



Final recommended questions for the 2011 Census in England and Wales

Students

March 2010 Version 1.0

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1. Summary

Question development for the 2011 Census began in 2004. An iterative and comprehensive process of user consultation, prioritisation of user requirements, and both qualitative and quantitative question testing has been carried out to inform the decision on the questions to be included in the 2011 Census.

This paper outlines the development of questions on students, drawing on evidence from cognitive question testing and results of the 2007 Census Test, a series of postal tests, and other strands of research.

Students and boarding school children are a group that can be difficult to count properly. As in the 2001 Census, students should be counted as usually resident at their term time address as this is where the information is most needed about them for service provision and housing requirements. However, basic demographic information is also collected from students at their home address (if different from their term time address).

The questions included in the census will identify students or schoolchildren in full-time education and filter them correctly, to ensure that the appropriate information is collected from them at different addresses, and that no-one is missed or double-counted. This helps to gain an accurate measure of the usually resident population which is used for the purposes of resource allocation by central and local government.

The recommended student questions are similar to those used in the 2001 Census, although as a result of the new question on second addresses, which will be asked to students, an additional tick-box has been added to the filter question on term time address. This will allow students to state that they lived a second address during term time.

The questions presented below are the final recommended questions for the 2011 Census, for England and Wales, subject to Parliamentary approval:

Figure 1.1 – Student and term time address- England and Wales (English language)

7 Are you a schoolchild or student in full-time education?
 Yes No ➔ Goto 9

8 During term time, do you live:
 at the address on the front of this questionnaire?
 at the address in question 5? ➔ Go to 43
 at another address? ➔ Go to 43

Figure 1.2 – Student and term time address- Wales (Welsh language)

7 A ydych yn blentyn ysgol neu'n fyfyrwr mewn addysg amser llawn?
 Ydw Nac ydw ➔ Ewch i 9

8 Yn ystod y tymor a ydych yn byw:
 yn y cyfeiriad ar flaen yr holiadur hwn?
 yn y cyfeiriad yng nghwestiwn 5? ➔ Ewch i 43
 mewn cyfeiriad arall? ➔ Ewch i 43

2. Introduction

The next census will take place on 27 March 2011. The topics to be included were announced in the 2011 Census White Paper, 'Helping to shape tomorrow', published in December 2008¹. A paper explaining the development process for the questions recommended for inclusion in the 2011 Census along with detailed recommendation papers for all topics is available on the ONS website at:

<http://www.ons.gov.uk/census/2011-census/2011-census-questionnaire-content/question-and-content-recommendations-for-2011/index.html>.

Development of the population questions for the 2011 Census began in 2004. An iterative and comprehensive process of user consultation, evaluation and prioritisation of user requirements, and qualitative and quantitative question testing has been carried out to inform the decisions on the questions to be included in the 2011 Census. The questions for England and Wales have been developed with the Welsh Assembly Government and through close collaboration with the census offices of Scotland and Northern Ireland. A key aim of this collaboration is to minimise differences between questionnaires across the UK, although it is recognised that differing circumstances will sometimes require different solutions. A paper on the UK differences in census questions will be available on the National Statistics website in 2010.

This paper outlines the development of the questions to identify students in England and Wales, including the Welsh language versions. It will begin by outlining the user requirements and the methods of question testing that have been used. It will then describe the development of the questions through the various stages of testing and present the final recommended questions.

¹ This document is available on the ONS website at <http://www.ons.gov.uk/census/2011-census/2011-census-questionnaire-content/2011-census-white-paper--english.pdf>.

3. User requirements

3.1 Consultation process

The inclusion of questions in the census must be supported by a clear user requirement for the information. The main user consultation process for the 2011 Census began in 2005 with a general topics consultation. In addition to this a Population Definitions Working Group (PDWG) was set up in September 2004 to provide clear definitional advice to ONS on population issues, particularly those relating to the 2011 Census. The PDWG consisted of mostly external stakeholders from central government, local authority and academic backgrounds, as well as staff from the Office for National Statistics (ONS) and Welsh Assembly Government (WAG). It was primarily an England and Wales group, led by a designated topic lead in the ONS Centre for Demography, but members of staff from the statistical offices in Scotland and Northern Ireland were correspondence members.

