

Report on vocational learning provision at key stage 4

Annex 5: Investigation into vocational learning at key stage 4 questionnaire analysis

January 2006

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Methodology

Schools

It is important to note that the schools that took part in this vocational provision at key stage 4 questionnaire were not a representative sample of secondary schools in England. The sample comes from a list provided by the DfES of the top 1,000 secondary schools in England in terms of significant vocational curriculum at key stage 4, determined by the number of students involved or number of vocational qualifications offered. The sample is therefore heavily weighted towards schools that do offer vocational qualifications and it is important that this is kept in mind when reading the following analysis and drawing any conclusions from it.

The questionnaires were sent to the school's head teacher with a covering letter explaining why their school had been chosen to participate and the purpose of the investigation into vocational provision at key stage 4. We expected the head teacher to pass the questionnaire onto the person responsible for the vocational curriculum at key stage 4.

Timetable

The first wave of 100 questionnaires was sent on 17 February 2005, with a return date of 18 March. In an attempt to increase the response rate, respondents were told that if they returned their questionnaire before the deadline they would receive a £10 'Thank you' voucher.

The second wave of 100 questionnaires was sent out to schools on 18 April, with a return date of 18 May. These schools were not offered the incentive voucher, as the reason for this sample was to increase our base of returns.

This analysis is based on returns of 106 questionnaires (53 per cent response rate).

Headline Findings

Management and coordination of vocational qualifications

• Eighty-eight per cent of schools said they had a senior management team member with accountability for vocational provision at key stage 4 in place.

- Fifty-four per cent of schools said they had a designated coordinator (other than the senior manager) for vocational provision at key stage 4.
- Only 17 per cent of respondents said their schools had a written policy on vocational qualifications.
- Ninety-one per cent of schools said they had included vocational qualifications in their school development plan.
- Eighty-six per cent of schools said that over the last two years vocational provision at key stage 4 had increased in their school.

GCSEs in vocational subjects

- Eighty-six per cent of schools said they offered at least one of the GCSEs in vocational subjects. The most common subjects offered to key stage 4 students were health and social care and leisure and tourism (offered by 48 per cent of schools). The least common was manufacturing (offered by 10 per cent of the schools).
- The majority of schools offered the GCSEs in vocational subjects on site and to all students. Yet, the range of numbers of students taking GCSEs in vocational subjects went from one to a group of 360 students. Applied ICT was the subject that attracted the largest average numbers of students.
- The most common amount of time allocated to teaching a subject was 10 hours a fortnight, but the average amount of time allocated each fortnight was between seven and eight and one-half hours. The range of time that schools allocated to GCSEs in vocational subjects was as low as two hours a fortnight for ICT, engineering and leisure and tourism and as high as 14 hours a fortnight for art and design, health and social care and manufacturing.
- Respondents thought that GCSEs in vocational subjects were most significant to the middle quartiles and least significant for the upper quartile. Teachers did however consider them to be the most significant 'vocational' qualification for students in the upperattainment quartile.
- A large percentage of students got below their predicted grades in applied ICT and manufacturing. For all other GCSEs in vocational subjects, the majority of schools reported that their students achieved the grades predicted. The subjects that appeared to achieve grades that were most in line with predictions were applied business and applied ICT.

NVQs

- Thirty-six per cent of schools said they offered NVQs to key stage 4 students.
- The majority of NVQs (81 per cent) were offered off site and most commonly delivered in collaboration with an FE college (39 per cent of NVQs).
- Schools reported small numbers of students taking NVQs, which were offered to selected groups of students in terms of their ability.

• NVQs were considered most highly significant to students in the lower-attainment quartile and least significant to those in the upper quartile.

Other vocational qualifications

- Seventy-six per cent of schools said they offered vocational qualifications other than GCSEs in vocational subjects and NVQs at key stage 4 (this is a very high figure and we must remind ourselves of the heavily weighted school sample).
- The majority (65 per cent) of the qualifications were offered on site and in no collaboration with other schools, colleges or training providers.
- The number of students reported to be taking other vocational qualifications ranged from one to a full year group of 271, although this was highly dependent on the subject.
- Teachers reported that they felt that other vocational qualifications were most significant to students in the lower-attainment quartile and least significant to students in the upper quartile.

