

Inequality in access to education, and inequality in access to information about allocation of school places

Duke-Williams O, Shepherd E, Eveleigh A

¹Department of Information Studies, UCL

January 9, 2015

Summary

The process of allocation of school places generates administrative data that can be used to explore ideas about access to education, and to allow parents / guardians to make a more informed choice when applying for school places for children. A case study explores changing patterns of pseudo catchment areas in the London Borough of Waltham Forest, and illustrates difficulties of assembling some of the relevant data. Similar analysis is carried out for other local authorities, and it is shown that the amount of data available and the ease with which it can be retrieved varies considerably between authorities.

KEYWORDS: school allocation, administrative data, active commuting, spatial literacy

1. Introduction

The paper explores patterns of equality in access to education (as evidenced by allocation of school places) at two levels. Firstly, some patterns of school allocations and pseudo 'catchment areas' for both primary and secondary schools are explored at a local level for a case study area. This can be discussed in the light of ideas about spatial literacy, and the degree to which visualised (mapped) indicators may be preferable to solely tabular data. Secondly, at a more general level, different areas within England are compared in terms of the amount of information that is made available to parents / guardians of pupils on whose behalf applications for school places are made. Differences exist between local authorities / local educational authorities in terms of the rules used to allocate school places, most pertinently in the case of addressing over-subscription for some schools. On that basis, families in different areas are likely to have different information requirements in order to make an informed decision about the likelihood of a successful application for any particular school. However, it is shown that even where information requirements are broadly similar, the availability of information is variable between authorities.

School place allocation is an administrative operation carried out by local authorities that sets out to achieve a particular requirement, but in turn generates sets of administrative data that can inform research into access to education.

2. Data sets

Two groups of data are used: firstly, national (England) level schools performance data are used as a possible proxy for school preference, and secondly, sets of data published by local authorities are used to illustrate results of school applications.

Whilst the use of performance table data as a measure of school quality may be the subject of critique (Goldstein et al, 1996), that is not the focus of this paper. School place allocation is a politically contested area, and one for which a number of alternate optimisations might be suggested; for example: maximising application success (most applicants getting a preferred choice), minimising aggregate distance, with a view to reducing vehicle usage, or allocating so as to maximise actual or potential for active commuting. Patterns of allocation have, for example, been considered in terms of

social segregation (Taylor and Gorard, 2001) and active commuting (Cooper et al 2005).

3. Case study area

Historical results are shown for a local authority with which the corresponding author is familiar. The London Borough of Waltham Forest has a relatively standard set of rules applied in order to allocate school places: preference is typically given to pupils with special educational needs, then to siblings of current pupils, and remaining places are then allocated on the basis of the distance between home and school, with preference given to those living nearer to the school. Where a school is over-subscribed, then the furthest relevant distance under which a pupil application was accepted is subsequently published.

Whilst these distance cut-offs are presented as tabular data in published reports, it is also possible to map the data, using circles of a fixed radius: Figure 1 illustrates such a map.

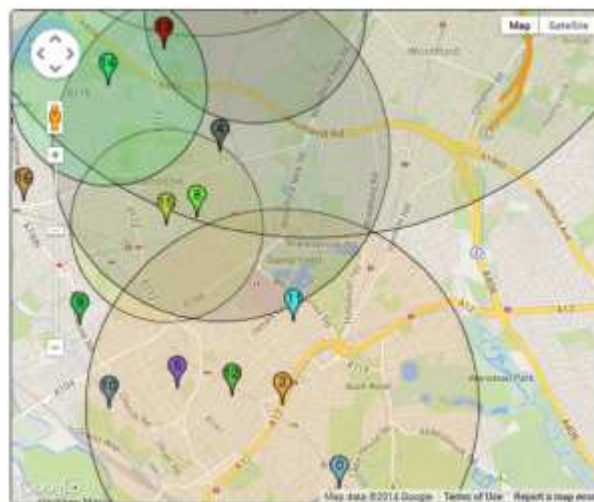


Figure 1: School distance cut-offs in Waltham Forest

Whilst there are many caveats about such a map – it misrepresents the actual distribution of students – anecdotal evidence suggests that it is easier to interpret than a simple table of data listing distance values for each school. The map also allows an assessment to be made of the degree to which parents / guardians have a choice of schools: those living in the areas overlapped by multiple circles have a wider apparent choice than those living elsewhere, perhaps only a short distance away. Various forms of overlay can also be used to indicate the extent to which cut-off distances have varied over time; again visualisation of this may allow the data to be easier to interpret.

