



Office of
the Schools
Adjudicator

DETERMINATION

Case reference: ADA3297

Objector: A member of the public

Admission Authority: Aylesbury High School Trust for Aylesbury High School, Buckinghamshire

Date of decision: 29 August 2017

Determination

In accordance with section 88H(4) of the School Standards and Framework Act 1998, I do not uphold the objection to the admission arrangements for September 2018 determined by the academy trust for Aylesbury High School, Buckinghamshire.

I have also considered the arrangements in accordance with section 88I(5) and find there are other matters which do not conform with the requirements relating to admission arrangements in the ways set out in this determination.

By virtue of section 88K(2) the adjudicator's decision is binding on the admission authority. The School Admissions Code requires the admission authority to revise its admission arrangements within two months of the date of the determination.

The referral

1. Under section 88H(2) of the School Standards and Framework Act 1998, (the Act), an objection has been referred to the adjudicator by a member of the public, (the objector), about the admission arrangements for September 2018 (the arrangements) for Aylesbury High School (the school), a selective academy for girls aged 11 to 18. The objection is that the selection test used by the school appears to disadvantage high attaining children who come from disadvantaged backgrounds and those of Asian Pakistani ethnic origin.
2. The local authority for the area in which the school is located is Buckinghamshire. The local authority is a party to this objection. Other parties to the objection are the objector and the school's academy trust and its governing body.

3. The same objection was lodged to all thirteen selective schools in Buckinghamshire. The thirteen schools use the same selection test, but each has its own admission authority and separate determinations are required for each school.

Jurisdiction

4. The terms of the academy agreement between the academy trust and the Secretary of State for Education require that the admissions policy and arrangements for the academy school are in accordance with admissions law as it applies to maintained schools. These arrangements were determined on 23 January 2017 by the governing body on behalf of the trust, which is the admission authority for the school, on that basis.
5. The objector submitted his objection to these determined arrangements on 14 May 2017. The objector has asked to have his identity kept from the other parties and has met the requirement of Regulation 24 of the School Admissions (Admission Arrangements and Co-ordination of Admission Arrangements) (England) Regulations 2012 (the Regulations) by providing details of his name and address to me. I am satisfied the objection has been properly referred to me in accordance with section 88H of the Act and it is within my jurisdiction. I have also used my power under section 88I of the Act to consider the arrangements as a whole.

Procedure

6. In considering this matter I have had regard to all relevant legislation and the School Admissions Code (the Code).
7. The documents I have considered in reaching my decision include:
 - a. the objector's form of objection dated 14 May 2017, documents attached to it and subsequent emails;
 - b. the admission authority's response to the objection and supporting documents;
 - c. the admission authority's response to my further enquiries;
 - d. the comments of the local authority on the objection and supporting documents;
 - e. the LA's composite prospectus for parents seeking admission to schools in the area in September 2017;
 - f. a map of the area identifying relevant schools;
 - g. confirmation of when consultation on the arrangements last took place;
 - h. copies of the minutes of the meeting at which governing body of the

school determined the arrangements; and

- i. a copy of the determined arrangements.

The Objection

8. The objector said *“I feel that their entrance tests are significantly biased against certain groups of children. Specifically, against high attaining children gaining a KS2 [Key Stage 2] average points score (APS) ≥ 30 who come from disadvantaged backgrounds (as measured by the eligibility for free school meals and/or IDACI), and those of Asian Pakistani (APK) ethnic origin.”* IDACI is the Government’s Income Deprivation Affecting Children Index. The objector went on to identify paragraphs 14, 1.8 and 1.31 of the Code as possibly being contravened.
9. Paragraph 14 says: *“In drawing up their admission arrangements, admission authorities **must** ensure that the practices and the criteria used to decide the allocation of school places are fair, clear and objective.”* Paragraph 1.8 says: *“Admission authorities **must** ensure that their arrangements will not disadvantage unfairly, either directly or indirectly, a child from a particular social or racial group”,* and paragraph 1.31 says: *“Tests for all forms of selection **must** be clear, objective, and give an accurate reflection of the child’s ability or aptitude, irrespective of sex, race, or disability. It is for the admission authority to decide the content of the test, providing that the test is a true test of aptitude or ability.”*

