Improving Assessment in National Courses Research: National 5 Physics

Published: June 2026

Proposal

The following proposal was shared with respondents who stated they had taught or studied National 5 Physics:

- We are proposing reducing the marks of Section 1 from 25 marks to 20 marks.
- We are proposing reducing the marks of Section 2 from 110 marks to 90 marks.
- We are proposing reducing the duration of both Section 1 and Section 2 of the National 5 Physics exam from 2 hours 30 minutes to 2 hours.
- There would be no changes to the assignment.
- The weightings of the exams and the assignment would stay the same.
- We are proposing these changes to improve the exam experience for learners and for schools, while maintaining appropriate sampling of subject content.

The proposed changes for National 5 Physics are:

Current

Component	Marks	Duration	Weighting
Section 1 + Section 2	25 + 110	2 hours 30 minutes	80%
Assignment	20		20%

Proposed

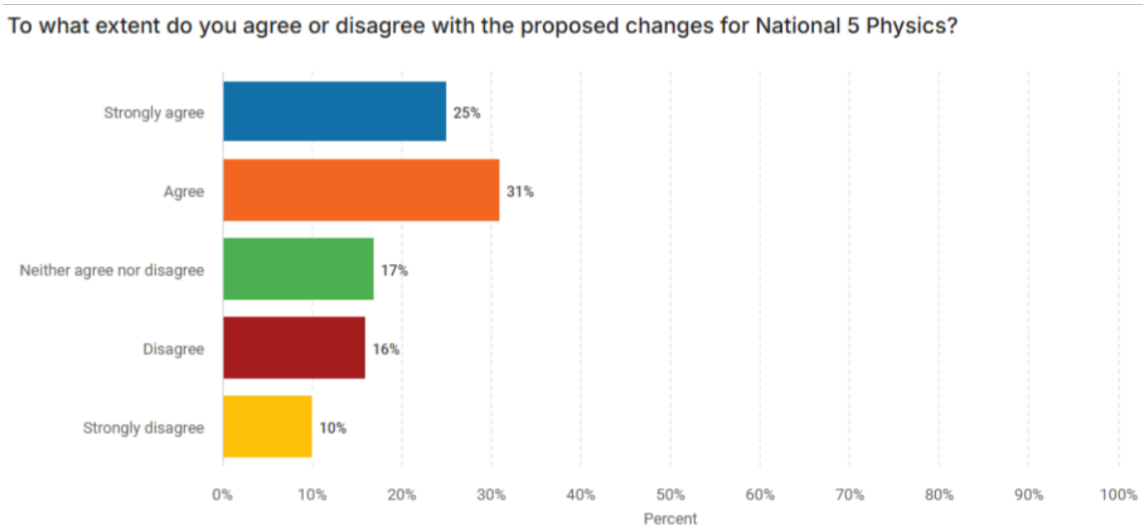
Component	Marks	Duration	Weighting
Section 1 + Section 2	20 + 90	2 hours	80%
Assignment	20		20%

Note: though the information is the same, it was presented differently in the survey.

Findings: learners

We received responses from 385 learners who stated they had studied National 5 Physics. As shown in Figure 1, more than half (56%) of learner respondents agreed or strongly agreed that this proposal should be implemented, while 26% said they disagreed or strongly disagreed.

