

The Royal Society Computing Project

KS4 NPD data on gender, pupil premium, BAME, EAL and course choices in computing

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April 2017

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1 Notes on methodology

The data analysed here is from the following sources:

- Student demographic information from the DfE National Pupil Database: all students that are linked to one or more results.
- Student results information from the DfE National Pupil Database: all results with a matching student record, exams taken in 2016.
- School characteristic information from Edubase.

Depending on the grouping variable used, tables may show different totals. This is because the grouping variable information is not complete for all students and schools, and where data is missing those students or schools have been excluded from the summaries. Tables showing % of students taking A-level and GCSE are showing the number of students taking A-level or GCSE Computing out of all students who take any A-level or GCSE. The health of the fields used in this report are as follows:

- Gender, 0% missing.
- Pupil premium, 9.8% missing.
- Ethnicity, 9.2% missing.
- EAL, 8.4% missing.

KS5 demographic data is very incomplete and where possible data has been brought across from matching KS4 student datasets for 2012-16. Whilst possible for student circumstances to change, namely gender and pupil premium, it is assumed that these descriptors will match their KS4 profile. ICT AS entry numbers differ from JCQ data, the JCQ methodology is unclear: they might combine multiple year's data to produce their tables, or combine multiple subjects into one category. Overall total trends match the JCQ. Computer science data is very close to JCQ numbers.

Several tables contain data that would allow for the recognition of 5 or fewer students. Following the DfE guidance on this, certain values have been anonymised and rounding has been applied throughout the report to prevent cross tabular student number calculations. All student level data has been rounded to the nearest 5, except in the case where the number would be rounded *down* to 5, in this case the number has been rounded to 6 to distinguish it from the X figure explained below:

- X denotes a value that means 5 or fewer students could be recognised for a school, local authority or Region. Or a percentage that represents 5 or fewer instances. In the case that several schools have been collected together, e.g. in the case of local authorities, X is given when the *number of students* < *number of schools* + 5; this anonymises all schools in that particular collection.
- Y denotes a value that is 5 or fewer smaller than the largest value possible, or a percentage that represents 5 or fewer instances. For example in the case that a school has 100 students and 97 of them are categorised as BAME, the BAME value would be replaced by Y to anonymise the 3 students who are White British.
- NA denotes a field that has no data stored against it for the school or collection. For example, an area with only one school offering computer science, where the school is an independent school. As independent schools don't return data on pupil premium, this area would be put down as NA .

The school tables below have been filtered so that only larger cohort sizes are shown and these numbers have been rounded to the nearest 5. This serves two purposes, firstly it avoids situations where the statistics of very small institutions, which are much more susceptible to the influence of small demographic changes, dominate the top of the tables. Secondly, combining anonymised school level data with anonymised local authority or regional data might allow for recognition of 5 or fewer students. As a result, beyond the provided tables, school level data has been redacted from this report and where shown, all numbers have been rounded as described above.

Where individual schools have been analysed, there are several schools that have no name or descriptive data stored about them in edubase. These schools can be identified by a URN of value 900000+ and do not appear on Edubase. Provision in these schools makes up less than 0.1% of all computing provision and they have been included in this report for completeness. We await the DfE's confirmation about their status.

2 KS2 results and computer science

Table 1: KS2 Maths profiles of 2016 GCSE subject cohorts. 45 largest subjects

| Subject | Mean | SD |
|-----------------------------------|------|------|
| Latin | 4.89 | 0.33 |
| Chemistry | 4.68 | 0.51 |
| Physics | 4.68 | 0.51 |
| Biology | 4.67 | 0.52 |
| Economics | 4.61 | 0.57 |
| German | 4.53 | 0.61 |
| Computing | 4.44 | 0.67 |
| Spanish | 4.43 | 0.65 |
| French | 4.43 | 0.65 |
| Music | 4.36 | 0.72 |
| Psychology | 4.35 | 0.65 |
| Statistics | 4.34 | 0.72 |
| Applications of Maths | 4.31 | 0.75 |
| Bus Studies | 4.30 | 0.68 |
| English Lang | 4.28 | 0.73 |
| History | 4.27 | 0.72 |
| Physical Ed | 4.27 | 0.70 |
| Geography | 4.26 | 0.73 |
| Applied Engineering | 4.24 | 0.73 |
| English Lit | 4.24 | 0.75 |
| Relig Studies | 4.23 | 0.75 |
| D&T Graphics | 4.21 | 0.75 |
| Maths | 4.16 | 0.77 |
| Sociology | 4.16 | 0.70 |
| ICT | 4.15 | 0.76 |
| Drama | 4.14 | 0.77 |
| ALL | 4.14 | 0.80 |
| D&T Prod Des | 4.13 | 0.78 |
| Office Technology | 4.12 | 0.75 |
| Fine Art | 4.11 | 0.82 |
| Dance | 4.10 | 0.76 |
| Science Additional | 4.07 | 0.73 |
| D&T Textiles | 4.06 | 0.79 |
| Social Science: Citizenship | 4.05 | 0.78 |
| Media/Film/Tv | 4.05 | 0.75 |
| D&T Res Mat | 4.05 | 0.80 |
| Art & Design | 4.03 | 0.84 |
| Home Economics: Food | 3.97 | 0.82 |
| D&T Food Tech | 3.97 | 0.82 |
| Art & Design (Textiles) | 3.96 | 0.84 |
| Photography | 3.94 | 0.79 |
| Science Core | 3.91 | 0.79 |
| Health & Social Care | 3.85 | 0.76 |
| Home Economics: Child Development | 3.77 | 0.77 |
| English Lang Lit | 3.58 | 0.87 |

3 Gender

3.1 Schools

Table 2: 2016 GCSE computer science provision by school gender characteristic

| Gender | Total Schools | Total Students | Subject Providers | Providers % | Subject Students | Students % | Average Cohort Size |
|--------|------------------|-------------------|----------------------|----------------|---------------------|---------------|---------------------------|
| Mixed | 4440 | 514209 | 2061 | 46.4 | 54320 | 10.6 | 26.4 |
| Girls | 400 | 41366 | 153 | 38.2 | 2760 | 6.7 | 18 |
| Boys | 295 | 27419 | 122 | 41.4 | 3641 | 13.3 | 29.8 |
| Totals | 5135 | 582994 | 2336 | 45.5 | 60721 | 10.4 | 26 |

Table 3: 2016 GCSE computer science mixed gender provision

| Gender | Type | Total Computing Providers | Female computing students | Male computing students | Providers with no females | Percentage of providers |
|--------|------------------------|---------------------------------|---------------------------------|-------------------------------|---------------------------------|----------------------------|
| Mixed | Independent | 145 | 222 | 1283 | 68 | 46.9 |
| Mixed | State Non Selective | 1884 | 9205 | 42607 | 321 | 17.0 |
| Mixed | State Selec- tive | 32 | 187 | 816 | 5 | 15.6 |
| | Totals | 2061 | 9614 | 44706 | 394 | 19.1 |

Table 4: 2016 GCSE computer science all schools, top 30 providers
(subject cohort size ≥ 20)

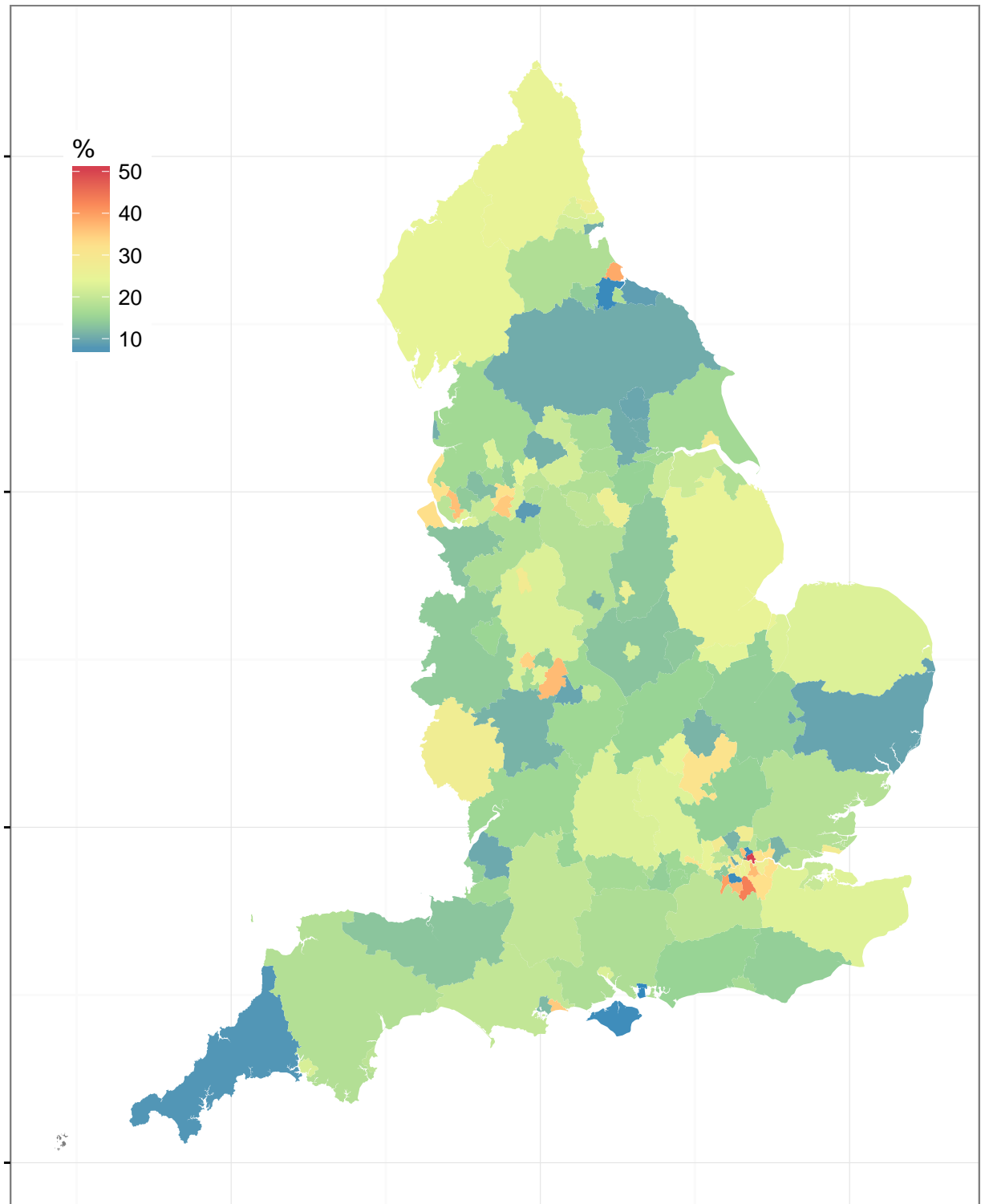
| URN | Name | Gender Charac- teristic | Total students | Total subject students | % of total students |
|--------|--------------------------------------------------------------|-------------------------------|-------------------|------------------------------|------------------------|
| 140941 | Heathrow Aviation Engineer- ing UTC | Mixed | 40 | 40 | 100 |
| 101575 | Islamia School for Girls' | Girls | 25 | 25 | 100 |
| 109705 | Manshead School | Mixed | 265 | 255 | 96.2 |
| 136495 | Teignmouth Community School, Exeter Road | Mixed | 180 | 155 | 86.1 |
| 138571 | Queensbury Academy | Mixed | 120 | 100 | 83.3 |
| 140972 | UTC Swindon | Mixed | 60 | 50 | 83.3 |
| 137116 | The Magna Carta School | Mixed | 230 | 190 | 82.6 |
| 122360 | Bedlingtonshire Community High School | Mixed | 115 | 95 | 82.6 |
| 139268 | UTC Reading | Mixed | 50 | 40 | 80 |
| 141086 | University Technical College Norfolk | Mixed | 85 | 65 | 76.5 |
| 137612 | Range High School | Mixed | 190 | 145 | 76.3 |
| 140961 | WMG Academy for Young En- gineers | Mixed | 105 | 80 | 76.2 |
| 139669 | Bristol Technology and Engi- neering Academy | Mixed | 100 | 75 | 75 |
| 139405 | Dyke House Sports and Tech- nology College | Mixed | 195 | 145 | 74.4 |
| 139589 | The Studio School Liverpool | Mixed | 75 | 55 | 73.3 |
| 112388 | Millom School | Mixed | 75 | 55 | 73.3 |
| 112958 | Whittington Green School | Mixed | 110 | 80 | 72.7 |
| 135653 | Maltings Academy | Mixed | 175 | 125 | 71.4 |
| 138187 | Woodcote High School | Mixed | 215 | 150 | 69.8 |
| 112398 | St Benedict's Catholic High School | Mixed | 145 | 100 | 69 |
| 135481 | St Edmund Arrowsmith Catholic Centre for Learning (VA) | Mixed | 205 | 140 | 68.3 |
| 130490 | Hugh Baird College | Mixed | 55 | 35 | 63.6 |
| 111401 | The Grange School | Mixed | 120 | 75 | 62.5 |
| 140950 | Lincoln UTC | Mixed | 80 | 50 | 62.5 |
| 116440 | The Vyne Community School | Mixed | 75 | 45 | 60 |
| 136491 | De Aston School | Mixed | 110 | 65 | 59.1 |
| 136315 | Queen Elizabeth's Grammar Alford - A Selective Academy | Mixed | 85 | 50 | 58.8 |
| 140976 | Discovery School | Mixed | 60 | 35 | 58.3 |
| 135631 | The Langley Academy | Mixed | 175 | 100 | 57.1 |
| 139180 | The Boston Grammar School | Boys | 105 | 60 | 57.1 |
| TOTAL | | | 583573 | 60737 | 10.4 |

