

The effects of the academisation of English schools on educational trajectories of children with Special Educational Needs

Presentation at NPD User Group 2018, Bristol

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19 September 2018

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Academisation and educational inclusiveness in England

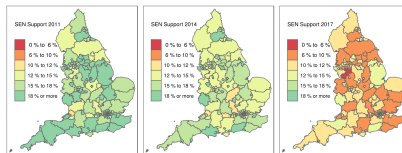
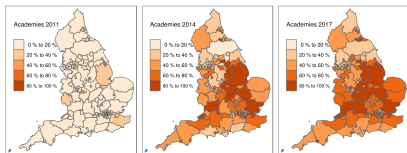
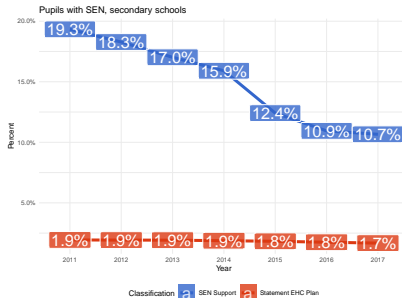
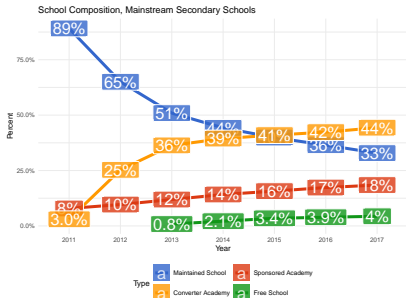
- Over the last 30 years there have been two key policy initiatives in schooling in England:
 - Academisation of schools with higher level of autonomy;
 - Provision for more pupils with special educational needs (SEN) in ordinary / mainstream schools rather than in special schools.
- Existing maintained schools
 - are encouraged to convert to Academies and be self-governing (academisation to Converter Academies),
 - or are required to convert under a sponsor due to poor performance (academisation to Sponsored Academies).
- Anecdotal evidence of Academies being more unwilling to offer places to pupils with significant SENs (IPPR, 2014).

Previous studies

- Charter schooling and effects on academic performance (Abdulkadiroğlu, Angrist, Dynarski, Kane and Pathak, 2011; Abdulkadiroğlu, Angrist, Hull and Pathak, 2016; Fryer Jr, 2014). effects of academisation on educational performance for primary and secondary pupils (Eyles and Machin, 2015; Eyles, Machin and McNally, 2017).
- Effects of sponsored academisation on inclusion of SEN pupils in the 2000s (Wilson, 2011). Effects of attending charter schools on the special education classifications (Winters, Carpenter and Clayton, 2017).
- Special educational needs (Norwich, 2014; Norwich and Black, 2015), and the past and current trends of academisation and educational inclusiveness, and their implications (Black, Bessudnov, Liu and Norwich, 2018).

2017 NPD User Group presentation

We need to analyse the effect of academisation on SEN at pupil level.



Source: Black et al. (2018)

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Academisation and Special Educational Needs

Academisation of schools:

- Converter Academisation (CA): initially from high attaining predecessors.
- Sponsored Academisation (SA): sponsors keen to raise academic standards.

Special educational needs (SEN):

- SEN Support (SENS): administered by schools. School Action and School Action Plus prior to 2014.
- Statements, Education, Health and Care Plans (EHC): administered by Local Authorities.

Type	Year	Schools	Pupils	% NoSEN	% SENS	% EHC
Maintained School	2004	4,578	2,995,558	81	14	4
	2010	3,955	2,697,908	75	21	4
	2015	1,951	1,072,452	81	13	6
Converter Academy	2012	841	771,910	81	17	2
	2015	1,476	1,224,385	85	12	2
Sponsored Academy	2004	12	9,459	67	29	3
	2010	201	162,452	69	29	2
	2015	556	403,368	81	17	2

The primary data in our research needs to be accessed from Administrative Data Research Centre Wales:

- Physical access in two secure rooms in:
 - Wales Institute of Social & Economic Research, Data & Methods (WISERD), Cardiff University.
 - Medical School, Swansea University.
- Data hosted by Secure Anonymised Information Linkage (SAIL) databank, Swansea University.
- The "work station" is a virtual machine of standard Windows desktop transmitted from the HPC at Swansea.
- Commonly used statistical packages and databases are provided. R can access packages from an online CRAN mirror.
- Output is released after reviews.

NPD datasets:

- Pupil Level School Annual Census: pupils' SEN status and socio-economic variables. SEN status harmonised to No SEN (NoSEN), SEN Support (SENS), Statement EHC Plan (EHC).
- NPD Key Stage 2. An averaged score from standardised numeric scores of KS2 Reading and KS2 Maths .

