

# Buckinghamshire Additional Report

CEM, April 2014

This report analyses the Buckinghamshire 2014 entry results for which there are data on free school meals (FSME) and English as a second language (E2L). These data were not available for out-of-county candidates, or most partner schools. Therefore this analysis only covers Buckinghamshire LA state school candidates.

## Groups

The percentages provided in the table below are within each group, rather than as a percentage of the whole cohort. Please note that the overall number of males is greater, so the gender splits below should not expect to be even, but ideally close to the overall percentages provided in the first row.

N=4712 Group	Candidates		% Split		Qualified		% of Candidates	
	F	M	F%	M%	F	M	F%	M%
<b>Overall</b>	<b>2280</b>	<b>2432</b>	<b>48.4%</b>	<b>51.6%</b>	<b>439</b>	<b>487</b>	<b>19.3%</b>	<b>20.0%</b>
<b>FSME</b>	139	137	50.4%	49.6%	4	6	2.9%	4.4%
<b>Non-FSME</b>	2141	2295	48.3%	51.7%	435	481	20.3%	21.0%
<b>E2L</b>	382	399	48.9%	51.1%	75	58	19.6%	14.5%
<b>Non-E2L</b>	1898	2033	48.3%	51.7%	364	429	19.2%	21.1%

## Age Standardisations

The relationship between age and raw score is calculated separately for each of the three test sections (Verbal, Maths and NonVerbal).

Every pupil's score for each test section is then adjusted by a small amount according to their age, so the youngest pupil in the cohort is not disadvantaged on the basis of their age. This creates the age-adjusted raw scores.

The valid age range for the academic year was from 10.034 to 11.031 years, giving 4709 candidates with a valid age (3 candidates were too old and 0 were too young). The numbers of candidates for each month of birth are given below:

2002				2003							
September	October	November	December	January	February	March	April	May	June	July	August
380	406	398	389	372	372	383	433	374	419	413	370

Finally the age-adjusted raw scores are standardised for each section to make the mean (average) standardised score for each section equal: **mean 100** and **standard deviation 15**. A total, Weighted, score is also calculated by adding 50% of the pupil's Verbal score, 30% of their Maths score and 20% of their Non-Verbal score.

The mean (average) standardised scores in the following table are below 100 because this analysis was carried out on a subset of the sample used for standardisation. The out-of-county candidates and partner schools were excluded from this analysis because there were no FSME or E2L data available for them. These excluded candidates were not representative of the whole population and their removal from this analysis reduced the mean scores from 100 to approximately 90.

