

Establishing qualification requirements

Environmental and land-based sector

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List of abbreviations

ABC	Awarding Body Consortium
ABRS	Association of British Riding Schools
ACCAC	Awdurdod Cymwysterau, Cwricwlwm ac Asesu Cymru
AQA	Assessment and Qualifications Alliance
ASDAN	Award Scheme Development and Accreditation Network
AVCE	advanced vocational certificate of education
BAGMA	British Agricultural and Garden Machinery Association
BHS	British Horse Society
BHTB	British Horseracing Training Board
BVNA	British Veterinary Nursing Association
CCEA	Council for the Curriculum Examinations and Assessment
CEI	Centre for Education and Industry
CIEH	Chartered Institute of Environmental Health
CITB	Construction Industry Training Board
CPA	Corrugated Packaging Association
CPD	continuous professional development
DARD	Department for Agricultural and Rural Development
DfES	Department for Education and Skills
DMQ	Deer Management Qualifications
ELWa	Education and Learning Wales
FE	further education
FETAC	Further Education and Training Awards Council
FISS	Fencing Industries Skills Scheme
GCSE	general certificate of secondary education
GMOCN	Greater Manchester Open College Network
GNVQ	general national vocational qualification
HND	higher national diploma
HTA	Horticultural Trades Association
IAT	Institute of Animal Technology
IFM	Institute of Fisheries Management
LSC	Learning and Skills Council
NAPAE0	The Association for Land Based Colleges
NFA	National Fencing Association
NFU	National Farmers Union
NFUW	National Farmers Union of Wales
NOCN	National Open College Network
NOS	national occupational standards
NPTC	National Proficiency Tests Council
NQF	National Qualifications Framework
NVQ	national vocational qualification
OCN	Open College Network
OCR	Oxford and Cambridge and RSA Examinations
QCA	Qualifications and Curriculum Authority
RCVS	Royal College of Veterinary Surgeons
RFS	Royal Forestry Society of England, Wales and Northern Ireland
SSC	sector skills council
SVQ	Scottish vocational qualification
UCAS	University & Colleges Admissions Service
VGCSE	vocational general certificate of secondary education
VRQ	vocationally related qualification
WCF	Worshipful Company of Farriers
WJEC	Welsh Joint Education Committee

Executive summary

Seventeen different industries are represented within the environmental and land-based sector, each with its own education and training needs and qualification requirements.

Environmental, technological and economic changes have transformed the way in which the sector operates. These changes have created new demands on the skills needs of the sector and on its education, training and qualifications requirements. This research aimed to establish the current qualifications requirements for the sector.

When considering the value of general vocationally related qualifications (for example, GNVQs), on the whole respondents considered that there were already suitable vocational qualifications available post-16 and that these should be used, possibly in partnership with local specialist colleges.

The key conclusions and recommendations arising from the research are detailed below. These will be used to inform environmental and land-based development work and accreditation decisions. The majority of interviewees (76) thought that it would be valuable to have more vocationally relevant qualifications available pre-16. Respondents to the questionnaire, who were using current awards, agreed that a vocational general certificate of secondary education (VGCSE) would provide a model for the environmental and land-based sector (71 per cent).

Generally those interviewed thought that qualifications used as entry to the industry were both attractive to entrants and credible with employers. For several industries there are no suitable awards available at entry level or level 1 to encourage entry to the industry. There are also gaps in level 4 provision which are preventing progression within the industry. The majority of industries value level 2 as a suitable entry level and the most recognised and valued award appears to be the BTEC level 3 national diploma. The most used qualification is the national vocational qualification (NVQ) at levels 1–3.

One of the key issues raised by respondents related to the impact of key skills units on the take-up and completion of qualifications, specifically modern apprenticeships.

The majority of respondents thought that there was now a clear qualifications progression route that was understood by both employers and employees within their industry. Issues concerning progression in the sector mainly revolved around the structure of qualifications and assessment procedures. For those already within the industry the most popular qualification was the NVQ at level 2 or 3. For some industries, for example farriery, the advanced modern apprenticeship was considered the most important qualification. In general the range of available qualifications was supported. There is a clear need to develop and market these qualifications to encourage progression from school to further education or training.

Respondents particularly emphasised how important practical skills and short courses are to those within the workplace, particularly the National Proficiency Tests Council (NPTC) certificates of competence and other tests relating to legislative requirements. One of the changes recommended was the need to reduce the amount of paperwork associated with assessing work-based learning/activity and to develop a CPD portfolio that would give people credit for learning on the job.

There was no consensus on whether the current titles were clear or not; opinion depended upon the particular industry being discussed. Some were considered to be descriptive and sufficiently adequate to inform candidates about the content and level of qualifications (34), such as those for veterinary nursing and farriery. An almost equal number of respondents

described current titles as confusing and not easily understood by students, parents or employers (28), such as those for land-based engineering, equine, countryside management and animal care.

For some industries, such as farriery and land-based engineering, the modern apprenticeship is satisfying industry needs and is well embedded in the qualification system. Some industries are actively working towards the development of a modern apprenticeship, such as forestry and veterinary nursing. Others are still not sure that this route would be relevant in their industry, for example fencing, aquaculture and gamekeeping. There are significant obstacles in the NVQ framework and assessment requirements, which include the inappropriateness of the key skills requirements (and levels), external tests, evidence requirements and portfolio building.

The National Qualifications Framework (NQF) is starting to take effect and rationalisation appears to have made qualifications more relevant and easily accessible. The existing framework now needs to be consolidated and used before more changes are considered. There are specific issues that need to be resolved to increase the flexibility and accessibility of qualifications and assessment strategies. Some industries are still perceived to have too many qualifications available and too many awarding bodies involved in delivery. Specific examples quoted include general and amenity horticulture, and the equine and floristry industries.

