

Millennium Cohort Study

MCS5: A guide to the Linked Education Administrative Datasets

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User guide to the data (First Edition)

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Background

The Millennium Cohort Study (MCS) is the fourth of Britain's world-renowned national longitudinal birth cohort studies. Each follows a large sample of individuals, born over a specific period of time, through the course of their lives. They provide insight into trajectories/mobility over the life course (e.g. in weight, poverty, education) for the population as a whole, and also into how these movements vary across different sub-populations. They are also uniquely placed to allow for an understanding of the relationship between early life events and circumstances and outcomes later on in life.

The MCS provides detailed information on approximately 19,000 children born at the start of the new century and their families, across the United Kingdom. The cohort members were born, in England and Wales, over the 12 months period starting September 2000; in Scotland and Northern Ireland they were born over 13½ months from November 2000. The sample design allowed for disproportionate representation of families living in areas of child poverty, and in areas of England with high ethnic minority populations. Information was first collected from parents, through a home-based survey, when the cohort members were aged nine months. This first survey recorded, amongst other things, the circumstances of pregnancy and birth, as well as those of the early months of life, and the social and economic background of the children's families.

These multidisciplinary baseline data reveal the diversity of starting points from which the 'Children of the New Century' set out. Subsequent surveys have taken place at ages 3, 5, 7, 11 and 14 (ongoing at time of writing). These surveys coincide with important moments in children's lives, including the preschool period (age 3), and the start, middle and end of primary school (ages 5, 7, 11 respectively). From age 3 onwards, measured physical development and objective cognitive assessments have been carried out with children; surveys also include interviews with both parents (where co-resident), and, increasingly since age 7, with the cohort member. At age 7 (11), a postal survey of class teachers in all four countries took place.

Further details of the data available from the main survey are available from the CLS website and, in particular, the MCS Guide to the Datasets at www.cls.ioe.ac.uk/mcs.

¹The previous birth cohort studies, still ongoing, are the 1946 National Birth Cohort, the 1958 British Birth Cohort (also known as the National Child Development Study) and the 1970 British Cohort Study.

Consent to Education Data Linkage

During the fourth (age 7) sweep, the child's parent / carer was asked for consent to link the child's education records to their MCS survey data. Details of the consent form and the wording of the consent are reproduced in the MCS4 Technical Report, Appendices Section A16: consent form 3. Details of the response rates are available in the MCS4 Guide to the Education Linkage Dataset 2013.

Education Data Linkage

Education data have been successfully linked to the MCS. These are data collected from the Department for Education (DfE) in the form of the National Pupil Database (NPD). The NPD is an extremely rich dataset, containing data collected directly from schools, local authorities, and awarding bodies, alongside data from annual school censuses. Further information can be found at https://www.gov.uk/government/collections/national-pupil-database

Linking the NPD provides access to Key Stage 1 and 2 (KS1 and KS2), as well as Pupil Level Annual School Census (PLASC) data. KS1 and KS2 tests are undertaken in all state maintained schools in England, at ages 7 and 10 respectively. Further details can be found at https://www.gov.uk/national-curriculum/key-stage-1-and-2

The NPD KS1 data were previously linked to consented MCS participants using the Pupil Matching Reference (PMR). Further details of the data linkage methodology are contained in the MCS4 Guide to the Education Linkage Dataset 2013. Linked NPD data are available for a total of 7476 MCS participants from England. We note that this corresponds to a successful linkage rate of 88.5% amongst consenting participants.

We obtained permission from DfE to update the link to include KS2 data, for consented MCS participants.

Table 1: Participation, consent and linkage by sweep

	MCS1	MCS2	MCS3	MCS4	MCS5
Number of participants resident in England, of those resident at MCS4	8502	8294	8583	9000	7896
Number with valid consent, of those who consented at MCS4	7985	7810	8080	8448	7464
Number with linked KS2 data, of those who consented at MCS4	7085	6927	7167	7476	6651

Notes: Consent to education data linkage was sought at MCS4. The number in MCS4 equals those with valid consent and successful KS2 linkage. Numbers in columns MCS1, MCS2, MCS3, MCS5 are those who provided valid consent at MCS4, whose KS2 data were successfully linked, *and* who were present in both the MCS4 survey and the column-specific survey.

