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Shopping for schools or shopping for peers: public schools and catchment area segregation

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ABSTRACT

Market theory positions the consumer as a rational choice actor, making informed schooling choices on the basis of 'hard' evidence of relative school effectiveness. Yet there are concerns that parents simply choose schools based on socio-demographic characteristics, thus leading to greater social segregation and undercutting the potential of choice to drive quality improvements. In this paper, we explore segregation by examining catchment areas for a range of public high schools in a specific middle-class urban area. We focus on socio-demographic characteristics, including levels of income, country of birth and religion affiliation, in order to explore residential segregation according to public high school catchment areas. Our data suggest distinct residential segregation between catchment areas for each public school within our data-set, particularly for the schools deemed to be popular and rejected, that may pose risks for broader equity concerns. We argue that, in contrast to market theory, even more affluent and active choosers are not equipped with information on the programmatic quality of their different school options, but instead may be relying on socio-demographic characteristics of schools – through surrogate information about the urban spaces that the schools occupy – in order to choose peer groups, if not programmes, for their children.

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School choice; segregation; socio-demographic characteristics; public high school; Geographic Information Systems (GIS); mixed-methods research; middle-class; rational choice; market theory

Introduction

Voluminous research from multiple contexts indicates that school choice policies are linked to greater levels of segregation (OECD 2012, 2014). But such research also finds that it is difficult to disentangle the extent to which between-school segregation is a cause or result of larger patterns of social segregation, particularly in terms of residence. Indeed, due to enrolment procedures, public schools are inherently entangled within matters of physical space – school zones, districts and residential address. Noreisch (2007) writes, from the perspective of Germany-based research, that 'although school segregation has been a widely researched topic, very little work has been done on the forms of segregation that exist in a pure catchment area system' (69). Like many other OECD countries, such as the US, Finland and Germany, educational policy in Australia dictates that parents are 'zoned' to their closest public high school; however, parents are free to choose a private (fee-paying) and often religious school, or choose a (relatively free) public high school outside of their catchment area. Enrolment will depend on whether the public school is experiencing high-demand, and accepting students outside of the catchment area.

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Advocates of 'market theory' emphasize demand-driven, rational and individualized choices driving the schooling market. In this paradigm, parents need to be equipped with information to choose schools as based on the best academic programme for their child, and that those choices, particularly from 'active' or 'alert' consumers, and the competitive pressures that they generate, will drive up quality and equity for all (Bast and Walberg 2004; Hoxby 2003; Walberg 2000). Yet while the logic of those assumptions may be attractive in the abstract, less is known about how parents actually make school choice decisions in the real world, dealing with the constraints of geography, uneven demographic distributions, and incomplete information about educational options. By studying the landscape of school choice in a real-world 'local education market' (LEM) populated by more affluent and active choosers, this analysis seeks to contribute to a better understanding of residential and school segregation as they are manifest through school choice policies.

In this study we examine residential segregation and school choice by analysing socio-demographics in catchment areas for public high schools, considered to be 'popular, rejected and balanced' within a competitive, middle-class LEM (Seppánen 2003, 513). First we identify 'popular' public high schools for relatively affluent middle-class school choosers; second, we examine residential segregation by school catchment area, particularly for the popular and rejected public high schools; and third, compare these first two analyses with standardized test-scores for each public high school within the LEM. Herein, we consider the drivers of public secondary school choice within LEMs, markers of residential segregation, and whether standardized test results supersede the importance of socio-demographics.

It is necessary to acknowledge that standardized test results and socio-economic status (SES) correlate and work together. The literature has consistently showed, across OECD countries, that a higher SES – when applied both to the school, and the individual student – correlate with higher standardized test scores and conversely, schools that are in higher demand from school choosers (Lubienski and Lubienski 2013; Lamb et al. 2015; McConney and Perry 2010; Perry and McConney 2010; Schmidt et al. 2015; Strathdee 2013). Therefore, endeavouring to separate these drivers from one another is methodologically flawed and problematic. Rather, we explore how these drivers of public school choice coalesce, and how policies and choice exacerbate or ameliorate residential segregation.

Residential and school-level segregation

Valenzuela, Bellei, and Ríos (2014) provide a useful literature review of the detrimental effects of various forms of segregation, including residential and schooling. The authors conceptualize segregation as '*unevenness*, which refers to the difference in the distribution of population groups in geographical and/or organizational units' (218, emphasis in original). The authors contend that 'residential segregation is probably the most relevant external factor explaining educational segregation' (220). However, while the broader literature affirms this emphasis on residential segregation, it is also a somewhat limited perspective in that it diminishes the roles of how parents interact with schools in understanding the phenomenon. Thus, studying the Australian educational context is useful in this regard – in that Australia offers a relatively affluent nation with a widespread culture of choice, in addition to a policy context that maintains a well-funded and supported private sector (Perry and Southwell 2014; Teese 1998, 2007). The private school has effectively marketed itself as the more elite brand, and increasingly captured a growing proportion of the market – particularly with regard to the secondary school (see, Rowe 2016, 2017). The private school sector has also captured the more affluent segment of the market, and it is well established that the private school sector educates the majority of higher SES students in Australia. Conversely, the public school sector educates the majority of lower socio-economic and disadvantaged students (Gonski et al. 2011; Watson and Ryan 2010; Windle 2015). Between-sector segregation has been clearly identified, but these broad generalizations obscure the disparities occurring from *within*. Therefore, in this paper we pay attention to levels of segregation in the public school, a sector that is – at times – portrayed as accessible, fair

and inclusive for more vulnerable members of the population. It is critical to illuminate differences and disparities, not only between the public and private school, but examine how inequitable policy levers and choice constructs cultural and social divisions between public schools. This is, in effect, an additional stratum of segregation.

At the school-level, segregation by race and poverty was initially flagged by the US Coleman Report (Coleman et al. 1966) as potentially negative and damaging to students' educational outcomes, and in the more current literature, as harmful for a student's civic and social outcomes (Holme, Wells, and Revilla 2005). The 'residualisation' of schools via multiple tiers of poverty and disadvantage leverage and reinforce structural inequality.

Australian-based research has found that 'the socio-economic profile of the school matters substantially in terms of academic achievement' (Perry and McConney 2010, 72). Furthermore, 'increases in school SES are consistently associated with increases in students' academic performance, and this relationship holds regardless of individual students' SES' (Perry and McConney 2010, 72).

The Australian education policy agenda pushes and promotes parents to avoid low-performing schools, and be active and engaged in choosing the 'best' school. For these reasons, the *My School* website was introduced in 2010, to enable parents to make more informed, calculated and rational choices, using the best available data (Gobby 2016).

'Market-oriented' policy moves, as discussed by Bunar (2010), have continually sought to generate competition between schools, such as the abolishment of the *New Schools* policy in 1996, removing regulations that restricted market competition between public and private schools. Overall, government policy has continued to bolster educational privatization, particularly in the form of guaranteed funding for private schools, the legislation of Independent Public Schools and the consistency and proportionality of public school closure. These policies encourage school choice, and as Maloutas (2007) writes, 'enhance the margins for, and at the same time legitimate, middle class strategies' (51).

Middle-class school choice and the importance of socio-demographics

There is a considerable body of research pertaining to middle-class school choice (Ball 1993, 2003) – or the affluent, 'privileged/skilled chooser' (Ball, Bowe, and Gewirtz 1996) – a categorization that routinely rests on economic, social and cultural characteristics (Reay, Crozier, and James 2013). While we acknowledge the mutability of this categorization, we refer to the participants in this study as middle-class choosers, in order to capture the weight that these choosers bring into the market, but also to indicate horizontal and vertical capital in the form of race, tertiary qualifications, house ownership and income levels. The urban middle-class in Australia, as in the US, the UK, and other nations, is increasingly defined by their 'connection to schooling … and the distinctive ways in which middle-class parents manage children and their schooling' (Campbell, Proctor, and Sherington 2009, 18).