### Mean (SD) age-standardised scores

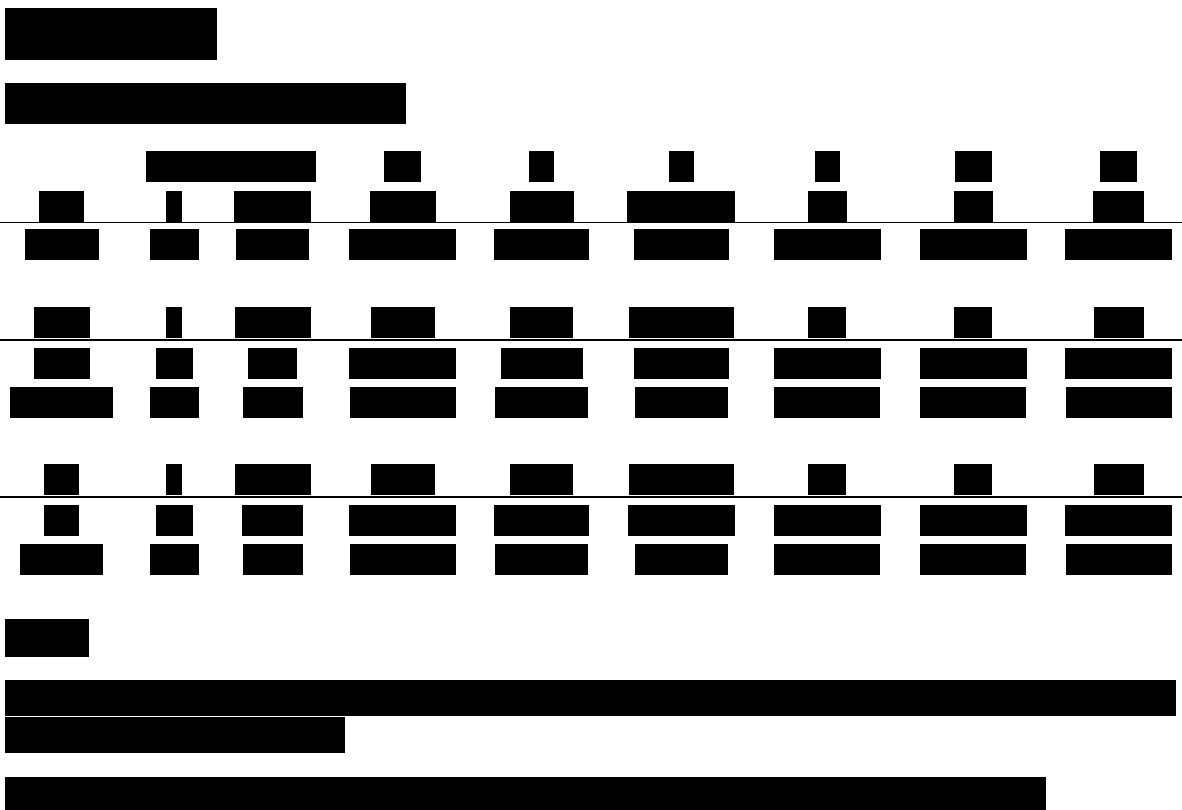
Split	N	Percent	Age	Verbal	Maths	NonVerbal	Weighted
Cohort	4712	100.0%	10.5 (0.3)	90.9 (38.1)	87.4 (35.2)	88.2 (37.9)	89.3 (34.1)
FSME	N	Percent	Age	Verbal	Maths	NonVerbal	Weighted
FSME	276	5.9%	10.5 (0.3)	64.2 (29.3)	65.7 (28.9)	62.4 (35.6)	64.3 (27.3)
Non-FSME	4436	94.1%	10.5 (0.3)	92.5 (38.0)	88.7 (35.1)	89.8 (37.5)	90.8 (33.9)
E2L	N	Percent	Age	Verbal	Maths	NonVerbal	Weighted
E2L	781	16.6%	10.5 (0.3)	78.7 (38.0)	84.1 (39.0)	82.3 (40.7)	81.1 (36.2)
Non-E2L	3931	83.4%	10.5 (0.3)	93.3 (37.7)	88.0 (34.3)	89.3 (37.2)	90.9 (33.4)

### Notes:

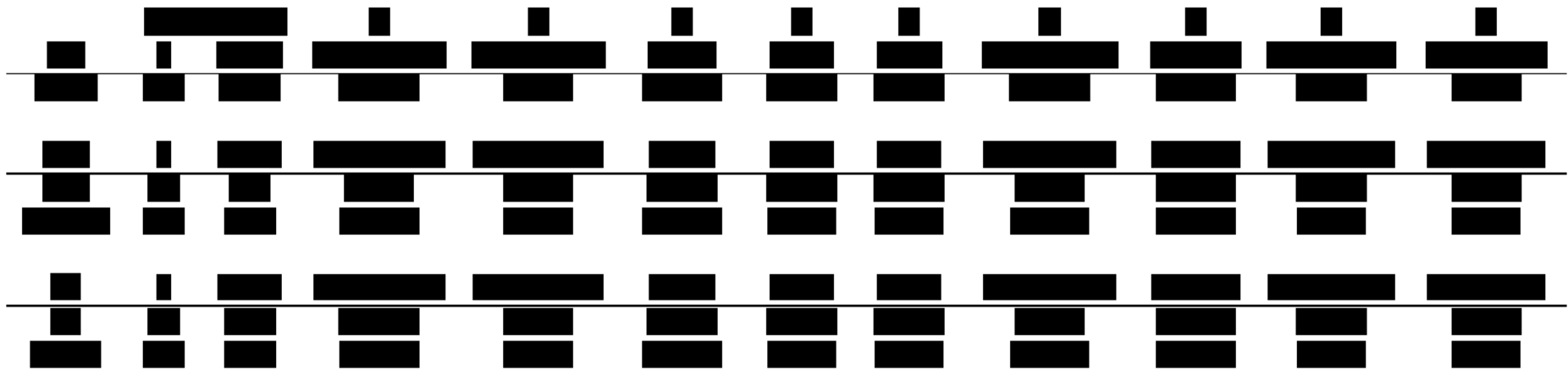
FSME candidates had much lower mean scores (~64) than non-FSME candidates (~90). FSME candidates performed best in Maths.