The PDWG group met several times a year until 2007 when a final statement of requirements was produced. The recommendations of the PDWG were considered, tested and adopted where possible, although it has not been possible to satisfy users' requirements in all instances.

The key user needs for information on students are outlined in the following section.

3.2 Student status and term time address

A question on whether the respondent was 'a scholar or student' has been asked in the census since 1851. Both questions on student status and term time address were included in the 2001 Census.

Students and boarding schoolchildren are a group that are can be difficult to count properly. As in the 2001 Census, the 2011 Census will enumerate people where they are 'usually resident'. Students should be counted as usually resident at their term time address as this is where the information is most needed about them for service provision and housing requirements. However, there is also a need for the census to collect information on household and family relationships. It is thought that parents of students will most often include children at boarding school and students on a census questionnaire, even if they are away from home to study. Therefore, the approach ONS has taken is to include students on a census questionnaire at their home address **and** their term time address (if different).

At the home address, only basic information will be collected, whereas a full census return will be collected at their term time address. The questions included in the census will identify students or schoolchildren in full-time education and filter them correctly to ensure that the appropriate information is collected from them at different addresses, and that no-one is missed or double-counted.

Identifying students and schoolchildren and ensuring they are counted at the correct address, helps to gain an accurate measure of the usually resident population which is used for the purposes of resource allocation by central and local government. For example, the information is used to analyse the local demand for student accommodation such as halls of residence and household accommodation. This has an impact on the overall demand for housing. Ensuring the accuracy of the census, and therefore the mid-year estimates, is also important for ensuring population projections are of the best quality possible. There are also other specific needs for information on students by central government, for example, the need to understand how policies impact on students.

4. Methods of question testing

This section gives an overview of the testing that was completed in the development of the content for the 2011 Census. The relevant findings from these tests are discussed in the following section on the development of the questions.

4.1 Cognitive testing

The Data Collection Methodology (DCM) branch of ONS was commissioned to carry out a programme of cognitive question testing on census questions in English and in Welsh. The English language testing began in February 2005, and the Welsh language testing began in October 2007. The aim of this testing was to develop questions that collect accurate and meaningful information that meet user requirements, minimise the burden on respondents, and are designed to conform as close as possible to best practice of questionnaire design. The testing was split into four main phases:

1. Pre-testing for the 2007 Census Test

- Waves 1 to 4 (February 2005 to April 2006)

2. Whole Questionnaire Testing for the 2007 Census Test

- Waves 1 to 2 (June to August 2006)

3. Testing for the 2009 Census Rehearsal

- Wave 1 (November 2006 to January 2007)
- Wave 2 (April to May 2007)
- Wave 3 (July to September 2007)
- Wave 4 (October to November 2007)
- Wave 5 (January to March 2008)
- Wave 6 (April to July 2008)
- Welsh language testing, Wave 1 (October to November 2007)
- Welsh language testing, Wave 2 (June to July 2008)

4. Testing for the 2011 Census

- Wave 7 (March to April 2009)
- Whole Questionnaire Testing—English language (June to July 2009)
- Whole Questionnaire Testing—Welsh language (June to July 2009)

The student questions have been tested since the first wave which began in 2005.

4.2 Quantitative testing

Analysis on the performance of the student questions has been conducted for several quantitative tests since June 2006.

4.2.1 Lambeth Postal Test

During June and July 2006, a test of postal enumeration procedures was carried out in the London Borough of Lambeth. Although this was designed to test aspects of the census field operation, it also allowed the opportunity to analyse and evaluate the performance of the questions. A response rate of 25 per cent was obtained and the data was keyed for 366 households and 787 individual respondents.