Background

The supply of education and training opportunities throughout the UK for the 17 industries in the environmental and land-based sector covers a wide range of courses and qualifications at all levels from entry to postgraduate. The sector has access to a range of learning opportunities at notional N/SVQ levels 2 and 3 whether full-time courses, modern apprenticeships, or through distance learning. There are fewer opportunities in the form of relevant general qualifications, for example general certificate of secondary education (GCSE), general national vocational qualification (GNVQ) and certificates of education. Some GCSE courses have been rationalised by QCA and the future of the GNVQ in land and environment remains undecided; both of these could impact on the entry routes available for the sector. Economic and technological changes in the industries have created new demands for skills, education and qualifications.

The recent publication of the government's policy document: *14–19 opportunity and excellence*, emphasises the importance of vocational choices for young people and offers opportunities for the development of work-related learning at schools and colleges. In particular it stresses the importance of collaborative working and delivery of programmes across institutions. This too could have a significant impact on the delivery of programmes for the environmental and land-based sector, since it offers the opportunity for the development of alliances between providers who perhaps singly would not have the range of resources available to deliver to the 14–19 age group.

The Cassels Report on modern apprenticeships has also set new national targets for completion and identified ways in which work-based training and classroom-based routes need to be coordinated; the sector has a number of modern apprenticeships available to it. The rationalisation of a number of higher national diploma (HND) qualifications by Edexcel, and other awarding bodies, has begun to address some of the overlaps in provision. Industries, awarding bodies and centres are adjusting to the new national occupational standards (NOS) and resulting NVQs as well as the rationalisation of the NQF. The industry has also had to adjust to a number of new educational qualifications, for example key skills, advanced modern apprenticeships and foundation degrees.

The Centre for Education and Industry (CEI) at the University of Warwick was commissioned by QCA/ACCAC/CCEA, in summer 2002, to undertake independent research to establish qualification requirements for the environmental and land-based sector. Specifically, it was required to:

- Establish through direct consultation with candidates, deliverers and employers the extent to which presently available qualifications, across the NQF categories, contribute to meeting the needs of the environmental and land-based sector.
- Ensure that both the final outcomes benefit from the involvement of a wide range of stakeholders within the environmental and land-based sector, across England, Wales and Northern Ireland and all interested awarding bodies.
- Provide recommendations on the requirements for environmental and land-based qualifications from entry level to level 3 and across the general, vocational and occupational pathways of the NQF. To identify any issues arising from the relationship between the different pathways, between NQF qualifications and qualifications and training outside the NQF; taking account of different candidates' requirements and progression routes. In particular to identify the qualification needs of candidates in full-time school education versus those taking qualifications for reasons of technical or personal development.

- Identify any progression issues emerging during the consultation that relate to higher level qualification provision.
- Provide recommendations on the form and content of any guidance the regulatory authorities might prepare to make the methodology useful to inform future development work by sector skills councils (SSCs), awarding bodies and other interested parties.

Research methods

A mixed method of data gathering was deployed using both quantitative and qualitative instruments. Telephone interviews were conducted with key representatives, for example industry leaders and awarding bodies; face-to-face interviews were conducted with education and training providers and included a representative sample to ensure coverage by industry, type of centre, qualification and candidate. A questionnaire was sent to specialist colleges, general further education (FE) colleges, schools, private training providers and employers.

In addition a ‘snapshot’ report of qualifications available within the environmental and land-based sector was developed (both within the NQF and other provision). This report (see Appendix 3) provides a grid of qualifications identified by industry sector, level of qualification, their intended role and rationale based on the needs they seek to meet within the education, training and employment development of the sector and possible issues for their future development. The report was used as a basis for the field research and the relevant industry sections were shown to employers and training providers for comment. Each awarding body representative interviewed was asked to comment on the accuracy of the data in the report and to update the information with regard to qualifications in development. The data is shown in Appendix 3.

One hundred and forty interviews were carried out with representatives of industry organisations, employers, training providers (both private and colleges), schools and awarding bodies. This included interviews with candidates in schools and colleges following qualifications from GCSE and GNVQ to national diploma. The responses were summarised to produce a sectoral overview. Where there were specific issues relating to one of the 17 industries these have been highlighted in the ‘By industry’ section. In addition, issues specific to the situation in Wales and Northern Ireland have also been summarised in the ‘Further issues’ section. All numbers in brackets represent respondents who made a direct comment about the issue under discussion.

The final sections summarise issues for awarding bodies and the regulatory authorities, as well as issues raised by the awarding bodies. A table of interview responses by industry and type of respondent can be found in Appendix 1.

Four hundred and ninety-seven questionnaires were distributed to training providers (specialist and general FE colleges and private trainers), schools and employers. The response rate was fairly low, with only 130 useable questionnaires returned. Responses from schools, employers or training providers to the questionnaires are given in percentages. These figures should be treated with caution as they represent percentages of small numbers of respondents’ views. A breakdown of the return rates and the full questionnaire data can be found in Appendix 2.

Qualification requirements

Cross-sectoral issues

School-based qualifications

There were mixed views about whether school leavers were ready for employment in the industry. Some felt that young people would have the ability to learn specific jobs if given appropriate training; other industries did not employ school leavers. There were concerns raised about the level of skills and knowledge that young people have and whether or not these would hinder their ability to learn on the job. The particular skills mentioned were literacy, numeracy, communication, personal and work skills (especially team working), study skills and general behaviour that only comes with maturity. For several industries there were also concerns about health and safety issues when employing young people.