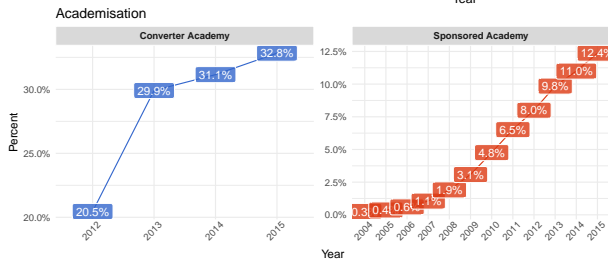
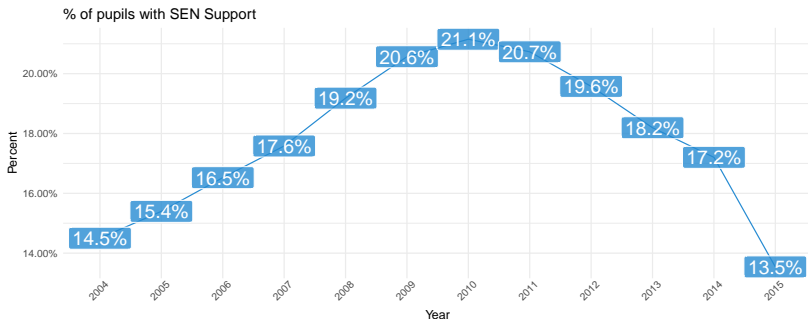
External datasets:

- Open Academies: linkage of Predecessors to Academies. Cases of “one-to-one” and “many-to-one”.
- Edubase: consistent classification of school types.

Sample:

- Our sample is a pupil level longitudinal sample from the 2002/2003 academic year to 2014/2015 academic year.
- Include schools that are known to academise between September 2002 to February 2018 (DfE, 2018).

Effect on SEN inclusion

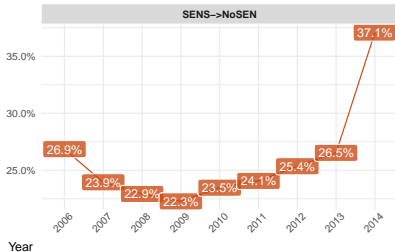
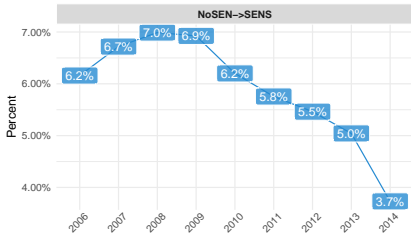


TypeAcademy ■ Converter Academy ■ Sponsored Academy

To what extent can we attribute the declines in SEN inclusion to academisation of schools?

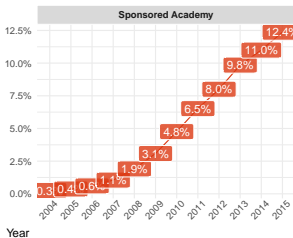
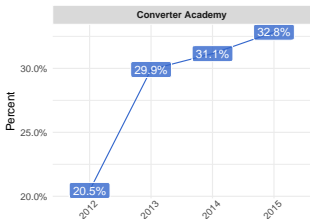
Effect on SEN (re)classification

Reclassification at secondary enrollment



Recls ■ NoSEN→SENS ■ SENS→NoSEN

Academisation



TypeAcademy ■ Converter Academy ■ Sponsored Academy

To what extent can we attribute the declines in SEN (re)classification to academisation of schools?

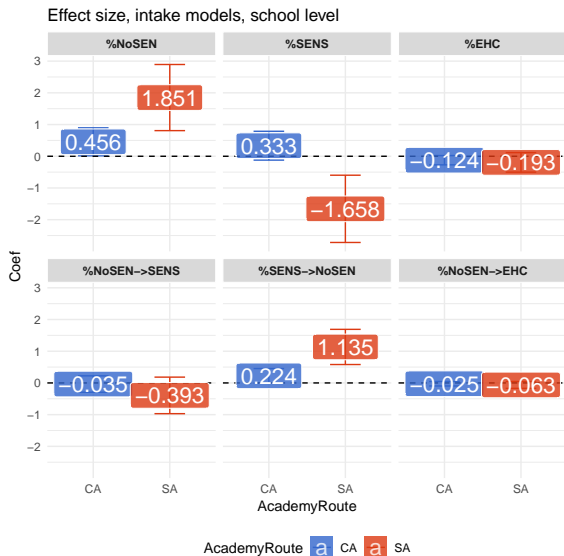
Estimation strategy

- The average treatment effect of academisation on the outcome: the difference in the means of the outcome measure, between
 - schools (and their pupils) that have converted to Academies,
 - and schools (and their pupils) that are yet to convert to Academies.
- Estimate with panel fixed effects models controlling for schools and academic years.
- Controls for socio-economic background in gender, eligibility for free school meals, White British, English as first language.

The academisation effects on pupils with SEN, at the Year 7 enrollment stage:

1. Inclusion: School's inclusion of pupils with SEN at Year 7.
2. Reclassification: Pupil's probability of being reclassified at enrollment at Year 7, e.g. **SENS -> NoSEN**, and the school level reclassification.