4.2.2 2007 Postal Test

The ONS Questionnaire Design and Content team ran a postal test of 10,400 households across England in April 2007. Although the main objective of this test

was aimed at testing issues related to questionnaire length, it also provided valuable information on the acceptability and understanding of definitions and questions.

4.2.3 2007 Census Test

A large-scale census test, covering 100,000 households, was carried out across England and Wales in May 2007. The questionnaire that was used for the test was 24 pages long and included four pages of individual questions per person for five respondents. This allowed the opportunity to test new and updated questions.

Please refer to the evaluation report for greater detail about the 2007 Census Test, found on the ONS website at <http://www.ons.gov.uk/census/2011-census/2011-census-project/2007-test/2007-test-questionnaire-evaluation.pdf>.

4.2.4 2008 Postal Test

In July 2008 two postal surveys were carried out, each with a sample of 10,200 households, one across England, and the other in Northampton. The main purpose was to test any impact on response rates of including a question on intended length of stay in the UK.

The test also allowed valuable analysis to be conducted on the performance of the questions developed for the 2009 Rehearsal.

4.2.5 March 2009 Postal Test

In March 2009, a postal test was conducted with the primary aim of assisting the development of questions relating to the student population. Around 20,000 questionnaires were sent to three separate sample areas. 10,000 were sent to a random sample of households in England, 5,000 were sent to the city of Durham and 5,000 were sent to an area of central Norwich. The latter two areas were chosen because they are known to have a high concentration of students, along with a number of other characteristics desirable for testing.

This postal test was designed to assess the effect of questionnaires being received during term time or outside of term time. It also incorporated some changes to the question order to collect second address information of all respondents, including students, before the student status filter question.

4.2.6 July 2009 Postal Test

In July 2009, a postal test was conducted with the primary aim of testing the questions relating to ethnicity and identity. 27,000 questionnaires were sent to areas selected for characteristics that were desirable for the purposes of the test.

5. Development of the questions

This section provides a detailed description of how each question evolved from the beginning of testing through to the finalisation of the question. It uses evidence gathered from all the strands of research described in the previous section.

5.1 Student status and term time address

The starting point for testing of these questions was the version that was used in the 2001 Census. Non-response for the student status question in the 2001 Census was low, at 1.4 per cent.

Figure 5.1 – 2001 Census

5 Are you a schoolchild or student in full-time education?

Yes ▶ Go to 6

No ▶ Go to 7

6 Do you live at the address shown on the front of this form during the school, college or university term?

◆ Only answer this question if you have answered 'Yes' to Question 5.

Yes, I live at this address during the school/college/university term

▶ Go to 7

No, I live elsewhere during the school/college/university term

▶ Go to 36

The 2001 Census questions were used throughout the pre-testing of the 2007 Census Test questionnaire. Throughout these waves of testing, respondents generally understood this question and followed the routing. This version of the question was also used in the Lambeth Postal Test, where it was found that there was a relatively high non-response rate (9.9 per cent) for the student status question. It appeared that people often assumed that the question did not apply to them.

Many respondents also left the term time address filter question blank. Of those who answered it, 0.7 per cent of students and 2.7 per cent of non-students incorrectly followed the directions about which question to go to next. This highlighted a risk for non-student respondents to be routed out of the questionnaire, by incorrectly answering or following the routing in the student status question.

In the Whole Questionnaire Testing for the 2007 Census Test, the same version of the question was used. The results showed that some respondents who felt that this question did not apply to them at all left it blank. Respondents who did this generally ignored the routing and read the next question which was not relevant to them. Also, the routing was not always followed correctly, and some non-student respondents went on to read the next question. Additionally, some respondents thought that this question was referring to their children rather than to themselves.

Some respondents did not notice the instruction to 'only answer this question if you have answered 'Yes' to Question 5' in the term time address question. However, respondents who noticed it found it helpful, in that it prevented them from answering question 6. Students tended to answer the question correctly.