Table 1, column "MCS4" row 1, shows the distribution of individuals who were resident in England during sweep 4, forming the universe of individuals whose NPD data it is possible to link. Subsequent rows show the number at MCS4 with valid consent to education record linkage (row 2), and with linked KS2 data (row 3). The other columns show the corresponding numbers, from amongst the MCS4 universe, available at other MCS sweeps.

Data variables

Table 2 lists the variables obtained from linkage to the National Pupil Database (NPD) or PLASC.

Table 2: Data Variables (England)

Variable Name	Description	Source
MCSID	MCS Research ID	CLS
MCSFLAG	Consented to Record Linkage or not	CLS
CMNUM	Cohort Member Number	CLS
CMSEX	CM Sex	CLS
CMPRES1	Child present at MCS1	CLS
CMPRES2	Child present at MCS2	CLS
CMPRES3	Child present at MCS3	CLS
CMPRES4	Child present at MCS4	CLS
CMPRES5	Child present at MCS5	CLS
CONSENT_EDUC	Consent to Educational Linkage (MCS4)	CLS
KS2_LEAANON	Anonymised LEA	CLS
KS2_SCHOOLANON	Anonymised School	CLS
KS2_LAESTAB	Anonymised LEA+SCHOOL	CLS
KS2_ACADYR	KS2 Academic Year	NPD
KS2_MONTHOFBIRTH	Month of birth	NPD
KS2_YEARGRP	Year Group of Pupil	NPD
KS2_GENDER	The gender of the pupil	NPD
KS2_NFTYPE	Institution type (see section 2.5.2)	NPD
KS2_MMSCH	Maintained mainstream school (including academies, excluding special schools)	NPD

Variable Name	Description	Source
KS2_MMSCH2	Maintained mainstream school (excluding academies, excluding special schools)	NPD
KS2_MSCH	Maintained school (including academies, including special schools)	NPD
KS2_MSCH2	Maintained school (excluding academies, including special schools)	NPD
KS2_OPEN_AC	Converter Academy: open date	NPD
KS2_TOE_CODE	Type of establishment code (see section 2.5.2)	NPD
KS2_AMDPUPIL	Type of pupil amendment	NPD
KS2_ENDKS	Pupil is at end of KS2	NPD
KS2_EXAMYEAR_EN	English examination year	NPD
KS2_EXAMYEAR_MA	Maths examination year	NPD
KS2_SCHRES	Pupil included in School Results	NPD
KS2_LARES	Pupil included in LEA Results	NPD
KS2_NATRES	Pupil included in National Results	NPD
KS2_NATMTDRES	Pupil included in national (maintained) averages.	NPD
KS2_NPDDEN_LA	Pupil included in denominator for LA averages	NPD
KS2_NPDDEN_NAT	Pupil included in denominator for national averages	NPD
KS2_SCHRESTA	Pupil included in school results for TA calculations	NPD
KS2_LARESTA	Pupil included in LA results for TAs	NPD
KS2_NATRESTA	Pupil included in National results (all) for TAs	NPD
KS2_NATMTDRESTA	Pupil included in National results (MAINTAINED) for TAs	NPD
KS2_ELIGREAD	Pupil included in eligible pupil number for reading	NPD
KS2_ELIGREADTA	Pupil included in eligible pupil number for reading TA	NPD
KS2_ELIGWRIT	Pupil included in eligible pupil number for writing	NPD
KS2_ELIGWRITTA	Pupil included in eligible pupil number for writing TA	NPD