Activities and support for vocational qualifications

- It is important to keep in mind that the activities we asked about were in addition to work experience. Around 95 per cent of the key stage 4 cohort will have at least one week's block work experience by the time they finish year 11.
- Among students doing NVQs, the most common activity was taking part in an extended work placement.
- Among students taking GCSEs in vocational subjects, the range of activities on offer to them was much greater than that on offer to students taking other vocational qualifications or NVQs.
- The most common activity for students taking GCSEs in vocational subjects was visits to industry.
- The most common activity listed as being part of the key stage 4 programme for all students and for students taking 'other' vocational qualifications was having visitors to schools.
- In terms of support from outside organisations, schools reported that on the whole they
 received the most support for GCSEs in vocational subjects from LEAs and EBLOs.
 School said the most support for NVQs and other vocational qualifications came from other
 colleges.

Attitudes towards vocational qualifications

• The vast majority of schools said that teacher and parent attitudes towards vocational qualifications were very positive or generally positive.

The schools

- 57 per cent of respondent schools were IFP schools
- 52 per cent of schools were 11-16
- 42 per cent were 11–18
- 6 per cent described themselves as other (an 11–16 in a collaborative post-16 partnership, an 11–19, a 12–18, a 13–18 and a 14–19 school)

The table below shows the averages (highlighted in grey), the maximum and the minimum number of students in a year group.

	Y10	Y11	Y12	Y13
Number responding	95	96	39	39
Mean number of students in year	190	183	107	78
Minimum number of students in year	8	7	21	7
Maximum number of students in year	397	373	300	280

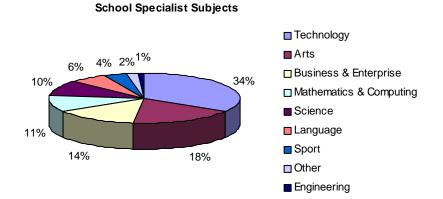
The sample of respondent schools was made up of

School size	%
Small (less than or equal to 128 students in Y10)	15%
Medium (greater than 128, less than 186 students in Y10)	27%
Large (greater than or equal to 186 students in Y10)	47%

School Specialism

Seventy-five per cent of the schools had already been granted a specialist status, 9 per cent said they had applied for specialist status and 16 per cent had no specialist status and had not applied for one.

Among schools that had applied for or been granted specialist status, the most common specialism was technology (30 schools reported that this was their specialism) and the least common was engineering (only one school named it as their specialism).



Management and coordination of vocational provision at key stage 4

Eighty-eight per cent of schools that responded had a senior management team member in place with accountability for vocational qualifications at key stage 4; a further 2 percent said they would have one in place for 2005/6.

Fifty-four per cent of respondent schools had a designated coordinator (other than a senior manager) for vocational qualifications and an additional 3 per cent said they would have one in place for 2005/6. Forty-three per cent of respondents said they had no plans to have one. Among schools that did have designated coordinators, only 17 per cent said that these coordinators had no other responsibilities. The most common other responsibilities held by the coordinators were that of subject head (16 per cent) and work experience coordinator (13 per cent).

Only 17 per cent of the respondent schools had a written policy on vocational qualifications. Forty per cent had no current plans to write one, but 43 per cent of the schools said they would have one in place by 2006/7.

The majority of schools (91 per cent) had vocational qualifications in the school's development plan and 86 per cent said that their vocational provision at key stage 4 has increased over the last two years.

Vocational Provision

Vocational Courses that do not lead to a qualification

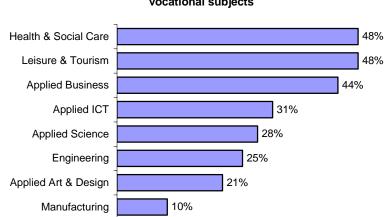
Twenty-eight per cent of schools said they offered their key stage 4 students at least one vocational course that did not lead to a qualification. (See Appendix 1 for the list of courses given by schools.)