It has been well-demonstrated in research from Australia, the US and United Kingdom that middle-class socio-demographics are related to over-subscription in the local public school (Campbell, Proctor, and Sherington 2009; Posey-Maddox 2014; Reay, Crozier, and James 2013). From the US, Holme (2002) argues that, when it comes to choosing public schools, high-status or 'White and middle to upper income parents' (179) pay very little attention to markers of school quality, such as test results or curriculum, and are far more attentive to socio-demographics of the school, including the presence of 'other' high-status parents. In this way, a school-of-choice is largely socially constructed. Majority and affluent parents tend to choose schools that are dominated by other such parents, and furthermore, these families tend to be privileged in terms of accessing high-demand and high-elite schools (Roda and Wells 2013). From Australia, Ho (2011) contends that race is a key driver of school choice, by outlining 'white flight' away from schools that contain a high percentage of students from a language background other than English.[1]

Table 1. The catchment areas and surrounding public high schools.

Name of public high school	Distance from catchment area Wallace (km)	Popular, rejected or balanced	Enforced catchment area (zoned)
Addison high	3.7	Balanced	Zoned
Casey high	5.3	Rejected	Not zoned
Bailey high	6.0	Popular	Zoned
Dale high	6.8	Rejected	Not zoned
Harvest high	7.8	Rejected	Not zoned
Name of public high school	**Distance from catchment area Reagan (km)**	**Popular, rejected or balanced**	**Enforced catchment area (zoned)**
Raphael high	1.9	Rejected	Not zoned
Morris high	6.0	Rejected	Not zoned
Ferris high	6.6	Rejected	Not zoned
Avery high	6.8	Popular	Zoned
Cecil high	7.4	Popular	Zoned

Table 2. Data-sets and description.

Data	Description	Number
Australian Bureau of Statistics socio-demographic statistical data (median weekly household income, country of birth, religion)	Ten catchment areas with public high schools, and two catchment areas without a public high school	12 catchment areas and three variables
Statistical data – NAPLAN	Standardized test scores (year 9) for five domains	10 schools and five testing domains (year 9) for each school
Interviews	Interviews with ten parents living in the Reagan catchment area	10 face-to-face in-depth interviews
Letters/emails to policy-makers	Letters/emails written by parents living in the Wallace catchment area (distributed and freely available online)	38 letters written by Wallace residents

The study and the data-sets

We assemble data for a total of twelve catchment areas in middle-class neighbourhoods of Melbourne, Australia, examining country of birth, religion and median levels of household income. Our analysis is based around the catchment areas of 'Reagan' and 'Wallace', each located in the inner-city of Melbourne, Australia (see Table 1). We selected Reagan and Wallace because both of these catchment areas do not have a public high school within their immediate area, and parents need to travel between 1.9 and 7.8 km (equivalent to 1.2–4.8 miles, respectively) to access their closest public high school. In response, the parents have been active and vocal in expressing their discontent with their schooling options, generating surveys, websites and writing letters to politicians and Department of Education representatives. The surveys and letters are freely available and distributed actively online through their websites, and the parents routinely emphasize the importance of public education, and also proximity.

This presents us with the opportunity to observe how parents in the catchment areas consider their various options in terms of proximity, but also in terms of the information they have available on those options. The following table (see Table 1) shows the public secondary schools that surround the catchment areas of Wallace and Reagan, and whether these schools are considered popular, rejected or balanced within the data-set. The schools are ordered from closest to furthest from the designated catchment area.

Both Reagan and Wallace catchment areas are located less than 10 km from the central business district of Melbourne, and are located on separate sides of the city. Reagan and Wallace have experienced rapid gentrification since 2000, with Census statistics indicating an increase in household income, university or higher education qualifications, and an influx of young families into the locale. Whilst

the incomers emphasize the importance of public schooling, there are clear preferences in terms of the surrounding public high schools, generated within the written letters and surveys.

In this paper, we compile several datasets to explore the aims of the study. Table 2 offers an overview of the main sources for this analysis.

We draw on Australian Bureau of Statistics to generate socio-demographic statistical data relating to: median weekly household income, country of birth, and religion for each catchment area, and for the year 2012. This year corresponds to the year that interviews were generated. It follows the socio-demographical changes in the catchment areas of Wallace and Reagan, from 2000 to 2006. Focusing on one year only limits our capacity to judge the longevity or durability of our analysis. This is a limitation of the study, and long-term analysis may be useful to complement this paper.

The comparative analysis rests on the categorization of 'popular, rejected and balanced' public high schools (Seppánen 2003), for the choosers in our study. We signify this categorization in each figure by utilizing the symbols (P), (R) and (B). Seppánen's (2003) 'popular, rejected and balanced' categories are useful for rejecting the dualism of choice, even though preferences can be considerably weighted in a particular direction, and are typically not based on empirical data as related to test-scores. We argue that certain public high schools are, for the vast majority of parents living in these catchment areas, far more desirable than others.

We determined these schools as popular, rejected and balanced, primarily through qualitative data with parents residing in the catchments of Reagan and Wallace. We draw on interviews with ten parents living in the Reagan catchment area (see Table 2), and the participants were recruited through a larger five-year ethnographic study, studying parental organization, choice and activism around public education (see, Rowe 2017).[2] Further, we draw on 38 support letters written by residents living in the Wallace catchment area, generated in 2011 and 2012. The 'popular, rejected and balanced' schools were coded by frequency. At times, residents explicitly stated that certain schools were preferable choices, within interviews, support letters or additional online survey data generated by the parents, whereas at other times it was subtle and nuanced. While there is a subjective element to this approach, the multiple data sources give us some degree of confidence in our assessments of the desirability of the different schools. Subsequently, we contacted the schools deemed to be 'popular' within the data-set, to ascertain potential application figures. Enrolment application figures, as well as the number of potential applicants rejected, increased slightly each year (2011–2016) for the popular schools (Bailey, Cecil, Avery, and Addison is 'balanced'). We found that approximately two-third of applications are denied enrolment into the popular schools, on the basis of high-demand for the school, and living inside the catchment area was a pre-requisite for enrolment. However, there are exceptions and we explain this in further depth subsequently.

For the schools of Bailey, Avery and Cecil – all popular schools in our data-set – even if parents had younger children in these schools, accessed many years earlier before a surge of popularity, this wasn't enough to acquire enrolment for the siblings if they resided outside of the catchment area. Albeit, the popular and zoned schools do accept a small proportion of students outside of their catchment area, but on a select-entry basis, favouring parents with the know-how to navigate this system successfully, and students with higher academic results, or special skills related to sport or music. In the data, residents tend to speak or write in great length about the popular public high schools and the 'zoning' rules – in other words, many were aware of the challenges to acquire enrolment within the popular schools, but also aware of the exemptions to enrolment rules. We endeavour to understand how their school choice preferences shape, and are shaped by, the social landscape of the area, and study the relationship between these choice preferences with residential socio-demographics within each catchment area (Denessen, Driessena, and Sleegers 2005; Noreisch 2007; Waslander and Thrupp 1995).

Whilst these schools are determined as 'high-demand' and 'heavily zoned' by many participants living in these catchment areas, there are shortcomings in arguing that all residents living in the catchment areas of Wallace and Reagan prefer these particular high schools, and moreover, that all parents living in these zones are white and affluent. Even though the majority of residents living in these catchment areas, and responding to the Census, represent a higher SES, and are Australian-born

with higher education qualifications, it is important to be cautious in generalizations with regard to catchment areas and schooling choices. Rather, we note that there are majority or dominant socio-demographic characteristics within each of the catchment areas, and dominant school preferences, but there are also various degrees of diversity.