3.2 Local Authority

Table 5: 2016 GCSE computer science local authority top female provision

| Name | Total providers | Total Comp providers | Comp Sch with females | Total students | Female students | % of total students | Total subject students | Female subject students | % of subject students |
|------------------------|-----------------|----------------------|-----------------------|----------------|-----------------|---------------------|------------------------|-------------------------|-----------------------|
| City of London | 2 | 1 | 1 | 200 | 90 | 45 | 10 | 10 | 100 |
| Tower Hamlets | 28 | 8 | 4 | 2805 | 1330 | 47.4 | 170 | 85 | 50 |
| Croydon | 44 | 16 | 15 | 4440 | 2165 | 48.8 | 575 | 250 | 43.5 |
| Hartlepool | 9 | 5 | 3 | 1060 | 540 | 50.9 | 230 | 90 | 39.1 |
| Sutton | 24 | 12 | 7 | 2820 | 1400 | 49.6 | 290 | 110 | 37.9 |
| Kingston upon Thames | 16 | 8 | 5 | 1800 | 1020 | 56.7 | 145 | 55 | 37.9 |
| Islington | 16 | 6 | 5 | 1445 | 655 | 45.3 | 190 | 70 | 36.8 |
| Lewisham | 22 | 13 | 9 | 2535 | 1220 | 48.1 | 245 | 90 | 36.7 |
| Birmingham | 136 | 51 | 39 | 12925 | 6410 | 49.6 | 1315 | 480 | 36.5 |
| Knowsley | 11 | 5 | 5 | 1115 | 535 | 48 | 235 | 85 | 36.2 |
| Bournemouth | 17 | 7 | 5 | 1720 | 850 | 49.4 | 395 | 140 | 35.4 |
| Trafford | 26 | 12 | 9 | 2815 | 1380 | 49 | 525 | 185 | 35.2 |
| Wolverhampton | 26 | 13 | 12 | 2575 | 1320 | 51.3 | 320 | 110 | 34.4 |
| Wirral | 31 | 18 | 13 | 3540 | 1850 | 52.3 | 375 | 125 | 33.3 |
| Salford | 26 | 8 | 6 | 2275 | 1210 | 53.2 | 135 | 45 | 33.3 |
| Hammersmith and Fulham | 23 | 7 | 5 | 1840 | 1065 | 57.9 | 120 | 40 | 33.3 |
| Barking and Dagenham | 13 | 6 | 6 | 2275 | 1130 | 49.7 | 305 | 100 | 32.8 |
| Bexley | 20 | 11 | 10 | 3195 | 1555 | 48.7 | 490 | 160 | 32.7 |
| Bromley | 32 | 15 | 11 | 3630 | 1875 | 51.7 | 445 | 145 | 32.6 |
| Sefton | 32 | 18 | 12 | 3265 | 1625 | 49.8 | 590 | 190 | 32.2 |
| Central Bedfordshire | 18 | 8 | 6 | 2620 | 1330 | 50.8 | 585 | 185 | 31.6 |
| Newham | 25 | 13 | 9 | 3695 | 1840 | 49.8 | 555 | 175 | 31.5 |
| Slough | 16 | 9 | 8 | 1765 | 865 | 49 | 330 | 100 | 30.3 |
| Stoke-on-Trent | 28 | 13 | 8 | 2300 | 1150 | 50 | 255 | 75 | 29.4 |
| Kingston upon Hull | 22 | 7 | 6 | 2475 | 1225 | 49.5 | 140 | 40 | 28.6 |
| City of Wandsworth | 24 | 10 | 8 | 2110 | 1000 | 47.4 | 300 | 85 | 28.3 |
| Harrow | 22 | 11 | 9 | 2560 | 1175 | 45.9 | 355 | 100 | 28.2 |
| Herefordshire | 25 | 9 | 9 | 1855 | 875 | 47.2 | 250 | 70 | 28 |
| Greenwich | 26 | 7 | 6 | 2420 | 1230 | 50.8 | 180 | 50 | 27.8 |
| Southwark | 24 | 12 | 9 | 2930 | 1460 | 49.8 | 235 | 65 | 27.7 |
| TOTAL | 5166 | 2339 | 1820 | 583195 | 287105 | 49.2 | 60739 | 12372 | 20.4 |

[1] “For the following map the City of London (100% of computer science students are female) and Isle’s of Scilly (0% of computer science students are female) have been removed so that differences in provision can be more



clearly seen.”

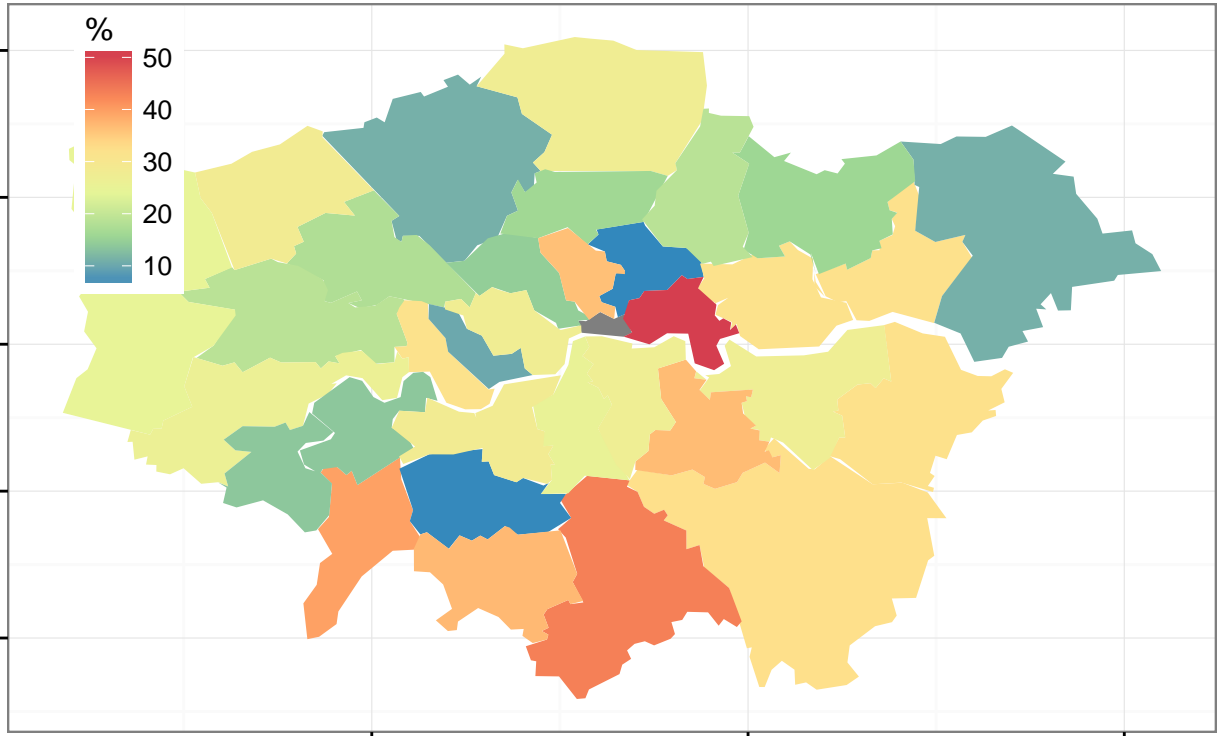


Figure 1: 2016 GCSE computer science local authorities gender representation - London focus

3.3 Region

Table 6: 2016 GCSE computer science Regional female provision

| Name | Total providers | Total Comp providers | Comp Sch with females | Total students | Female students | % of total students | Total subject students | Female subject students | % of subject students |
|--------------------------|-----------------|----------------------|-----------------------|----------------|-----------------|---------------------|------------------------|-------------------------|-----------------------|
| London | 761 | 328 | 252 | 85065 | 42395 | 49.8 | 8900 | 2370 | 26.6 |
| West Midlands | 614 | 258 | 203 | 63950 | 31215 | 48.8 | 6410 | 1465 | 22.9 |
| North West | 709 | 334 | 265 | 77755 | 38365 | 49.3 | 8550 | 1785 | 20.9 |
| North East | 233 | 107 | 90 | 26310 | 13040 | 49.6 | 2665 | 550 | 20.6 |
| South East | 886 | 396 | 303 | 97185 | 47575 | 49 | 10300 | 1985 | 19.3 |
| East of England | 561 | 276 | 206 | 66585 | 32560 | 48.9 | 7420 | 1380 | 18.6 |
| Yorkshire and The Humber | 462 | 204 | 160 | 57400 | 28335 | 49.4 | 5055 | 905 | 17.9 |
| East Midlands | 412 | 188 | 150 | 49805 | 24440 | 49.1 | 4935 | 870 | 17.6 |
| South West | 528 | 248 | 191 | 57470 | 28315 | 49.3 | 6400 | 1065 | 16.6 |
| TOTAL | 5166 | 2339 | 1820 | 581525 | 286240 | 49.2 | 60635 | 12375 | 20.4 |

