PLUG Conference

Tuesday 17 June 2014
Room 4.10, 4th Floor, Graduate School of Education, University of Bristol
35 Berkeley Square, Clifton, Bristol, BS8 1JA
http://www.bristol.ac.uk/cmpo/plug/

10:00 - 10.15	**Registration**	
10:15 - 10:50	Richard Lumley (DfE)	NPD update
10:50 - 11:25	David Robinson (DfE)	Using the NPD to reform the secondary accountability system
11:25 - 11:45	**Break**	
11:45 - 12:20	Amanda Spielman (Ofqual & ARK)	School use of data
12:20 - 12:55	Mike Treadaway and Dave Thomson (FFT)	Using longitudinal school census data
12:55 - 13:30	Ellen Greaves (IFS)	The construction and value of a school database
13:30 - 14:15	**Lunch**	
14:15 - 14:50	Andy Wiggins and Helen Wareham (Durham)	Linking 11+ assessments with NPD – some methodological issues
14:50 - 15:25	Jack Worth (NFER)	Interim findings from the second year of the phonics screening check evaluation, being carried out by NFER for DfE
15:25 - 16:00	Steve Strand (Oxford)	Exclusion from English secondary schools - a cohort analysis
16:00 - 16:20	**Break**	
16:20 - 16:55	Will Cook (MMU)	Modelling peer effects on school attendance using the pupil absence module of the National Pupil Database
16:55 - 17:30	Claire Crawford (Warwick)	What drives HE participation and outcomes?
17:30	**Finish**	

Department for Education

NPD Update
Richard Lumley
National Pupil Database & Transparency Team, Education Data Division, Department for Education

A general update on the NPD team and data. This will cover; the tiered data system; the simplified application process; the new linked data request system; new data items available.

Using the NPD to reform the secondary accountability system
David Robinson
Department for Education

The Department for Education recently announced reforms to the secondary accountability system. This presentation will look at how the NPD played a hugely important part in the development of these reforms. As well as covering the analysis itself the presentation will also cover the process by which this information influenced decisions. It will cover how we: (1) provided almost daily analysis for ministers to inform their decisions; (2) created a simple tool to quickly model the range of options for the accountability measures; (3) worked with Bristol University to improve the Value Added methodology. It will also include new NPD analysis on the new headline accountability measure, Progress 8.

School use of data
Amanda Spielman, Chair, Ofqual and Education Adviser, ARK

How data is used at different levels: teacher, department head, school, chain; and what consequences follows from these uses, desirable and less so.

Using longitudinal school census data
Mike Treadaway and Dave Thomson
Fischer Family Trust

FFT has maintained the central pupil table that links pupil records together from source datasets (e.g. School Census, ILR, HESA) within the National Pupil Database (NPD) since its inception in 2002. Full histories of pupil registrations in state-funded schools in England can now be observed and this presents any number of analytical opportunities. In this session we will present two examples: (1) Measuring in-year admissions (pupil mobility); (2) Longitudinal effect of free school meal eligibility on attainment.

On behalf of RSA, we attempted to measure the number of pupils changing schools at non-standard times (in-year admissions) using longitudinal School Census data. This involved resolving changes in school identifiers over time and defining rules to distinguish non-standard school moves. We found that non-standard moves account for around 20% of all admissions within an academic year, with higher rates in London, parts of the South East, some large urban areas and some coastal authorities. We also propose a typology of non-standard moves.

Secondly, we have examined variation in pupil attainment at Key Stage 4 in relation to the length of time pupils have been eligible for free school meals. This was in response to a widespread tendency to consider pupils eligible for the Pupil Premium (PP) as a homogenous group. However, our research shows substantial variation in attainment and progress. Moreover, the attainment of progress of year 11 pupils not eligible for the pupil premium but who had been eligible for free school meals at primary school (in

years 1 to 5) is closer to the pupil premium group than to the group of pupils who have never been eligible for free school meals.

The construction and value of a school database

Ellen Greaves
Institute for Fiscal Studies

Research projects concerned with pupil attainment typically require information about the attributes of schools (such as current and lagged academic attainment). This can be complicated by changes in school identifiers (the unique reference number – URN or Local Authority and Establishment number - LAESTAB) over time that restrict the creation of school-level variables; schools that convert to academy status or change religious status will be assigned new URNs, for example.

We create a database of schools that links schools across changes in URN, for use by the academic and wider community. Indicators for school mergers, separations, changes in status, and changes in site are recorded. A practical example is given to illustrate the benefit of the database: we show how the database can be linked to the Millennium Cohort Study to record changes in school versus changes in school organisation.

Linking 11+ assessments with NPD – some methodological issues.