Many of these residents will eventually choose private secondary schooling. This study is located in the state of Victoria, a state which prides itself on the privatization of public services. The state of Victoria records the second highest percentage of full-time secondary students enrolled in the private, non-government school sector (Independent and Catholic schools); and, the second lowest proportion of full-time students enrolled in the public secondary school sector (56.81%) in Australia (see, Rowe 2016). The Australian Capital Territory is the only state or territory to report a lower percentage of full-time secondary school students enrolled in the public sector (54.31%), according to the Australian Bureau of Statistics Census data (2016). Parents are increasingly choosing private secondary schools, a shift that highlights education policies that undercut the stability of public schooling, including under-funding and under-supply, which in turn drives parents into private schooling despite the enormity of the costs.

Methodology

We draw on numerical data from the Australian Bureau of Statistics (hereby referred to as ABS) to calculate the socio-demographic independent variables: median level of weekly household income; country of birth; and religion. The median level of weekly household income is a gross figure which includes single parents and families with and without children. All figures are reported in Australian Dollars ($AUD). Each independent variable, excluding median income, was geo-coded as a percentage, as based on the total population of the catchment area, in order to compare and contextualize. We make further comparative analyses with the state median percentage, following a similar calculation as previously iterated (ABS 2012).

Each variable is considered within Black's (1999) 'boundary-fixed' effects model – as extended by Bayer, Ferreira, and McMillan (2007) as a boundary discontinuity design – and taken up by a number of studies measuring the relationship between district boundaries, house prices and test scores for public schools (Davidoff and Leigh 2008; Dougherty et al. 2009). We use this design to measure and assess each variable in relation to the total population size, within a boundary-fixed or discontinuous catchment area. This is limited in that catchment areas are not entirely fixed or discontinuous – parents can circumvent the boundary in a number of ways, such as renting within the catchment area, or via special examinations. However, utilizing this approach enables us to illuminate tiers of segregation occurring between public school catchment areas.

Moreover, we compare the socio-demographic variables to standardized test scores for each public high school within the data-set. We utilize the 2012 year nine results from the National Assessment Program – Literacy and Numeracy (NAPLAN) test, as available on the *My School* website. This is an Australian-wide test administered annually to students in years 3, 5, 7 and 9 in five domains: reading; persuasive writing; spelling; grammar and punctuation; and, numeracy (see ACARA 2013). The standardized test (NAPLAN) has been widely critiqued as a high-stakes test, pushing teachers to 'teach to the test' and for schools to manipulate results (Gorur 2013; Thompson and Cook 2014; Thompson and Harbaugh 2013). We acknowledge that these test results are imperfect in terms of representing the overall academic ability of the student cohort. We draw on the NAPLAN results to consider the influence of 'cold' knowledge, in making school choices (Ball and Vincent 1998). Indeed, middle-class parents are likely to ignore standardized test results in their final decision-making process (Rowe and Windle 2012; Ball, Bowe, and Gewirtz 1996).

Analysis of socio-demographic characteristics by catchment area: median weekly level of household income

The public high schools deemed to be 'popular' within our data-set are located in catchment areas that record higher median levels of gross household income (see Figure 1), in comparison to the

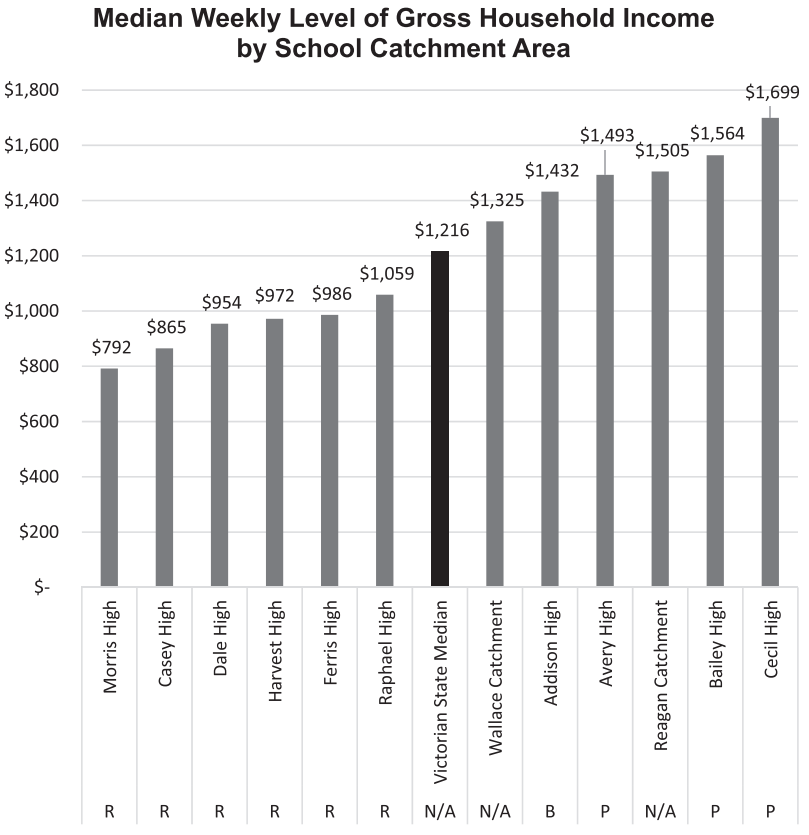

Figure 1. Median weekly level of gross household income by school catchment area: rejected, balanced or popular school.

surrounding catchment areas, and the Victorian state median. There is a relatively large gap between the highest and the lowest, in that the most affluent catchment area (Cecil) records more than double the lowest earner (Morris). Conversely, each rejected school is located in a catchment area that records lower levels of household income in comparison to the Victorian state median. The schools are symbolized here as popular (P), rejected (R) or balanced (B), and arranged from lowest to highest levels of income for each catchment area.

It is unsurprising that the popular public high schools are located in a catchment area which records higher levels of median household income, in comparison to the Victorian state median. School choice policies position the higher-income school chooser as inherently more valuable, and intrinsically, more desirable. This is reflected in the ongoing trend of middle-class gentrification within urban public high schools in the US, where parents not only contribute and participate within the schooling environment, but effectively market the school to the more valuable, higher income school chooser (Cucchiara 2008, 2013; Posey-Maddox 2016). This contributes to the increasing residualization of high-poverty schools, characterized by multiple tiers of disadvantage and under-funding. Madanipour, Cars, and Allen (1998) define social exclusion as:

> A multi-dimensional process, in which various forms of exclusion are combined: … access to employment and material resources, and integration into common cultural processes. When combined, they create acute forms of exclusion that find a spatial manifestation in particular neighbourhoods. (22)

The residents living in the catchment areas of Wallace and Reagan tend to refer to the 'rejected' public high schools as 'outside of our community', rather than focus on particular elements of the schools that they disapprove of. Like many other studies pertaining to middle-class choice of public schooling

Table 3. Country of birth according to catchment area.

	Catchment area	Australia (%)	UK (%)	Vietnam (%)	Born elsewhere/ country of birth not stated (%)	India (%)	China (%)
R	Morris high	38	1	21	20	5	3
R	Raphael high	41	2	9	22	7	5
R	Ferris high	45	2	11	20	7	2
R	Casey high	47.4	1.0	1.0	16.0	3.0	1.0
R	Dale high	54.0	2.0	1.0	14.0	5.2	2.0
R	Harvest high	55.9	2.0	2.0	12.0	4.0	3.0
P	Avery high	57	4	1	12	1	6
N/A	Wallace catchment	60.3	2.0	1.0	11.0	2.0	2.0
B	Addison high	61.0	3.0	1.0	12.0	2.0	2.0
N/A	Reagan catchment	66	4	3	10	2	1
P	Bailey high	68.9	4.0	1.0	8.0	2.0	2.0
P	Cecil high	74	7	0	7	1	0

(Holme 2002; Posey-Maddox 2016), the participants had not visited the neighbouring secondary schools. Most interview participants are completely unaware of their location. Participant Adele is the only parent who has actually visited the rejected schools, and she says, 'I was surprised when I visited Morris High … it wasn't as bad as I thought it would be'.