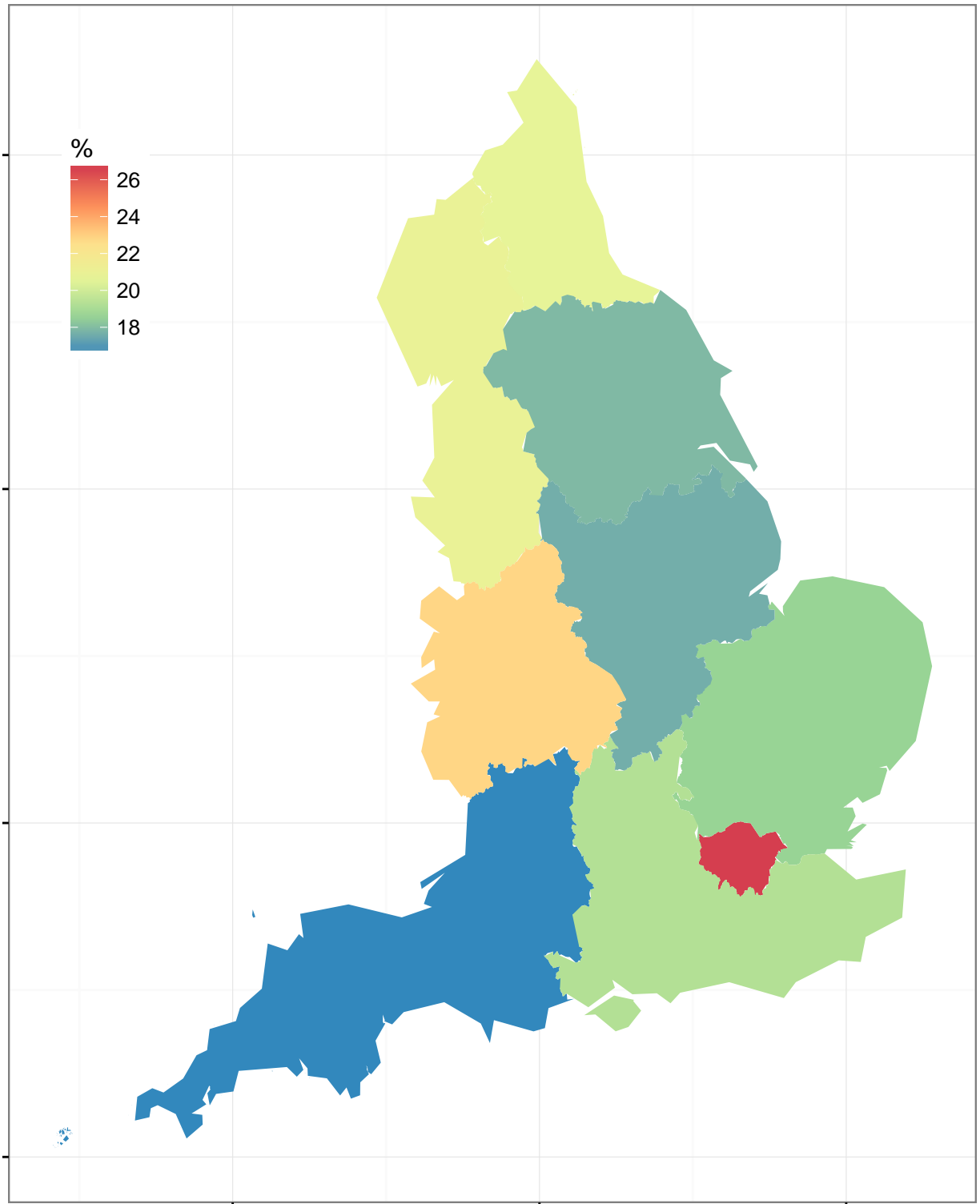


Figure 2: 2016 GCSE computer science regional gender representation

4 Pupil premium

4.1 Local authorities

Table 7: 2016 GCSE computer science local authority top pupil premium provision

| Name | Total providers | Total Comp providers | Comp Sch with PP | Total students | PP students | % of total students | Total subject students | PP subject students | % of subject students |
|------------------------|-----------------|----------------------|------------------|----------------|-------------|---------------------|------------------------|---------------------|-----------------------|
| Islington | 16 | 6 | 6 | 1420 | 955 | 67.3 | 190 | 125 | 65.8 |
| Tower Hamlets | 28 | 8 | 8 | 2605 | 1740 | 66.8 | 170 | 105 | 61.8 |
| Camden | 19 | 7 | 5 | 1410 | 800 | 56.7 | 130 | 80 | 61.5 |
| Westminster | 21 | 8 | 7 | 1575 | 875 | 55.6 | 140 | 85 | 60.7 |
| Newham | 25 | 13 | 11 | 3545 | 2105 | 59.4 | 540 | 305 | 56.5 |
| Hackney | 26 | 9 | 9 | 2050 | 1050 | 51.2 | 195 | 110 | 56.4 |
| Haringey | 20 | 9 | 9 | 2240 | 1085 | 48.4 | 260 | 135 | 51.9 |
| Knowsley | 11 | 5 | 5 | 1110 | 585 | 52.7 | 235 | 115 | 48.9 |
| Enfield | 25 | 10 | 10 | 3520 | 1430 | 40.6 | 400 | 190 | 47.5 |
| Manchester | 45 | 21 | 20 | 4755 | 2485 | 52.3 | 495 | 220 | 44.4 |
| Salford | 26 | 8 | 7 | 2125 | 825 | 38.8 | 135 | 60 | 44.4 |
| Kingston upon Hull | 22 | 7 | 6 | 2265 | 925 | 40.8 | 115 | 50 | 43.5 |
| City of Southwark | 24 | 12 | 12 | 2425 | 1205 | 49.7 | 235 | 100 | 42.6 |
| Lambeth | 20 | 12 | 11 | 1925 | 1030 | 53.5 | 200 | 85 | 42.5 |
| Hartlepool | 9 | 5 | 5 | 1055 | 395 | 37.4 | 230 | 95 | 41.3 |
| Halton | 12 | 6 | 6 | 1360 | 545 | 40.1 | 135 | 55 | 40.7 |
| Waltham Forest | 27 | 15 | 14 | 2570 | 1060 | 41.2 | 370 | 150 | 40.5 |
| Ealing | 27 | 13 | 11 | 2815 | 1060 | 37.7 | 300 | 120 | 40 |
| Kensington and Chelsea | 20 | 3 | 2 | 750 | 345 | 46 | 50 | 20 | 40 |
| Oldham | 20 | 8 | 8 | 2905 | 985 | 33.9 | 245 | 95 | 38.8 |
| Birmingham | 136 | 51 | 47 | 12110 | 5620 | 46.4 | 1295 | 500 | 38.6 |
| Wandsworth | 24 | 10 | 8 | 1690 | 720 | 42.6 | 285 | 110 | 38.6 |
| Greenwich | 26 | 7 | 5 | 2220 | 980 | 44.1 | 170 | 65 | 38.2 |
| Liverpool | 45 | 20 | 18 | 4595 | 1955 | 42.5 | 370 | 140 | 37.8 |
| Stoke-on-Trent | 28 | 13 | 12 | 2240 | 780 | 34.8 | 255 | 95 | 37.3 |
| Nottingham | 27 | 12 | 12 | 2560 | 1120 | 43.8 | 230 | 85 | 37 |
| Southampton | 22 | 12 | 9 | 1965 | 720 | 36.6 | 190 | 70 | 36.8 |
| Middlesbrough | 12 | 6 | 6 | 1405 | 650 | 46.3 | 180 | 65 | 36.1 |
| Hammersmith and Fulham | 23 | 7 | 4 | 1380 | 565 | 40.9 | 85 | 30 | 35.3 |
| Barking and Dagenham | 13 | 6 | 6 | 2250 | 945 | 42 | 300 | 100 | 33.3 |
| TOTAL | 5166 | 2339 | 1964 | 535520 | 143640 | 26.8 | 58669 | 12761 | 21.8 |

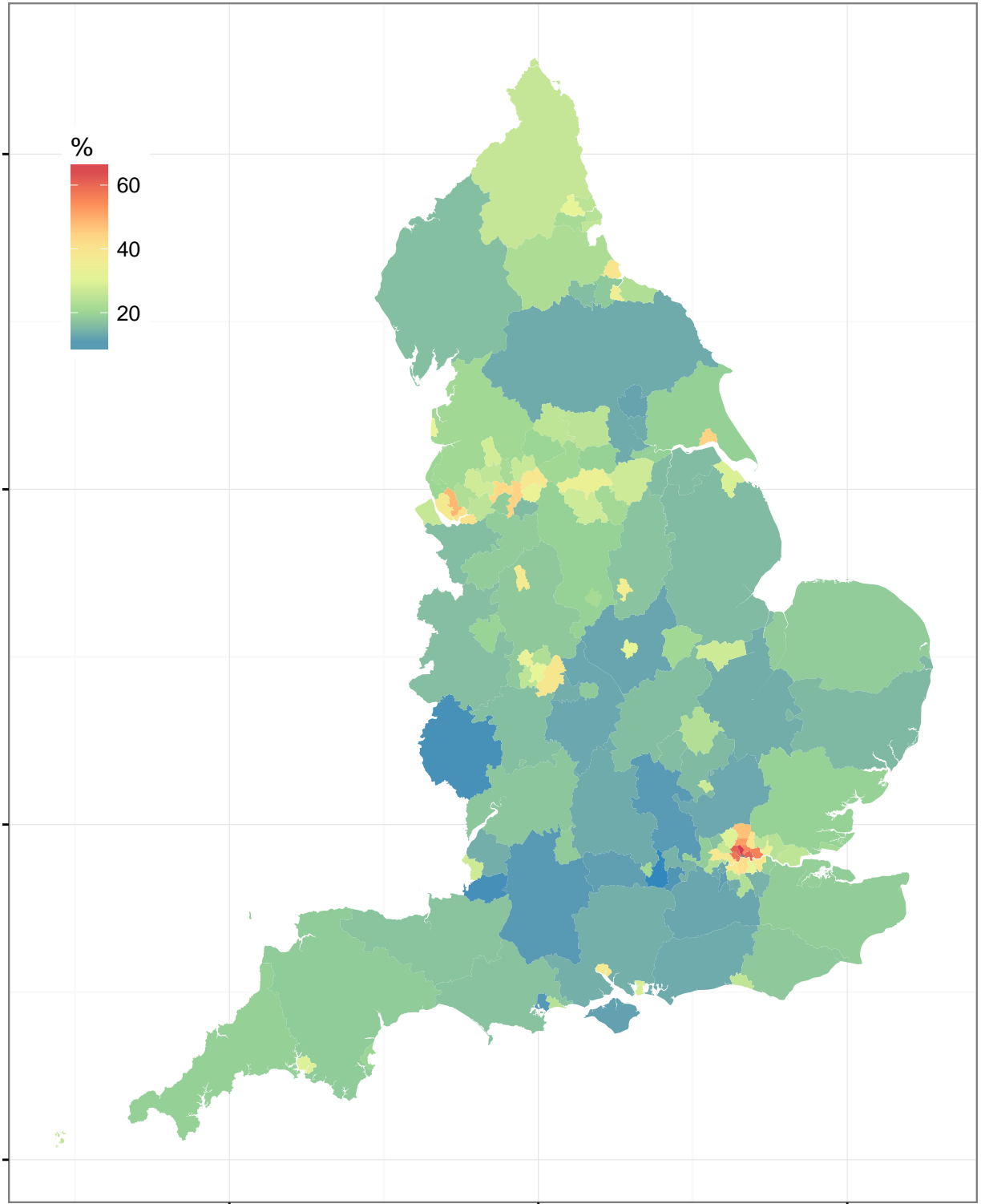


Figure 3: 2016 GCSE computer science local authorities pupil premium representation

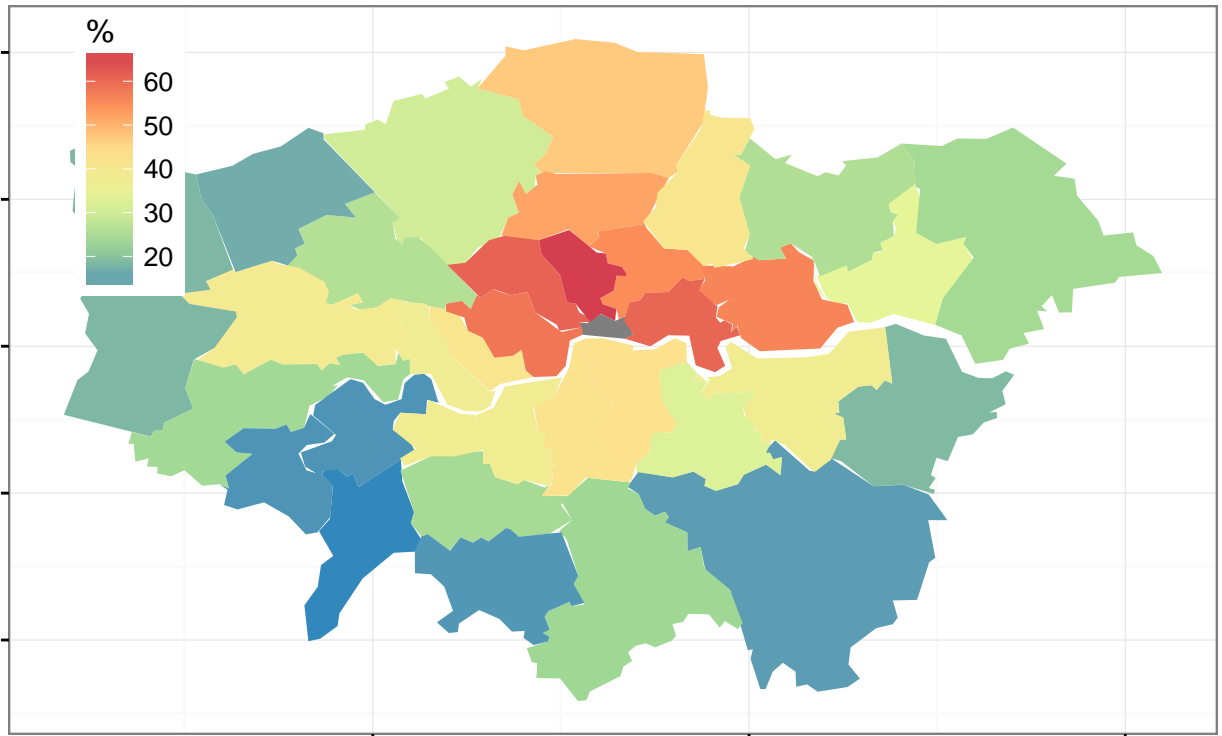


Figure 4: 2016 GCSE computer science local authorities pupil premium representation