Where these courses are offered, the majority of schools offer them to selected groups of students in terms of students' ability or learning style or because students selected them as an option choice.

When asked why they chose to offer courses that do not lead to qualifications, schools generally agreed that such courses were of benefit to students with behavioural, motivational or attendance issues, those at risk of exclusion and those who would not succeed with regular qualifications.

GCSEs in vocational subjects

Eighty-six per cent of the respondent schools said they offered at least one of the GCSEs in vocational subjects. The most widely offered subjects were health and social care and leisure and tourism (both offered by 48 per cent of the schools), followed by applied business, offered in 44 per cent of the schools. The least common subject offered by the respondent schools was manufacturing, which was offered by just 10 per cent of schools.



Percentage of respondent schools offering GCSEs in vocational subjects

Among respondents, the majority of schools (over 86 per cent for each subject) offered the GCSE in vocational subjects on site. The subject most likely to be offered off site was engineering (35 per cent offered it off site).

In terms of the numbers of students taking part in the GCSEs in vocational subjects, the lowest average number of key stage 4 students taking a subject was in applied art and design. The highest average number of key stage 4 students taking a subject was in applied ICT.

Subject	Number of students					
	Mean	Mean	Min	Min	Max	Max
	Y10	0 Y11	Y10	Y11	Y10	Y11
Applied ICT	116	125	22	20	360	360
Applied science	58	56	16	18	136	120
Applied Business	38	40	15	12	206	220
Health & Social Care	30	28	1	1	75	60
Engineering	25	30	1	15	120	110
Leisure & Tourism	23	21	1	4	75	68
Manufacturing	19	27	4	10	44	75
Applied Art & Design	19	17	2	2	45	56

The majority of GCSEs in vocational subjects were offered with no collaboration with other schools, FE colleges or training providers. Where schools did offer qualifications in collaboration with partners it was most likely to be with an FE college.

Collaboration was reported most by schools that offered engineering. Forty-six per cent of respondents who said they collaborated in offering vGCSEs said they offered engineering in collaboration with an FE college, other schools or with a consortium of schools and colleges. This collaboration took place both on and off site.

Schools most commonly named staff expertise and student demand as reasons why they offered the specific GCSEs in vocational subjects.

Time allocated

Among all subjects, the most common amount of time allocated in a fortnight was 10 hours. The average amount of time allocated was less; for most subjects the average time allocated in a fortnight was between seven and one-quarter hours and eight and one-half hours.

The range of hours allocated per fortnight varies considerably, from two hours a fortnight reported by schools that offered applied ICT, engineering and leisure and tourism to a maximum of 20 hours allocated to engineering and 14 hours allocated to applied art and design and health and social care.

Subject		Approx hours and minutes			Std	
	N	Mode	Mean	Min	Max	deviation
Applied art & design	23	10	8.10	4.40	14	2.51
Applied business	43	10	7.30	3	13.30	2.48
Applied science	28	10	8.45	5	12	1.78
Applied ICT	31	10	7.30	3.30	13.30	2.55
Engineering	26	10	8.40	5	20	2.94
Health & social care	49	10	7.50	3.30	14	2.78
Leisure & tourism	46	10	7.20	3.30	13.30	2.58
Manufacturing	11	10	8.40	5	10	1.78

N = number of respondents. Mode = most common amount of time allocated.

Mean = average amount of time allocated. Std. Deviation = distribution of times

Over the last year, 23 per cent of respondents said they had increased the amount of time allocated to GCSEs in vocational subjects.

While the majority of schools (79%) said the time allocation for vGCSEs would stay the same over the next two years, 10.5 per cent of respondents said they were going to increase the amount of time allocated and 10.5 per cent said they would decrease the time allocated.

Thirty-eight per cent of respondents said that in the next year (2005/6) they were going to increase the number of GCSEs in vocational subjects offered and 10 per cent of respondents said that their school was going to reduce the number.