The majority of interviewees (76) felt that it would be valuable to have more vocationally relevant qualifications available pre-16. Respondents to the questionnaire, who were using current awards, agreed that a VGCSE would provide a model for the environmental and land-based sector (71 per cent) and felt that existing provision should be developed and improved (58 per cent). There were several routes suggested including applied GCSE, GNVQ, NVQ, NPTC entry level or a combination of any two of these and competency tests such as NPTC. Some employers disagreed that there was a need for a GCSE (49 per cent) but they agreed that there was a need for an NVQ at each level (1–4) (57 per cent). Training providers were not very knowledgeable about the GCSE but 31 per cent felt that it could provide a useful model for a general qualification.

The general agreement that vocationally related qualifications (VRQs) pre-16 would be a good idea was often further explained by one of the following comments:

- It would raise awareness of the sector and rural issues in general with students, teachers and parents.
- Credit would need to be given in future courses /accreditation of prior learning.
- The balance between theory and practice would need to be reflective of industry needs and basic skills would need to be maintained.
- The availability might encourage some of the more talented students to consider wider opportunities available.
- It would encourage applied activity, for example biology or food and farming.
- There would be positive benefits for progression to further education.
- The qualification could be offered by specialist colleges or in partnership with schools.
- Any qualification would need to be flexible with regard to the options available, the resources required, and pathways devised. Maybe a unitised GCSE with compulsory and optional units to allow schools to adapt to their own expertise and resources.
- The opportunity for meaningful and relevant work experience would be essential.
- Currently the GNVQ and GCSE are seen as being insufficiently practical.
- Respondents from schools with specialist resources were committed to continuing their land-based provision although they are currently working with qualifications that they find unsatisfactory.
- GCSE/GNVQ Land and Environment is a better title, it sounds more professional than 'rural', which has negative connotations.
- Parents tend to like the GCSE title; it has more resonance for them. It is likely that the more able students would take a vocational GCSE in preference to a GNVQ or NVQ.
- There has been an impact on the uptake of rural science exams because parents have been unwilling to allow their children to take such programmes because of their perceptions of rural/agricultural careers.
- Rural science could be a module within science to give it more validity.

- The new rural science course does not fit the full range of ability from students. It is less practical than the agriculture and horticulture GCSE, which allowed flexibility according to student need.
- The new vocational GCSE would be better as a single award; it is difficult to fit double awards into the school timetable.
- There is a need for more commercial application studies including the use of machinery and good health and safety learning.

The school and college students interviewed generally felt very strongly that vocational options at key stage four would be beneficial:

'At the moment there's absolutely nothing there (in schools) and yet it's an enormous industry. Many kids haven't a clue about the countryside and it's an area which is completely missed out'.

'This is an excellent idea. Too much of school is simply preparation for A levels'.

Students currently on the existing GCSE or GNVQ courses at schools were very positive about the experience, value and progression possibilities offered by this route. The questionnaire returns from schools indicated that by far the largest numbers of young people are enrolled on the GCSE rural science (80 per cent of schools). The GNVQ was being used in 19 per cent of the schools. Students commented that they liked the combination of theory and practical study, which gave a feeling of flexibility and that they appreciated the links with science. One school commented that the GCSE rural science was not challenging enough for schools that run farms, compared to the previous agriculture and horticulture GCSE. There was a feeling that students were not being stretched in the skills assessments. The majority of schools reported that the current qualification offering was only partially meeting the needs of students (65 per cent). Although 68 per cent felt that it was meeting the needs of students and employers for a general level 2 qualification. The main difficulty reported was the lack of consistent demand from student to take the qualification (27 per cent), which makes it difficult for schools to maintain quality resources.

There were some concerns expressed that vocational GCSEs would have low status and be regarded as for less able students (7). There was also some concern about the adequacy of schools' resources to deliver the practical components of such courses. A small number of respondents felt that the GCSE approach was not appropriate for land-based learning, fearing that it would force an academic rather than practical style of learning.

Several respondents felt that they need to be concentrating on raising the level of their basic skills (14) and there were some concerns about what students would actually learn at this age. On the other hand, some of the schools with specialist facilities use the opportunity to broaden the curriculum at key stage 3. The students find this to be a very positive experience, which helps them with their GCSE choices and for some, gives them credit towards the Duke of Edinburgh scheme. One school uses the unit awards scheme from the Assessment and Qualifications Alliance (AQA) to deliver focused entry-level experience, such as lambing and morning husbandry. Other respondents commented that they would like to see more rural and environmental studies at key stage 3 maybe alongside science or geography (65 per cent). Several school and college respondents mentioned the 'Growing Schools' initiative, which is trying to promote awareness of the land and environment for school children.

GNVQs

School respondents to the questionnaire said that the GNVQs in land and environment were not currently meeting the needs of students (21 per cent). Also that there was a need to develop a vocational/ occupational qualification that would better serve the needs of the type of student who currently takes this qualification (35 per cent). Training providers disagreed with this statement saying there was no need for a general qualification (33 per cent) and that there were already alternative qualifications that could take the place of the foundation and intermediate GNVQ (24 per cent). There were several comments made specifically about the existing GNVQ, these included:

- The award is seen as bureaucratic and unlike other qualifications and therefore does not sit well with overall curriculum offerings.
- It was felt that there is uncertainty about the future of GNVQ, which made several respondents unwilling to take it on.
- There is little understanding of the GNVQ within the sector – there were some comments that it was of little value and was seen as ‘woolly’ by employers.
- Students were not sure about the status of the intermediate GNVQ compared to the GCSE. They felt it would be better if it were titled AS or A level with equivalent points for university entry.
- Several respondents (5) who were using the qualification said that, although they were not keen on the process, they felt it was a valuable qualification and would not like to see it lost.
- The current GNVQ is quite difficult to fit into school timetables.
- Staff and students like the GNVQ emphasis on planning and researching: ‘A levels could learn something from that. They learn real science and use good methods’.
- The current syllabus would benefit from more information on the business and legal environment.