4.2 Region

Table 8: 2016 GCSE computer science regional pupil premium provision

| Name | Total providers | Total Comp providers | Comp Sch with PP | Total students | Total PP students | % of PP students for region | Total subject students | Total PP subject students | % of PP students for subject |
|--------------------------|-----------------|----------------------|------------------|----------------|-------------------|-----------------------------|------------------------|---------------------------|------------------------------|
| London | 761 | 328 | 281 | 76530 | 29035 | 37.9 | 8460 | 2815 | 33.3 |
| North East | 233 | 107 | 99 | 25380 | 8055 | 31.7 | 2645 | 680 | 25.7 |
| North West | 709 | 334 | 295 | 73615 | 21670 | 29.4 | 8290 | 2105 | 25.4 |
| West Midlands | 614 | 258 | 213 | 59720 | 18030 | 30.2 | 6240 | 1460 | 23.4 |
| Yorkshire and The Humber | 462 | 204 | 180 | 54185 | 15215 | 28.1 | 4870 | 1080 | 22.2 |
| East Midlands | 412 | 188 | 159 | 46940 | 11150 | 23.8 | 4805 | 865 | 18 |
| South West | 528 | 248 | 203 | 51820 | 10660 | 20.6 | 6170 | 1065 | 17.3 |
| East of England | 561 | 276 | 230 | 60830 | 12830 | 21.1 | 7265 | 1215 | 16.7 |
| South East | 886 | 396 | 304 | 85090 | 16670 | 19.6 | 9825 | 1445 | 14.7 |
| TOTAL | 5166 | 2339 | 1964 | 534110 | 143315 | 26.8 | 58570 | 12730 | 21.7 |

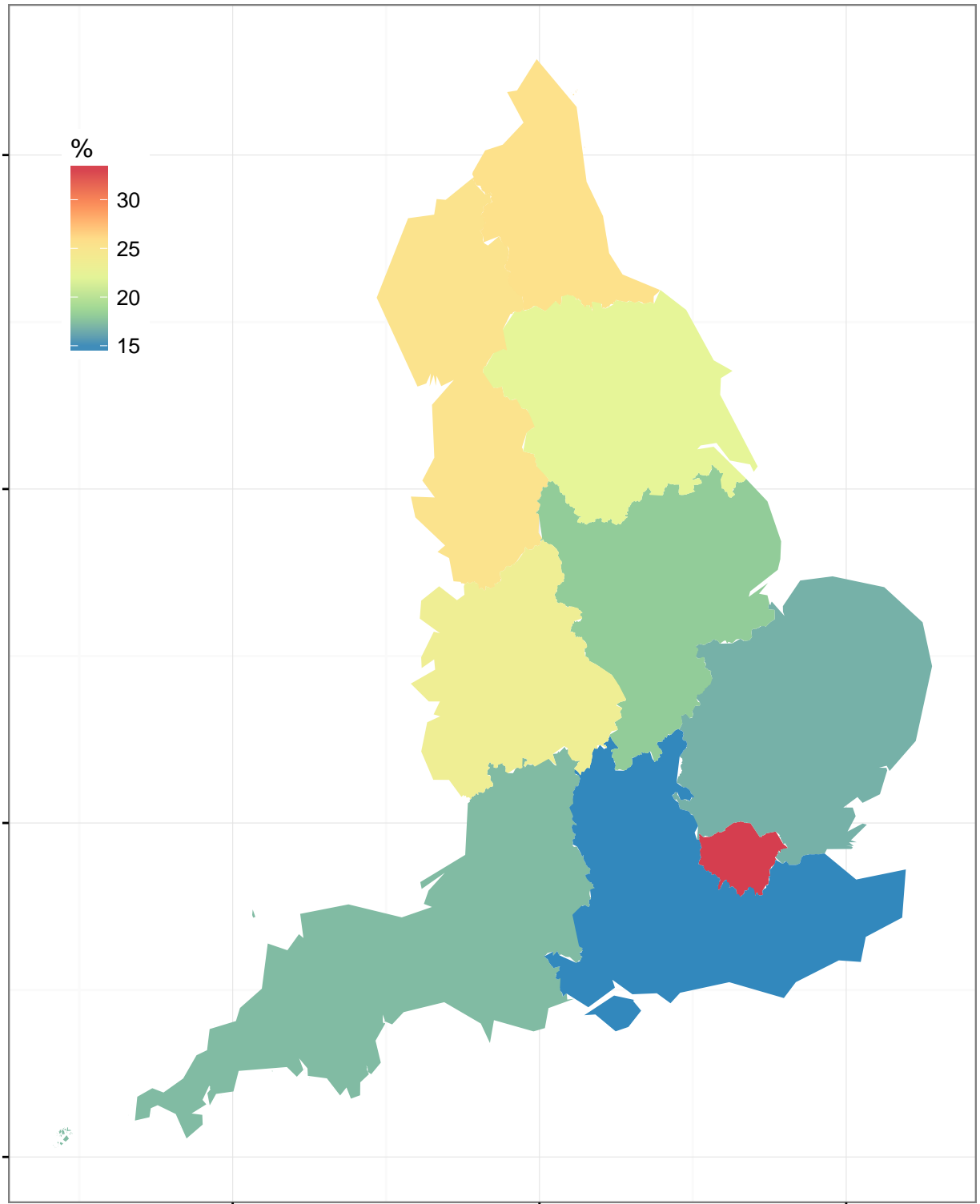


Figure 5: 2016 GCSE computer science regional pupil premium representation

5 BAME students

5.1 Local authorities

Note: figures for Redcar and Cleveland, Halton, and Isles Of Scilly have been removed due to small, identifiable numbers.

Table 9: 2016 GCSE computer science local authority top BAME provision

| Name | Total providers | Total Comp providers | Comp Sch with BAME | Total students | BAME students | % of total students | Total subject students | BAME subject students | % of subject students |
|------------------------|-----------------|----------------------|--------------------|----------------|---------------|---------------------|------------------------|-----------------------|-----------------------|
| Brent | 24 | 11 | 8 | 3090 | 2915 | 94.3 | 235 | 220 | 93.6 |
| Newham | 25 | 13 | 12 | 3550 | 3305 | 93.1 | 540 | 505 | 93.5 |
| Westminster | 21 | 8 | 7 | 1580 | 1335 | 84.5 | 140 | 125 | 89.3 |
| Ealing | 27 | 13 | 11 | 2815 | 2310 | 82.1 | 300 | 265 | 88.3 |
| Harrow | 22 | 11 | 9 | 2170 | 1815 | 83.6 | 320 | 280 | 87.5 |
| Lambeth | 20 | 12 | 10 | 1950 | 1745 | 89.5 | 200 | 175 | 87.5 |
| Hackney | 26 | 9 | 9 | 2065 | 1735 | 84 | 195 | 170 | 87.2 |
| Redbridge | 27 | 15 | 13 | 3385 | 2770 | 81.8 | 385 | 335 | 87 |
| Hounslow | 21 | 10 | 10 | 2575 | 1940 | 75.3 | 185 | 160 | 86.5 |
| Enfield | 25 | 10 | 10 | 3525 | 2785 | 79 | 400 | 340 | 85 |
| Slough | 16 | 9 | 9 | 1715 | 1345 | 78.4 | 330 | 275 | 83.3 |
| Haringey | 20 | 9 | 9 | 2260 | 1840 | 81.4 | 260 | 215 | 82.7 |
| Islington | 16 | 6 | 6 | 1420 | 1140 | 80.3 | 190 | 155 | 81.6 |
| Kensington and Chelsea | 20 | 3 | 2 | 755 | 590 | 78.1 | 50 | 40 | 80 |
| Waltham Forest | 27 | 15 | 14 | 2580 | 2090 | 81 | 370 | 295 | 79.7 |
| Southwark | 24 | 12 | 12 | 2435 | 1925 | 79.1 | 235 | 185 | 78.7 |
| Lewisham | 22 | 13 | 11 | 2365 | 1885 | 79.7 | 230 | 180 | 78.3 |
| Wandsworth | 24 | 10 | 8 | 1715 | 1305 | 76.1 | 290 | 225 | 77.6 |
| Leicester | 34 | 14 | 13 | 3475 | 2560 | 73.7 | 340 | 260 | 76.5 |
| Greenwich | 26 | 7 | 6 | 2235 | 1380 | 61.7 | 170 | 130 | 76.5 |
| Hammersmith and Fulham | 23 | 7 | 4 | 1380 | 950 | 68.8 | 85 | 65 | 76.5 |
| Barnet | 41 | 12 | 11 | 3690 | 2570 | 69.6 | 280 | 205 | 73.2 |
| Camden | 19 | 7 | 5 | 1415 | 1110 | 78.4 | 130 | 95 | 73.1 |
| Hillingdon | 27 | 14 | 13 | 3145 | 1885 | 59.9 | 485 | 340 | 70.1 |
| Merton | 14 | 6 | 6 | 1455 | 950 | 65.3 | 150 | 105 | 70 |
| Luton | 18 | 8 | 8 | 2465 | 1700 | 69 | 145 | 100 | 69 |
| Barking and Dagenham | 13 | 6 | 6 | 2260 | 1490 | 65.9 | 300 | 200 | 66.7 |
| Croydon | 44 | 16 | 13 | 3785 | 2515 | 66.4 | 525 | 345 | 65.7 |
| Birmingham | 136 | 51 | 47 | 12160 | 8055 | 66.2 | 1295 | 840 | 64.9 |
| Kingston upon Thames | 16 | 8 | 7 | 1520 | 770 | 50.7 | 125 | 80 | 64 |
| TOTAL | 5166 | 2339 | 1868 | 536890 | 143720 | 26.8 | 58689 | 16981 | 28.9 |