Variable Name	Description	Source
KS2_ELIGENG	Pupil included in eligible pupil number for English	NPD
KS2_ELIGENGTA	Pupil included in the eligible pupil number for English TA	NPD
KS2_ELIGMAT	Pupil included in the eligible pupil number for Maths	NPD
KS2_ELIGMATTA	Pupil included in the eligible pupil number for Maths TA	NPD
KS2_ELIGENGLA	Pupil achieved eligible result in English for LA calcs	NPD
KS2_ELIGREADLA	Pupil achieved eligible result in Reading for LA calcs	NPD
KS2_ELIGWRITLA	Pupil achieved eligible result in Writing for LA calcs	NPD
KS2_ELIGMATLA	Pupil achieved eligible result in Maths for LA calcs	NPD
KS2_ELIGSCITA	Pupil included in the eligible pupil number for Science TA	NPD
KS2_VALENG	Pupil included in eligible pupil number for English (no missing)	NPD
KS2_VALENGTA	Pupil included in the eligible pupil number for English TA	NPD
KS2_VALREAD	Pupil included in the eligible pupil number for reading	NPD
KS2_VALREADTA	Pupil included in the eligible pupil number for reading TA	NPD
KS2_VALWRIT	Pupil included in the eligible pupil number for writing	NPD
KS2_VALWRITTA	Pupil included in the eligible pupil number for writing TA	NPD
KS2_VALMAT	Pupil included in eligible pupil number for maths (no missing)	NPD
KS2_VALMATTA	Pupil included in the eligible pupil number for Maths TA	NPD
KS2_VALSCITA	Pupil included in the eligible pupil number for Science TA	NPD
KS2_READLEVTA	Pupil included in the eligible pupil number for Reading Level TA	NPD
KS2_WRITLEVTA	Pupil included in the eligible pupil number for Writing Level TA	NPD
KS2_ENGTIER	English paper sat by pupil	NPD
KS2_ENGREADMRK	Marks achieved in English reading tests	NPD
KS2_ENGWRITMRK	Marks achieved in English writing test	NPD

Variable Name	Description	Source
KS2_ENGTOTMRK	Total marks achieved in English test	NPD
KS2_ENGREADLEV	Nat Curric level awarded for English reading test	NPD
KS2_ENGWRITLEV	Nat Curric level awarded for English writing test	NPD
KS2_ENGLEV	Nat Curric level awarded for English test	NPD
KS2_ENGLEVTA	National Curriculum level awarded for English Teacher Assessment.	NPD
KS2_ENGPOINTS	English attainment point score	NPD
KS2_ENGFINE	Finely graded level of English test	NPD
KS2_MATTIER	Maths paper sat by pupil	NPD
KS2_MATTESTAMRK	Marks achieved in test A of the maths test	NPD
KS2_MATTESTBMRK	Marks achieved in test B of the maths test	NPD
KS2_MATARTHMRK	Marks achieved in mental arithmetic test of maths test	NPD
KS2_MATTOTMRK	Total marks achieved in maths test (sum of A, B and mental arithmetic)	NPD
KS2_MATLEV	Nat Curric level awarded for maths test	NPD
KS2_MATLEVTA	National Curriculum level awarded for Maths Teacher Assessment.	NPD
KS2_MATPOINTS	Maths attainment point score	NPD
KS2_MATFINE	Finely graded level of maths test	NPD
KS2_SCILEVTA	National Curriculum level awarded for Science Teacher Assessment.	NPD
KS2_LEVLENG	Achieved level 2 or below in KS2 English	NPD
KS2_LEVLMAT	Achieved level 2 or below in KS2 maths	NPD
KS2_LEVLEMSTA	Achieved level 2 or below in KS2 English, maths and science TA	NPD
KS2_LEVXREAD	Achieved Level 4 or above (expected level) in KS2 English reading.	NPD
KS2_LEVXREADTA	Achieved Level 4 or above (expected level) in KS2 English reading TA	NPD
KS2_LEVXWRIT	Achieved Level 4 or above (expected level) in KS2 English writing.	NPD