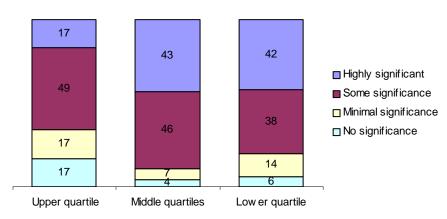
The students

Among schools offering a GCSE in a vocational subject, the majority offered them to all students. Science was the only subject that was more likely to be offered to selected groups of students.

Where a subject was offered to selected groups of students, the majority of respondents said that students were selected in terms of their option choice. It was only where schools selected students for applied science that the majority of respondents said these students were selected in terms of their ability (although we are unable to comment on whether schools selected for higher- or lower-ability students).

We asked respondents to tell us how significant they thought the GCSEs in vocational subjects were for students in different ability quartiles.

Respondents thought that the GCSEs in vocational subjects were most significant for students in the middle-attainment quartiles and least significant for students in the upper-attainment quartile.



Significance of GCSEs in vocational subjects for different ability students

School's experience of GCSEs in vocational subjects

Training and support

We asked questionnaire respondents to tell us how satisfied they were with their experience of the following aspects of the training and support they received for the GCSEs in vocational subjects:

- The amount of time they had to prepare before the launch of the qualification
- The ease of accessing training on assessment of the qualification
- The ease of accessing training on the content of the qualification
- The guidance from awarding bodies on delivery
- The guidance from awarding bodies on assessment

- The exemplar materials available to help support assessment
- The example tests available to help with preparation for exams
- Their experience of moderation by awarding bodies.

See Appendix 2 of this analysis for tables detailing percentage of satisfied and dissatisfied respondents for each subject.

Applied art & design

The majority of the schools that offered the applied art and design GCSE were generally satisfied with the various aspects of training and support they had for the qualification. For most aspects, around two-thirds of respondents were either satisfied or very satisfied, compared to one-third who said they were dissatisfied or very dissatisfied. Respondents were least satisfied with the exemplar materials and example tests they had received and most satisfied with their experience of moderation.

Applied business

Respondents from schools who offered applied business were generally positive about their experiences of training and support. For six of the aspects, over 72 per cent of respondents said they were satisfied or very satisfied. Respondents were only slightly less satisfied with the exemplar materials (66 per cent were satisfied or very satisfied) and guidance on assessment (68 per cent were satisfied).

Applied science

At least two-thirds of respondents were satisfied or very satisfied with each of the various aspects of training and support they received for applied science. Respondents were most satisfied with the ease of accessing training on the content of the qualification (86 per cent were satisfied or very satisfied) and by their experience of moderation.

Applied ICT

More than 69 per cent of respondents were satisfied or very satisfied with each of the aspects of training and support they received for applied ICT. Respondents reported that they were most satisfied with the ease of accessing training on the content of the qualification.

Engineering

The majority of respondents who offered engineering were on the whole either satisfied or very satisfied with the training and support they received for the qualification. Most respondents were satisfied with the example tests (77 per cent were satisfied or very satisfied). However, 46 per cent were dissatisfied or very dissatisfied with the guidance they received from the awarding bodies on assessment.

Health and Social Care

Respondents were positive about the training and support they received for health and social care, with more than 69 per cent of respondents saying they were satisfied or very satisfied with each aspect. Most respondents were satisfied with their experience of moderation by awarding bodies (85 per cent were satisfied or very satisfied).

Leisure and Tourism

Of all of the GCSEs in vocational subjects, respondents were most positive about the training and support they received for leisure and tourism. More than 80 per cent of respondents said they were satisfied or very satisfied with the majority of aspects. Respondents were most satisfied with their experience of moderation by awarding bodies.

Manufacturing

As with all other subjects, respondents' experiences of training and support were generally positive, with 91 per cent saying they were satisfied or very satisfied with the guidance they received from awarding bodies on assessment. The most respondents were dissatisfied or very dissatisfied with their experience of moderation by awarding bodies.