E2L candidates mean scores were lowest for Verbal, whereas non-E2L scores were highest for Verbal.

E2L means were all higher than for FSME candidates.



Mean (SD) raw subsection scores



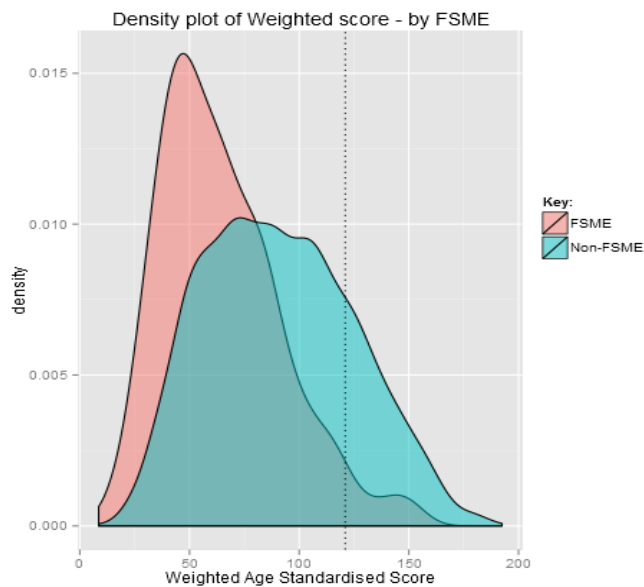
Notes:

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## Density plots

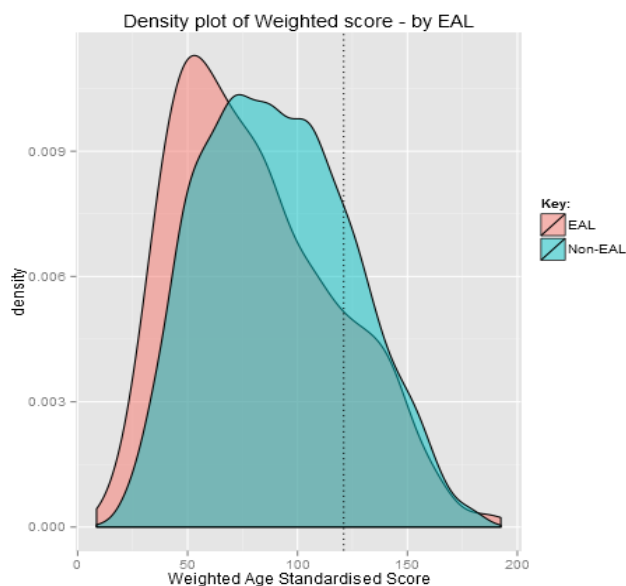
Density plots display the relative distribution of scores: regardless of the size of the group, the coloured areas of the chart are the same (100%). This allows the distribution of scores for a small group to be easily compared with a much larger group. (A histogram would show actual numbers, so a small group of 50 would be difficult to see against a much larger group of 5000.)

The vertical dotted line shows the 121 threshold for qualifying.



## FSME

Some FSME candidates qualified, but the most FSME candidates had scores below the sample mean of approximately 90.



## E2L

A similar proportion of E2L and non-E2L candidates had high scores (above 140), but a higher proportion of E2L candidates scored around the 121 threshold.