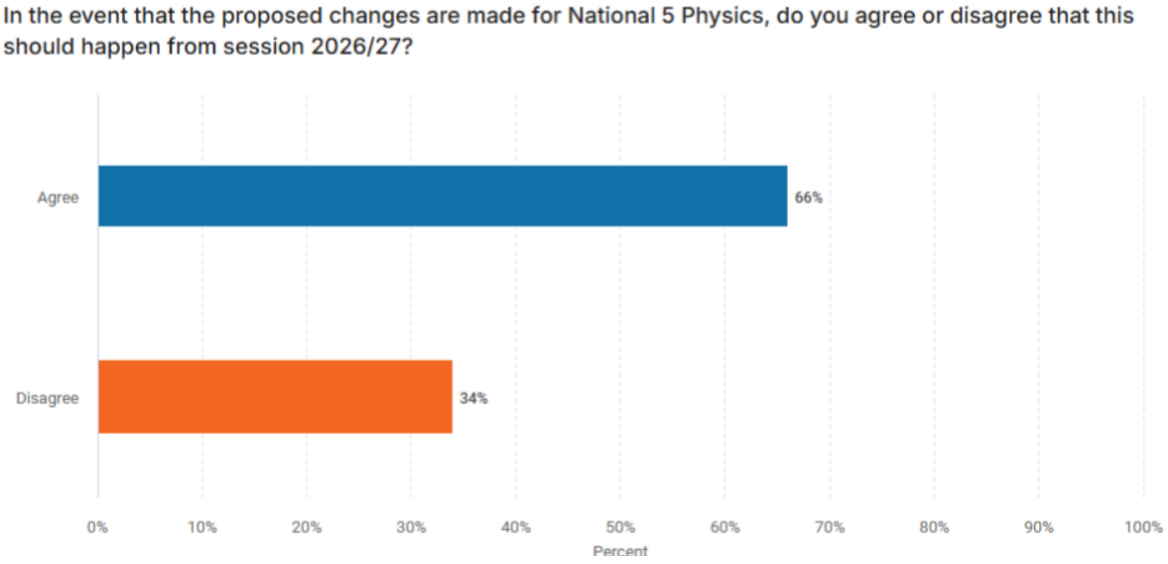
Figure 1: To what extent do you agree or disagree with the proposed changes for N5 Physics? Learner respondent views



Base: 385 learner respondents who stated they had studied National 5 Physics

Learner respondents were also asked to what extent they agreed with the decision to begin the proposed change in 2026–27, should it be made. As shown in Figure 2, the majority of learners (66%) agreed that the change should be made from the 2026–27 session, while 34% disagreed.

Figure 2: In the event that the proposed changes are made for N5 Physics, do you agree or disagree that this should happen from session 2026–27? Learner views



Base: 385 learner respondents who stated they had studied National 5 Physics

Qualitative analysis

Learner respondents were asked if they had any further comments that they would like to share about the proposed changes to N5 Physics and 45 respondents left a comment. Although just over half (56%) of learner respondents agreed or strongly agreed with the proposed changes, most of the comments were from those who disagreed with the changes, explaining their reasoning. There were some comments from learners who expressed what they saw as the benefits of proposals, and the rest were suggestions outwith the scope of what Qualifications Scotland was proposing at this time.

Benefits of the proposed changes

A few learner respondents simply said that they felt the proposed changes were a good idea, but did not elaborate further. One potential benefit that emerged repeatedly from the data was related to the proposal to reduce the exam duration from two hours and 20 minutes to two hours. Several learner respondents thought that the National 5 Physics exam was currently too long, making it difficult for them to concentrate. A few respondents explained that this was especially hard when sitting exams for the first time.

> ‘Exams over 2 hours long are tiring and difficult to focus on by the end, especially for s4s doing their first exams, so reducing the exam time would have been helpful for me when I did the course.’

> ‘2.5 hours is a long time to sit down. Concentration wanders!’

Challenges with the proposed changes

Exam duration

The majority of the comments were related to challenges that learner respondents perceived with the proposed changes. In contrast to those who said why they agreed with the proposals, it was common for learner respondents who disagreed to say that they needed more than two hours to complete the exam, even with the number of marks being reduced. A few respondents said that the marks should be reduced but the time should stay the same, saying that it was already challenging to complete on time. Several respondents also indicated that they thought physics required more thinking and processing time than other subjects so time allowed per mark should be higher.

> ‘[…] do not reduce time but reduce marks, as the exam is already very time restricted.’

> ‘amount of time per mark (1 minute 6 seconds) is too low for physics at the moment. candidates should be getting a minimum of 1 minute and 30 seconds per mark in the exam as physics involves a lot of skills such as problem solving, calculations, explaining’

> ‘If anything the time shouldn’t be cut as much, as physics requires much more thinking compared to other subjects and many people including me struggled with time in the national 5 physics paper.’

Related to the length of the exam, one respondent mentioned that that more time should be considered to allow for nerves to settle, while another said that they already struggled to complete the exam with extra time as part of additional assessment arrangements, so reducing the duration would impact on this further.