Interview participants frequently mention Cecil High and Avery High as their preferences, and Avery High is also frequently mentioned by the Wallace residents in written communication. The only exception is interview participant Michelle, who discusses her visit to Avery High for an official tour, but says that she was 'put off by the elitist academics and it seems to be half-Asian.' For Michelle, questions of race and ethnicity do influence the choice process. Indeed, the 'privileged/skilled chooser' will 'deliberately not consider all the schools they could' (Ball, Bowe, and Gewirtz 1996, 94) and it is questionable whether this is based on 'hard-data' and rational choice logics, regarding the proximity and academic outputs of the school (Bosetti 2004), or whether this is a largely socially constructed, and predicated by socio-demographics. We argue that middle-class parents incorporate a range of measures into their school choices, responding to the market as both rational choice actors and emotional consumers.

Country of birth and religious affiliation

Contextually, 68.45% of residents in the state of Victoria are Australian-born, indicating that approximately three out of ten residents were born in another country. Australia then, is a relatively diverse cultural landscape (Windle 2015), although this diversity tends not to be equally reflected within schools. Ho (2011) refers to this as 'cultural polarisation' (616), with students divided on the basis of language background. The following table lists each catchment area within our data, arranged from lowest to highest according to the proportion of Australian-born residents (see Table 3).[3] The left column indicates whether the school in this catchment area is 'popular, balanced or rejected'.

In this analysis, 'popular' public high schools are located in a catchment area with increased proportions of Australian and United Kingdom-born residents, and conversely contain *lower* percentages of individuals born in Vietnam, India or 'Country of Birth not stated'. The only outlier in this regard is Avery Secondary, with a higher proportion of Chinese-born residents; however, this catchment area still maintains a relatively high proportion of Australian-born residents. There is a particularly strong relationship between the percentage of Australian-born residents in the popular school catchment areas, in addition to a higher percentage of Indian-born residents in the catchment areas of 'rejected' public high schools. On the following graph, we utilize a combination of bar and line graph to indicate the inverse relationship (see Figure 2).

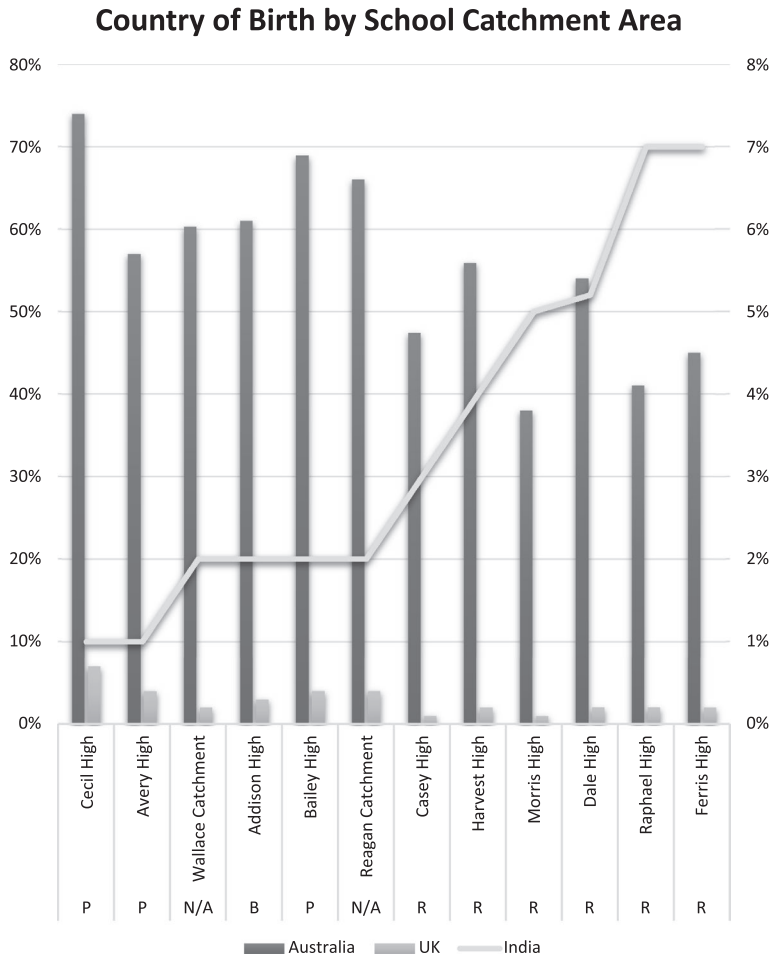

Figure 2. Country of birth by school catchment area (Australia, UK and India only).

Table 4. Religious affiliation, by catchment area.

	Catchment	Christianity (%)	Buddhism (%)	Hinduism (%)	Islam (%)	No religion (%)
R	Raphael high	33	11	6	6	26
P	Avery high	40	5	2	2	38
R	Morris high	40	20	3	8	16
B	Addison high	40	3	2	5	39
P	Bailey high	44	2	1	1	41
N/A	Reagan catchment	48	4	1	2	34
R	Ferris high	51	11	4	5	15
N/A	Wallace catchment	52	2	2	8	25
R	Dale high	54	3	4	16	12
P	Cecil high	60	1	1	1	28
R	Harvest high	61	3	3	6	16
R	Casey high	61	2	2	24	7

In this study, there is well-defined polarization across income, country of birth and religious lines, visibly playing out in the catchment areas of public high schools. But the causal direction is not clear: are families with Australian-born students better able to find ways of enrolling their children in popular public high schools, or are those schools more popular because they serve higher proportions of

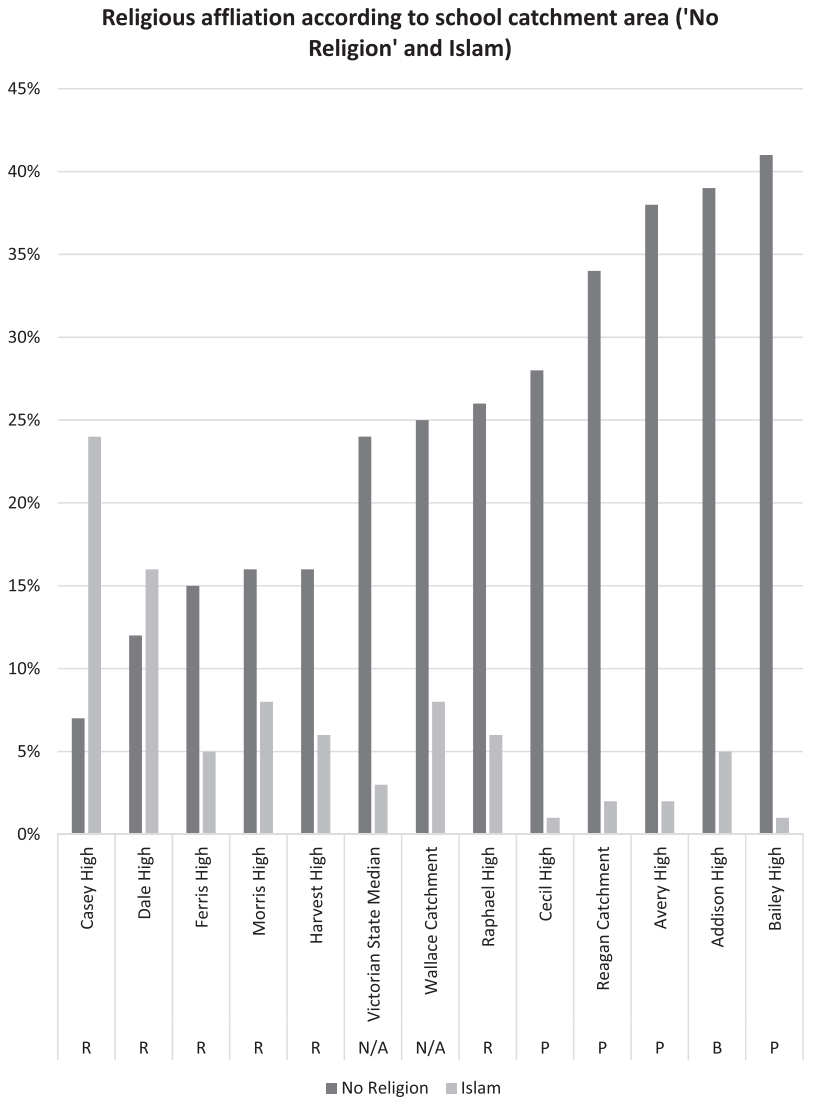

Figure 3. Religious affiliation according to school catchment area ('No Religion' and Islam).