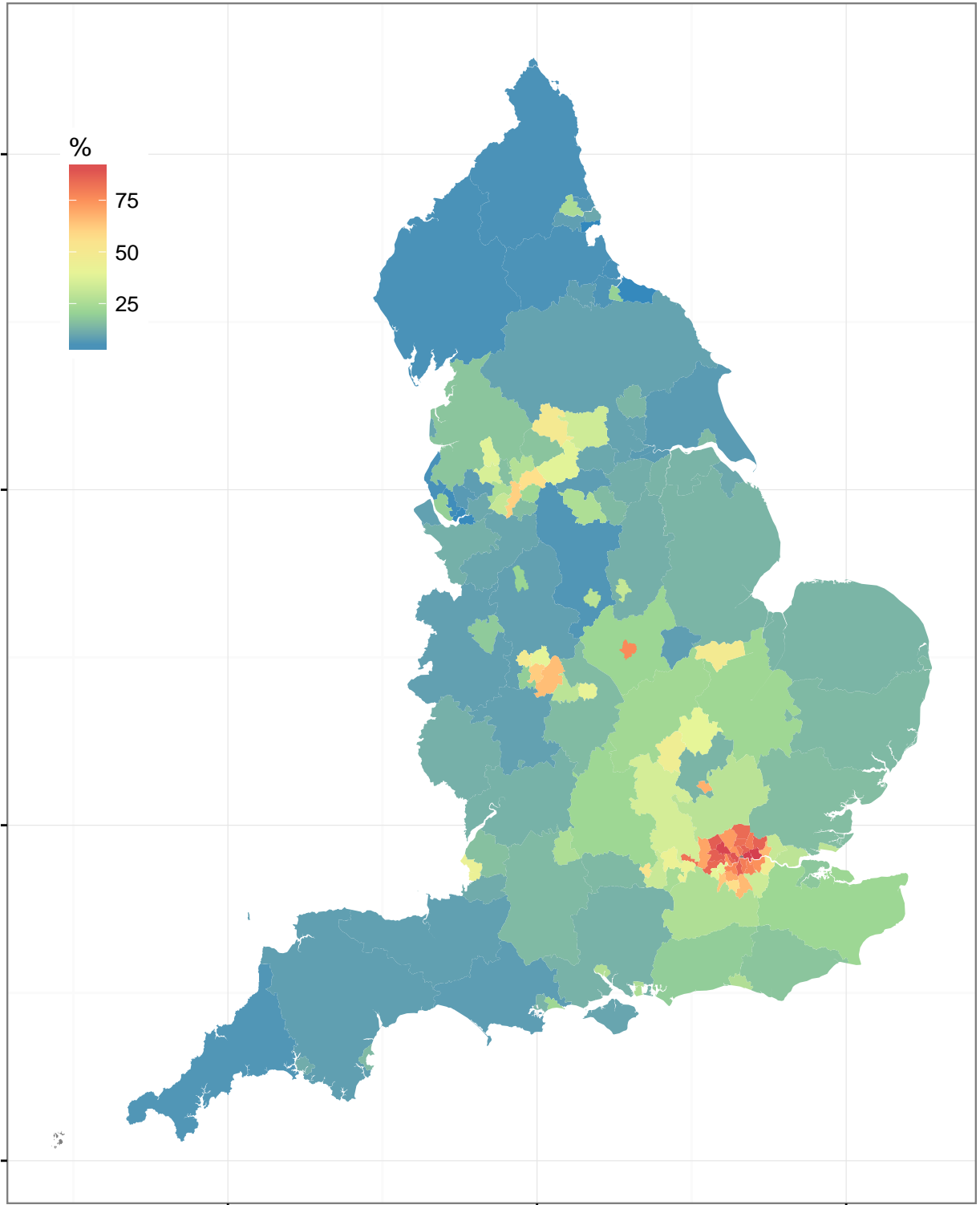


Figure 6: 2016 GCSE computer science local authorities BAME representation

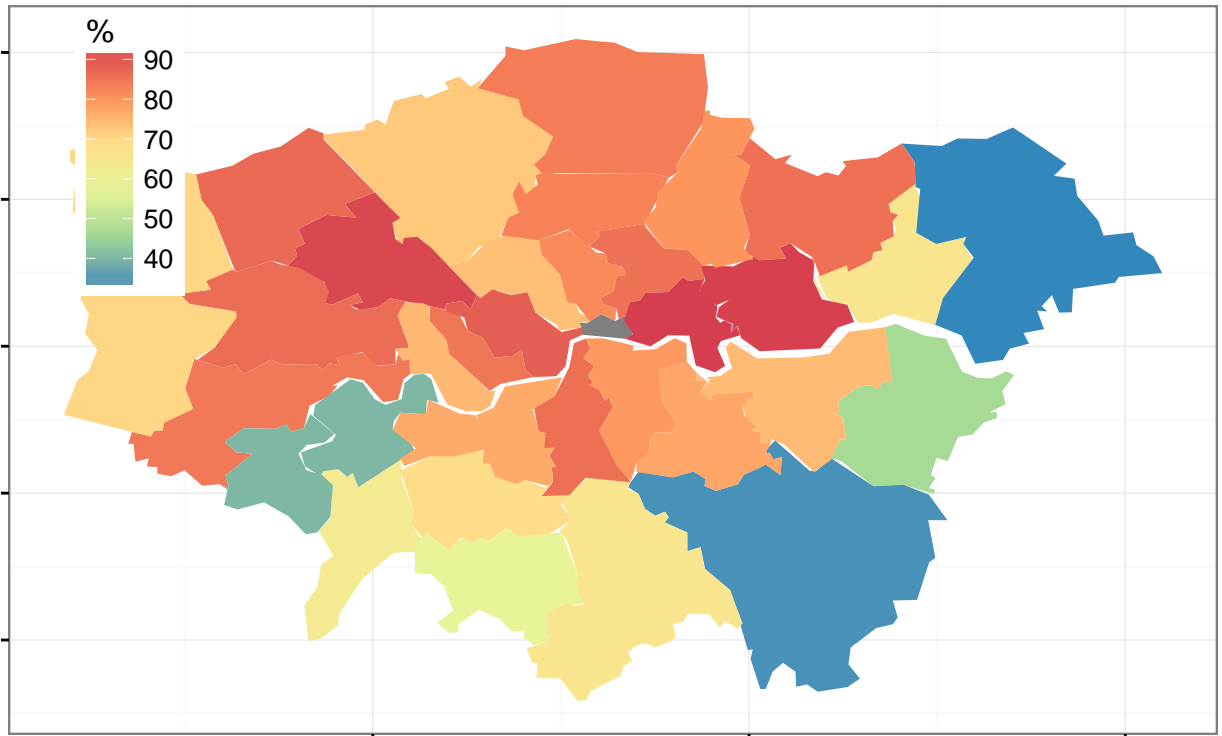


Figure 7: 2016 GCSE computer science local authorities BAME representation - London focus

5.2 Region

Table 10: 2016 GCSE computer science regional BAME provision

| Name | Total providers | Total Comp providers | Comp Sch with BAME | Total students | Total BAME students | % of BAME students for region | Total subject students | Total BAME subject students | % of BAME students for subject |
|--------------------------|-----------------|----------------------|--------------------|----------------|---------------------|-------------------------------|------------------------|-----------------------------|--------------------------------|
| London | 761 | 328 | 292 | 76805 | 53855 | 70.1 | 8465 | 6230 | 73.6 |
| West Midlands | 614 | 258 | 212 | 59905 | 17875 | 29.8 | 6240 | 1950 | 31.2 |
| South East | 886 | 396 | 319 | 85315 | 16730 | 19.6 | 9825 | 2455 | 25 |
| East of England | 561 | 276 | 232 | 60995 | 12630 | 20.7 | 7270 | 1615 | 22.2 |
| Yorkshire and The Humber | 462 | 204 | 154 | 54300 | 11495 | 21.2 | 4870 | 1055 | 21.7 |
| East Midlands | 412 | 188 | 149 | 47030 | 9370 | 19.9 | 4805 | 975 | 20.3 |
| North West | 709 | 334 | 257 | 73770 | 13495 | 18.3 | 8300 | 1615 | 19.5 |
| South West | 528 | 248 | 186 | 51955 | 5840 | 11.2 | 6175 | 850 | 13.8 |
| North East | 233 | 107 | 67 | 25425 | 2075 | 8.2 | 2645 | 225 | 8.5 |
| TOTAL | 5166 | 2339 | 1868 | 535500 | 143365 | 26.8 | 58595 | 16970 | 29 |

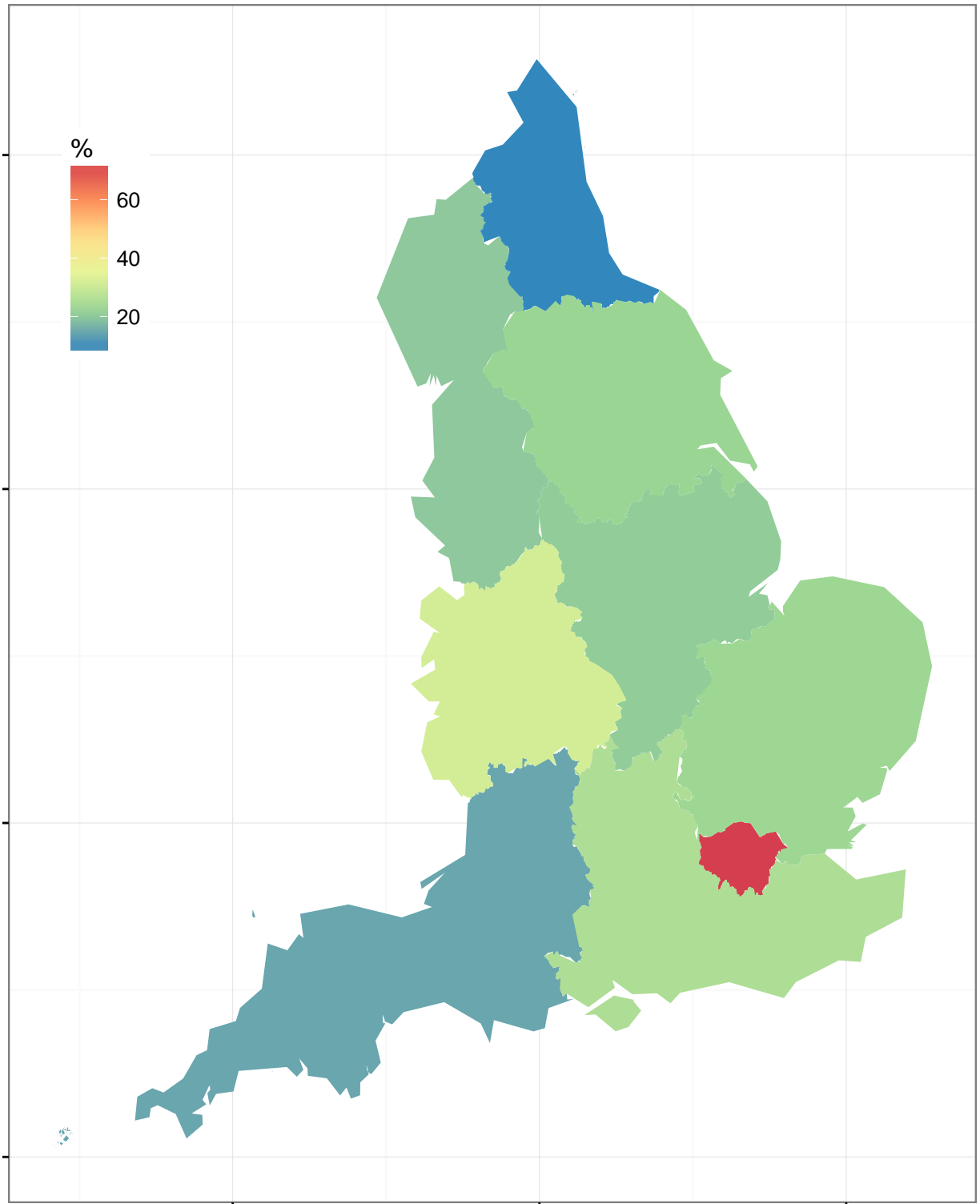


Figure 8: 2016 GCSE computer science regional BAME representation

6 EAL students

6.1 Local authorities

Note: have been removed due to small, identifiable numbers.

Table 11: 2016 GCSE computer science local authority top EAL provision

| Name | Total providers | Total Comp providers | Comp Sch with EAL | Total students | EAL students | % of total students | Total subject students | EAL subject students | % of subject students |
|------------------------|-----------------|----------------------|-------------------|----------------|--------------|---------------------|------------------------|----------------------|-----------------------|
| Newham | 25 | 13 | 12 | 3545 | 2505 | 70.7 | 540 | 410 | 75.9 |
| Westminster | 21 | 8 | 7 | 1575 | 1045 | 66.3 | 140 | 100 | 71.4 |
| Ealing | 27 | 13 | 11 | 2805 | 1620 | 57.8 | 300 | 210 | 70 |
| Tower Hamlets | 28 | 8 | 8 | 2600 | 1800 | 69.2 | 170 | 115 | 67.6 |
| Harrow | 22 | 11 | 9 | 2145 | 1255 | 58.5 | 315 | 200 | 63.5 |
| Hounslow | 21 | 10 | 10 | 2560 | 1325 | 51.8 | 185 | 115 | 62.2 |
| Leicester | 34 | 14 | 13 | 3465 | 1820 | 52.5 | 340 | 210 | 61.8 |
| Camden | 19 | 7 | 5 | 1405 | 785 | 55.9 | 130 | 80 | 61.5 |
| Redbridge | 27 | 15 | 13 | 3380 | 1920 | 56.8 | 385 | 230 | 59.7 |
| Haringey | 20 | 9 | 9 | 2235 | 1110 | 49.7 | 260 | 155 | 59.6 |
| Brent | 24 | 11 | 8 | 3035 | 1805 | 59.5 | 235 | 140 | 59.6 |
| Hammersmith and Fulham | 23 | 7 | 4 | 1380 | 540 | 39.1 | 85 | 50 | 58.8 |
| Islington | 16 | 6 | 6 | 1420 | 765 | 53.9 | 190 | 105 | 55.3 |
| Enfield | 25 | 10 | 10 | 3495 | 1530 | 43.8 | 400 | 220 | 55 |
| Lambeth | 20 | 12 | 10 | 1925 | 860 | 44.7 | 200 | 110 | 55 |
| Luton | 18 | 8 | 8 | 2460 | 1190 | 48.4 | 145 | 75 | 51.7 |
| Wandsworth | 24 | 10 | 8 | 1690 | 745 | 44.1 | 285 | 145 | 50.9 |
| Slough | 16 | 9 | 9 | 1700 | 840 | 49.4 | 330 | 165 | 50 |
| Barnet | 41 | 12 | 10 | 3655 | 1465 | 40.1 | 280 | 140 | 50 |
| Greenwich | 26 | 7 | 6 | 2210 | 815 | 36.9 | 170 | 85 | 50 |
| Oldham | 20 | 8 | 6 | 2905 | 835 | 28.7 | 245 | 120 | 49 |
| Waltham Forest | 27 | 15 | 14 | 2570 | 1225 | 47.7 | 370 | 180 | 48.6 |
| Hackney | 26 | 9 | 9 | 2050 | 900 | 43.9 | 195 | 90 | 46.2 |
| Barking and Dagenham | 13 | 6 | 6 | 2250 | 930 | 41.3 | 300 | 135 | 45 |
| Merton | 14 | 6 | 6 | 1445 | 500 | 34.6 | 150 | 65 | 43.3 |
| Hillingdon | 27 | 14 | 13 | 3135 | 1235 | 39.4 | 485 | 200 | 41.2 |
| Peterborough | 20 | 11 | 10 | 2310 | 750 | 32.5 | 310 | 125 | 40.3 |
| Kingston upon Thames | 16 | 8 | 7 | 1515 | 415 | 27.4 | 125 | 50 | 40 |
| Kensington and Chelsea | 20 | 3 | 2 | 750 | 355 | 47.3 | 50 | 20 | 40 |
| Southwark | 24 | 12 | 11 | 2415 | 970 | 40.2 | 235 | 90 | 38.3 |
| TOTAL | 5166 | 2339 | 1544 | 534775 | 80701 | 15.1 | 58614 | 9970 | 17 |