One respondent also suggested reducing the length of the exam but by less than what was being proposed.

Number of marks

Some respondents felt that reducing the number of marks would give them less opportunity to demonstrate their knowledge of the course, impacting on the sampling of the course content. One respondent expressed concerns that reducing the number of marks increased the weighting of each mark towards their final grade.

> ‘You need more marks to show your true knowledge of physics and not that you have just played the exam game’

> ‘If there are less marks available there is less of a cushioning for the quantity of marks you can lose to still get an A which is more stressful.’

> ‘National 5 physics is one of the broadest courses at the level, so why cut content out of the exam? Because that's exactly what will happen if the exam is cut down in length, and you'll surely agree that it's necessary to test candidates on all of their learning, not just a fair portion.’

Less common themes

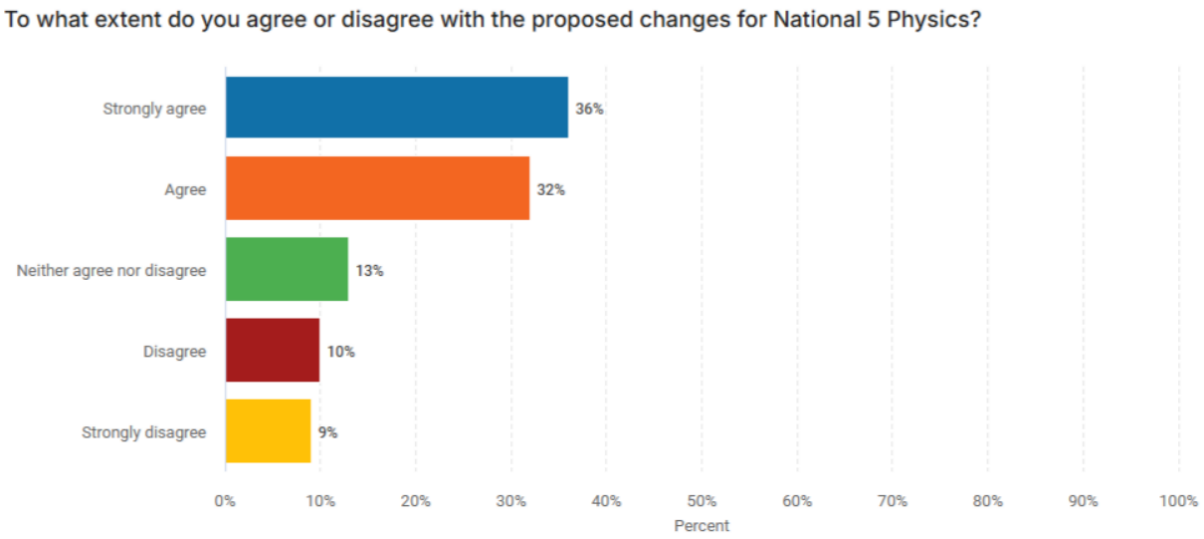
There were a few challenges that a minority of learner respondents spoke about. These were:

- Shortening the exam duration was unfair to learners who had previously studied the course
- The number of marks being proposed was still higher than for Biology and Chemistry courses
- The changes make the exam easier

Findings: educators

We received responses from 379 educators who stated they had taught National 5 Physics. As shown in Figure 3, 68% of educator respondents agreed or strongly agreed with the proposed changes for National 5 Physics, while 19% disagreed or strongly disagreed.

