

Improving Assessment in National Courses Research: Higher Human Biology

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Proposal

The following proposal was shared with respondents who said they had studied or taught Higher Human Biology:

- We are proposing making the exam for Higher Human Biology shorter, reducing the time from 3 hours to 2 hours and 30 minutes.
- The proposed changes to the exam duration would mean a return to one question paper. We would shorten Paper 1 by removing five multiple choice questions, and would shorten Paper 2 by removing 15 marks' worth of questions, and then combine the two papers. The proposed changes to the question paper also include an additional extended-response question with a choice of topic.
- 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 Higher Human Biology are:

Component	Current marks	Current duration	Current weighting
Paper 1 + 2	25 + 95	40 minutes + 2 hours 20 minutes	80%
Assignment	20		20%

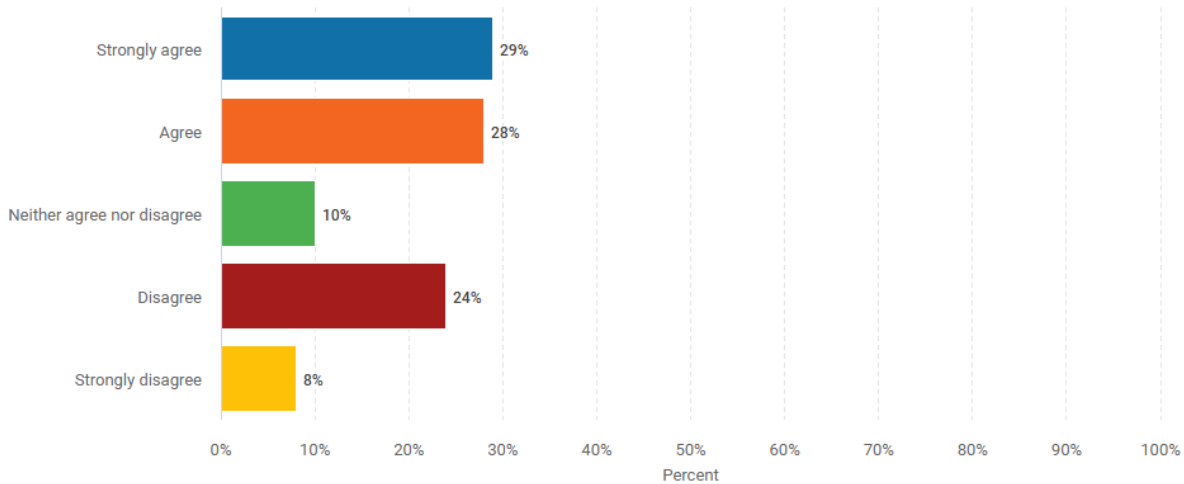
Component	Proposed marks	Proposed duration	Proposed weighting
Paper: Sections 1 + 2	20 + 80	2 hours 30 minutes (one question paper)	80%
Assignment	20		20%

Findings: learners

We received responses from 134 learners who said they had studied Higher Human Biology. As shown in Figure 1, the majority of learner respondents (57%) agreed or strongly agreed with this proposal, while 32% disagreed or strongly disagreed.

Figure 1 To what extent do you agree or disagree with the proposed changes for Higher Human Biology? Learner views

To what extent do you agree or disagree with the proposed changes for Higher Human Biology?

