

Report on vocational learning provision at key stage 4

Annex 1: Analysis of DfES performance tables data, 2004

January 2006

Annex 1: Analysis of DfES performance tables data, 2004

The following figures are based on data provided by the DfES Data Services Group: D3 and relate to the 2003/4 results. They describe the cohort of students who were 15 on 31 August 2003.

Analysis by centre type

Table 1: Percentage of students in schools that are taking vocational qualifications. This table describes, for each centre type, the proportion of vocational points achieved as a percentage of all of their qualification points. To provide context, it also shows the number of centres and that number as a percentage of all centres.

Centre type	Number of centres	% of all centres	Total qualification points	Total vocational points	Vocational points as a % of total qualification points
Academy	11	0.2	461326	108728	23.6
CTC	14	0.3	1221019	294782	24.1
Independent	879	17.1	18909757	64890	0.3
Pupil referral unit	194	3.8	163380	4409	2.7
Special school	939	18.3	595992	13962	2.3
State secondary	3088	60.1	197273011	15097104	7.7
Missing	16	0.3	19570	258	1.3
All centres	5141	100.1	218644055	15584133	7.1

As shown in Table 1, academies and CTCs achieve a far higher proportion of their total qualification points from vocational qualifications than any other centre type. Together, they account for just 0.5 per cent of all centres. The next-highest proportion of vocational qualification points (7.7 per cent) is in state secondary schools, which represent 60.1 per cent of all centres. Independent schools show the lowest percentage of vocational points as a proportion of total qualification points (0.3 per cent). These schools account for 17.1 per cent of all centres.

Table 2: Percentage of total students aged 15 at start of school year (31 August 2003) with vocational qualifications:

Centre type	Number of Students aged 15	Number of Students with Voc quals	% of students with voc quals
Academy	1812	659	36.4
CTC	2439	1718	70.4
Independent	43898	1475	3.4
Pupil referral unit	4686	140	3.0
Special school	10863	375	3.5
State secondary	575745	148585	25.8

Missing	110	4	3.6
Total	639568	152956	23.9

Table 2 shows information at student level, by centre type, indicating the numbers of students within each centre type who hold vocational qualifications. CTCs have by far the highest proportion of students with vocational qualifications (70.4 per cent), indicating that such schools have a policy of encouraging, or requiring, vocational achievement. Academies have over a third of students achieving vocational qualifications and state secondary schools have 25.8 per cent.

Analysis by approach to selection

Table 3: Vocational provision by selective status

Selective status	Number of centres	% Centres	Total qualification points	Total voc points	Vocational points as % of total points
Non-selective	3293	64.1	190340894	15493937	8.1
Selective	699	13.6	27524219	71568	0.3
Not applicable	1146	22.3	778942	18629	2.4
Missing	3	0.1	-	-	-
	5141	100.1			

Table 3 shows that the total vocational points as a percentage of all points are much higher in non-selective centres (8.1 per cent) than the selective centres (0.3 per cent).

Table 4: Percentage of total students aged 15 at start of school year (31 August 2003) with vocational qualifications:

Selective status	Number of Students aged 15	Number of Students with Voc quals	% of students with voc quals
Non-selective	565287	150789	26.7
Selective	58607	1648	2.8
Not applicable	15659	519	3.3
Total	639568	152956	23.9

Table 4 reinforces the information in table 3, showing that over a quarter of students in nonselective centres gain vocational qualifications, compared with less than 3 per cent of students in selective centres.

Gender	Total pop	% total	Total voc quals	% voc quals	Total voc quals excl vGCSe	% total excl vGCSE	Av N of voc quals per 100 studs	Av N of voc quals excl vGCSE per 100 studs
Female	313950	49.2	85432	52.1	38639	51.2	27.2	12.3
Male	323645	50.8	78638	47.9	36857	48.8	24.3	11.4
All	637595	100	164070	100	75496	100	25.7	11.8

Analysis by gender

Table 5 shows number of vocational qualifications achieved by gender, and also has a split of the total population by gender. Since some students will have gained more vocational qualifications than others, the table shows proportions rather than number of vocational qualifications per student. Females constitute 49.2 per cent of the cohort population and gain 52.1 per cent of the vocational qualifications. Conversely, males constitute 50.8 per cent of the cohort population and gain 47.9 per cent of the vocational qualifications. When vGCSEs are excluded, females achieve 51.2 per cent of qualifications and males achieve 48.8 per cent. The average number of vocational qualifications gained per 100 students is 27.2 for females and 24.3 for males. When vGCSEs are removed, the average amount is reduced by more than half, to 12.3 for females and 11.4 for males.