Australian-born students? The latter possibility is suggested by research that finds different valuations of different types of students in education markets (Ball and Gewirtz 1997; Waslander and Thrupp 1995). But the rise of a mobile middle class, particularly in several Asian economies, has also meant that some families are moving to countries such as Australia specifically to enrol their children in desirable schools.

The data would suggest that whiteness becomes a valuable choice marker for school choosers – perhaps a surrogate source of information on school quality, if not a distinguishing factor in itself (Schneider and Buckley 2002). The data also indicates robust residential segregation. Indeed, the popular Cecil High catchment is exceedingly white – individuals born in India constitute only 1% of the population, whereas the Ferris and Raphael catchment area contain seven times this percentage (7%). The population of the Cecil catchment constitutes 74% Australian-born residents, and a further 7% United Kingdom-born residents – which is higher than the state median (68.45% Australian-born

and 4% United Kingdom-born). The robust residential segregation is visible across the catchment areas. For example, the Vietnamese-born population comprises only 1% of the total state population, however, 21% of the total population in the Morris catchment is Vietnamese-born. We compare this percentage (21%) to the Cecil catchment (0%), and for catchments less than 5 km apart, this demonstrates relatively significant urban stratification.

Similarly, religious affiliation may be influenced by country of birth, and the following table demonstrates the percentage of individuals from the Australian Census who affiliate with a particular religion, according to the school catchment area in which they reside (see Table 4). We have arranged the table from lowest to highest, according to Christian affiliation.

The proportion of individuals affiliating with Christianity does not indicate a clear relationship between the 'popular' school catchment areas and the 'rejected' school catchment areas, and this is an inadequate marker. The proportion of those affiliating with minority religions – in particular, the Islamic faith – and the proportion of individuals who identify with 'no religion' is far more telling. The 'popular' public high school is located in a catchment area with *higher* percentages of individuals identifying with 'no religion' and *lower* percentages of individuals who affiliate with Islam, Hinduism and Buddhism. To place this in perspective, these religions are minorities and under-represented in the state of Victoria. Buddhism comprises only 3% of the total population, but it represents 20% of the Morris population; only 2% of the total population in the state of Victoria identifies with Hinduism, and yet it is three times this percentage in Raphael (6%); and Islam, which represents 3% of the state population, stands at 8% in the Morris catchment area. The highest affiliation in the state of Victoria is Christianity (57% of the total state population) and this includes some nineteen Christian denominations.[4]

The stand-out trend is that 'rejected' public high schools are located in catchment areas with a higher proportion of individuals who identify with Islam, and conversely the popular schools are located in catchment areas with a higher proportion of 'no religion' affiliation. The trend is stronger for 'no religion', as there are more outliers when examining Islam affiliation, although this religious affiliation is clearly higher in the 'rejected' public school catchment area. We demonstrate this relationship on the graph below, comparing all twelve catchment areas (see Figure 3), and arranging from lowest to highest according to 'no religion'.

Contextually, individuals who identify with 'no religion' on the Census makes up 24% of the total population in Victoria, as shown on this graph. The focus catchment area of Wallace (25%) and Reagan (34%) contain higher than average percentages of individuals identifying with 'no religion'. Indeed, the catchment area of Reagan is particularly concentrated. Each of the popular public high schools within our data is located in a catchment area with higher percentages of individuals who identify with 'no religion', and this is in comparison to the surrounding catchment area and the state median. The only exception is the catchment area of Raphael (26%) and this may be due to a pattern of gentrification currently occurring in this locale.

Standardized test scores for the popular and rejected public high schools

While parents may readily perceive the socio-demographic characteristics of a school or catchment area by looking at the people, the businesses, or the houses of worship, for instance, their insights into the academic quality of schools depends on either access to information on school effectiveness, as provided by sites such as *My School*, or on proxy information on school quality. In that regard, the following analysis differs from the previous in that it focuses on schools, rather than community factors. The subsequent graph includes the ten public high schools within our data-set, rather than the previous data-set of twelve catchment areas (Wallace and Reagan do not have public high schools in their catchment areas). The popular schools do achieve higher results for the standardized tests, and we illuminate the results on this graph, organized from lowest to highest according to the mean result (see Figure 4).

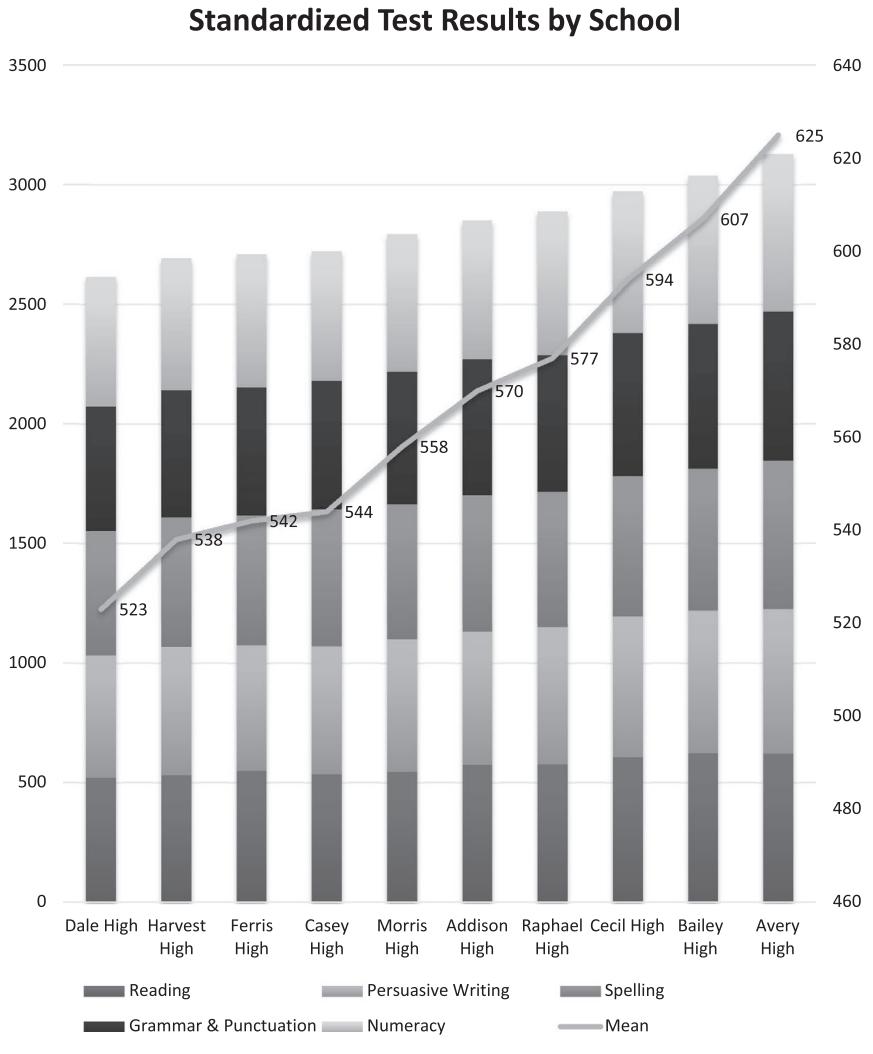

Figure 4. Standardized test results and academic performance, by school (2012).