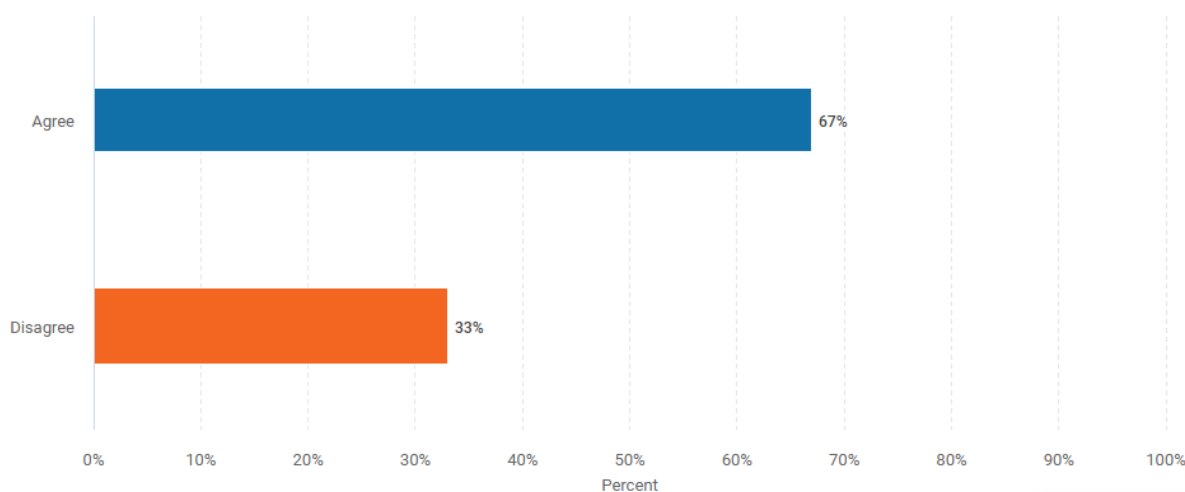


Base: 134 learners who said they had studied Higher Human Biology

Respondents were also asked to what extent they agreed with the decision to begin the proposed change in 2026–27, should the change be made. As shown in Figure 2, the majority of learners (67%) agreed or strongly agreed that the change should be made from the 2026–27 session, while 33% disagreed or strongly disagreed.

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

In the event that the proposed changes are made for Higher Human Biology, do you agree or disagree that this should happen from session 2026/27?



Base: 131 learners who said they had studied Higher Human Biology

Qualitative analysis

Learner respondents were asked if they would like to share any further comments about the proposed changes to Higher Human Biology. Nineteen respondents left a comment. While the majority (57%) of learner respondents strongly agreed or agreed with the proposal, most of the comments were from those who disagreed. Indeed, only two comments suggested that those respondents supported the move to one question paper, with the other 17 comments focused on perceived challenges.

Challenges with implementing this change

The most common theme was that learner respondents preferred two question papers. While most of these comments stated simply that they preferred two question papers, one did say they thought two question papers would be less challenging than one.

‘I think it is easier having two question papers.’

‘Make it two separate papers still.’

Related to this, a number of respondents thought that having a break between papers, rather than one question paper, was beneficial. These learners thought that a break helps with focus and concentration.

'I disagree with making it one paper. The break in between is important for concentration, general things (getting something to eat, bathroom etc.) and some last minute preparations.'