It was widely agreed that college links courses or partnerships between colleges and schools were extremely important and very valuable in enabling the delivery of vocational qualifications (32). Some colleges were already helping to deliver NVQs at level 1 for school students, while others are looking at NVQ level 2 for sixth-form students. Successful partnerships with colleges were considered to improve retention on the vocational courses (50 per cent). Other establishments were using NPTC awards for pre-entry and entry level because they liked the fact that they were accredited via simple skills assessments and not through portfolio building. A number of school respondents to the questionnaire reported that successful partnerships with the industry sector had a positive impact on retention within the vocational qualification route (69 per cent).

Post-16 qualifications

There was no agreement about the value of general vocationally relevant qualifications available post-16. Respondents to the questionnaire from schools agreed that there is a need for an AVCE for the environmental and land-based sector (35 per cent). Many of them indicated that the removal of the advanced GNVQ had created a gap in progression routes (33 per cent) and resulted in there being no suitable qualifications available for some young people to access (32 per cent). The response to the need for an AVCE was more positive, on the whole, from industry representatives (9) than from training providers. There were several provisos to the positive responses that included the need for the courses to include practical, relevant and worthwhile activities, and the need for employer support. ‘Foundation courses must be appropriate to the learning needs and capabilities of students and must recognise the differences of the students that start at each of the three levels. It is not sufficient to offer just the same material but a bit easier. This was a problem with the old Foundation – it didn’t offer the right kind of learning to the students it was targeted at’.

Other respondents felt that post-16 students would be better following a full-time vocational course and gaining relevant skills, knowledge and experience (23). Training providers agreed that there was no requirement for an alternative general vocational qualification (34 per cent). It was generally agreed that there would not be sufficient demand to make such a qualification viable (41 per cent). There was some concern expressed from students and trainers that general vocational qualifications post-16 would need to be aligned with A levels to make them more attractive to young people and their parents.

There was a feeling from industry respondents that there was a need for a higher level GNVQ or GCSE to reflect progression in the industry and to give it status amongst other vocational areas. There was some concern from training providers that schools were not giving students the full range of options because they were protecting their A level recruitment (7). The quality of careers advice in some areas was also questioned (10). Respondents to the questionnaire from schools felt that improved careers advice could help to increase retention on vocational courses (54 per cent).

Several respondents (10) agreed that there was a need for more specific entry-level (level 1) courses to aid progression into further education, and for some students already in further education.

Qualifications for entry to the sector

On the whole those interviewed felt that qualifications used as entry to the industry were both attractive to entrants and credible with employers. Some commented that the current suite of qualifications were more attractive than they used to be.

The main qualifications used by people wanting to enter the environmental and land-based sector include GCSEs, NVQs, national diplomas, national certificates and NPTC certificates, and for some, higher education awards. The most often mentioned level used for entry was level 2, although for some industries entrants have qualifications at level 4 or above. The overwhelming majority of respondents said that the Edexcel BTEC level 3 national diploma was the most popular qualification; for some specialist institutions it was seen as the 'flagship course'.

Training providers indicated that the current qualifications fully (55 per cent) or partially (45 per cent) meet students' needs. The most used type of qualification was the NVQ at levels 1–4 (a breakdown of awards by type can be found in Appendix 2). Several respondents (28) felt that the preferred qualifications were adequate for entry to their industry and that the notional NVQ level definition was correct. Many people commented that they were involved in the process of standards review and/or qualification development and therefore should be content with the qualifications that are currently available. Other respondents had more qualified responses including that there continued to be a need for practical experience and the importance of specific skills in the recruitment process. In order to satisfy the need for skills and knowledge expected by employers many training providers are combining courses to ensure students get the full breadth of experience (12). Examples of such combinations are:

- Agriculture national diploma and NVQ (some students cover NVQ level 2 and 3 during their sandwich year).
- Equine national diploma and British Horse Society (BHS) awards.
- Countryside management national certificate and NVQ forestry.
- Animal care first diploma and NVQ.
- Horse care first diploma, NVQ, BHS, NPTC, health and safety and first aid.
- Environmental conservation NVQ level 2 and NPTC.

Students stressed how important the practical skills were to them and many commented that they would like more practical learning and assessment as part of their qualification (15). They also commented that they felt it was important to have specialist learning, maintaining industry specialisms, rather than general land-based skills (14). Several training providers said that they would like to be able to offer a separate certification for practical skills, such as chainsaw operation, but that the cost of the resources, assessment and accreditation were prohibitive. There was a concern expressed that the accreditation offered was often wasteful and that it was only provided to satisfy perceived employers' needs. A specific example illustrates the issue raised by several training providers:

In arboriculture the minimum requirement would be the ability to climb trees and use a chainsaw. Employers want NPTC qualifications because of insurance requirements, which you can get by doing a five-day course. You need to get these qualifications because the employer believes in them, although they are not strictly technically required. Assessment costs for four basic units is £300 alone. This doubles the assessment cost if offered as part of the national diploma. Industry needs to understand the value of the national diploma. If they have been assessed already this additional assessment is wasteful.