The popular schools (Cecil, Bailey and Avery) are also the highest performers, however Raphael High (a rejected school) has achieved higher results than Addison (a balanced choice) in 2012. There are comparable results between Raphael High and Cecil High with a minor seventeen-point difference – less than 3% of the mean score. There is a 16% difference in test results between Dale High and Avery High, and differences would appear more robust in the public high schools located in the surrounding catchment areas of Wallace.

Predictably, the 'popular' public schools within the data-set also have high 'school ICSEA values', according to the *My School* website, suggesting that the popular schools serve a far more socio-economically advantaged student cohort. Conversely, the rejected schools for the participants retain increased proportions of students in the lowest quarter of the ICSEA measurement. Thereby, the 'rejected' schools may be adding more value to their students' learning, and thus be more effective, if both inputs and outcomes were considered. Furthermore, the 'popular' schools may be more mindful of 'teaching to the test' or manipulating test results for the purpose of maintaining their marketability (Thompson and Cook 2014).

Discussion of data and conclusion

In order to examine how middle-class parents are situated for making choices about schools, we examined a number of socio-demographic factors in and across fixed-boundary school catchment areas – factors known to be of importance in parents' school choices and that would be available to parents considering where to live and where to send their children to school. In order to understand how those choices are arranged in real-world contexts (Hesketh and Knight 1998; Waslander and Thrupp 1995), we sought to capture the popular public high schools for residents living in a LEM, and particularly for families in communities with no assigned local school, thus for whom choice is an imperative, and for whom there are a wider range of options.

In our analysis of this LEM, the popular public high schools are located in catchment areas with higher levels of income, a higher proportion of Australian-born residents and a higher proportion of individuals whom identify with 'no religion' on the Census. In this study, the 'popular' public high schools, for the middle-class school chooser, are located in catchment areas with a lower proportion of individuals who identify with minority religions, such as Islam, Hinduism and Buddhism. The affiliation with Christianity was an ineffective marker, and was comparatively high across the 'popular, rejected and balanced' public high school catchment areas (Seppánen 2003). The lack of religious affiliation may be utilized by the school chooser as a proxy for, or correlated with, higher levels of parental educational attainment. Overall, these data suggest a rather straightforward link between the affluence of a community and the desirability of a community's school. From this analysis, we are unable to assess whether each public school mirrors the segregation of the catchment area. However, as the 'popular' public schools report that the majority of their intake is from their catchment area, it is reasonable to assert that the popular public high schools reflect their catchment area. The *My School* data regarding these individual schools certainly reiterate these assertions.

Standardized test results are higher for the popular public high schools, in the domains of reading, numeracy, grammar and punctuation, and spelling; however, the differences between the popular and the rejected schools, when examining standardized test results, is far less heightened and dramatic, in comparison to the racial, income and religious segregation that is playing out across residential and public school catchment areas.

The data in this paper suggest that middle-class parents are choosing a public high school that serves a higher SES cohort, but so too, choosing a public high school in respects to a shared secularist and religious view, in addition to a dominant ethnicity. Choosing a public school that serves a higher SES cohort of students is a rational choice in the sense that it may offer a perceived higher chance of success. Research indicates that the peers in a child's classroom are indeed a strong influence on achievement (Arnott and Rowse 1987; Gauri 1998; Gorard 2016; Hanushek et al. 2003; Hoxby 2000; Rothstein 2006; Walford 2003; Willms 1986; Willms and Echols 1992; Zimmer and Toma 2000). Schools that serve higher SES cohorts also tend to have long waiting lists and are over-subscribed, a claim that is supported within this study and others (Waslander and Thrupp 1995). Whilst there are exceptions, wealthier schools are largely 'insulated from market competition by virtue of their own popularity' (Waslander and Thrupp 1995, 22). Thus, choosing the school that serves a larger cohort of higher SES students – whether this be private or public – is rational within the logic of the market place. This choice effectively applies consumerism logic to the acquisition of school enrolment. Certainly this lends itself to Rational Action Theory, which argues that 'people behave according to their interests, attempting to maximize the utility of their decisions' (Hatcher 1998, 10).

These findings align with previous studies of a similar scope, but also offer some contrasts as well. From their study of a 'lived market' in New Zealand, Waslander and Thrupp (1995) found that 'school segregation added to residential segregation', and high SES families are more likely to travel further, in order to bypass local schools characterized by low SES students. The authors argue that dezoning policies exacerbate socio-economic segregation between schools 'more than would be predicted simply on the basis of residential segregation' (Waslander and Thrupp 1995, 22). Clearly residential segregation and schooling segregation coalesce with one another, but as Gorard (2016) writes, 'the most malleable

factors identified as associated with segregation relate to the types of schools in each area' (142). The more selective that schools are, generally, the higher the levels of between-school segregation (Gorard 2016). In relating this to our study from Australia, there is a disturbing implication that so-called accessible and 'public' schools are largely implicated within the logic of the market, and reproducing highly segregated compositions, along the lines of race, income and religion. Clearly public schools are far from disconnected or *protected* from market-oriented policies of choice and are entangled within consumer behaviour.

Whilst we are not advocating for market theory, in that parents are making the 'best' choices, we argue there is a need to reconceptualize the notion of rational choice within the context of a competitive schooling market. Thus, what can be a rational choice for individual parents can lead to undesirable, if not irrational, operations in the choice system for public education. We argue, while these choices may seem rational in the logic of the market, policies that promote choice are undercutting social cohesion, fairness and inclusion within quality, well-resourced education. So-called 'accessible' and equitable public schools are clearly reflecting an additional stratum of segregation for families that bring fewer resources into school choice. Furthermore, a 'certain degree of choice is creating a segregated schooling landscape in an urban setting' (Noreisch 2007, 87). This has strong implications for the potential of market-oriented choice policies to ameliorate or exacerbate social sorting in schools and communities. We suggest that public high schools be regulated and required to enrol a certain proportion of students outside of their catchment area. The segregation within public schools, and the catchment areas of the 'popular, balanced and rejected' schools, suggests that policies that promote choice and competition, and the under-funding of public schools, have exacerbated the competitive acquisition of public high schools, dominated by a higher income and homogenous student cohort. It also provokes questions surrounding the perceived gaps between public high schools, and whether these gaps and between-school variance, is fair and equitable for young people.

Notes

1. On 'white flight' and self-sorting by minority families, see Cobb and Glass (1999), Garcia (2008a, 2008b), and Bifulco and Ladd (2006).
2. The 'popular, rejected and balanced' coding relied on qualitative data, as indicated on Table 2. Ten parents were interviewed within a larger five-year ethnographic study (see, Rowe 2016, 2017). At the time of writing, the interview participants were active within a neighbourhood group, lobbying the state government for public education. The parents do not have a public high school in their immediate locale. The parents were accessed through this group by the first author and consented to face-to-face in-depth interviews. The first author did interview parents from the neighbourhood of Wallace, however these interviews are not included for ethical reasons. This qualitative data also included contact with schools and administrators determined as 'high-demand' or popular within the data-set. This contact was generated each year from 2011 to 2015. The authors referred to online survey data that were generated by the parents living in the Wallace and Reagan catchment area. The Reagan survey was generated in 2007 (249 responses from 1173 surveys). The Wallace survey was generated in 2012 (267 responses, advertised and open on social media). We have not referred to this survey data in this paper, and therefore we did not include this data on Table 2. However, it has assisted in coding of schools.
3. For the purpose of brevity on this table, we only include the categories that were consistently high and well-represented across the catchment areas.
4. It is important to note that the category 'Christian' incorporates nineteen different religions on the Australian Census, and the graphs in this paper use 'Christian' to denote all nineteen different categories. We have categorized in this way for the purpose of brevity and readability, however it must be acknowledged there is an extensive amount of theological diversity within this category.