Delivery and Assessment

We asked respondents to tell us how satisfied they were with their experience of the following aspects of delivery and assessment of the GCSEs in vocational subjects.

- The size of the qualification.
- The structure of the qualification.
- The amount of coursework and manageability for staff.
- The amount of coursework and manageability for students.
- The content of the qualification.

- The vocational relevance of the qualification.
- The level of demand of tests on students.

See Appendix 3 of this analysis for tables detailing percentage of satisfied and dissatisfied respondents for each subject.

The majority of respondents were positive about all aspects of delivery and assessment for each of the subjects, with over 70 per cent of respondents saying they were either satisfied or very satisfied with most of the above aspects.

Respondents whose schools offered health and social care and leisure and tourism had the most positive overall experiences of delivery and assessment.

Respondents who offered manufacturing were least satisfied with the size of the qualification (45 per cent said they were dissatisfied or very dissatisfied), respondents who offered art and design or applied science were least satisfied with the amount of coursework and the manageability of this for staff (35 per cent and 40 per cent, respectively, were dissatisfied or very dissatisfied with this aspect) and respondents who offered applied business, applied ICT or engineering were least satisfied with the amount of coursework and the manageability of this for staff with the amount of coursework and the manageability of satisfied with the amount of coursework and the manageability of this for students.

Activities to develop vocational context

We asked respondents to tell us about the ease of arranging activities used to develop a vocational context in the vGCSEs they offered. Specifically, we asked them about:

- Time available for staff to arrange activities
- The ease of accessing employers
- The ease of engaging with employers
- The ease of obtaining information about employers/industry
- The ease of arranging work placements for students
- Support from outside organisations with arranging vocational links.

See Appendix 4 of this analysis for tables detailing percentage of satisfied and dissatisfied respondents for each subject.

Respondents were generally less positive about the experiences they had of the above aspects of developing the vocational context of a subject than they were about any of the other interview topics.

Time available

For each subject, a greater number of respondents were satisfied or very satisfied with the amount of time they had available to arrange activities to develop the vocational context of the course than those who were dissatisfied. Respondents for applied art and design and applied science listed it as the most satisfactory aspect.

Ease of accessing and engaging with employers

The majority of respondents for each subject were dissatisfied or very dissatisfied with the ease of accessing and engaging with employers. This is not that surprising, given that people will always think that interacting and engaging with employers should be easier than it is.

Ease of obtaining information

The majority of respondents for applied business, applied ICT, engineering, health and social care and leisure and tourism were positive about the ease of obtaining information about employers/industry.

The ease of arranging work placements

Most respondents for each subject were more dissatisfied than satisfied with the ease of arranging work placements. However, it is uncertain how involved respondents were in arranging work placements, which are usually arranged by the student and a careers or Connexions adviser.

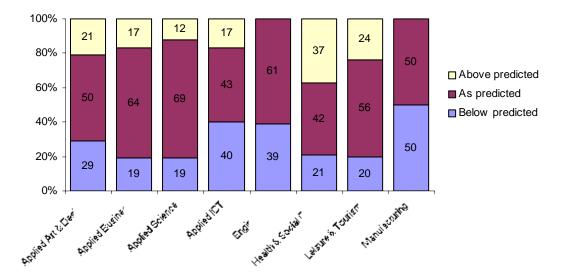
Support from outside organisations

Respondents would like more support from outside organisations. However, there were differences by subject in the responses. Respondents who offered applied business, health and social care, leisure and tourism and manufacturing were more satisfied than dissatisfied with the support they received from outside organisations. By comparison, respondents offering applied art and design, applied science, applied ICT and engineering were more likely to by dissatisfied with the support.

Awarded grades

We asked respondents to tell us whether the grades awarded to their students were generally in line with what had been predicted or if they were above or below the student's predicted grade. Students doing applied science or applied business were most likely to be awarded the grades predicted. Students taking health and social care were most likely to be awarded grades above

the ones predicted. Fifty per cent of respondents said that their manufacturing students received grades below what had been predicted, while 40 per cent of respondents reported below-predicted grades for their applied ICT students.