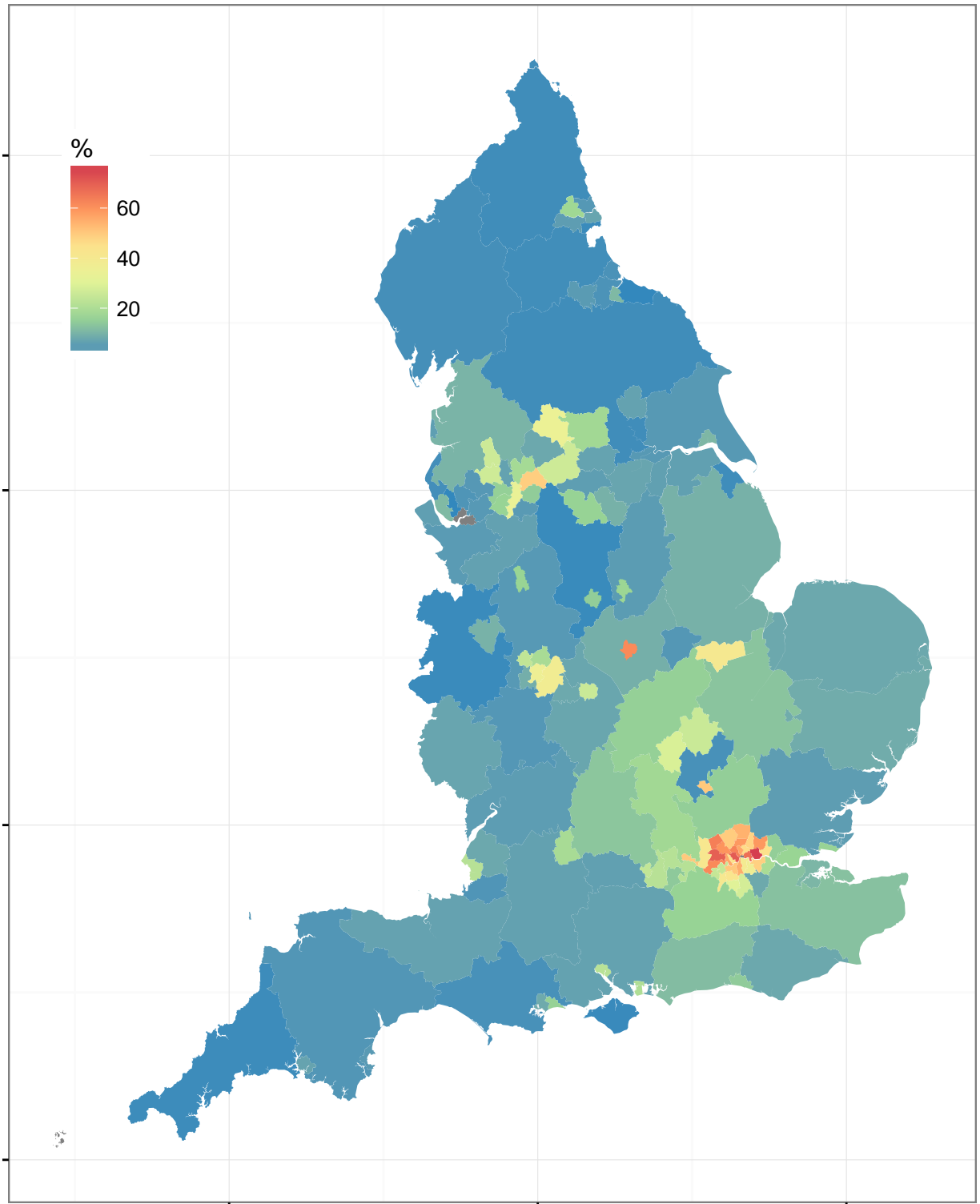


Figure 9: 2016 GCSE computer science local authorities EAL representation

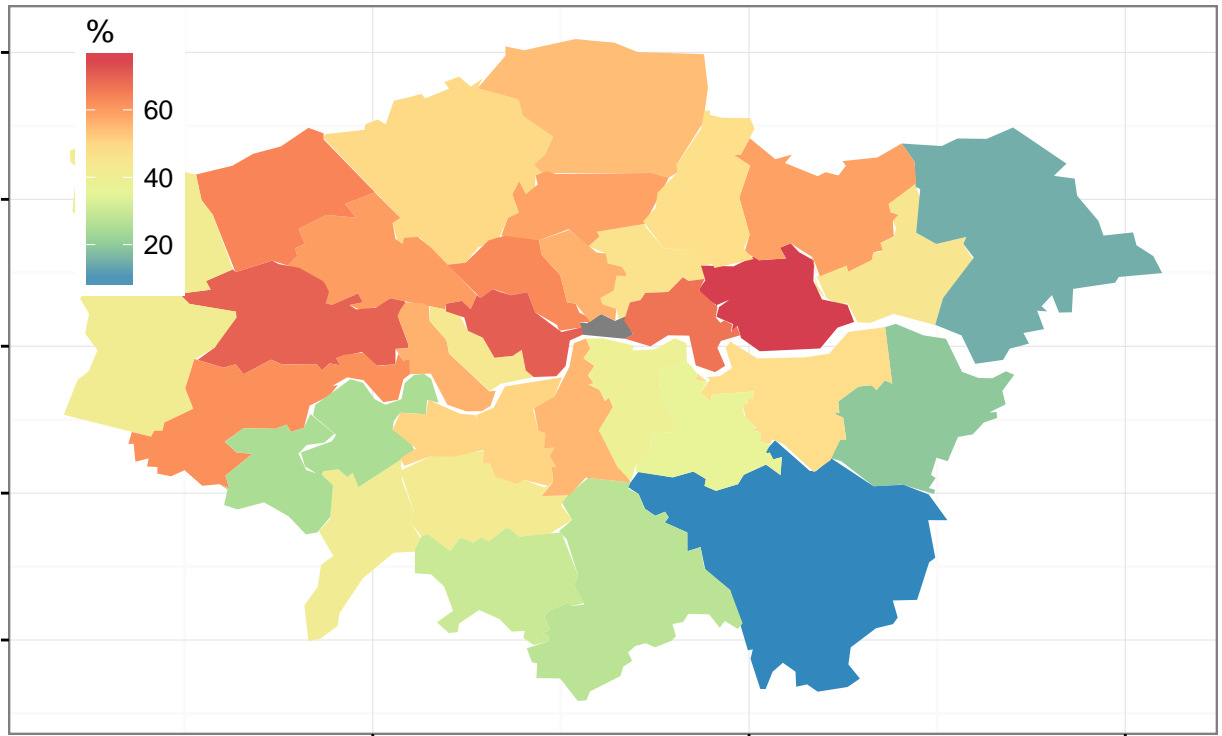


Figure 10: 2016 GCSE computer science local authorities EAL representation - London focus

6.2 Region

Table 12: 2016 GCSE computer science regional EAL provision

| Name | Total providers | Total Comp providers | Comp Sch with EAL | Total students | Total EAL students | % of EAL students for region | Total subject students | Total EAL subject students | % of EAL students for subject |
|--------------------------|-----------------|----------------------|-------------------|----------------|--------------------|------------------------------|------------------------|----------------------------|-------------------------------|
| London | 761 | 328 | 283 | 76305 | 31775 | 41.6 | 8435 | 3940 | 46.7 |
| West Midlands | 614 | 258 | 170 | 59540 | 9670 | 16.2 | 6230 | 1050 | 16.9 |
| South East | 886 | 396 | 272 | 85015 | 8520 | 10 | 9810 | 1385 | 14.1 |
| Yorkshire and The Humber | 462 | 204 | 123 | 54135 | 6880 | 12.7 | 4865 | 635 | 13.1 |
| East Midlands | 412 | 188 | 113 | 46890 | 5200 | 11.1 | 4805 | 575 | 12 |
| East of England | 561 | 276 | 195 | 60780 | 6505 | 10.7 | 7260 | 860 | 11.8 |
| North West | 709 | 334 | 197 | 73565 | 7940 | 10.8 | 8285 | 945 | 11.4 |
| South West | 528 | 248 | 140 | 51805 | 2680 | 5.2 | 6170 | 445 | 7.2 |
| North East | 233 | 107 | 51 | 25360 | 1290 | 5.1 | 2640 | 135 | 5.1 |
| TOTAL | 5166 | 2339 | 1544 | 533395 | 80460 | 15.1 | 58500 | 9970 | 17 |

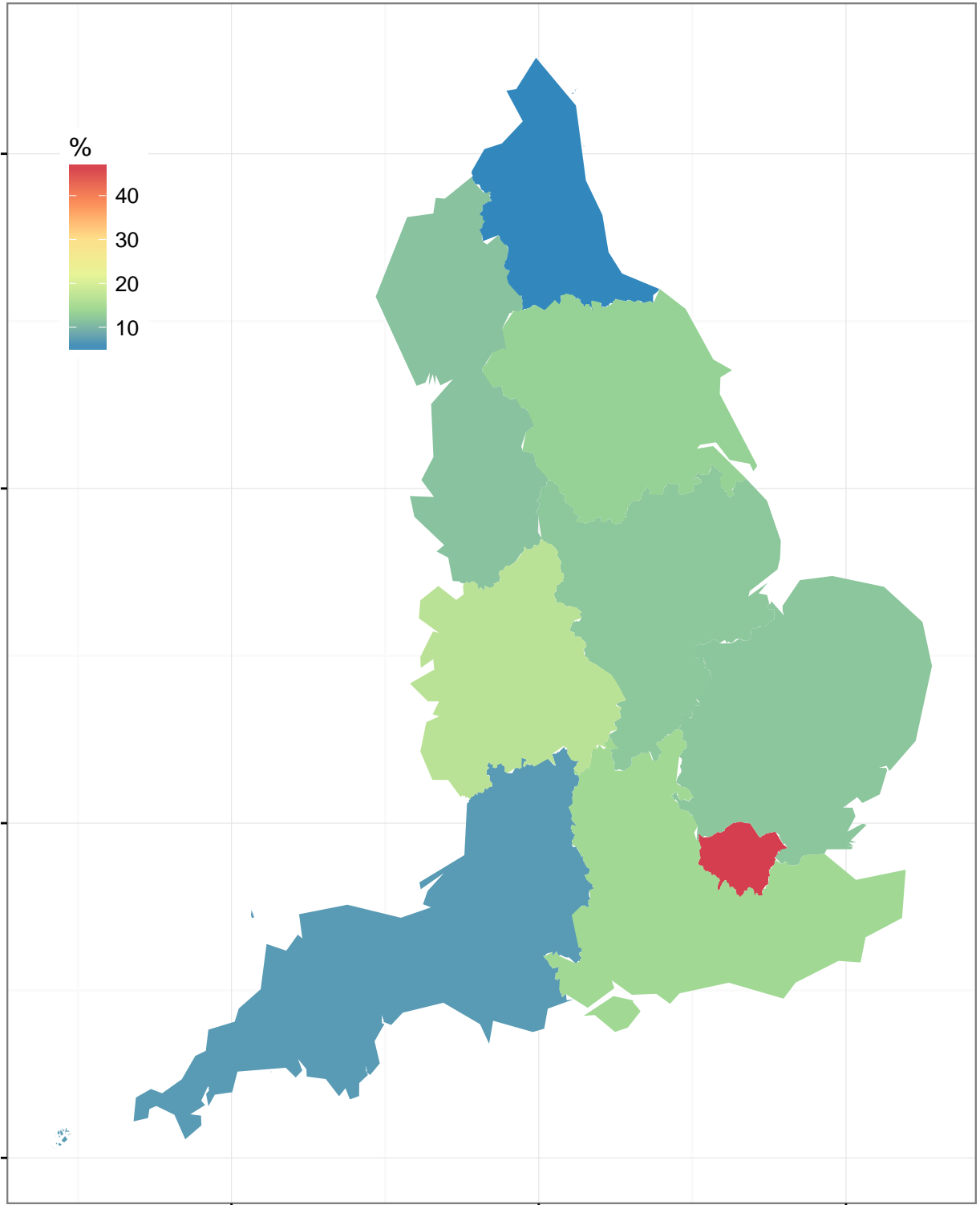


Figure 11: 2016 GCSE computer science regional EAL representation

7 Computing cohort size - longitudinal study

For the following tables and graphs ‘Computing’¹ is defined by any subject under the names: Applications, Applied ICT, Computer Appreciation / Introduction, Computer Architecture / Systems, Computer Games, Computer help, Computing, D&T Sys & Control, desk Operations, Electronic / Electrical Engineering, Handling & Interpreting Data, ICT, Keyboarding, Music Technology (Electronic), Office Technology, Systems / Network Management, WebSite Development