As a result of this finding in cognitive testing, the question that was used for the 2007 Census Test placed the ‘only answer this question if...’ instruction before the question text, to help prevent routing errors and respondent confusion.

Figure 5.2 – 2007 Census Test

5 Are you a schoolchild or student in full-time education?

Yes → Go to **6**

No → Go to **7**

6 Only answer this question if you have answered ‘Yes’ to Question 5.
Do you live at the address shown on the front of this questionnaire during the school, college or university term?

Yes, I live at this address during the school/college/university term → Go to **7**

No, I live elsewhere during the school/college/university term → Go to **30**

Looking at the results of the 2007 Census Test, 10.4 per cent of respondents did not answer the student status question, which was a fairly high proportion. Many adults may have thought the question was not relevant to them and therefore passed over it. Indeed, further analysis of this non-response rate has shown that for those aged twenty-five or under (the age group most likely to be either a schoolchild or student), the non-response rate was much lower, at 4.7 per cent. As a result, further work was recommended to try and improve response rates for older adults.

In terms of understanding the routing directions correctly, only 0.8 per cent of people who answered ‘no’ to the student status question missed the routing instruction to skip the next question.

There was no evidence to suggest that the question on term time address was not performing well. However, there was a fairly high routing error rate, with 22.7 per cent of people who answered ‘no, I live elsewhere during school/college/university term’ missing the instruction to direct them to the end of the questionnaire and instead continuing on to answer the following question on country of birth.

While routing errors can be a useful indicator of how well respondents understand how to answer the questionnaire, they are not as important as question non-response rates. In cases such as this, the answers incorrectly provided as a result of routing errors can be omitted when processing the Census data.

The question was slightly updated in wave two of pre-testing for the 2009 Census Rehearsal, to create additional space on the page. The instruction to ‘only answer this question if you have answered ‘Yes’ to Question 5’ was removed.

Figure 5.3 – Testing for the 2009 Census Rehearsal, wave two

4 Are you a schoolchild or student in full-time education?

Yes → Go to **5**

No → Go to **6**

5 Do you live at the address shown on the front of this questionnaire during the school, college or university term?

Yes → Go to **6**

No → Go to **38**

This version of the question was generally well understood and respondents were able to provide accurate answers. Occasionally respondents missed the routing instructions and consequently routed out of the questionnaire without completing all of the necessary questions.

A new format for this question was then trialled whereby the two questions were merged into one.

Figure 5.4 – Testing for the 2009 Census Rehearsal, wave three

4 Are you a full-time student or schoolchild who usually lives at another address during term-time?

Yes → Go to **37**

No

During testing there was some confusion surrounding how to answer this question, and respondents did not always answer the question correctly. In some cases the respondent answered yes to the first part of the question, but no to the other, and then incorrectly ticked 'yes' and routed to the end of the questionnaire.

Some respondents admitted that they saw the reference to student or schoolchild and then "*didn't bother reading it*". This caused some respondents who lived at the same address during term time and holidays to answer the question incorrectly. These respondents again routed straight to the end of the questionnaire.

Those respondents with children away at university recognised that they would tick 'yes' on behalf of their children.

A Welsh language equivalent of the English wave three rehearsal question was developed and cognitively tested.

Figure 5.5 – Testing for the 2009 Census Rehearsal, Welsh language, wave one

4 Ai myfyriwr amser llawn neu blentyn ysgol sydd fel arfer yn byw mewn cyfeiriad arall yn ystod y tymor ydych?

Ie → Ewch i **37**

Some respondents commented that they did not like the emphatic phrasing of this question in Welsh, as they would prefer the question to follow the normal order of beginning with the verb rather than ending with it. However, this emphatic phrasing is grammatically correct and was particularly chosen for this question to ensure that the second part of the question clearly related to both full-time students and schoolchildren. Furthermore, these respondents' opinions did not prevent them from answering correctly.