   On the Australian Census, the 'Christianity' category includes the following sub-categories: Anglican, Assyrian Apostolic, Baptist, Brethren, Catholic, Churches of Christ, Eastern Orthodox, Jehovah's Witnesses, Latter-day Saints, Lutheran, Oriental Orthodox, Other Protestant, Pentecostal, Presbyterian and Reformed, Salvation Army, Seventh-day Adventist, Uniting Church, Christian, nfd(a), Other Christian. When presenting this data, the percentage (%) represents the 'total' number of individuals identifying within this category on the Census. The data-sets in this paper can be accessed via the first author. All data is anonymized for the purpose of ethical research and will remain with the first author for the required duration of time (7 years).

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References

ACARA. 2013. "National Assessment Program (NAP)." ACARA. Accessed October 1. http://www.nap.edu.au/

Arnott, Richard, and J. Rowse. 1987. "Peer Group Effects and Educational Attainment." *Journal of Public Economics* 32 (3): 287–305.

Australian Bureau of Statistics. 2012. *1301.0 – Year Book Australia, 2012: Income and Welfare – Household Income, Expenditure and Wealth*. Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics. 2016. "4221.0 – Schools, Australia, 2015." ABS. Accessed January 8, 2015. http://www.abs.gov.au/ausstats/abs@.nsf/mf/4221.0

Ball, S. J. 1993. "Education Markets, Choice and Social Class: The Market as a Class Strategy in the UK and the USA." *British Journal of Sociology of Education* 14 (1): 3–19. doi:10.1080/0142569930140101.

Ball, S. J. 2003. *Class Strategies and the Education Market: The Middle Classes and Social Advantage*. London: RoutledgeFalmer.

Ball, S. J., R. Bowe, and S. Gewirtz. 1996. "School Choice, Social Class and Distinction: The Realization of Social Advantage in Education." *Journal of Education Policy* 11 (1): 89–112. doi:10.1080/0268093960110105.

Ball, Stephen J., and Sharon Gewirtz. 1997. "Girls in the Education Market: Choice, Competition and Complexity." *Gender & Education* 9 (2): 207–222. doi:10.1080/09540259721376.

Ball, S. J., and Carol Vincent. 1998. "'I Heard It on the Grapevine': 'Hot' Knowledge and School Choice." *British Journal of Sociology of Education* 19 (3): 377–400. doi:10.1080/0142569980190307.

Bast, Joseph L., and Herbert J. Walberg. 2004. "Can Parents Choose the Best Schools for Their Children?" *Economics of Education Review* 23 (4): 431–440.

Bayer, Patrick, Fernando Ferreira, and Robert McMillan. 2007. "A Unified Framework for Measuring Preferences for Schools and Neighborhoods." *Journal of Political Economy* 115 (4): 588–638.

Bifulco, Robert, and Helen F. Ladd. 2006. "School Choice, Racial Segregation, and Test-score Gaps: Evidence from North Carolina's Charter School Program." *Journal of Policy Analysis and Management* 26 (1): 31–56.

Black, Sandra E. 1999. "Do Better Schools Matter? Parental Valuation of Elementary Education." *Quarterly Journal of Economics* 114 (2):577–599.

Bosetti, L. 2004. "Determinants of School Choice: Understanding How Parents Choose Elementary Schools in Alberta." *Journal of Education Policy* 19 (4): 387–405. doi:10.1080/0268093042000227465.

Bunar, Nihad. 2010. "Choosing for Quality or Inequality: Current Perspectives on the Implementation of School Choice Policy in Sweden." *Journal of Education Policy* 25 (1): 1–18. doi:10.1080/02680930903377415.

Campbell, C., H. Proctor, and G. Sherington. 2009. *School Choice: How Parents Negotiate the School Market in Australia*. Sydney: Allen & Unwin.

Cobb, C. D., and G. V. Glass. 1999. "Ethnic Segregation in Arizona Charter Schools." *Education Policy Analysis Archives* 7 (1): 1.

Coleman, J., E. Campbell, C. Hobson, J. McPartland, A. Mood, F. Weinfeld, and R. York. 1966. *Equality of Educational Opportunity*. Washington, DC: US Government Printing Office.

Cucchiara, M. B. 2008. "Re-branding Urban Schools: Urban Revitalization, Social Status, and Marketing Public Schools to the Upper Middle Class." *Journal of Education Policy* 23 (2): 165–179.
Cucchiara, M. B. 2013. *Marketing Schools, Marketing Cities: Who Wins and Who Loses When Schools Become Urban Amenities*. Chicago, IL: University of Chicago Press.
Davidoff, I. A. N., and Andrew Leigh. 2008. "How Much Do Public Schools Really Cost? Estimating the Relationship between House Prices and School Quality." *Economic Record* 84 (265): 193–206. doi:10.1111/j.1475-4932.2008.00462.x.
Denessen, Eddie, Geert Driessena, and Peter Sleegers. 2005. "Segregation by Choice? A Study of Group-Specific Reasons for School Choice." *Journal of Education Policy* 20 (3): 347.
Dougherty, J., J. Harrelson, L. Maloney, D. Murphy, R. Smith, M. Snow, and D. Zannoni. 2009. "School Choice in Suburbia: Test Scores, Race, and Housing Markets." *American Journal of Education* 115 (4): 523–548. doi:10.1086/599780.
Garcia, David R. 2008a. "Academic and Racial Segregation in Charter Schools: Do Parents Sort Students into Specialized Charter Schools?" *Education & Urban Society* 40 (5): 590–612.
Garcia, David R. 2008b. "The Impact of School Choice on Racial Segregation in Charter Schools." *Educational Policy* 22 (6): 805.
Gauri, Varun. 1998. *School Choice in Chile: Two Decades of Educational Reform, Pitt Latin American Series*. Pittsburgh, PA: University of Pittsburgh Press.
Gobby, Brad. 2016. "Obliged to calculate: My School, markets, and equipping parents for calculativeness." *Journal of Education Policy* 31 (4):421–431. doi:10.1080/02680939.2015.1083124.
Gonski, D., K. Boston, K. Greiner, C. Lawrence, B. Scales, and P. Tannock. 2011. *Australian Government Review of Funding for Schooling: Final Report, December 2011*. Edited by Employment and Workplace Relations Department of Education. Canberra City, ACT: Department of Education, Employment and Workplace Relations.
Gorard, Stephen. 2016. "The Complex Determinants of School Intake Characteristics and Segregation, England 1989 to 2014." *Cambridge Journal of Education* 46 (1): 131–146. doi:10.1080/0305764X.2015.1045446.
Gorur, Radhika. 2013. "My School, My Market." *Discourse: Studies in the Cultural Politics of Education* 34 (2): 214–230. doi:10.1080/01596306.2013.770248.
Hanushek, Eric A., Jacob M. Markman, John F. Kain, and Steven G. Rivkin. 2003. "Does Peer Ability Affect Student Achievement?" *Journal of Applied Econometrics* 18 (5): 527–544.
Hatcher, Richard. 1998. "Class Differentiation in Education: Rational Choices?" *British Journal of Sociology of Education* 19 (1): 5.
Hesketh, A. J., and P. T. Knight. 1998. "Secondary School Prospectuses and Educational Markets." *Cambridge Journal of Education* 28 (1): 21–35.
Ho, Christina. 2011. "Respecting the Presence of Others: School Micropublics and Everyday Multiculturalism." *Journal of Intercultural Studies* 32 (6): 603–619.
Holme, Jennifer Jellison. 2002. "Buying Homes, Buying Schools: School Choice and the Social Construction of School Quality." *Harvard Educational Review* 72 (2): 177–206.
Holme, Jennifer Jellison, Amy Stuart Wells, and Anita Tijerina Revilla. 2005. "Learning through Experience: What Graduates Gained by Attending Desegregated High Schools." *Equity & Excellence in Education* 38 (1): 14–24. doi:10.1080/10665680590907846.
Hoxby, Caroline M. 2000. *Peer Effects in the Classroom: Learning from Gender and Race Variation*. Cambridge, MA: National Bureau of Economic Research.
Hoxby, C. 2003. "School Choice and School Productivity: Could School Choice Be a Tide That Lifts All Boats?" In *The Economics of School Choice (National Bureau of Economic Research Conference Report)*, edited by C. Hoxby, 287–342. Chicago, IL: University of Chicago Press.
Lamb, S., J. Jackson, A. Walstab, and S. Huo. 2015. *Educational Opportunity in Australia 2015: Who Succeeds and Who Misses Out*. Centre for International Research on Education Systems, Victoria University, for the Mitchell Institute. Melbourne: Mitchell Institute.
Lubienski, C. A., and S. T. Lubienski. 2013. *The Public School Advantage: Why Public Schools Outperform Private Schools*. Chicago: The University of Chicago Press.
Madanipour, A., G. Cars, and J. Allen, eds. 1998. *Social Exclusion in European Cities: Processes, Experiences, and Responses*. London: Jessica Kingsley.
Maloutas, Thomas. 2007. "Middle Class Education Strategies and Residential Segregation in Athens." *Journal of Education Policy* 22 (1): 49–68. doi:10.1080/02680930601065742.
McConney, A., and L. B. Perry. 2010. "Science and Mathematics Achievement in Australia: The Role of School Socioeconomic Composition in Educational Equity and Effectiveness." *International Perspectives on Successes and Challenges: Research and Policy Directions* 8 (3): 429–452. doi:10.1007/s10763-010-9197-4.
Noreisch, Kathleen. 2007. "School Catchment Area Evasion: The Case of Berlin, Germany." *Journal of Education Policy* 22 (1): 69–90. doi:10.1080/02680930601065759.
OECD. 2012. *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*. Paris: OECD.
OECD. 2014. *PISA 2012 Results: What Students Know and Can Do*. Student Performance in Mathematics, Reading and Science. Vol. I, Revised ed. OECD. Accessed October 1. http://www.keepeek.com/Digital-Asset-Management/oecd/