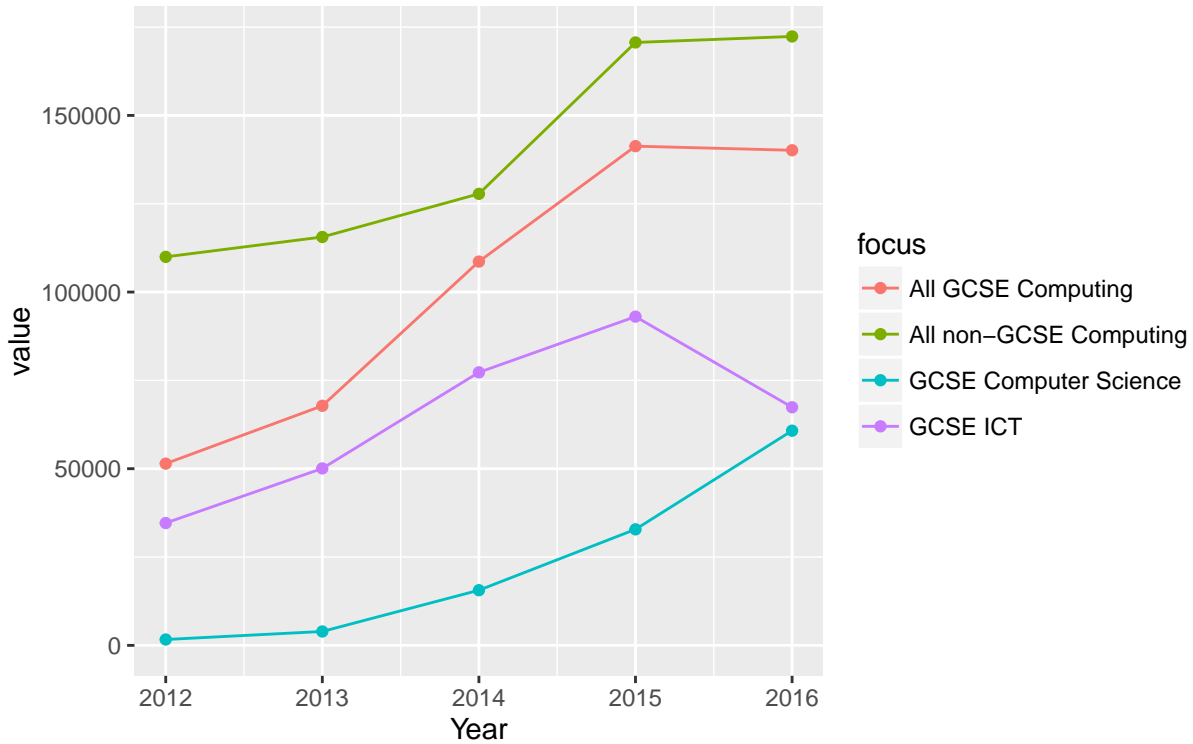


Figure 12: 2012-2016 KS4 computing qualification trends - total participants

¹Note: government guidance documents still list GCSE computer science as computing

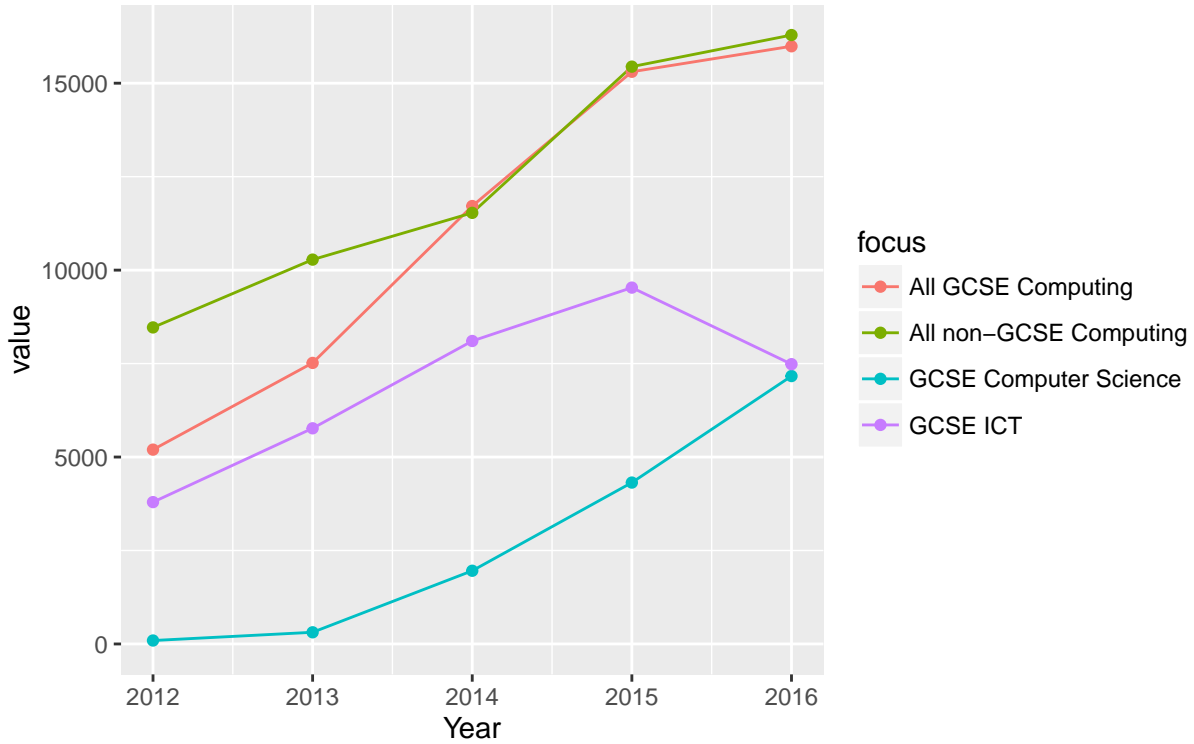


Figure 13: PyeTait schools, 2012-2016 KS4 computing qualification trends - total participants



Figure 14: 2012-2016 KS4 GCSE computer science qualification trend - participant % by Region



Figure 15: PyeTait schools, 2012-2016 KS4 GCSE computer science qualification trend - participant % by Region

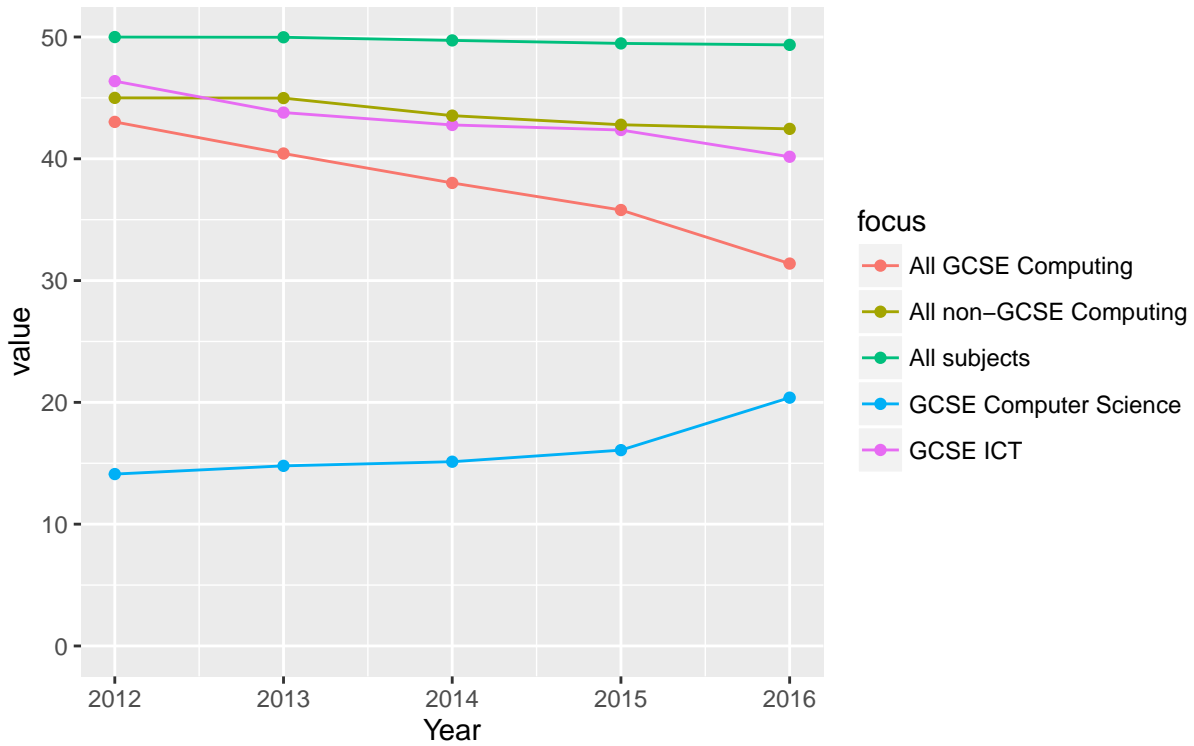


Figure 16: 2012-2016 KS4 computing qualification trends - Female %

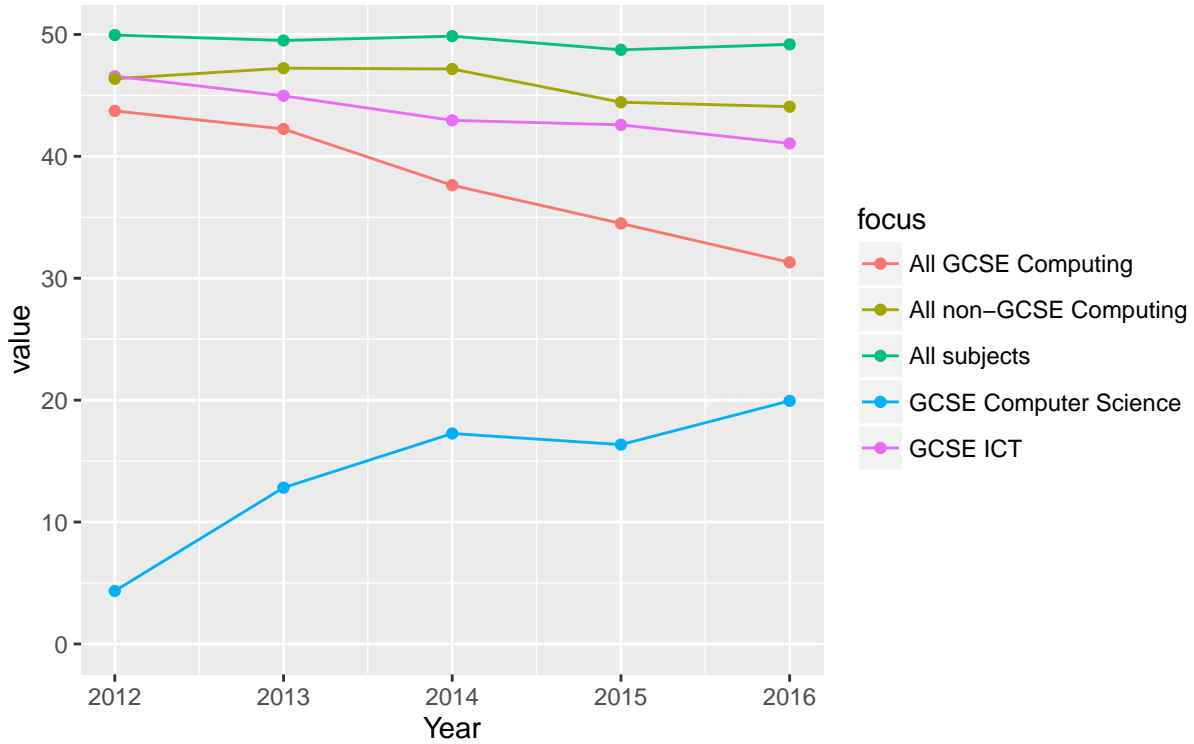


Figure 17: PyeTait schools, 2012-2016 KS4 computing qualification trends - Female %