Other Matters

10. When I considered the arrangements as a whole I noted a number of matters which did not, or may not, meet the requirements of the Code.
 - a) The definition of looked after and previously looked after girls in the first oversubscription criterion may not be clear. Paragraph 1.8 of the Code requires that oversubscription criteria are clear.
 - b) The second and third oversubscription criteria refer to siblings. The definition of sibling may not be clear.
 - c) The arrangements refer to a catchment area. These references may not meet the requirements of paragraph 1.14 and paragraph 1.47 of the Code.
 - d) The arrangements did not appear to meet the requirements for waiting lists is set out in paragraph 2.14 of the Code.
 - e) The statement in the arrangements regarding admission outside of the normal age group may not meet the requirements of paragraph 2.17 of the Code.

Background

11. The school became an academy on 1 July 2011; it is one of 13 selective grammar schools in Buckinghamshire. Each of these schools is an academy with its own admission authority. The 13 schools established The Buckinghamshire Grammar Schools (TBGS), a company limited by guarantee in order to manage and administer secondary transfer testing. The website for this company says its aim is to *“maintain a coordinated selection system using a common secondary transfer test to select pupils for entry into all Buckinghamshire grammar schools at 11+ each year, to avoid an admissions and testing ‘free for all’ which would be to the detriment of children and families.”*
12. The 13 schools purchase the selection test from the Centre for Evaluation and Monitoring (CEM) at Durham University and commission the local authority to administer the testing process. I have noted that a different organisation will be supplying the tests in 2019. The CEM tests cover, verbal, numerical and non-verbal ability in two multiple-choice tests each about 50 minutes long and return a standardised score reflecting the child’s age. The verbal, numerical and non-verbal elements of the tests are weighted 50:30:20 respectively.
13. Tests for admission in September 2018 will be taken by, unless withdrawn by their parents, all children attending primary schools in Buckinghamshire and children attending other schools who register for the eleven-plus. To be considered for places at any of the 13 grammar schools children must achieve a standardised score of 121. If any of the schools are oversubscribed, they apply their individual oversubscription criteria to decide which applicants get places.
14. This school has a published admission number (PAN) of 180. The oversubscription criteria can be summarised as:
 1. Looked after and previously looked after girls.
 2. Siblings of girls in the school.
 3. Siblings of boys at Aylesbury Grammar School.
 4. Girls who qualify for free school meals who live in the catchment area.
 5. Girls living in the catchment area.
 6. Girls living closest to the school.
15. Distance from the school is used as a tie-breaker and if two or more girls live the same distance from the school, random allocation is used to offer the final place.

Consideration of Case

Arguments from the objector

16. The objector referred me to quotes from Buckinghamshire headteachers in the national press concerning the susceptibility of the tests used before the CEM tests were introduced to coaching and tuition. These quotes expressed an opinion that children from better-off families, who could afford tuition for the eleven-plus, did better in the test than abler children from families that could not afford such tuition.
17. The objector said that the CEM tests were intended to be more resistant to coaching than earlier tests and allow children to demonstrate their natural ability. He provided a document from CEM which said: "...our tests are designed to enable all children to demonstrate their natural ability and achievement". This document contained a section headed "Resistance to Tuition" which ends "*Whilst CEM acknowledges that no assessment can ever be truly tutor-proof, we are confident that our rigorous controls minimise the potential for tutors to prepare candidates with assessment specific knowledge.*" The objector then said that CEM had withdrawn this document and referred me to other articles in the national press which quoted the Director of CEM acknowledging that CEM were looking at why certain groups of children were not doing well in the tests.
18. The objector provided me with a copy of a document entitled "*The Impact of Demographic Variables on Test Performance*" (the CEM report) produced by CEM in June 2015 which analyses the Buckinghamshire 2014 test results. He also quoted the Department for Education (DfE) Chief Scientific Adviser and Chief Analyst's evidence to the Commons Education Committee in November 2016 where he said "*They introduced it [the CEM test] in Buckinghamshire for exactly the right reasons. I don't want to cast any aspersion on their reasons for doing it or on the people who designed the test but, as Becky [Dr Rebecca Allen] said earlier, it didn't work.*" The objector did not provide the subsequent sentences in the evidence which I consider pertinent to the case, "*But designing the best test is an empirical matter. The only thing you can do is to try it and see whether it works better or worse than the predecessor. If it works better you build on it. If it works less well, you withdraw it and go back to what you had before.*"
19. Background information on the tests published on the local authority's website was quoted by the objector. The objector said he thought the information was not clear on whether the tests measured skills, ability or academic potential and there was no evidence for the local authority to claim that tutoring was not required. The objector referred to data published on the local authority's website which he claimed suggested that the current tests provide little improvement on previous tests in terms of fairness.
20. The objector said he wanted to focus his objection on eleven-plus outcomes for high attaining children from low-income and Asian