From a data visualisation perspective, alternative mapping strategies will be discussed.

3.1 Data discovery

A map such as that illustrated in Figure 1 is relatively easy to construct, and for map-users to explore, but it relies on availability of data on which to base the map. A description of the process of locating relevant components of the full data set used to draw the map will be given for this case study area. These data are all implicitly open data: they are published by a local authority, with no restrictions indicated regarding re-use. In order to map data for a single year, data must be manually transcribed from a PDF document, and several different lists of a fixed set of schools must be used to assemble a single canonical set.

In order to extend this into a time series, former publications must be located; in the case of machine readable versions this required the use of Google searches revealing relevant URLs, rather than any bespoke index or archive at the local authority website. This is time consuming, and requires some

level of research skill in identifying and downloading the relevant documents. Not all persons applying for school places will be able to do this, and families are thus make decisions with different amount of information at their disposal.

4. Comparison of information availability between authorities

In order to compare change over time, two further local authorities were selected: one in Essex, and one in West Yorkshire. An attempt was made to retrieve the data required to construct similar time-series maps. It was discovered that there were considerable differences in the range of data made available to prospective applicants, as well as in the ease with which data could be retrieved. Specifically, whilst 'distance' was used as a criterion for selection, it was not always possible to determine from the published documentation what the cut-off distance had been in previous allocation rounds. Where this is the case, applicants are required to make a decision without all of the relevant information available to them.

Again, the data discovery process depended on web search strategies that in themselves are not particularly difficult, but would not be possible for all potential applicants.

[Author note: full examples of these will be given, and additional authorities added]

5. Discussion

Ideally, applications for school places should be made with applicants having suitable information available to them. Where distance is a key element in the success of an application, it is useful for applicants to know whether any application they make is likely or unlikely to be successful: an application for a school for which they are very unlikely to be eligible on distance grounds might be avoided, along with the emotional investment in such an application by both the parent and child. It is important to couch this in terms of spatial and statistical literacy, and for applicants to understand that distance cut-offs vary from year to year, with a number of factors influencing them, not all of which are easily predictable. At present, information made available to applicants is variable from place to place, and can be demonstrated to be only partially complete. It is argued that data of this sort would benefit from collation at national level, although it is recognised that there are obstacles to this, most notably that different authorities operate different sets of allocation systems, (and that there is within-authority variation), and therefore different data items are relevant in different cases.

6. Acknowledgements

This work has been supported by the ESRC via grant ES/L007517/1, 'Administrative Data Research Centre, England (ADRCE)'.

7. Biography

Oliver Duke-Williams is a lecturer in Digital Information Studies, with research interests in the dissemination and analysis of demographic data, specialising in UK Census data.

Elizabeth Shepherd has a chair in archives and records management, and research interests in the development of the UK archive profession, and links between records management and information policy compliance.

Alexandra Eveleigh is a Research Associate for the Administrative Data Centre for England (ADRC-E), working on information governance issues in respect of government administrative data.

References

Cooper, A. R., Page, A. S., Foster, L. J., & Qahwaji, D. (2003). Commuting to school: are children

- who walk more physically active?. *American journal of preventive medicine*, 25(4), 273-276.
- Goldstein, H., & Spiegelhalter, D. J. (1996). League tables and their limitations: statistical issues in comparisons of institutional performance. *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, 385-443.
- Taylor, C., & Gorard, S. (2001). The role of residence in school segregation: placing the impact of parental choice in perspective. *Environment and Planning A*, 33(10), 1829-1852.