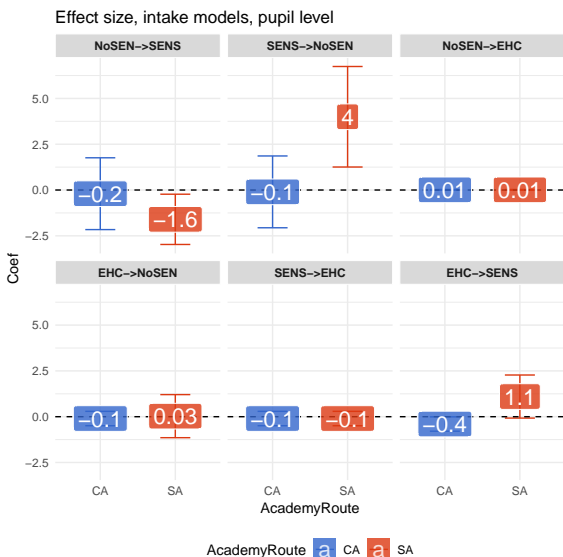
Intake: school level measures



- Sponsored Academisation leads to taking in fewer pupils with SEN Support.
- Sponsored Academisation leads to more pupils with SEN Support being reclassified to No SEN.

95% confidence intervals from heteroskedasticity-consistent SE estimators

Intake: pupil level measures



95% confidence intervals from heteroskedasticity-consistent SE estimators

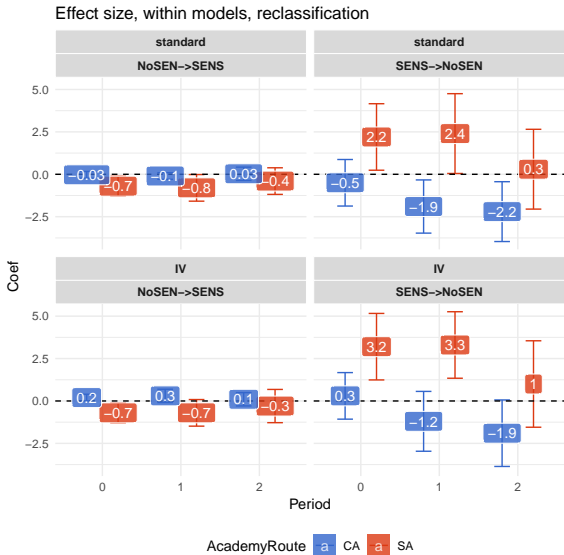
- Effects scaled to percentage point changes in linear probabilities.
- Primary graduates with SEN Support who are enrolled in Sponsored Academies are more likely to lose their SEN status.

Methodology: “within” model sets

The academisation effects on pupils with SEN, within the secondary phase (Year 7 to Year 11), adding pupils' year group to controls.

1. Pupil's probability of being reclassified through the secondary phase.
 - Standard fixed effect specification.
 - Estimate “compliers' effect” with the “intention-to-treat” (Fryer Jr, 2014; Abdulkadiroğlu et al., 2016; Eyles and Machin, 2015; Eyles et al., 2017) as an instrumental variable.
2. Pupil's probability of switching schools through the secondary phase.

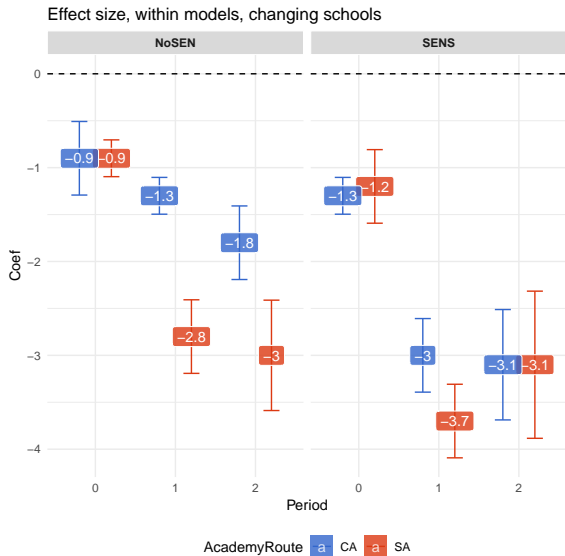
Within: reclassification measures



- Pupils with SEN Support in recently academised Sponsored Academies are more likely to lose their SEN status.

95% confidence intervals from heteroskedasticity-consistent SE estimators

Within: switching schools



- Pupils are more likely to stay in the academised schools, regardless of SEN types.

95% confidence intervals from heteroskedasticity-consistent SE estimators

We study the effect of academisation of English schools on the inclusion of pupils with Special Educational Needs, from pupil level data in the NPD.

Consistent with our earlier findings, Sponsored Academisation leads to fewer pupils classified with SEN Support, and more pupils being classified unfavourably. We do not find evidence from Converter Academisation.

Our study opens many research questions to follow: e.g. underlying mechanisms in academisation, non-admission of pupils with SEN, and trajectories of pupils with SEN in schools.

The effects of the academisation of English schools on educational trajectories of children with Special Educational Needs

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-  [sen-england.github.io](https://github.com/sen-england)
-  sen-england.shinyapps.io/sen-england-shiny

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