Rural/urban	Total pop	% total	Total voc quals	% voc quals	Total voc quals excl vGCSE	% total excl vGCSE	Av N of voc quals per 100 students	Av N of voc quals excl vGCSE per 100 students
Rural	88459	13.9%	19720	12%	8355	11.1%	22.3	9.4
Urban	549131	86.1%	144350	88%	67141	88.9%	26.3	12.2
All	637595	100	164070	100	75496	100	25.7	11.8

Analysis by rural/urban status

Table 6 shows the number of vocational qualifications achieved by rural/urban split, and also has a split of the total population by rural/urban location. Clearly, some students will have gained more vocational qualifications than others, so the table shows proportions, rather than number of vocational qualifications per student. Rural students constitute 13.9 per cent of the cohort population, and gain 12 per cent of the vocational qualifications. Urban students constitute 86.1 per cent of the cohort population, and gain 88 per cent of the vocational qualifications. When vGCSEs are removed, 11.1 per cent of vocational qualifications are earned by rural students and 88.9 per cent by urban students. Urban students are punching above their weight in terms of getting a higher percentage of the vocational qualifications than their percentage of their cohort but not by a large margin (although the margin increases when vGCSEs are removed). The average number of vocational qualifications gained per 100 students is 22.3 for rural students and 26.3 for urban students. When vGSCEs are removed, this changes to just 9.4 for rural students and 12.2 for urban students.

Ethnic group	Total populati on	% total	Total voc quals	Total voc excl vGCSE	% voc quals	%voc excl vGCSE	Average N of voc quals per 100 students	Average N of voc quals excl vGCSE per 100 students
White	494406	77.5	134535	61082	82.0	80.9	27.2	12.4
Mixed	11447	1.8	2875	1414	1.8	1.9	25.1	12.4
Indian	13973	2.2	4773	2169	2.9	2.9	34.2	15.5
Pakistani/ Bangladeshi	18895	3.0	6891	3186	4.2	4.2	36.5	16.9
Black Caribbean	8799	1.4	2450	1153	1.5	1.5	27.8	13.1
Black African	8058	1.3	2366	1038	1.4	1.4	29.4	12.9
Chinese	2079	0.3	529	270	0.3	0.4	25.4	13.0
Other	10000	1.6	2560	1253	1.6	1.7	25.6	12.5
Missing	46643	7.3	1709	1590	1.0	2.1	3.7	3.4
Unclassified	23295	3.7	5382	2341	3.3	3.1	23.1	10.0
Total	637595	100.1	164070	75496	100	100.1	25.7	11.8

Analysis by ethnicity

The category of 'missing' is striking, representing 1.0 per cent of vocational qualifications and 7.3 per cent of the population. The most likely explanation is that ethnicity data comes from the Pupil Level Annual School Census, which is not a requirement for independent schools. Such schools are therefore most likely to be classified as missing. This is broadly in line with what we would expect, since the centre type split shows independent schools averaging very low vocational points.

Excluding the missing category, the average number of vocational qualifications gained per 100 students is highest for Pakistani/Bangladeshi students (36.5) and lowest for mixed ethnicity students (25.1). When vGSCEs are discounted all average numbers fall by at least half, except in the missing category.

Analysis of average key stage 3 and GCSE points score

For all figures below, students aged 15 without any GCSE and equivalent attainment were removed from the calculations in order to make the 'with vocational qualifications' and 'without vocational qualifications' groups more comparable. Since all students with vocational qualifications by definition had some attainment, it is most useful to compare these students to students without approved vocational qualifications but with some GCSE and equivalent attainment.