Helen Wareham, John Little and Andy Wiggins
Centre for Evaluation and Monitoring (CEM), Durham University

Background; CEM, supported by the Grammar Schools Heads Association and the DfE, have been commissioned by the Sutton Trust and the King Edwards Foundation to further explore and test interventions to help improve access to Grammar schools by children from more disadvantaged homes. This research will build on the findings from the Poor Grammar Report (Cribb et. al., 2013) for the Sutton Trust which highlighted the inequalities in access to grammar schools. CEM provides a wide range of educational assessments, including the 11+ tests for about half of the grammar schools in England.

Research plan; As part of this research pupil level data from the NPD will be matched and linked with corresponding 11+ test data from CEM, and 'offers and destination' data from the participating grammar schools and relevant LAs. UPNs are not routinely collected for those taking the 11+ tests, therefore linking CEM data and NPD data can be quite complex process, although to date we have achieved about a 90% match rate. We will outline the data matching process we have used, and discuss some of the issues we have encountered. For example, in further investigation of unmatched pupils we discovered issues of private school and home educated pupils with no NPD history, and the possibility of 'ringers' who may be practicing or finding out about the test. We will also briefly discuss some of the planned analyses and interventions.

Interim findings from the second year of the phonics screening check evaluation, being carried out by NFER for DfE

Jack Worth
National Foundation of Educational Research

Systematic synthetic phonics is a central element in policy guidance on early literacy teaching. Since the 2010 Schools White Paper, there has been a commitment to ensure that the teaching of phonics is firmly

established in the first years of school. The phonics screening check is a statutory, light-touch assessment, the specified purpose of which is to confirm whether individual pupils have learnt phonic decoding to an expected standard. From June 2012, the check has been administered annually to all Year 1 pupils in maintained schools, academies and Free Schools, and, from June 2013, to all Year 2 pupils that did not meet the expected standard in Year 1.

NFER has been commissioned by the Department for Education to evaluate the phonics screening check, with a focus on the impact of the check on teaching and learning and exploring whether the issues raised in the pilot evaluation have been addressed. The evaluation draws on evidence from surveys and case-studies, as well as quantitative analysis of data from the National Pupil Database.
I propose to present the main findings from the second year of the three-year evaluation. The focus will be the analysis of combined survey and NPD data, which used latent class analysis to identify groups of schools with different approaches and attitudes towards phonics and the screening check, and a multilevel model to compare the attainment progress made by pupils through Key Stage 1 in those different types of school.

Exclusion from English secondary schools - a cohort analysis

John Fletcher and Steve Strand
Department of Education, University of Oxford

Exclusion from school is widely used as a disciplinary tool, but there has long been concern that it is applied disproportionately to certain groups of students. We report the first longitudinal analysis of exclusion in England using the NPD to follow 500,000 young people from Y7 through to Y11 (in 2011). We find that probability of exclusion is strongly related to gender, family poverty (FSM), English test score at age 11, early levels of attendance in Y7, ethnicity and neighbourhood deprivation. Black Caribbean and Mixed White & Black Caribbean students are significantly over-represented even after control for all covariates. The school (20%) and LA (6%) levels together accounted for over a quarter of the variation in rates of exclusion and very little of that was explained by our (limited) measures of school characteristics. The study highlights the need to better understand school and LA level practices that might be effective in terms of behaviour management.

Modelling peer effects on school attendance using the pupil absence module of the National Pupil Database

Will Cook
Manchester Metropolitan University

This study considers whether pupils who have been identified as having behaviour problems affect their classmates' school attendance in primary schools in England. My hypothesis is that such peers decrease the school attendance rates of their classmates. I use the pupil absence module of the National Pupil Database – a dataset that has been little used in research. I focus on a single cohort of pupils who completed the primary phase in 2010 as they progress through the final three years (years 4 to 6) of their primary schooling, whose school attendance, personal characteristics and peer groups are observed every term (i.e. three times a year).

I exploit the panel structure of the data by basing my empirical strategy upon pupil fixed effects models that remove all time invariant heterogeneity between pupils that may be correlated with the level of peers with behaviour problems in a classroom. I find evidence that suggests that peers with behaviour problems appear to induce a moderately sized increase in the absence rate of pupils who are eligible for

free school meals; no effect is found on the absence rate of those pupils who are not eligible for free school meals – a finding that concurs with similar studies in the USA.

What drives HE participation and outcomes?

Claire Crawford
University of Warwick

There are sizeable returns to going to university, which vary by institution, subject and degree class. Yet there remain very large differences in the proportion of young people from different backgrounds who go to university, and how well they do once they are there. This paper uses linked administrative data that enables us to follow pupils attending schools in England through to HE participation at any UK university to document and explore what drives differences in HE participation and degree outcomes.