Unitisation

A large number of respondents talked about how useful it would be to accredit what students have achieved; many find it difficult to sustain part-time courses over a number of years. Some training providers talked explicitly about how important it is to be able to offer unit accreditation (16). They would like to offer credit for a single unit and also to have a mini award of three units to satisfy the needs of employers and employees. Not all units of a single award are always relevant in a particular workplace. There is evidence that some students have gained a number of units, relevant to their work, but not the mandatory ones needed to gain one of the existing staged qualifications, such as a national award. Unitisation would offer flexibility in delivery and assessment.

Most people were generally happy with the level of skills and knowledge provided by the current qualifications. There were some suggestions for additions that would be useful to employers. These included customer care, people skills, specific industry knowledge and awareness of land management and conservation across the whole of the sector.

Again there was an emphasis on the need for more generic foundation level 1 qualifications. A small number of respondents asked specifically what had happened to the first certificate level. In addition, in common with the pre-16 comments, there was a need for more entry-level courses to aid progression and particularly to support students with learning difficulties. Some training providers are already using entry-level courses for students with learning difficulties, these include Oxford and Cambridge and RSA Examinations (OCR) (which allows accreditation of single units), ASDAN and NPTC.

Most training providers, and several large employers within the sector, said that retention was not an issue for them. It was generally agreed by interviewees that there were good progression routes both within colleges and outside. Training providers indicated that there were some specific issues that impacted on progression; only 21 per cent of respondents said that there were no barriers to progression.

Progression routes

There were some issues raised by respondents that particularly impacted on progression between qualifications and into work; some of these are detailed below.

- One of the biggest problems for students is finances, including the cost of accommodation, travel and subsistence. Several people mentioned the impact of part-time work on completion of coursework.
- Some higher education institutions are still not willing to accept students with national diplomas, although from some quarters there was a feeling that the situation was starting to improve.
- The lack of level 1 qualifications in some industries has made progression difficult for certain students.
- For some it was felt that level 1 qualifications were too basic while level 2 was too theoretical. The gap between level 1 and level 2 in some subject areas required a bridging course for some students (for example horticulture). There is a particular issue with the more mature entrants to the sector for whom the NVQ level 1 can be seen as patronising, while the NVQ level 2 could be too big a step to take for others.
- For some students the gap between level 2 (for example first diploma/national certificate) and level 3 (national diploma) awards is too great. Some specialist colleges would like a way to extend level 2 students who are not ready to progress to level 3.
- The impact of foundation degrees on the well-respected and understood HND. This has particularly affected progression routes from the national diploma: 'Strong students used to be able to progress straight from national diploma to year 2 of the HND. Now they have to go through year 1 of the foundation degree, with some repetition, which seems like a wasted year for able students'.

There is a need to consider the skills and experience of mature entrants to the sector, many of whom are job changers, when planning progression routes. Many are concerned with employability and not qualifications.

In some industries there are still many unskilled/ unqualified workers taken on and their needs, often for basic skills training, have to be taken into account.

Key skills

One of the most frequently mentioned issues relating to progression was the impact of key skills on completion of awards. Despite the fact that there was no direct question in the schedule about key skills almost every respondent raised the issue. There was particular concern about the impact of key skills on the take-up, completion and reputation of awards such as the modern apprenticeship. One industry lead body summed up the feelings of several respondents: 'The key skills requirements (in particular external testing and the three-year limitation on proxy qualifications) for modern apprenticeships are posing a major barrier to acceptance within the veterinary industry'.

As the extent of concern about key skills seemed to be significant it is worth including some of the main comments of respondents here.

- Difficulty is caused by the lack of integration with main awards.
- Little appears to have been done to make key skills vocationally relevant. It is essential that they are seen as relevant to both students and employers and need to be put into context for learners. Employers feel unhappy about having to pick up basic skills where schools have failed.
- Specific examples were given of the environmental conservation modern apprenticeship, which requires students to gain communications at level 3, which is not seen as being realistic by the industry. Another example is of farriery key skills at level 2, which some centres felt a lot of apprentices would not be able to achieve, all of which will jeopardise their achievement of the full qualification.

- There was a particular issue about the fixed times for key skills tests which does not fit in with the learning of trainees. They need to be more flexible and accessible.
- One respondent, who was the manager of learning services with responsibility for key skills across a specialist college, felt that key skills could be made appropriate/relevant if they were integrated in the subject. She felt that the key was good staff development and a supportive team.
- It was claimed by some respondents that the modern apprenticeship simply ‘does not fit’ many of the industries in the sector. One of the primary reasons for this opinion was the inclusion of the key skills. The opinion of trainees and employers alike was that the NVQ is satisfactory but that it is the other added hurdles that make it difficult to achieve the full award. ‘The demands on key skill levels in the modern apprenticeship need to be retuned so that they really are appropriate for the needs of the student and employer. At the moment it is soul destroying that they fail the framework because they cannot reach the right key skill level. Our approach is to start with the individual’s needs. The modern apprenticeship framework is too crude; it does not differentiate as it could by simply recording the key skills level that the student has reached and then allowing the employer to make a decision on that basis. Levels need to be set for the individual’.
- One of the issues raised by several training providers and employers was that in England there is no funding for over 25 year olds, which impacts on entry and progression for more mature trainees.

Industry-based qualifications

There are obvious differences between different types of employer within the industry depending upon the outlook and resources of the particular business. There are always concerns about the costs of training, whether these are financial or issues of time away from the workplace and these are particularly relevant to very small businesses. Many land-based businesses operate as sole traders or with one or two employees, which makes training and assessing individuals difficult. For these smaller businesses practical experience is more important than qualifications. The larger organisations are committed to training and providing the opportunities for employees to gain qualifications relevant to their job and in some specific cases providing basic skills training. However, several employers commented that funding is not provided for courses that are required by legislation.