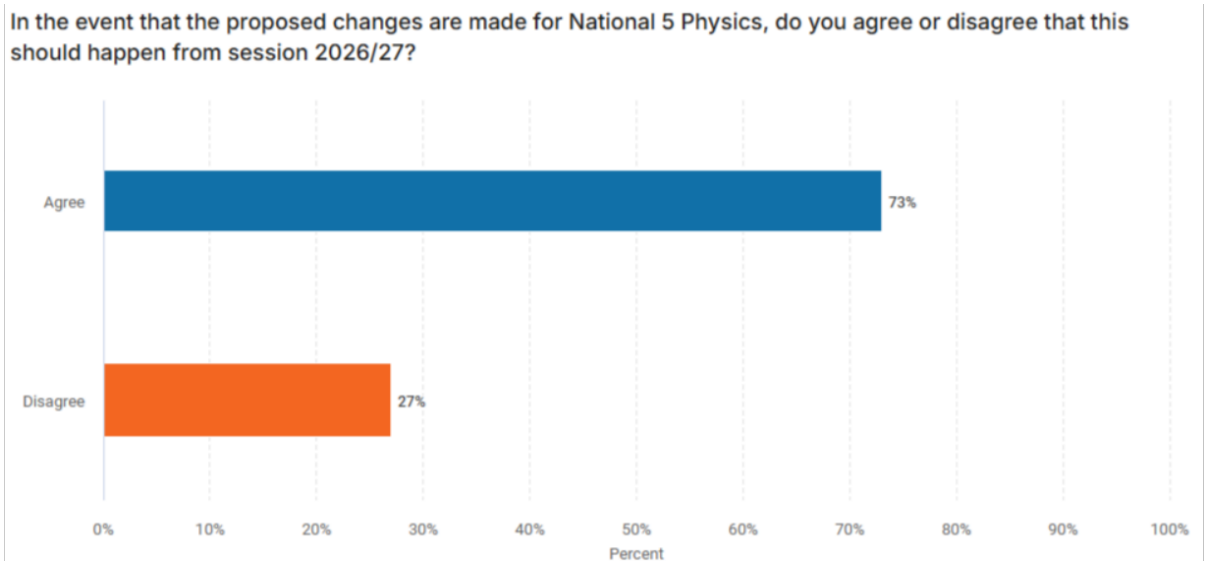
Figure 3: To what extent do you agree or disagree with the proposed changes for National 5 Physics? Educator views



Base: 379 educator respondents who said they taught National 5 Physics

As shown in Figure 4, 73% of educator respondents agreed and 27% disagreed that if the proposed changes went ahead, they should be implemented from the 2026–27 session.

Figure 4: In the event that the proposed changes are made for National 5 Physics, do you agree or disagree that this should happen from session 2026–27? Educator views



Base: 376 educator respondents who said they had taught National 5 Physics

Qualitative analysis

Educator respondents were asked if they had any further comments that they would like to share about the proposed changes to National 5 Physics and 191 respondents left a comment. Despite the majority of educators being in favour of the proposed changes, most comments were from respondents who were concerned with the N5 Physics course as a whole, explaining their reasoning.

Benefits of implementing this change

The key benefit educator respondents perceived was that reducing the exam length would reduce the burden on learners and educators. Further themes were that accessibility to the course would improved, the benefits of a return to the previous format of the assessment, and parity with other sciences.

Many educator respondents thought that reducing the exam length would benefit learners, especially those who received extra time as part of additional exam arrangements. Several mentioned that they felt exams were currently too long, which they felt put too much pressure on National 5 learners.

> ‘Exams have been far too long for years, any change that makes it a less stressful experience for students has got to be a good thing.’

> ‘This would benefit learners who get extra time for exams as I feel the demands on them are too great having to sit in an examination for 3 hours plus in some cases.’

> ‘I believe a 2h exam is more beneficial for students due to tiredness if nothing else.’

There were also mentions of the benefits the reduced exam length would have to educators, such as reducing the burden of marking and making planning for prelims easier.

> ‘More manageable exam time for pupils and better workload for teachers for marking prelims.’

> ‘[…] This would also assist schools produce assessments closer to the standard of the final exam as fitting in a shorter prelim assessment would be easier.’

A number of educator respondents also saw with the proposed changes was that they would improve access to the course, and improve attainment.

> ‘Will really help with ASN learners and give more accessibility to the course.’

> ‘I think that these changes could have significant positive impact on attainment in Physics due to increased accessibility.’

A few educator respondents said that the proposed changes would bring National 5 Physics more in line with the other sciences, which they saw as a benefit. There were also some respondents who praised the changes for what they saw as return the previous format of the National 5 Physics assessment.

Many of the responses from the open-text comments welcomed these changes overall.