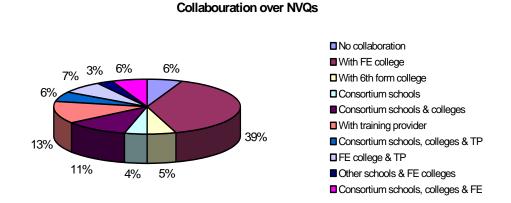


National Vocational Qualifications (NVQs)

Among responding schools, 36 per cent said that they offered NVQs to their key stage 4 students. See Appendix 5 of this analysis for a full list of the NVQs that schools said they offered.

The vast majority (81 per cent) of the NVQs offered by schools were taught off site and most commonly delivered in partnership with an FE college (39 per cent of NVQs).

[Note misspelling of collaboration, in title of pie chart below]



Among schools offering NVQs, the number of students taking them is low, with the average number of students below 10 for each subject.

Respondents named 'student demand' as the most common reason to offer NVQs.

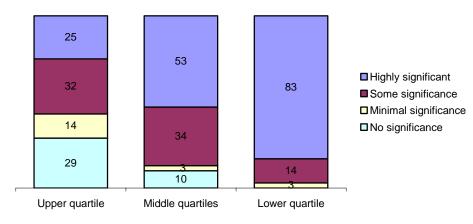
Fifty-four per cent of respondents who offered NVQs said they would be increasing the number they offered, 5 per cent said they would be decreasing the number of NVQs offered and 35 per cent said the number would stay the same.

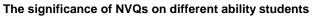
The students

Respondents stated that the majority of NVQs their school offered were available to selected groups of students. The majority of respondents said that these students were selected in terms of their ability (although option choice was only slightly less common).

In terms of significance of NVQs to students of different abilities, respondents reported that they saw them as having the most significance to students in the lower-attainment quartiles and having the least significance to students in the upper quartile.

Respondents overwhelmingly believed that NVQs were most highly significant for students in the lower-attainment quartiles, with 97 per cent of respondents saying they were either highly significant or had some significance. Fifty-three per cent of respondents believed that NVQs were highly significant to students in the middle quartiles (an additional 34 per cent said they felt they had some significance). Only 25 per cent of respondents said they felt NVQs were highly significant for students in the upper-attainment quartiles and 29 per cent said they had no significance to these students.





[typo in third bar, above]

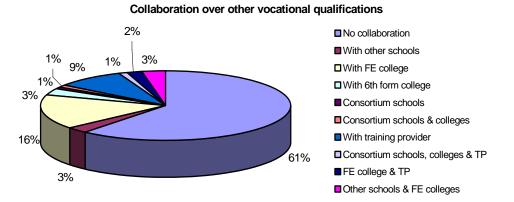
Other vocational qualifications

This section refers to vocational qualifications other than NVQs and GCSEs in vocational subjects; these qualifications include GNVQs and BTECs.

Seventy-six per cent of respondents said that their school offers other vocational qualifications to their key stage 4 students. The most common subject of other vocational subject offered was ICT and the most common listed qualification type was intermediate GNVQs. See Appendix 6 of this analysis for a full list of the subjects that respondents said their school offered.

If you remove the schools that offer only GNVQ in ICT, the figure of 76 per cent falls to 67 per cent of respondents.

Over 65 per cent of the qualifications offered were taught on site and the majority were offered without any collaboration with other schools, colleges or training providers.



The numbers of students taking the other vocational qualifications ranges from one to a full year group of 271. The number of students taking the qualification does seem to depend on the subject and qualification type; for example the numbers of students taking GNVQ ICT tends to be fairly high whereas the less common subjects, such as a foundation-level city and guilds horticulture course, which had only one enrolled student.

Respondents named student demand followed by staff expertise as the top reasons why the subjects were offered in their schools.