For those already within the industry the most popular qualification was the NVQ, either at level 2 or 3. For some industries the advanced modern apprenticeship was considered the most important qualification, for example farriery. The majority of employers responding to the questionnaire indicated the need for part-time vocational qualifications at each level (65 per cent). There was also considerable agreement about the importance of flexible learning methods including distance learning (employers: 84 per cent; training providers: 66 per cent). However, it should not be underestimated how important short courses are to those within the workplace, particularly the NPTC certificates of competence and legislative requirements (29).

For many, training that is legislation driven is also linked to their insurance premiums. People are looking for skill-based practical updates that ‘enable them to do the job for which they were employed’. Employers agreed that there is a need for more training in the workplace by the employer (89 per cent) and some saw the need for input by other organisations (61 per cent).

In some areas training providers are now having to deliver child protection courses for those employees working with young people, for example equine and environmental conservation. One training provider felt that the NOS were valuable and would like to see a national standard for short courses.

In the majority of industries both employees and employers valued courses. Many commented that the situation had changed and that the qualifications were now more valued than they had been in the past, although there was a feeling in some industries that employers still do not fully understand the place of NVQs. For some industries the value and importance of practical skills and experience cannot be overlooked. There is still a place for additional qualifications, particularly at the supervisory level, but NVQs are not always the appropriate vehicle. A number of respondents said that it was increasingly difficult to 'find employers who are willing to assess and lose someone for one day a week. Employers want someone else to do the training'.

There are obvious differences between different types of employer within the industry depending upon the outlook and resources of the particular business. There are always concerns about the costs of training, whether these are financial or issues of time away from the workplace and these are particularly relevant to very small businesses. Many land-based businesses operate as sole traders or with one or two employees, which makes training and assessing individuals difficult. For these smaller businesses practical experience is more important than qualifications. The larger organisations are committed to training and providing the opportunities for employees to gain qualifications relevant to their job and in some specific cases providing basic skills training. However, several employers commented that funding is not provided for courses that are required by legislation.

One of the issues that was highlighted by several respondents was the need for information about legislative changes or the outcomes of enquiries to be communicated quickly to training providers and for changes to qualifications to be quick enough to pass on essential information to candidates:

There is not really any need for additions to qualifications at this point in time, however, it is important to look at the methodology and *procedures* for updating qualifications. It is essential that qualifications are continually updated and kept current, for example the outcomes from inquiries (Anderson, the foot and mouth inquiry: lessons learned) and legislative changes. This is possibly the difference between vocational qualifications and academic qualifications, in that the system is set up to support qualifications that do not need to be changed very often, whereas with vocational qualifications, particularly within this sector, the need for instant updating is essential. If these updates could be initiated through QCA, possibly using the Lantra industry groups as a verifying body, rather than leaving it to individual awarding bodies, this would give standardisation across qualifications and hopefully speed up the procedure. There should be a way of almost instantly changing qualification content to reflect changes in safety procedures and legislation.

For the majority of businesses retention is not an issue, although there were some notable exceptions, such as veterinary nursing, horse care and animal care. Several respondents talked about people making job changes to join their industry and having a vocation. Once in a full-time permanent post most people tend to stay either in the same job or certainly within the industry. The majority felt that any changes to qualifications would not make any difference to the current situation. Several respondents were concerned, however, particularly in industries where there were skills shortages, that if employers provided opportunities for employees to get national qualifications they will lose those employees once trained.

Questionnaire respondents felt that retention would be enhanced by giving more support to employees during study (employers: 54 per cent; training providers: 45 per cent) and once back in the industry (employers: 56 per cent; training providers: 40 per cent). For some the most important factor was financial support during study (employers: 59 per cent; training providers: 55 per cent) while others would like to see financial reward on completion of a qualification (employers: 49 per cent; training providers: 40 per cent). Once within the industry employers agreed that retention would be helped if the achievements of individuals were recognised (employers: 61 per cent, training providers: 36 per cent) and if they were encouraged to take part in CPD (employers; 66 per cent; training providers: 36 per cent).

One of the changes that was recommended by several very influential organisations was the need to reduce the amount of paperwork associated with assessing work-based learning/activity. Several respondents put forward the idea of some sort of CPD portfolio that would give people credit for learning on the job, these included NAPAE0, NFU, NFUW, and Lantra. Training providers agreed that there was a need for a system of accreditation for short-course attendance/ assessment or modules (69 per cent). In addition they indicated that incentives for learning would encourage lifelong learning (73 per cent):

We should be looking more at the concept of continual professional development; attendance at one-day courses, updates, seminars etc. could be part of a development portfolio. As the situation stands individuals are not given credit for the continual on-the-job training and updating that they do to enable them to do the job. The system of credit for these short bursts of training or development could build into a portfolio that works towards accreditation for a qualification.

When asked about information sources available to the industry to indicate the uptake of qualifications most respondents quoted the websites of specialist organisations, Lantra, local colleges or word of mouth and personal contact. There was no mention of awarding body, Learning and Skills Council (LSC) or QCA/ACCAC/CCEA data, which could help in determining which qualifications were most suitable and most used within the sector.

Legal requirements

Many industries have legal requirements for training and updating of certain skills, these include:

- health and safety updating
- pesticides training
- tractor driving
- manual handling
- first-aid
- forklift trucks
- chainsaws
- technical updating
- mechanical plant certification
- child safety and welfare training
- firearms legislation.

Some of these qualifications are still outside the NQF although with the inclusion of many of the NPTC certificates the situation has changed recently. Those still outside the framework include:

- first-aid
- assessor units
- some certificates of competence/ proficiency tests
- industry-developed certificates to cover specific skills.