Challenges with implementing this change

There were a number of challenges that came out of the open text responses from educators in regards to the changes being proposed. The most common challenge respondents perceived was that reducing the length of the exam would put pressure on learners as it increased the weighting of each mark.

Reducing the length of the question paper

It was common for educator respondents to say that reducing the length of the exam would impact learners negatively as they would have less time per mark than they do currently. Some educators felt that this change went against the rationale for the change of improving the exam experience for learners. However, some expressed the same concerns but acknowledged that this depended on the types of questions that were removed because some types of questions take longer than others.

> ‘Although reducing the total duration of the exam may have benefits for some pupils, the fact is that the weighting per mark/question actually increases. This increases pressure on pupils to be able to answer a higher proportion of the final paper correctly from a reduced bank of questions.’

> ‘You are proposing giving learners 80% of the current time to do 82% of the current number of marks, how does this give learners ‘more time to complete an exam? It ultimately increases the number of marks per minute the learner as to do and will reduce the breadth of assessment.’

One respondent expressed the view that reducing the length of the question paper would not make a difference, as they perceived that the learners who this might benefit from this would leave the exam early anyway.

Reducing the number of marks

Some educator respondents thought that reducing the number of marks would be unfair if the course content were to remain the same. These respondents felt that learners would be disadvantaged as they would not be able to demonstrate the same breadth and depth of

knowledge that they had learned on the course. A few also mentioned that this would not help to alleviate any pressure on teachers as the volume of content would remain the same.

> ‘There seems to be no reason to reduce the number of marks available in the exam when the same volume of course content will still be being covered. Pupils have to learn just as much but are not given as much of an opportunity to show their learning.’

> ‘I don’t see any need for this change. Obviously pupils will prefer a shorter exam but is not possible to examine the material in the same depth while removing 25 marks’ worth of questions.’

> ‘[…] keeping 100% of the teachable course content whilst reducing the marks available means that there is the same content that needs to be taught but not necessarily be examined which increases pressure on learners another way […]’

Related to this was the view of several respondents that the course content would not be sufficiently sampled by reducing the number of marks in the exam. A few respondents expressed that this would impact on the validity of the exam. One respondent was concerned that this would encourage teaching to the exam, at the expense of problem solving skills.

> ‘Fewer questions will make it harder to sample the course specifications with the appropriate range of question difficulty’

> ‘The examination doesn’t really cover the whole syllabus as it is. Reducing the number of questions will sample less of the course than is currently examined […]’

> ‘I think shortening the exam will remove the rigour and not allow enough course content to be covered or to the depth we could be assessing.’

Some opinions expressed by a minority of respondents related to reducing the number of marks. One respondent said that reducing the number of marks would make it more difficult to differentiate between the abilities of different learners, while another said it would be more difficult to predict and prepare learners for questions that ‘appear every year’, such as vector addition and v-t graphs.

Not enough time

Another challenge that some educator respondents spoke about was that bringing in the changes for the 2026–27 session would be too soon. Respondents spoke about how they would need time to prepare learners for the changes, and to prepare new resources and prelims. One respondent talked who taught the course over two years with learners in different year groups expressed that it would be a difficult to change the parameters halfway through the course.

> ‘2.5 hrs is a good length, dropping the length back to 2 hours, and changing the mark structure would necessitate extra work for teachers to rewrite all prelims to the new format.’

> ‘There are workload implications for teachers. They will need to spend time adapting current prelims and class assessment etc to fit in with the new marks.’

Some of these concerns were related to worry that the course content would be changed as a result of the changes being proposed.

> ‘Often, with changes made like this, content also changes. If there are changes being proposed teachers need time to understand what you are asking of our learners, to adequately prepare them for the assessment.’

Alternative suggestions

Some educator and learner respondents used the free text box to give varying suggestions for alternative changes that they felt should be made to National 5 Physics. We haven’t included these comments in the analysis, as they did not directly answer the research questions and were out of scope of this research. We passed the comments on to our Qualifications Development teams to make them aware of the themes that emerged on this topic. We’ll consider alternative changes to National Courses as part of wider qualifications reform in the future, and learners and educators will have opportunities to share their views and input more directly to this work.