Pakistani backgrounds. He provided me with data released under a Freedom of Information Act (FOI) request he had made to CEM on the children who took the test for admission in 2014. He said: *“To establish whether there is bias in 11+ tests, it is important to allow for the fact that some groups of children have lower average attainment as measured by other tests, for example KS2 SATs. Such groups might also be expected to achieve lower average STTS [Secondary Transfer Test Score] scores.”*

21. The objector noted that *“KS2 SATs are curriculum-based tests, and are therefore measures of prior-learning that are influenced by external factors, such as the quality of schooling a child has received.”* He argued that *“the 11+, on the other hand, is supposed to isolate aptitude and ability from external factors such as schooling, home environment and social circumstances. In other words, if the 11+ is operating fairly, it should significantly narrow the outcome gaps for disadvantaged children and children from certain ethnic minority groups relative to those observed KS2 SATs.”* He argued that the CEM report showed the opposite effect with the CEM tests widening the gap.
22. The objector provided me with a spreadsheet, obtained under FOI, detailing characteristics of over 4000 children who took the eleven-plus in Buckinghamshire in 2014. He also supplied me with his analysis of this data. The objector told me *“CEM have seen this analysis and responded: “At face value those results do look significant. While the sample sizes are quite small, the impacts are large enough that it does invite further investigation. In order to consider the problem further and to give any firm statements, I really would need to look at the original data that has been used to generate the results.” The last comment is strange: CEM provided the data themselves.”*
23. From this analysis the objector concluded that *“In the case of children who go on to achieve KS2 APS [Key Stage 2 average points score] = 33, this translates to % pass-rates of around 55% for the higher income group, compared to around 15% for the lower income groups”* and *“high attaining children from Pakistani backgrounds in Bucks (which is by far our largest ethnic minority group, making up about 11% of the cohort) are less than half as likely to pass the 11+ than other children of equal KS2 attainment”*.

Arguments from the school

24. The school chose to respond to the objection alongside the other 12 grammar schools through TBGS, the company which commissions the tests from CEM on behalf of all 13 grammar schools in the county. TBGS argued that by operating a common selection test for all of the schools in the county it made the arrangements fair, clear, objective and easier for parents to understand and so they complied with paragraph 14 of the Code.
25. TBGS also said in relation to meeting the requirements of paragraph

1.8 of the Code *“The grammar schools believe that their respective oversubscription criteria are compliant with these requirements. In our particular context, it is very difficult (or impossible) to argue that certain groups of Buckinghamshire children are adversely affected by application of the oversubscription criteria as to date all Buckinghamshire qualifiers have secured places in Buckinghamshire Grammar Schools.”* They continued: *“There is no evidence at all that parents are discouraged from applying because of, for example, uniform or trip policies and the county-wide opt-out agreement (whereby most primary children sit the test unless their parents withdraw them) is recognised as being most helpful to the groups of children and parents who would not always aspire to grammar school or understand the secondary system.”*