Qualification titles

There was no agreement on whether the current titles were clear or not; opinion depended upon the particular industry being discussed. Some were considered to be descriptive and sufficiently adequate to inform candidates about the content and level of qualifications (34), such as those for veterinary nursing and farriery. An almost equal number of respondents described current titles as confusing and not easily understood by students, parents or employers (28), such as those for land-based engineering, equine, countryside management and animal care. An industry/education leader commented: 'It is absolutely the case that young people are not understanding the names for qualifications or the differentiation between them. The marketing of a wide range of qualifications with different names for the same purpose is a waste of time and is confusing'.

The main confusion was in the titles of college-based qualifications; short courses were thought to be less of a problem. It was clear that training providers often guided candidates to the 'right' qualification.

The specific issues were in relation to the titles for amenity horticulture\landscaping\sports turf – these were felt to be confusing and unclear. The other issue concerns the levels of NVQs and it was felt that employers and candidates could not know and understand what each level would contain. In both cases it was felt that a more specific title would be clearer rather than trying to bracket together a whole industry area. For example within agricultural livestock, it would be clearer if sheep husbandry, beef rearing etc were indicated clearly in the title.

Some respondents felt that the confusion over titles made it difficult to compare qualifications and courses on offer to students. To further confuse the picture several colleges use awarding body qualifications but give them more popular titles to attract entrants. Particular areas where this was discussed were in horticulture, forestry, arboriculture, gamekeeping and equine.

There was a particular issue with regard to mature entrants that was raised by several respondents, in that they can sometimes enter qualifications at the wrong level because of perceptions of lower level awards. A specific example was given of the perception that the first diploma was being geared to the 16–19 age group and that mature entrants were being put off by the title.

Several respondents liked the idea of emphasising the level with the title and this point will be further discussed in the section on issues for the regulatory authorities.

Value of current qualification offering

On the whole, interview respondents felt happy that the available qualifications provide the right set of skills at the correct levels to meet current needs. When asked whether they used industry-specific qualifications when recruiting, the majority of employers indicated that they 'mostly or sometimes' do (66 per cent). An equal number said that they either always asked for industry qualifications or never did (17 per cent each).

Some felt that it was too early to comment on the rationalised provision and for others the importance of certain certificates and practical experience still had to be considered. There were some industries for which a higher level qualification, such as an NVQ level 4, would be valuable. One respondent summed up the views of others when he said that it was a question of the drivers behind qualification uptake. ‘What would make people want to do a particular qualification, if they don't need it to get or to keep their job?’ The majority of employers agreed that provision was fairly good but that it needs reviewing in parts (54 per cent). Training providers had significant difficulties with the rationalised provision: 57 per cent said that it needs a complete review and 37 per cent said that it needs some review.

Employers indicated that the current qualifications either fully or partially meet the needs of employees (94 per cent) and employers (93 per cent). There were some specific needs identified by particular industries that were looking to develop qualifications for supervisory (fencing) or management staff (landscaping – sports turf) and for others that were looking for an entry route (NVQ level 1 animal care assistants in veterinary practices; forestry modern apprenticeship). Employers (27 per cent) and training providers (16 per cent), who reported a difficulty with qualifications, claimed that the content was not relevant to the industry. There was agreement from both employers and training providers that some of the qualifications took too long to complete.

There were generally positive responses to the idea of qualifications being more transferable between different industries within the sector. Almost half of the employers responding to the questionnaire thought transferability was important (46 per cent). It was felt that the content of qualifications needed to be made a lot clearer to enable employers to judge the value and transferability of certain modules. For some it was felt that transferability could only come at the higher levels, for example, in management awards; while others thought that transferability would be impractical and that each industry would need to have a suite of very specific qualifications.

The majority of respondents felt that there was now a clear progression of qualifications that was understood by both employers and employees within their industry. Employers agreed that the current qualifications were a useful measure of competence for recruitment and promotion (66 per cent). Although only a minority agreed that qualifications might influence pay (30 per cent). There were a minority who felt that this was not the case for their industry or that the progression routes were not as clearly understood, as they should be.

Gaps

A minority of those interviewed did not feel there were any additions needed to the qualifications within their industry given that many of them had been involved in the review process and had had their views heard. A significant number of employers (64 per cent) and training providers (44 per cent) indicated that there were some gaps (or significant gaps) in provision for their industry. The industry representatives who said there were significant gaps were from landscaping (4), environmental conservation (2) and fencing (2). There were several other industries where only one person indicated significant gaps. The majority of industry representatives indicated that there were some gaps; the only industries not identifying gaps were aquaculture, fisheries management and farriery (all of which had very small return rates, so may not be significant).

The main reasons given for this comment were that the qualifications did not take account of working practices (employers: 34 per cent; training providers: 13 per cent) and that there were no appropriate qualifications available for their industry (employers: 22 per cent). The industry representatives who claimed there were no appropriate qualifications available were from landscaping (3), fencing (3), environmental conservation (2) and land-based engineering (2). Several respondents representing other industries claimed that there were no appropriate qualifications, but the views of one respondent for each industry are not statistically significant.

The majority of training providers said that there was insufficient student demand to justify offering all available qualifications (21 per cent) and that qualifications were not specialist enough (15 per cent). There were some specific industry suggestions to aid entry into and progression through employment and these will be outlined in the individual industry sections. Some of these suggestions are currently being developed or discussed by interested parties.