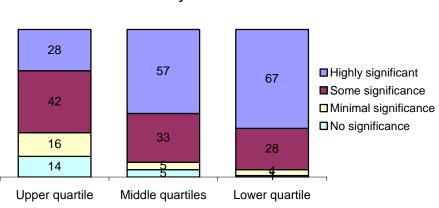
Fifty-nine per cent of respondents whose schools already offered 'other' vocational qualifications said that they would be increasing the number of qualifications they offered and 35 per cent said that the number they offered would stay the same.

The students

Among schools offering other vocational qualifications for their key stage 4 students, about twothirds said they offered the qualifications to selected groups of students and approximately a third offered them to all students.

The respondents from the schools that offered the qualifications to selected groups of students said they were selected in terms of their learning style and ability.

In terms of the significance of other vocational qualifications for students of different abilities, respondents reported that they believed the qualifications were most significant to students in the lower-attainment quartile.



Significance of 'other' vocational qualifications on different ability students

[should second bar be quartile, singular?]

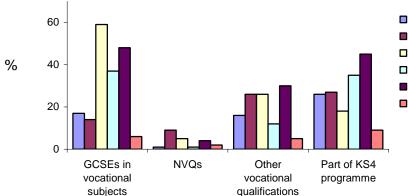
Activities and support for vocational learning

Activities supporting vocational learning

As mentioned in the headline findings, it is important to keep in mind the fact that the activities we asked about will be in addition to work experience. Around 95 per cent of key stage 4 students will take part in at least one week's block work experience by the time they finish year 11.

The most common activity among key stage 4 students is having visitors coming to schools (45 per cent of respondents said this took place at their school). Similarly, having visitors to school was the most common activity among students taking other vocational qualifications. A very small number of respondents said that their NVQ students took part in any of the activities; the most common activity was taking part in extended work placements, which was cited by 9 per cent of respondents.

Students taking GCSEs in vocational subjects were most likely to take part in an activity; the most common activity cited by the respondents was visits to industry.



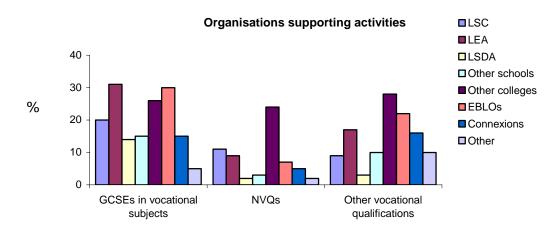
Activities supporting qualifications



Organisations supporting activities

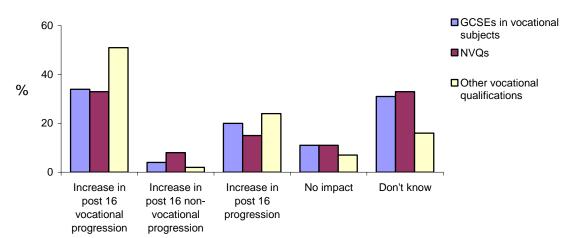
In terms of outside organisations helping to support the activities that schools offer as part of each qualification, respondents reported that the most support came from other colleges. Regarding the different qualification types, respondents said that the support they received from organisations for the GCSEs in vocational subjects was greater than the support they received for any of the other qualification types. This could be explained by the fact that the GCSEs in vocational subjects are still relatively new qualifications and will initially require greater support from outside organisations.

Respondents listed LEAs and EBLOs as offering the greatest amount of support for the activities offered to support GCSEs in vocational subjects. For the activities to support NVQs and other vocational qualifications, respondents in both cases said that the most support came from other colleges.



Progression routes

We asked respondents to tell us whether—after offering the vocational courses—they had seen an increase in the progression of students onto post-16 vocational courses or post-16 nonvocational courses. Respondents said they witnessed the greatest increase in progression of these students onto post-16 vocational courses among students taking other vocational qualifications. Approximately 33 per cent of the schools that offered GCSEs in vocational subjects or NVQs also said they had seen an increase in progression onto post-16 vocational courses.



Impact of qualifications on post-16 progression