and 'less' (Figure 2). Their comments indicated a number of areas where things were lacking for the current cohort; some examples are given below.

> "*They lack the help they normally get in the classroom*"

> "*Lack of time with teachers and other students*"

> "*I think the main problem is the lack of reinforcement over time*"

> "*… lack of resilience …*"

Taking the student and teacher responses and comments together, it seems clear that this cohort have found their A level mathematics experience to be challenging.

Figure 2: Word cloud of teacher comments to explore changes in students' confidence in mathematics.

5. Post-18 Intentions and Readiness for Higher Education

Of the 174 student respondents, 135 (77.6%) indicated that they are considering studying for a degree after completing their Year 13 studies, with the majority specifying a degree subject that requires mathematics. When asked to specify their degree choice, frequent words (count) included mathematics (20), engineering (18), science (18) and economics (13).

From Table 6, it is clear that teachers feel uncertain about students being prepared for the transition to higher education, with only 4 teachers (14.8%) from 3 schools feeling confident that their students are prepared to cope with the demands of a higher education course that requires mathematics. In contrast, 14 teachers (51.9%) feel, to some degree, that their students are not as well prepared as previous cohorts.

Table 6: Teacher responses – are your Year 13 A Level students as well prepared for the mathematical demands of a higher education course as your pre-pandemic cohorts? (n=27).

Teacher View	Count	Percent
Definitely	4	14.8
Possibly	7	25.9
Not sure	2	7.4
Possibly not	8	29.6
Definitely not	6	22.2

6. Conclusions

This study was conducted to gain insights into the experiences of Year 13 A level mathematics students who studied under the unusual conditions imposed by the COVID-19 pandemic during the academic year 2020-21. While we do not claim that the respondents in this study form a representative sample of the Year 13 cohort or their teachers, this high-level analysis has indicated a sense of struggle and reduced confidence in mathematics. The teachers feel that the students are less prepared than previous cohorts for the mathematical demands of a higher education course, and responses from both students and teachers indicate potential gaps in mathematics knowledge, particularly in applied topics such as mechanics and statistics. This paints a troubling picture for those who have recently entered higher education, as well as for the institutions who must try to bridge the gaps in knowledge and boost confidence levels.

In the light of these findings, the role of mathematics and statistics support is likely to be more crucial than ever. Students may have to 'fill in the gaps' in their knowledge of A level topics themselves, outside of scheduled teaching. As such, there may be opportunities for mathematics and statistics support providers to assist these students through the provision of focused workshops on topics known to have been covered less thoroughly over the past year. There will be value in individual support providers, and the mathematics and statistics support community as a whole, reflecting on their experiences at the end of the first semester/term of academic year 2021-22, comparing with previous years and identifying lessons to be learned to take into future years.

7. Appendix

7.1. Student Questionnaire

Note: Questions 1-3 are consent questions.

4. What is your gender?

Male
Female
Other
Prefer not to say

5. What grade did you achieve in GCSE Maths?

A*	A	B
C	D or lower	9
8	7	6
5	4	3 or lower
Did not study GCSE maths	Prefer not to say	Other

6. Which option best describes your ethnic background?

White
Asian/Asian British
Black/African/Caribbean/Black British
Mixed/Multiple Ethnic Group
Prefer not to say
Other

7. What A level subjects are you studying? Please state below (free text).

8. Are you also studying for a BTEC qualification?

Yes
No

9. Since the first COVID-19 lockdown in March 2020, have you attended school or college during the lockdown periods (e.g., because your parent/carer is a key worker, or for other reasons)?

Yes, I attended school or college as usual during lockdown periods
Yes, sometimes
No
Not sure

10. Please read the following statements. In each case, tick the box that shows how strongly you agree or disagree with the statement.
Measured on a 4-point scale: Strongly Disagree, Disagree, Agree, Strongly Agree. Statements adapted from Strand and Winston (2008).

I have a quiet place in which to do school/college work
If I get stuck, I can usually work things out
Family members/carers help me with homework
I am good at solving problems
I feel good about myself
I know how to be a good learner
Family members/carers reward me if I do well at school/college
I have had access to the technology I need to learn from home during the COVID-19 pandemic
I am good at most subjects at school/college
I am good at working with others
Family members/carers usually come to open evenings/reviews
Family members/carers often ask me how I'm doing at school/college
I enjoy working on my own

11. **Before the first COVID-19 lockdown** in March 2020, compared to my other subjects, I found learning in mathematics (tick one of the following options):

Easier
About the same
More difficult
Not sure

12. **Over the past year**, my confidence in my mathematical abilities has (tick one of the following options):

Reduced
Stayed about the same
Increased
Not sure

13. **Since the first COVID-19 lockdown** in March 2020, I have found learning in all of my subjects (tick one of the following options):

Easier than before lockdown
About the same as before lockdown
More difficult than before lockdown
Not sure

14. **Since the first COVID-19 lockdown** in March 2020, I have found learning in mathematics (tick one of the following options):

Easier than before lockdown
About the same as before lockdown
More difficult than before lockdown
Not sure

15. As a result of the COVID-19 pandemic, I think my A Level Mathematics grade will be (tick one of the following):

Worse than expected before the pandemic
About the same as expected before the pandemic
Better than expected before the pandemic
Not sure

15a. If you think your grade will be worse, please describe the reasons for this below (free text).