Variable Name	Description	Source
KS2_LEVXWRITTA	Achieved Level 4 or above (expected level) in KS2 English writing TA	NPD
KS2_LEVXENG	Achieved level 4 or above in KS2 English	NPD
KS2_LEVXENGTA	Achieved Level 4 or above (expected level) in KS2 English TA.	NPD
KS2_LEVXMAT	Achieved level 4 or above in KS2 maths	NPD
KS2_LEVXMATTA	Achieved Level 4 or above (expected level) in KS2 Maths TA.	NPD
KS2_LEVXSCITA	Achieved Level 4 or above (expected level) in KS2 Science TA.	NPD
KS2_LEVXENGMAT	Achieved level 4 or below in KS2 English and maths	NPD
KS2_LEVXEMSTA	Achieved level 4 or above in KS2 English, maths and science TA	NPD
KS2_LEVAXREAD	Achieved Level 5 or above (expected level) in KS2 English reading.	NPD
KS2_LEVAXREADTA	Achieved Level 5 or above (expected level) in KS2 English reading TA	NPD
KS2_LEVAXWRIT	Achieved Level 5 or above (expected level) in KS2 English writing.	NPD
KS2_LEVAXWRITTA	Achieved Level 5 or above (expected level) in KS2 English writing TA	NPD
KS2_LEVAXENG	Achieved level 5 or above in KS2 English	NPD
KS2_LEVAXENGTA	Achieved Level 5 (above expected level) in KS2 English TA.	NPD
KS2_LEVAXMAT	Achieved level 5 or above in KS2 Maths	NPD
KS2_LEVAXMATTA	Achieved Level 5 (above expected level) in KS2 Maths TA.	NPD
KS2_LEVAXENGMAT	Achieved level 5 or below in KS2 English and maths	NPD
KS2_LEVAXSCITA	Achieved Level 5 (above expected level) in KS2 Science TA.	NPD
KS2_LEVAXEMSTA	Achieved level 5 or above in KS2 English, maths and science TA	NPD
KS2_LEVBXREAD	Achieved Level 3 or below in KS2 Reading	NPD
KS2_LEVBXREADTA	Achieved Level 3 or below in KS2 Reading TA.	NPD
KS2_LEVBXWRIT	Achieved Level 3 or below in KS2 Writing	NPD
KS2_LEVBXWRITTA	Achieved Level 3 or below in KS2 Writing TA.	NPD

Variable Name	Description	Source
KS2_LEVBXENG	Achieved Level 3 or below in KS2 English.	NPD
KS2_LEVBXENGTA	Achieved Level 3 or below in KS2 English TA.	NPD
KS2_LEVBXMAT	Achieved Level 3 or below in KS2 Maths.	NPD
KS2_LEVBXENGMAT	Achieved Level 3 or below in KS2 Maths TA.	NPD
KS2_LEVBXMATTA	Achieved Level 3 or below in KS2 Maths TA.	NPD
KS2_LEVBXSCITA	Achieved Level 3 or below in KS2 Science TA.	NPD
KS2_LEVBXEMSTA	Achieved Level 3 or below in KS2 English, Maths and Science TA.	NPD
KS2_LEV6READMAT	Achieved Level 6 in KS2 Reading or KS2 Maths	NPD
KS2_LEVADREADTA	Absent or Disapplied in Reading TA	NPD
KS2_LEVADWRITTA	Absent or Disapplied in Writing TA	NPD
KS2_LEVADENGTA	Absent or Disapplied in English TA.	NPD
KS2_LEVADMATTA	Absent or Disapplied in Maths TA.	NPD
KS2_LEVADSCITA	Absent or Disapplied in Science TA.	NPD
KS2_LEVATENG	Absent of unable to access the test in English	NPD
KS2_LEVATMAT	Absent of unable to access the test in Maths	NPD
KS2_TOTPTS	Total KS2 point score as used in the value added calculations	NPD
KS2_APSDENS	Number of subjects pupil contributes to the average at the school level	NPD
KS2_APSDENN	Number of subjects pupil contributes to the average at the national level	NPD
KS2_APSDENNMTS	Number of subjects in which the pupil contributes to the APS	NPD
KS2_ENGLEVKS1	KS1 English level for progress measure	NPD
KS2_ENGLEVKS2	KS2 English level for progress measure	NPD
KS2_MATHLEVKS1	KS1 maths level for progress measure	NPD
KS2_MATHLEVKS2	KS2 maths level for progress measure (including TA)	NPD