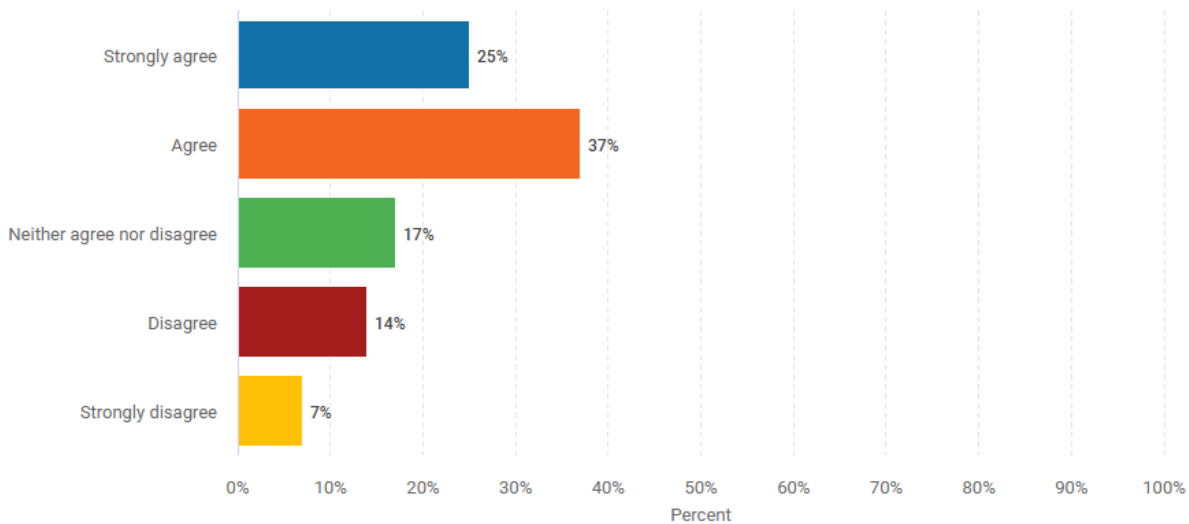
Other perceived issues with the proposal were each raised by one learner respondent. These were that one extended-response question is enough, that the changes would make the exam more difficult, and that reducing the number of marks would increase the weighting of each mark. Additionally, it was commented that the weighting of the assignment should be decreased. Finally, one learner respondent suggested that they were happy with the current arrangement, and this should not be changed.

Findings: educators

We received responses from 329 educators who stated they had taught Higher Human Biology. As shown in Figure 3, 62% of educator respondents agreed or strongly agreed with the proposed changes, while 21% disagreed or strongly disagreed.

Figure 3 To what extent do you agree or disagree with the proposed changes for Higher Human Biology? Educator views

To what extent do you agree or disagree with the proposed changes for Higher Human Biology?

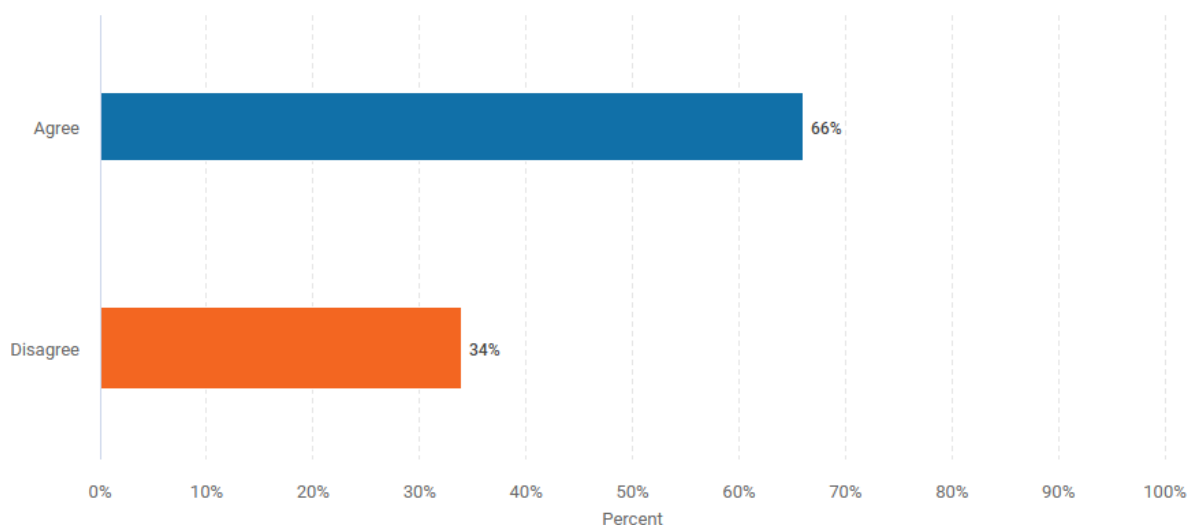


Base: 329 educators who said they had taught Higher Human Biology

As shown in Figure 4, when asked in the event that the proposed changes went ahead whether they should be implemented from the 2026–27 session, 66% of educator respondents agreed and 34% disagreed.