As a result of both English and Welsh language testing, the question was split back into two parts for wave four of English language testing. The questions were similar to those used in wave two, but instead of asking 'are you a...' the question forced the respondents to read the whole question by asking 'which of these are you?'. Three simplified categories were used, giving schoolchildren and full-time students separate tick-boxes with a 'neither of these' alternative.

Figure 5.6 – Testing for the 2009 Census Rehearsal, wave four

The image shows a screenshot of a questionnaire with two questions, 4 and 5, presented in a light purple box. Question 4 is titled "Which of these are you?" and has three options: "A schoolchild", "A full-time student", and "Neither of these". An arrow points from "Neither of these" to a box labeled "Go to 6". Question 5 is titled "During term-time, do you live:" and has two options: "At the address on the front of this form" and "At another address". An arrow points from "At another address" to a box labeled "Go to 39".

Respondents had a good understanding of what these questions were asking and were able to answer accurately. Respondents were also able to follow the routing correctly.

Some participants who were postgraduate students were initially confused as they felt that 'a full-time student' was not an entirely accurate description of their situation. However, these respondents were able to answer the question correctly and ticked 'full-time student'.

This version of the question was also tested in wave five and no issues were reported. However, testing of this question in the 2008 Postal Test indicated a very high non-response rate to the student status question (17.9 per cent). It is likely that this was because they were not a schoolchild or student, and therefore felt the question didn't apply to them and left it blank. As was the case in the 2007 Census Test, further analysis of this non-response rate revealed that for those aged twenty-five or under (the age group most likely to be either a schoolchild or student), the non-response rate was lower at 5.3 per cent.

The rate of error routing for this question was also greater than in the 2007 Census Test. It went up from 0.8 per cent to 2.8 per cent of people. These people indicated they were not students, but missed the guidance to skip the term time address question and consequently answered it in error.

The non-response rate to the term time address question was high at 9.8 per cent and much higher than the 1.7 per cent recorded in the 2007 Census Test. This may have been related to the high non-response to the preceding student status question.

Of those who answered 'at another address', 18.6 per cent made a routing error by continuing to answer the following question, instead of being routed to the end of the questionnaire. This was a reduced error rate from the 22.7 per cent in the 2007 Census Test, but was still high enough to be of serious concern.

Looking at the pattern of non response over the quantitative tests, it appeared that moving to the new question design was having a negative impact on response rates. Therefore when the 2009 Census Rehearsal was finalised in October 2008, a decision was taken to revert to the original 2001 style student status question, with the new term time address question.

Figure 5.7 – 2009 Census Rehearsal

5 Are you a schoolchild or student in full-time education?

Yes

No ➔ **Go to 7**

6 During term-time, do you live:

at the address on the front of this questionnaire?

at another address? ➔ **Go to 43**

Figure 5.8 – 2009 Census Rehearsal questions, Welsh language

5 A ydych yn blentyn ysgol neu'n fyfyrwr mewn addysg amser llawn?

Ydw

Nac ydw ➔ **Ewch i 7**

6 Yn ystod y tymor a ydych yn byw:

yn y cyfeiriad ar flaen yr holiadur hwn?

mewn cyfeiriad arall? ➔ **Ewch i 43**

5.1.1 Changes to the question after the 2009 Census Rehearsal

Following the finalisation of the census rehearsal questionnaires, concerns were raised around the planned timing of the 2011 Census in relation to student term times at different universities and the impact this might have on the enumeration of students.

The 2009 Postal Test was designed to inform decisions regarding the collection of information on students in the 2011 Census. A decision to reorder some of the questions - to ask all students to complete the second address question - meant that changes needed to be made to both the student questions. The term time address question required an additional tick box response (to indicate that during term time they live at the address provided in the second address question). To make room for this new tick box, the student status question was double banked, so that the tick boxes were positioned side-by-side.

Figure 5.9 March 2009 Postal Test

7 Are you a schoolchild or student in full-time education?

Yes No ➔ Go to **9**

8 During term-time, do you live:

at the address on the front of this questionnaire?

at the address in question 5? ➔ Go to **43**

at another address ➔ Go to **43**

Table 5.10 shows the response frequencies for the question.