26. In my view these parts of the response miss the point of the objection. If a child does not perform well enough in the selection test, the oversubscription criteria are irrelevant. If the reason a child from a particular racial or social group does not reach the required standard is because of some bias in the test which affects that particular group, then the test is not fair and therefore the arrangements are not fair.
27. The fairness of the tests is addressed in comments from TBGS on paragraph 1.31 of the Code. TGBS argued that by engaging a reputable specialist test provider such as CEM the tests benefitted from a rigorous process of writing, reviewing, trialling, analysis, amending and re-trialling. However, TGBS admitted that CEM does not have ethical approval to collect data on ethnicity or home deprivation when conducting trials.
28. TBGS provided a number of quotes from Daniel Koretz of the Harvard Graduate School of Education about test bias and how to interpret group differences. These quotes concern the analysis of admission tests for Berkeley campus at the University of California. As the objector has pointed out, the process and context of a major American university and grammar schools in Buckinghamshire are different. At Berkeley, test results are just one factor in the admissions process, in Buckinghamshire, passing the test gives access to be considered against other criteria which are not related to ability.
29. I think that two of these quotes are relevant to my considerations, the first is: *“A second common and perhaps more important misconception is that a simple difference in scores between groups implies bias.”* The second is *“As admission becomes more selective, low-scoring groups (African-Americans and Latinos, for example) will become progressively more severely underrepresented, and by the exact same mechanism, higher-scoring groups (for example, Asian-Americans) will become increasingly overrepresented. This is a mathematical certainty, so long as the distribution of scores conforms even roughly to the bell curve – specifically, so long as there are many students bunched up with scores near their own group’s average and progressively fewer with scores further from that average. And this effect is very powerful.”*

30. TBGS echoed concerns expressed by the local authority about the data used by the objector in his analysis before going on to say that: *“It is also the case that it cannot be automatically assumed that differences in test outcomes for particular children or groups is related to the test itself – multiple factors are likely to apply. For example, racial group is unlikely to be the determining factor of performance. Instead it may be other factors that are shared by a particular group e.g. the length of time the child or family has been in the UK, languages spoken at home, strong overlap with other factors such as deprivation indices etc. Feedback from Buckinghamshire primary schools, who know the children they teach very well, is that the CEM test is selecting the children who they think are suitable for grammar school which suggests that the test is performing as it should.”*
31. The schools also commented that outcomes for the groups of children observed in the data are in line with that seen in other national assessments such as Key Stage 2 national curriculum tests, GCSE and A level. That is not, however, the point made by the objector which is that children from those groups who do well in Key Stage 2 tests appear to do less well than others who also do well in Key Stage 2 tests in the CEM selection tests.
32. With their own comments on the objection, TBGS provided comments from CEM on the objection. The comments from CEM quoted studies identifying differences in the performance of different ethnic groups in examinations. Echoing the second of the above quotes from Koretz, CEM said *“The analysis cited in the objection looks at high performing KS2 children only and performance is thus limited to a narrow range. This makes the reliable interpretation of the data difficult, as there is little room for differentiation within such a small cross-section of KS2 data; taking only the top slice from a dataset will magnify any differences between groups, and as such could easily lead to misinterpretation if the finding is extrapolated.”* CEM confirmed that the results in 2015 showed the same overall pattern as those in 2014 and provided charts to support this.

Arguments from the local authority

33. The local authority identified some discrepancies in the data and questioned the validity of the objector’s analysis. It maintained that it considered the test did not discriminate against any groups.

Analysis

34. In considering this case I have been presented with a large amount of data and detailed statistical analysis. That analysis has been undertaken by statisticians working for CEM at Durham University and by the objector. Through correspondence with the parties I have established where discrepancies in the data provided to me may have arisen and undertaken my own statistical analysis of the data. I have considered my own analysis alongside the comments from all the

parties on the data and its analysis.

35. From these analyses of the data for 4186 pupils attending primary schools in Buckinghamshire who took the selection test in 2014 I am satisfied that:

- among children with an average point score at Key Stage 2 of 30 or more, that is the equivalent of level 5 or above in all subject areas, those from low income backgrounds, did less well in the selection test than other children; and
- among children with an average point score at Key Stage 2 of 30 or more, those from Asian Pakistani backgrounds, did less well in the selection test than other children.

36. The table below illustrates the finding in the previous paragraph.

Children with Key Stage 2 points score of 30 or more	Number	Mean Test Score	Test Score 121 or more
Children eligible for free school meals	92	93.3	14%
Children not eligible for free school meals	1990	110.6	37%
Children of Asian Pakistani background	178	99.1	21%
Children not of Asian Pakistani Background	1925	110.8	38%

Note: Totals are not the same as some data is missing for some children.