The vocational point scores include both vGCSEs and GNVQs. We have requested information from the DfES showing the above analyses of average student point score excluding points gained through vGCSEs and GNVQs, but they are unable to provide this information in the immediate future because of workload.

Of all vocational points achieved in 2003/4 (n=7,007,296.5), vGCSEs accounted for 42.4 per cent (2,969,360), GNVQs accounted for 52.1 per cent (3,647,646) and 'other' vocational qualifications accounted for 5.6 per cent (390,290.5).

All figures are based on students in institutions included in the 2004 Achievement and Attainment Tables.

Average key stage 3 points

Table 8: Average key stage 3 points for students with and without vocational qualifications

	N	Ave key stage 3 pts
With Vocational Qualifications	148791	33.7
Without Vocational Qualifications	417054	34.2

Please note: Only students with valid key stage 3 results were included in the above figures; not all independent schools do key stage 3 tests and therefore will not be included.

Table 8 shows those without vocational qualifications have slightly higher average key stage 3 points than those with vocational qualifications.

Average points per GCSE (including GCSE short courses)

Table 9: Average qualification points per GCSE, for students with and without vocational qualifications

	Ν	Ave. Pts per GCSE
With Vocational Qualifications	152954	36.4
Without Vocational Qualifications	460565	36.3

There were a small number of students with vocational qualifications that did not have any GCSE attainment. These were included in these figures with average points per GCSE of zero.

Table 9 shows that students without vocational qualifications have slightly higher average points per GCSE than those with vocational qualifications. Those with vocational qualifications may have done fewer GCSEs, or may have done a vocational qualification in one of their strongest areas. Both factors may have dampened GCSE average point score.

Average points per GCSE and equivalent

Table 10: Average qualification points per GCSE and equivalent, for students with and without vocational qualifications

	N	Ave. pts per GCSE & equivalent
With Vocational Qualifications	152954	36.1
Without Vocational Qualifications	460565	35.9

Table 10 shows those without vocational qualifications have slightly lower average points per GCSE and equivalent than those with vocational qualifications, which may support the position described above.

Summary

Data

The data in points 1–9 are drawn from: GCSE and Equivalent Results and Associated Value Added Measures for Young People in England 2003/04 (Revised) – SFR01/2005 - DfES January 2005

Pupil cohort = Total number of students on roll aged 15 at the start of the 2003/04 academic year, (i.e. 31 August 2003):

643,600

2. Total number of student cohort attempting at least 1 GCSE (excluding vGCSE):

616,900

- Percentage of student cohort attempting at least 1 GCSE (excluding vGCSE): 95.9%
- Total number of GCSEs (excluding vGCSE) achieved by student cohort: 4,999,400
- Average number of GCSEs (excluding vGCSE) achieved per student:
 7.8
- 6. Total number of vGCSEs achieved by student cohort:

96,000

- Total of vGCSEs achieved as a percentage of total GCSEs (excluding vGCSEs):
 1.9%
- Total number of GNVQs achieved by student cohort
 48,340
- Total of GNVQs achieved as a percentage of total GCSEs (excluding vGCSE):
 1%

The data in the points in the below were released to QCA by the DfES Data Services Group in January 2005. This data provides more detail about the different types of vocational qualifications. However, the cohort number on which the figures are based is slightly different, and therefore so are subsequent numbers of qualifications.

10. Numbers of students aged 15:

639,553

11. Numbers of these students achieving vocational qualifications (including GNVQ and vGCSE):

152,956

12. Percentage of these students achieving vocational qualifications (including GNVQ and vGCSE):

23.9%

- Numbers of these vocational qualifications achieved (including GNVQ and vGCSE):
 164,070
- Number of vGCSE achieved:
 88,574 (54% of vocational qualifications)
- 15. Number of GNVQ achieved:51,110 (31.2% of vocational qualifications)
- Number of 'other' vocational qualifications achieved:
 24,386 (14.9%)
- 17. Percentage of all schools achieving one or more qualification points with no students achieving vocational qualifications (including GNVQ and vGCSE):
 40%