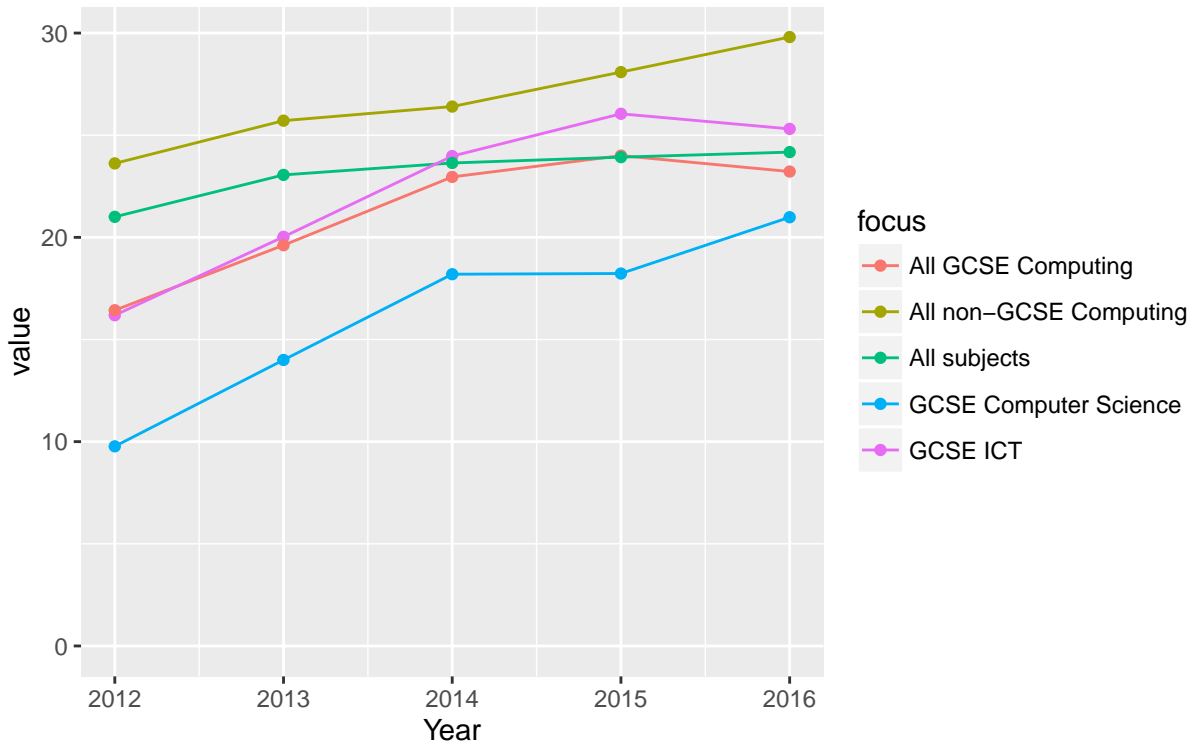


Figure 18: 2012-2016 KS4 computing qualification trends - Pupil Premium %

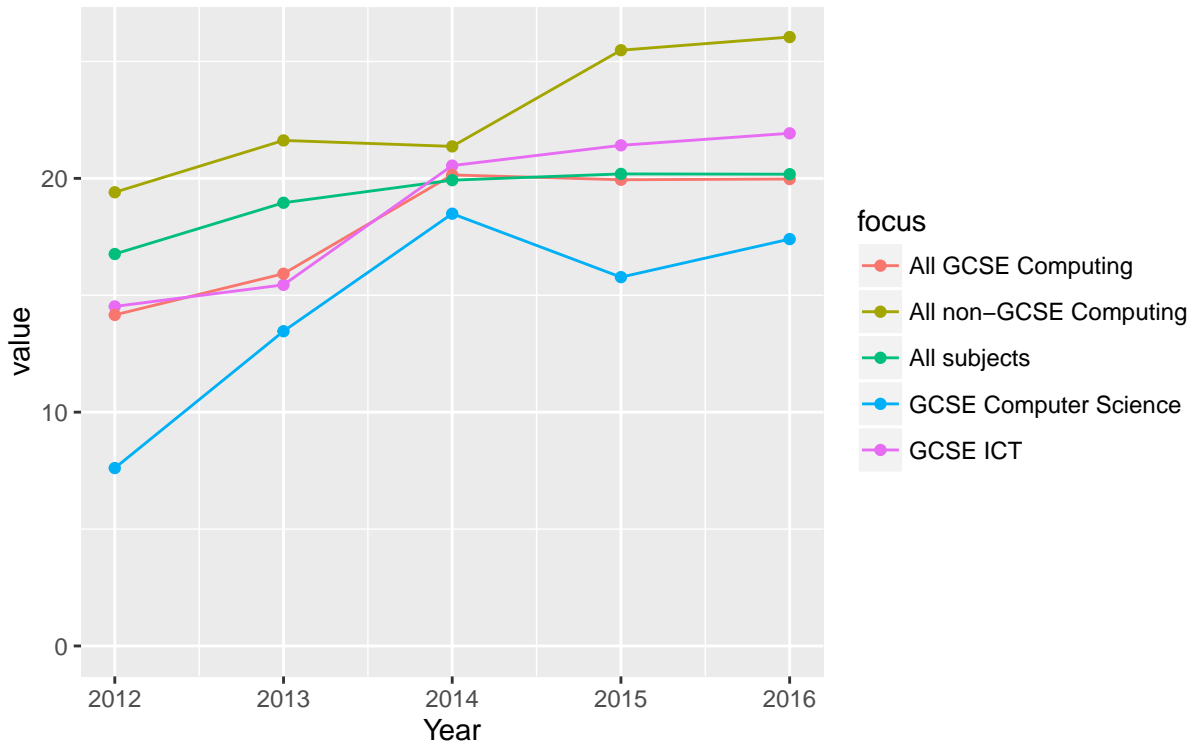


Figure 19: PyeTait schools, 2012-2016 KS4 computing qualification trends - Pupil Premium %

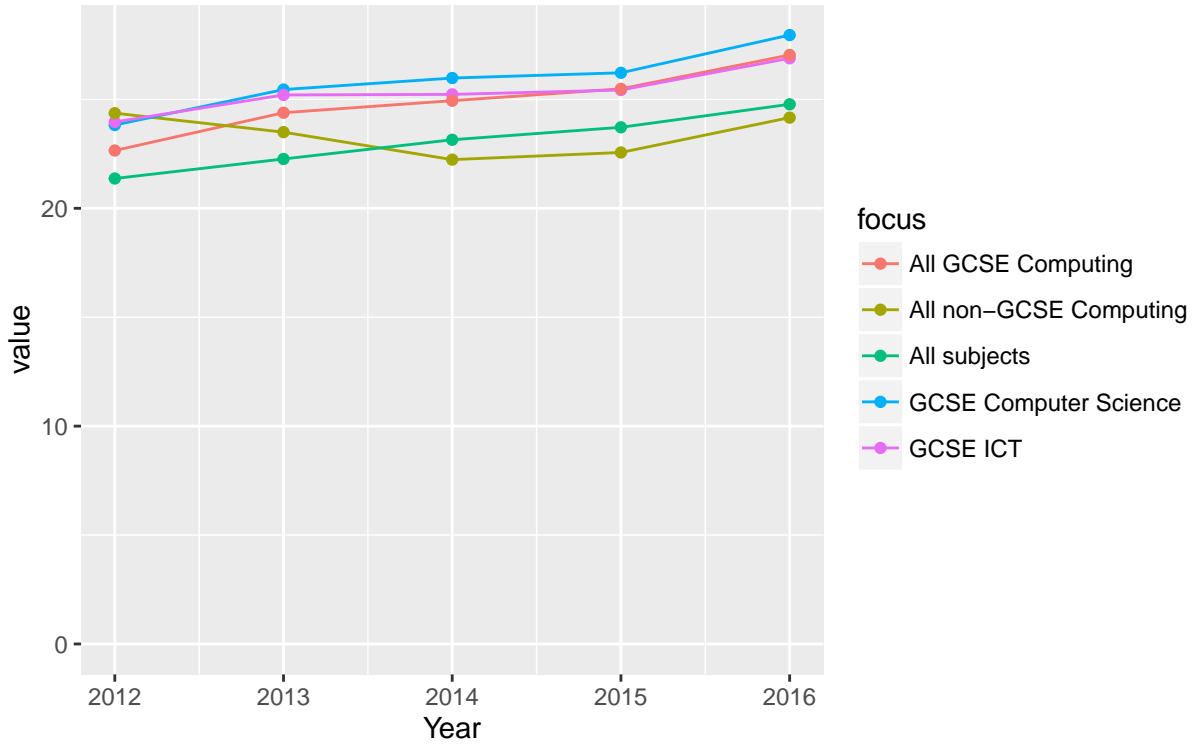


Figure 20: 2012-2016 KS4 computing qualification trends - BAME %

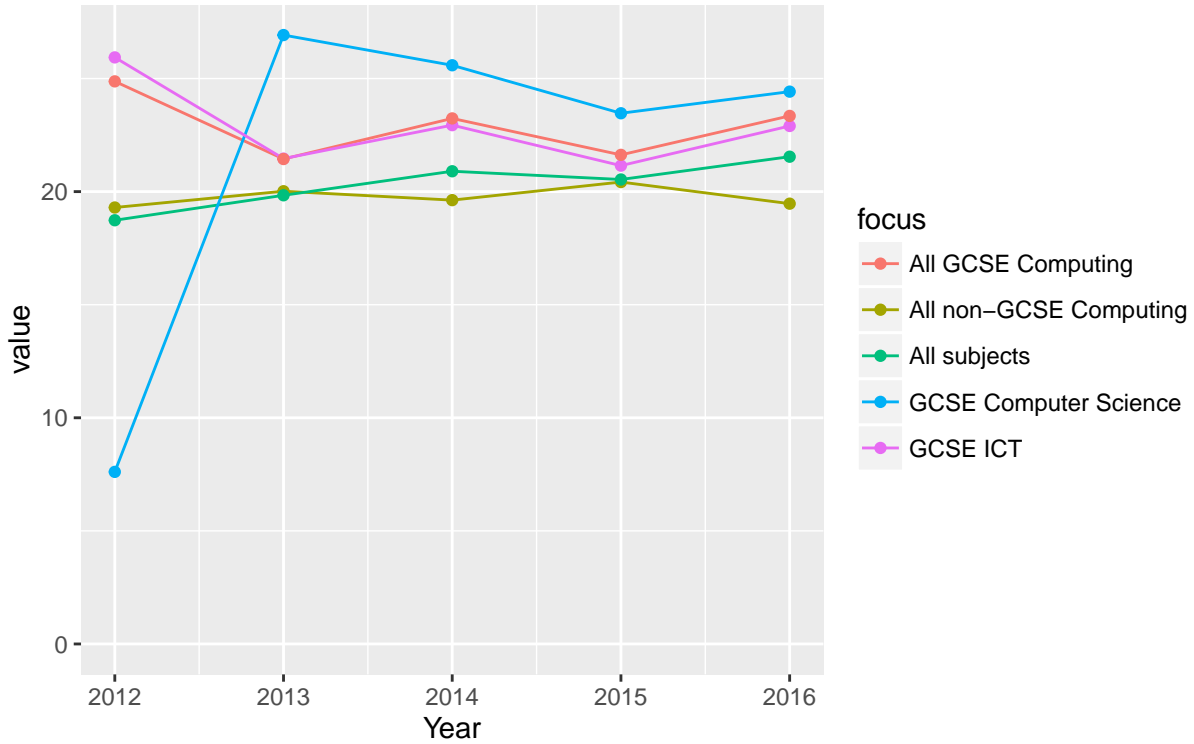


Figure 21: PyeTait schools, 2012-2016 KS4 computing qualification trends - BAME %