16. During your A Level studies in Mathematics (not including A Level Further Mathematics), for each of the following more advanced topics listed below, please indicate if you think you have covered them. Measured on a 5-point scale: Definitely covered, I think so, Don't know, I don't think so, Definitely not covered.

Proof by contradiction
Partial fractions
Parametric equations
Arithmetic sequences and series
Geometric sequences and series
Secant, cosecant and cotangent functions
Formulae for sin(A+B), cos(A+B), tan(A+B)
Points of inflection
Chain rule for differentiation
Parametric differentiation
Integration by substitution
Integration using partial fractions

16a. If you have any other comments about topics you feel you did or did not cover during your A Level Maths studies, please state them here (free text).

7.2. Teacher Questionnaire

Note: Questions 1-3 are consent questions.

4. Please state the name of your school or college.

5. Please state the postcode of your school or college.

6. If you know it, please state your school or college's URN.
7. Please state your job title. *Note: if you do not wish to provide this information please write 'prefer not to say' in the box.*

8. What impact has the pandemic had on how A level Mathematics has been taught in your school or college? *For example, the extent to which online and blended learning have been used, the use of technology in teaching and learning, changes to your teaching practices etc.* (Free text).

9. Since the pandemic started, have you covered the A level maths syllabus as completely as usual?

| Yes, as thoroughly as usual |
| Yes, but some parts have not been covered as thoroughly as usual |
| No, some parts of the syllabus usually covered have not been covered |
| Other *(please specify)* |

10. For each of the more advanced topics below, indicate how thoroughly you have covered them with your current Year 13 A Level Maths students. *Note: please do not include topics covered in A Level Further Mathematics.* Measured on a 5-point scale: Covered as thoroughly as usual, Covered but not as thoroughly as usual, Not covered (but on our syllabus), Not on our sullabus, Not sure.

| Proof by contradiction |
| Partial fractions |
| Parametric equations |
| Arithmetic sequences and series |
| Geometric sequences and series |
| Secant, cosecant and cotangent functions |
| Formulae for sin(A+B), cos(A+B), tan(A+B) |
| Points of inflection |
| Chain rule for differentiation |
| Parametric differentiation |
| Integration by substitution |
| Integration using partial fractions |

11. What change, if any, have you noticed in the level of confidence in mathematics of your current Year 13 A Level Mathematics students, compared to your previous Year 13 maths cohorts?

| Confidence is lower |
| Confidence is higher |
| Confidence is about the same |
| Not sure |

12. Do you think that your current Year 13 A Level Maths students are as well prepared for the mathematical demands of a higher education course (not necessarily in mathematics, but one with some mathematical content) as your pre-pandemic maths cohorts?

Definitely
Possibly
Not sure
Possibly not
Definitely not

13. Do you think your current Year 13 A Level Maths students have had sufficient opportunity to practise writing mathematical arguments in an appropriate manner? (*i.e., formally writing out solutions and not just giving answers?*)

Definitely
Possibly
Not sure
Possibly not
Definitely not

13a. If you answered definitely or possibly, how has this been achieved under pandemic conditions? (Free text).

14. Have your students encountered any particular difficulties when studying A Level Mathematics over the past year?

Yes
No
Not sure

14a. If your answered Yes above, can you please describe those difficulties? (Free text).

15. Are you aware of any ways your Year 13 maths students have revised their aspirations because of the pandemic?

Yes
No
Not sure

15a. If you answered Yes above, please outline how students' aspirations have changed (free text).

7.3. Comments Recored for Q 16a of Student Quesitonnaire.

Did not fully cover vectors.

Sequences and series, logarithms

Did not finish mechanics or statistics

We haven't finished stats and mechanics

Some of the year 13 mechanics topic was missed out.

My learning of these topics was not impacted by the pandemic because we finished the A Level course in Year 12 to move onto the further syllabus

We didn't learn moments from mechanics or numerical methods or vectors

We did no differential equations either

Proof was extremely hard to cover and as the exams focus on problem solving questions i found it hard to actually complete it due to lack of practice as i had less questions to work with than i would in class

Didn't really cover Rational proof

Didn't cover all of Mechanics A2 content

A2 Mechanics, Normal distribution

Vectors was not covered

We didn't do much in vectors or in applied maths

Didn't get to cover a lot of the year 2 applied maths content, and missed out the trapezium rule for integration

Numerical method

Stats year 2 Mechanics chapter 8 year 2 Vectors year 2

Numerical methods

Did not cover numerical methods and one or two other units I cannot remember.

We didn't cover Year 2 Vectors, The Normal Distribution or Year 2 Numerical Methods.

Vectors

Only assessed on half

There was topics I missed in lockdown which I then had to learn independently.

We did not do any stats or mechanics in late 1st year or at all in 2nd year

Some were covered over online which meant help from the teachers was more awkward and some had to be self taught.

I had a very good teacher and online resources on a classroom

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