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

In the event that the proposed changes are made for Higher Human Biology, do you agree or disagree that this should happen from session 2026/27?



Base: 328 educators who said they had taught Higher Human Biology

Qualitative analysis

Educator respondents were asked if they had any further comments they would like to share with us, and 132 respondents submitted a response. In common with the learner responses, while most educator respondents overall supported the proposed changes, those who were motivated to leave a comment generally cited perceived challenges associated with the proposal.

Benefits of implementing this change

There were a number of comments from educator respondents related to the benefits of implementing the proposed changes. The key themes that emerged from the data were that educators supported a move to one question paper and that the proposed changes would mean that Higher Human Biology would align better with Higher Biology.

One question paper

Several educator respondents suggested that they were supportive of returning to one question paper, even if some of them still had reservations about other aspects of the proposal. Some questioned why the exam had ever been split into two papers.

‘Always thought it was pointless splitting the exam.’

‘I see no problem with returning to a single paper for Higher Human Biology.’

Other educator respondents thought that having one paper instead of two would result in learners putting in more effort.

‘The gap between papers was not conducive to eliciting the best efforts from young people.’

One respondent thought that the proposal would allow learners to manage their time better in the exam — including being able to spend more time on their extended responses.

‘Currently pupils complain that they are sitting in the exam hall for up to 20 minutes during the MCQ [multiple choice question] portion doing nothing. This time could be better spent working through written response or essay questions that require more thought.’

Alignment with Higher Biology

Some educator respondents thought that the proposed changes would mean that Higher Human Biology would align better with Higher Biology, something that they were supportive of.

Other benefits

One or two educator respondents each mentioned a few other perceived benefits of the proposal. These were:

- A small number of respondents endorsed shortening the exam but did not include reasons why.
- Some respondents were supportive of the proposal to include an extra extended-response question; they felt the inclusion of more choice would be beneficial to learners.
- One respondent was supportive of reducing the number of marks, citing the comparison with the 100 marks in National 5.
- One respondent thought that the proposed changes would make the course more accessible to learners, including those progressing from National 5 with a B or C.

Challenges with implementing this change

Those educator respondents who commented raised a variety of perceived challenges associated with implementing the proposed change. The three main themes to emerge from these comments were concerns over the sampling of course content, uneasiness about an additional extended-response question, and disagreement with moving to one question paper.

Course sampling

Several educator respondents were concerned about a reduction in the breadth of knowledge that would be assessed, and that the course content would not be sufficiently sampled by reducing the number of marks.

‘Would narrow the scope of the exam considerably. This would be to its detriment as pupils are assessed on less content while still having to cover all content.’

‘I am concerned that the course coverage in questions will be impacted negatively by this change.’

‘Can you maintain a sample of enough key areas with fewer marks?’

Some of these respondents suggested that such a move would not be in the interests of learners, stressing that the reduction in exam sampling would not be matched with a reduction in content to be covered.

‘Without the course content changing, I cannot work out any benefit for students. They still need to study the same content, and volume of that content.’

Indeed, a couple of respondents suggested that the proposed format would privilege depth of knowledge over breadth and would therefore potentially disadvantage less able learners.

Some educator respondents emphasised that they thought the current approach is appropriate in terms of covering course content.

‘The current structure of HHB [Higher Human Biology] exam is robust and assesses students’ knowledge and skills across the course specification.’

‘The additional marks allow more content to be examined to assess learning. Should not be cut back.’

Additional extended response question

A number of respondents raised concerns about the proposed inclusion of an additional extended-response question in Higher Human Biology, particularly in relation to its potential impact on learners. It was argued that, when combined with a reduction in overall marks, this would increase the relative weighting of extended responses, with a potentially disproportionate negative effect on less able learners and those with ASN.

‘While removing 15 marks of shorter questions might seem like a reduction in workload, replacing them with a high-stakes "essay" question increases the literacy burden and "all-or-nothing" risk for learners.’