Variable Name	Description	Source
KS2_PROGENG12	Number of levels of progress in English between KS1 and KS2	NPD
KS2_PROGMATH12	Number of levels of progress in maths between KS1 and KS2	NPD
KS2_PROGENG12FLAG	Pupil flag for making 2 levels of progress in English between KS1 and KS2	NPD
KS2_PROGMAT12FLAG	Pupil flag for making 2 levels of progress in maths between KS1 and KS2	NPD
KS2_INKS12VA	Pupil included in value added (VA) model.	NPD
KS2_KS1APS	KS1 prior attainment average point score (APS) (not finely graded)	NPD
KS2_KS2APSFG	KS2 current attainment average point score (using fine grading)	NPD
KS2_KS1READPS	KS1 prior attainment Reading point score	NPD
KS2_KS1WRITPS	KS1 prior attainment Writing point score	NPD
KS2_KS1MATPS	KS1 prior attainment Maths point score	NPD
KS2_KS1EXP	KS1 Expected Levels	NPD
KS2_EALGRP	English as additional language	NPD
KS2_KS1APS2	KS1 APS squared.	NPD
KS2_KS1APS3	KS1 APS cubed.	NPD
KS2_KS2ENGFG	KS2 English point score (using fine grading)	NPD
KS2_KS2MATFG	KS2 maths point score (using fine grading)	NPD
KS2_VAAPSSCORE	English + Maths VA score (Actual-predicted)	NPD
KS2_VAENGSCORE	English VA score (Actual-predicted)	NPD
KS2_VAMATSCORE	Maths VA score (Actual-predicted)	NPD
KS2_VAAPSPRED1	Predicted score without deviation (English and Maths)	NPD
KS2_VAAPSPRED	Predicted score with ceiling (English and Maths)	NPD
KS2_VAENGPRED1	Predicted score without deviation (English)	NPD
KS2_VAENGPRED	Predicted score with ceiling (English)	NPD

Variable Name	Description	Source
KS2_VAMATPRED1	Predicted score without deviation (maths)	NPD
KS2_VAMATPRED	Predicted score with ceiling (maths)	NPD
KS2_PE_DEV	Prior attainment KS1 reading point score deviation	NPD
KS2_PM_DEV	Prior attainment KS1 maths point score deviation	NPD
KS2_PSENG	English P-scale	NPD
KS2_PSREAD	Reading P-scale	NPD
KS2_PSWRITE	Writing P-scale	NPD
KS2_PSSPEAK	Speaking P-scale	NPD
KS2_PSLISTEN	Listening P-scale	NPD
KS2_PSMATHS	Mathematics P-scale	NPD
KS2_PSNUM	Number P-scale	NPD
KS2_PSUSING	Using and Applying P-scale	NPD
KS2_PSSHAPE	Shape, Space and Measures P-scale	NPD
KS2_PSSCIENCE	Science P-scale	NPD
KS2_EAL_PAPS	Is English not first language x Prior APS	NPD
KS2_EAL_PAPSSQ	Is English not first language x Prior APS squared	NPD
KS2_MOB1	Pupil joined school in the latest academic year (year 6)	NPD
KS2_MOB2	Pupil joined school in the latest academic year (year 5)	NPD
KS2_MOB3	Pupil joined school in the latest academic year (year 3 or 4)	NPD
KS2_NEWMOBILE	Did pupil joining the school after 12 September 2010 (in year5)	NPD
KS2_REFTEST	Pupil KS2 results withheld by school?	NPD
KS2_REFTA	Pupil TA results withheld by school?	NPD
RECORDSTATUS_SPR12	Record Status	PLASC

Variable Name	Description	Source
ACADEMICYEAR_SPR12	Academic Year	PLASC
CENSUSDATE_SPR12	Census Date	PLASC
CENSUSTERM_SPR12	Census Term	PLASC
ONROLL_SPR12	On roll	PLASC
ETHNICGROUPMAJOR_SP R12	Pupil's minor ethnic group based on extended ethnicity code	PLASC
FSMELIGIBLE_SPR12	Eligible for FSM	PLASC
CONNEXIONS_SPR12	Do parents consent to pupil data being shared with Connexions?	PLASC
LANGUAGEGROUPMAJOR _SPR12	Pupil's major language group based on language code.	PLASC
FUNDEDHOURS_SPR12	Funded hours	PLASC
HOURSATSETTING_SPR12	Hours at setting	PLASC
ENROLSTATUS_SPR12	Enrolment status	PLASC
TYPEOFCLASS_SPR12	Type of class	PLASC
NCYEARACTUAL_SPR12	The year group in which the pupil is taught for the majority of their time	PLASC
SENPROVISION_SPR12	Provision types under the SEN Code of Practice.	PLASC
SENPROVISIONMAJOR_SP R12	Pupil's major SEN provision group based on SEN provision code	PLASC
SPR12_2012_IDACI	IDACI 2010 (Decile)	CLS

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