37. I have considered a number of possible reasons for these differences. The most obvious being that families with low income are unlikely to be able to afford coaching for their children to help them pass the selection test. Not all other families could afford coaching either and I have been unable to find any data about the proportion of families who do employ a tutor to help with the eleven-plus or how much of an impact such tutoring has. Such data would inform the debate about how tutor-proof CEM and other selection tests are.

38. It is possible to speculate that factors such as the main language used at home and quality of education at primary schools serving that community may lead to children from Asian Pakistani backgrounds doing less well in assessment at school generally. That said, it is more difficult to identify why children from Asian Pakistani backgrounds who do perform well in one form of assessment, Key Stage 2 tests, do not do as well in these selection tests as might be expected. The objector has stated it is the test itself which leads to these children not doing as well, but he has not suggested what characteristics of the test may be the cause.

39. CEM do not make past papers from the selection tests available. I have however, looked at the sample selection test questions which are published and cannot see any obvious characteristics which might lead

to the difference in performance of different groups of children. I have therefore considered other differences between the tests.

40. The end of Key Stage 2 test and the eleven plus test different things. The first tests the child's mastery of the Key Stage 2 curriculum and is used to evaluate the performance of the child's school while the second tests the child's suitability for a grammar school education. I therefore looked at those children from the two groups identified by the objector who did well in the selection test to see how they did at the end of Key Stage 2. The differences were small and not statistically significantly. Children from these groups who meet the standard for selection to grammar school, do well at Key Stage 2.

Children with Selection test score of 121 or more	Number	Mean KS2 Score	KS2 score 30 or more
Children eligible for free school meals	13	34.3	100%
Children not eligible for free school meals	744	34.5	99%
Children of Asian Pakistani background	39	34.4	97%
Children not of Asian Pakistani background	728	34.5	99%

41. The objector argued that the selection test should be identifying innate ability whatever the child's background. It would appear to be doing this as children who pass it almost invariably do well at the end of Key Stage 2. In contrast children who have been well prepared by their schools for the end of Key Stage 2 tests may not necessarily have the ability to cope with a grammar school curriculum and, if the selection test is doing its job, would not be selected for one.
42. Having considered all of the above factors and the comments from the objector on TBGS's arguments, I have reached the following conclusions. There is evidence that, in 2014, children from low-income families who did well in tests at the end of Key Stage 2 were less likely to pass the eleven-plus than other children who did as well at the end of Key Stage 2. The same can be also said for children from an Asian Pakistani ethnic background. There are many factors which could lead to these outcomes other than any bias in the eleven-plus test itself. There is no data to explore the other factors and I can see no characteristics in the sample test questions which might lead to such bias. End of Key Stage 2 tests and the eleven-plus test different things. Being able to do well on the Key Stage 2 test does not necessarily mean a child is suitable for a grammar school education. I have seen no evidence to persuade me that the effect is solely caused by the test or any other factor over which the schools have control. Indeed, it could be the "*mathematical certainty*" described by Koretz.
43. The objection is to the arrangements for 2018, not to those in 2014 in which the objector identified groups who were apparently

underperforming in the selection test. Given that TBGS were aware from the CEM report that some groups did not do well in the test I asked them what steps they had taken to address this matter. The reply said that the differences between groups identified in the CEM report could be due to a range of factors and that making changes to the test on the basis of a single year's data was unsound. TBGS however asked CEM to review the content of the test after discussion of the 2016 entry data. The findings of this review were "*inconclusive and suggested no reason for change*", although it was agreed that potential changes to the test should be kept under review.

44. In 2016 CEM approached TBGS with a research proposal to look in detail at differences between different groups of pupils. TBGS and the local authority agreed to the research proposal and had expected findings to have been available to inform the test for admission in 2018. The report has however taken longer to complete than expected.
45. I noted above the DfE Chief Scientific Adviser and Chief Analyst's evidence to the Commons Education Committee which said "*designing the best test is an empirical matter. The only thing you can do is to try it and see whether it works better or worse than the predecessor. If it works better you build on it. If it works less well, you withdraw it and go back to what you had before.*" I am satisfied that not only did the schools engage a specialist test provider with wide experience and credibility for measuring children's' ability to provide their test, they have been keeping the outcomes of the test under review.
46. I can see nothing more that the school could have done to ensure that their test meets the requirements of paragraph 1.31 of the Code to be "*clear, objective, and give an accurate reflection of the child's ability or aptitude, irrespective of sex, race, or disability.*" I do not uphold the objection.