Table 5.10 – Response to student status question (all ages) – March 2009 Postal Test

Response	Durham (per cent)	Norwich (per cent)	England (per cent)
Student	17.2	18.5	15.2
Not student	80.4	79.2	83.0
Non-response/invalid	2.4	2.3	1.8

Non-response rates to the redesigned student status question were found to be low, at only 1.8 per cent for the sample spread across all of England and 2.3 or 2.4 per cent for those areas selected for having a higher proportion of students as residents.

One of the concerns with the new question was that respondents who answer ‘no’ may miss the routing and answer question eight in error, with the possibility that they are subsequently routed away from answering the remainder of the questionnaire. Only 2.7 per cent of those answering ‘no’ to the student question failed to follow the routing correctly. All but one of these answered ‘the address on the front of the questionnaire’ and therefore continued through the questionnaire. Therefore, only one individual was at risk of wrongly ending their completion of the questionnaire at question eight.

Overall, the 2009 Postal Test found evidence that the redesigned student status question worked well. Double banking the question did not cause significant problems with either non-response rates or respondents’ ability to follow the routing.

Response rates to the student term time address question were not quite so good, as shown in Table 5.10 below.

Table 5.11 Term time address responses for students

Response	Durham (per cent)	Norwich (per cent)	England (per cent)
Address on front	75.2	73.0	68.9
Address in question five	9.0	9.0	10.4
At another address	0.0	0.3	0.5
Non-response	15.8	17.7	20.1

The non-response rate in the 2008 Postal Test was significantly lower than in any of the areas of the 2009 Postal Test. It is possible that the new tick box, 'at the address in question five' caused the increase in non-response. However, it is still felt that the benefit of collecting the additional address information from students outweighs the slight loss in data quality through item non-response. It is also expected than in the 2011 Census, when taking part is compulsory, response rates to this question will increase.

These questions were also tested cognitively in wave seven of testing for the 2011 Census. Results of this wave showed that respondents answered these questions easily and accurately. Those who answered accurately included non-students, students, parents answering on behalf of a student and mature students.

These questions were tested during Whole Questionnaire Testing in English and in Welsh. In general, respondents answered the student status question correctly, and moved on to the next appropriate question. However, on a couple of occasions, respondents either left the question blank or incorrectly followed the routing. No issues arose for the term time address question.

5.1.2 Final recommended student status and term time address questions

The questions below are recommended for the 2011 Census subject to approval by Parliament through the legislative process.

Figure 5.12 Final questions for England and Wales (English language)

7 Are you a schoolchild or student in full-time education?
 Yes No ➔ Goto 9

8 During term time, do you live:
 at the address on the front of this questionnaire?
 at the address in question 5? ➔ Go to 43
 at another address? ➔ Go to 43

Figure 5.13 Final questions for Wales (Welsh language)

7 A ydych yn blentyn ysgol neu'n fyfyrwr mewn addysg amser llawn?
 Ydw Nac ydw ➔ Ewch i 9

8 Yn ystod y tymor a ydych yn byw:
 yn y cyfeiriad ar flaen yr holiadur hwn?
 yn y cyfeiriad yng nghwestiwn 5? ➔ Ewch i 43
 mewn cyfeiriad arall? ➔ Ewch i 43

6. Justification and impact of changes since the 2001 Census

This section provides justification for any changes to the questions since the 2001 Census and any impact this may have on the comparability of data.

The changes to the student status and term time address questions have been minor and should not have a major impact on the comparability of data. The 2011 Census student term time address question has an additional tick-box for a second address. The people using the new response category would otherwise have been in the 'another address' option that existed in the 2001 Census, so the count of people in this category will be reduced. However, the group using the new tick-box could be combined with the 'another address' category to replicate the groupings in the 2001 Census for purposes of comparability.