‘A second extended-response question means pupils who are not great at them will lose even more marks than before from a smaller number of possible marks.’

‘I don't agree with including an additional extended-response question. This is a question that C pupils struggle with.’

Related to this, some respondents were concerned that the reduction in overall marks would increase the weighting of each mark, meaning that if a learner performs poorly on one topic, it will have more of a negative impact.

Preference for two question papers

Several educator respondents expressed a preference for retaining two separate question papers, although many did not elaborate beyond stating that this was a better approach. Among those who did provide further comment, it was suggested that two papers may be less challenging and less stressful for learners.

‘Removing a paper puts all the pressure on pupils to succeed in that one paper.’

‘Making it one paper applies more pressure to pupils.’

Respondents also highlighted the perceived benefits of a break between papers, particularly in helping to manage nerves and maintain concentration.

‘Combining into one paper will disadvantage pupils with anxiety as the short paper 1 currently helps them to settle into the exam.’

‘I think that having a break between the papers one and two is a good thing, as it allows students to “put the last paper behind them” and focus on the next paper, as well as getting to have a break.’

Relatedly, some respondents raised concerns that the proposed changes would result in an examination that is too long, notwithstanding the overall reduction in total exam time. A single paper lasting two and a half hours was viewed as placing sustained demands on learners' concentration without a break, with particular concern expressed for those requiring additional time.

‘Combining the two papers will mean learners with extra time are in one paper for much longer, impacting focus and preventing them having a break.’

‘Still think two-paper format is best; 2.5 hours is a long time for candidates to focus.’

Misalignment with Higher Biology

In contrast to respondents who viewed the proposal as improving alignment between Higher Human Biology and Higher Biology, several educator respondents raised concerns that it would create substantial differences between the qualifications (including in perceived level of demand), with a lack of clarity around the rationale for this. This was particularly highlighted in relation to the inclusion of an additional extended-response question in Higher Human Biology but not Higher Biology.

‘It reads like there will now be a substantial difference between the assessments for Higher Biology and Higher Human, with one having 1 long extended response and the other having 2. If I am correct this will likely mean one course is more challenging.’

‘Why would we not have the Higher [Biology] and Higher Human Biology examination consistent? An extra extended response for HHB [Higher Human Biology] but not Higher [Biology] does not achieve consistency across the two Highers.’

Level of demand

In contrast to respondents who viewed the proposal as increasing challenge for learners, a small number expressed concern that the proposed changes would reduce the robustness of the Higher Human Biology qualification.

‘I think the proposed changes do nothing more than make the qualification easier to achieve.’

‘Why should the challenge be removed from a science-based subject?’

Likewise, some respondents raised concerns that the proposed changes could weaken the qualification’s effectiveness in preparing learners for progression to university or the workplace.

‘They [the proposed changes] would not reflect the normal way of assessments in graduate jobs/universities, therefore I think we would be letting our students down by not preparing them for the real world outside school.’

‘Exams in university can last up to 4 hours. How are we preparing these pupils for the future by shortening these exams?’

Impact on centres

A number of educator respondents raised concerns regarding potential implementation in the 2026–27 academic year, suggesting that this would not provide sufficient time for centres to prepare, particularly given that the school academic session begins after the examination diet in June. Some respondents also highlighted the need for exemplar assessments to be available prior to implementation of any changes.

‘It is too soon to change courses by next term for teachers and students; this requires time for teachers and students to prepare.’

‘All course assessments that have been designed to prepare students for their exam will have to be changed to suit the new style.’

‘We would value having practice papers that reflect this change to be able to better prepare learners for the new experience and allow staff to tailor resources for this change, therefore not changing this for at least an academic year.’

Related to this, a number of respondents suggested that they would require more detail on the proposed change (including, for example, rationale, exemplars, and coverage) before coming to a firm view on whether or not they supported it.

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 Higher Human Biology. 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.