education/pisa-2012-results-what-students-know-and-can-do-volume-i-revised-edition-february-2014/a-profile-of-student-performance-in-reading_9789264208780-8-en#page1
Perry, L. B., and A. McConney. 2010. "School Socio-economic Composition and Student Outcomes in Australia: Implications for Educational Policy." *Australian Journal of Education* 54 (1): 72–85.
Perry, L. B., and L. Southwell. 2014. "Access to Academic Curriculum in Australian Secondary Schools: A Case Study of a Highly Marketised Education System." *Journal of Education Policy* 29 (4): 467–485. doi:10.1080/02680939.2013.846414.
Posey-Maddox, L. 2014. *When Middle-class Parents Choose Urban Schools: Class, Race, and the Challenge of Equity in Public Education*. Chicago, IL: University of Chicago Press.
Posey-Maddox, L. 2016. "Beyond the Consumer: Parents, Privatization, and Fundraising in US Urban Public Schooling." *Journal of Education Policy* 31 (2): 178–197. doi:10.1080/02680939.2015.1065345.
Reay, D., G. Crozier, and D. James. 2013. *White Middle-class Identities and Urban Schooling*. London: Palgrave Macmillan.
Roda, A., and A. S. Wells. 2013. "School Choice Policies and Racial Segregation: Where White Parents' Good Intentions, Anxiety, and Privilege Collide." *American Journal of Education* 119 (2): 261–293.
Rothstein, Jesse M. 2006. "Good Principals or Good Peers? Parental Valuation of School Characteristics, Tiebout Equilibrium, and the Incentive Effects of Competition among Jurisdictions." *The American Economic Review* 96 (4):1333–1350.
Rowe, E. E., and J. Windle 2012. "The Australian middle class and education: a small-scale study of the school choice experience as framed by 'My School' within inner city families." *Critical Studies in Education* 53 (2):137–151. doi:10.1080/17508487.2012.672327.
Rowe, E. E. 2016. "Politics, Religion and Morals: The Symbolism of Public Schooling for the Urban Middle-class Identity." *International Studies in Sociology of Education* 1–15. doi:10.1080/09620214.2016.1200479.
Rowe, E. E. 2017. *Middle-class School Choice in Urban Spaces: The Economics of Public Schooling and Globalized Education Reform*. New York & Milton Park: Routledge.
Schmidt, William H., Nathan A. Burroughs, Pablo Zoido, and Richard T. Houang. 2015. "The Role of Schooling in Perpetuating Educational Inequality: An International Perspective." *Educational Researcher* 44 (7): 371–386. doi:10.3102/0013189x15603982.
Schneider, Mark, and Jack Buckley. 2002. "What Do Parents Want from Schools? Evidence from the Internet." *Educational Evaluation and Policy Analysis* 24 (2): 133–144.
Seppánen, Piia. 2003. "Patterns of 'public-school markets' in the Finnish Comprehensive School from a Comparative Perspective." *Journal of Education Policy* 18 (5): 513–531. doi:10.1080/0268093032000124875.
Strathdee, Rob. 2013. "Neo-tribal Capitalism, Socio-economic Disadvantage and Educational Policy in New Zealand." *Journal of Education Policy* 28 (4): 501–516. doi:10.1080/02680939.2013.775348.
Teese, Richard. 1998. "Curriculum Hierarchy, Private Schooling, and the Segmentation of Australian Secondary Education, 1947–1985." *British Journal of Sociology of Education* 19 (3): 401.
Teese, Richard. 2007. "Structural Inequality in Australian Education." In *International Studies in Educational Inequality, Theory and Policy*, edited by Richard Teese, Stephen Lamb, Marie Duru-Bellat, and Sue Helme, 374–396. Netherlands: Springer.
Thompson, Greg, and Ian Cook. 2014. "Manipulating the Data: Teaching and NAPLAN in the Control Society." *Discourse: Studies in the Cultural Politics of Education* 35 (1): 129–142. doi:10.1080/01596306.2012.739472.
Thompson, G., and A. G. Harbaugh. 2013. "A Preliminary Analysis of Teacher Perceptions of the Effects of NAPLAN on Pedagogy and Curriculum." *The Australian Educational Researcher* 40: 299–314.
Valenzuela, Juan Pablo, Cristian Bellei, and Danae Ríos. 2014. "Socioeconomic School Segregation in a Market-Oriented Educational System. The Case of Chile." *Journal of Education Policy* 29 (2): 217–241. doi:10.1080/02680939.2013.806995.
Walberg, Herbert J. 2000. "Market Theory of School Choice." *Education Week*, July 12, 46, 49.
Walford, Geofrey. 2003. "School Choice and Educational Change in England and Wales." In *Choosing Choice: School Choice in International Perspective*, edited by David Nathan Plank and Gary Sykes, 68–91. New York: Teachers College Press.
Waslander, Sietske, and Martin Thrupp. 1995. "Choice, Competition and Segregation: An Empirical Analysis of a New Zealand Secondary School Market, 1990–93." *Journal of Education Policy* 10 (1): 1–26. doi:10.1080/0268093950100101.
Watson, Louise, and Chris Ryan. 2010. "Choosers and Losers: The Impact of Government Subsidies on Australian Secondary Schools." *Australian Journal of Education* 54 (1): 86–107.
Willms, J. Douglas. 1986. "Social Class Segregation and Its Relationship to Pupils' Examination Results in Scotland." *American Sociological Review* 51 (2): 224–241.
Willms, J. Douglas, and Frank Echols. 1992. "Alert and Inert Clients: The Scottish Experience of Parental Choice of Schools." *Economics of Education Review* 11 (4): 339–350.
Windle, J. A. 2015. *Making Sense of School Choice: Politics, Policies, and Practice under Conditions of Cultural Diversity*. New York: Palgrave Macmillan.
Zimmer, Ron W., and Eugenia F. Toma. 2000. "Peer Effects in Private and Public Schools across Countries." *Journal of Policy Analysis & Management* 19 (1): 75–92.