Other Matters

47. When I considered the arrangements as a whole I noted a number of matters which did not, or may not, meet the requirements of the Code.
48. The first oversubscription criterion correctly gives highest priority for looked after and previously looked after girls. However, the Code requires in paragraph 14 that arrangements are clear and in paragraph 1.8 that oversubscription criteria are clear. For a definition of previously looked after girls the reader is referred to the Code and there is no definition of a looked after girl in the arrangements.
49. When I raised this matter with the school, it proposed to add a definition which included reference to the Children Act 1989 into its arrangements. The proposed wording appears accurately to reflect the definition of such children used in the Code and would make the arrangements clear on this point.
50. The second and third oversubscription criteria refer to siblings. There is

a definition of sibling at the bottom of the page which says “*a sibling is a brother or sister*”. This suggest it may be possible for boys to be admitted to this girls’ school.

51. When I raised this matter with the school, it proposed to revise the arrangements to use the term “*sister*” consistently and clearly.
52. The fourth and fifth oversubscription criteria refer to a catchment area. Paragraph 1.14 of the Code says that “*Catchment areas must be designed so that they are reasonable and clearly defined.*” Admission arrangements are defined in the Code as “*the overall procedure, practices, criteria and supplementary information to be used in deciding on the allocation of school places and refers to any device or means used to determine whether a school place is to be offered.*” This means that the catchment area is part of the arrangements and paragraph 1.47 of the Code requires that admission authorities publish the arrangements on their website. The arrangements do no more than refer the reader to the home page of the local authority’s website.
53. When I drew this to the school’s attention it immediately arranged for a catchment area map to be displayed on its website. This map is clear and can easily be found, meeting the requirements of the Code.
54. The requirements for waiting lists is set out in paragraph 2.14 of the Code as “*Each admission authority must maintain a clear, fair and objective waiting list until at least 31 December of each school year of admission, stating in their arrangements that each added child will require the list to be ranked again in line with the published oversubscription criteria.*” The statement about waiting lists in the arrangements appeared not to comply with this requirement.
55. Paragraph 2.17 of the Code requires “*Admission authorities must make clear in their admission arrangements the process for requesting admission out of the normal age group.*” The statement in the arrangements regarding admission outside of the normal age group explained how the school will consider any such application, but it did not say what the process of requesting such consideration is.
56. When I drew these two matters to the school’s attention, it proposed a revision of the wording about waiting lists and the process of admission outside of the normal age group which would meet this requirement of the Code.

Summary of Findings

57. The objection was based on data which showed that in 2014, children from low-income families, or an Asian Pakistani ethnic background, who did well in tests at the end of Key Stage 2 did less well in the selection test for the school than other children who did equally well in end of Key Stage 2 tests. The objector said this made the selection test unfair to children in those groups.

58. I have satisfied myself that the data provided does show the patterns observed by the objector. However, for the reasons set out above, I am not convinced that these patterns are caused by the test itself and indeed could be a mathematical inevitability. By engaging with an organisation with a good reputation in the evaluation of children's ability which extensively trials its tests I do not think the school could do more to ensure the test it will use for 2018 is as fair as possible. Therefore, I do not uphold the objection.

59. I have found that the arrangements do not comply with requirements in other ways detailed above. I am pleased to report that the school has undertaken to revise its arrangements to address these matters.

Determination

60. In accordance with section 88H(4) of the School Standards and Framework Act 1998, I do not uphold the objection to the admission arrangements for September 2018 determined by the academy trust for Aylesbury High School, Buckinghamshire.

61. I have also considered the arrangements in accordance with section 88I(5) and find there are other matters which do not conform with the requirements relating to admission arrangements in the ways set out in this determination.

62. By virtue of section 88K(2) the adjudicator's decision is binding on the admission authority. The School Admissions Code requires the admission authority to revise its admission arrangements within two months of the date of the determination.

Dated: 29 August 2017

Signed:

Schools Adjudicator: Phil Whiffing