Overlaps

The majority of respondents felt that there were no overlaps in the qualifications available for their industry. Where there were thought to be overlaps, for example between national diplomas and NVQs, this was not seen as a problem as they were very different qualifications serving different needs. Employers and training providers felt that there were overlaps in the content of different qualifications (employers: 64 per cent; training providers: 27 per cent) and between levels of awards (employers: 61 per cent; training providers: 11 per cent). There were still considered to be too many qualifications available for some industries, such as horticulture, equine and floristry.

Modern apprenticeships

For some industries, such as farriery and land-based engineering, the modern apprenticeship is satisfying industry needs and is well embedded in the qualification system. Some industries are actively working towards the development of a modern apprenticeship, such as forestry and veterinary nursing. Others are still not sure that this route would be relevant in their industry, for example fencing, aquaculture and gamekeeping. Some respondents had particular issues that made the use of the apprenticeship route difficult. These included the perceived difficulty with the key skills and with external testing and the funding regime (the funding is not available to people over 25 years old in England). Within agriculture, it was felt that the modern apprenticeship was popular with the industry but was currently affected by the economic climate and, therefore, the ability to deliver appropriate training.

Industry issues

Agricultural crops/livestock

The respondents interviewed about qualification requirements in the agricultural sector tended to make comments that were relevant to both crops and livestock and for this reason the two sections have been combined. All respondents were in agreement that in the current climate qualifications were not the most important issue within agriculture and that all decisions were bound up with the economic situation. One of the main outcomes of this situation is that there are fewer people in the industry and it is therefore harder to release them for training and for small businesses to fund training.

There were a number of comments about the breadth of full-time courses with a concern that they have become too theoretical and the students were not necessarily gaining essential training and practical skills (for example tractor driving). Some employers feel that they are still having to train people in the skills they need. There was a feeling that farmers are starting to recognise and understand NVQs and that the modern apprenticeship needs to be available but will probably never be a main route into the industry.

Many agricultural employers are still looking for certificates of competence, some of which are provided on full-time courses, but are impacted upon by issues of funding and timetabling. The majority of employers understand the NPTC qualifications and regard them as a licence to carry out certain jobs. There is some confusion in the industry as to where non-accredited qualifications fit in relation to NPTC.

Interviewees had a number of suggestions about areas of agriculture that need to be included in future qualification developments. Some of these are:

- livestock handling
- common agricultural policy
- advanced pesticides
- agronomy
- alternative land use and new technology, with a forward-looking emphasis
- sustainability and general rural issues (this extends to and was mentioned within many land-based areas)
- diversification
- organic production
- genetically modified crops
- grassland
- machinery repair
- ploughing
- lambing
- general record-keeping
- business skills and marketing
- more on links to the food chain
- precision farming.

Some of these areas are included as units in qualifications and others are part of the developments currently under discussion with awarding bodies.

Amenity horticulture/landscaping

Within general and amenity horticulture there appeared to be more confusion over the number of qualifications available, as a result of the impact of the leisure market. Some qualifications attract a lot of people who are doing it for interest rather than vocational need. However, this may provide a route into the industry for those thinking of a career change.

Several employers complained that the NVQ was not meeting the needs within the industry. For some this was because NVQs take too long to complete and many horticultural workers are employed on a temporary/seasonal basis. Having said that, other respondents felt that the industry was ready to use the modern apprenticeship. 'Horticulture employers complain that NVQ horticulture was not meeting their skills needs. The situation is exacerbated in some areas by local authority horticulture staff cuts (major employer in horticulture) leading to less opportunity for people to learn "on the job" alongside experienced/skilled workers'.

There were two specific areas within landscaping that were particularly commented on. The first was garden design, which has become increasingly popular, and needs more specific qualifications geared to those with this interest. The second was greenkeeping, which is a very specialist subsection of the landscape industry. The level 2 horticulture and sports turf qualifications are very popular and those involved in greenkeeping are keen to ensure that the specialist knowledge and skills are retained. This is one of the industry areas where the titles of awards are particularly important to ensure they have credibility within the industry.

There was some comment from industry respondents that there is need for an amenity horticulture award at level 4.

Animal care

It was suggested that there is a gap for a level 1 animal care and management course. Some students find 'the transition from level 1 to level 2 difficult; they can cope with the practical but not with the academic demands'. The other main concerns were about the new modules not providing enough emphasis on practical skills and that students did not always understand the full range of animals encompassed in animal care qualifications.

Mature students looking for a change of career to animal care often sign on to full-time courses to get the practical experience, although they probably would not need the qualification to get a job.

Other specific issues raised by individual respondents were that there was a general view in the animal charity sector that the modern apprenticeship route is not appropriate for this industry and particular concerns over the key skills requirements. There is a perceived need to allow accreditation of prior learning from animal care courses to veterinary nursing qualifications. The change in qualification title from 'animal care' to 'animal management' has caused some confusion. There was a feeling, however, that in the long run this may have more credibility within the industry.

Animal technology

This is one of the industries where the title of qualifications is very important. Respondents tend to prefer the term 'animal management' rather than 'technology' or 'science' because they feel it is more attractive to recruits and pitches it at the right level.

There was concern expressed that some new modules do not offer the range of content they previously did; there is a feeling they were not written by vocational specialists. However, other respondents felt there is still a good range of modules. There is a suitable range of qualifications to support progression. As a general point of interest it was noted that the new national award seems to be attracting more mature entrants.

One specialist training provider noted the new animal assistants award could act as a route into veterinary nursing and said that a similar qualification would be useful for animal technology. It may even be possible to share modules on elements such as anatomy and physiology.

Aquaculture

This is an industry area where provision is patchy. Some colleges have tried to offer qualifications but have been unable to get sufficient numbers to make the courses viable. This is recognised as a very difficult area to teach within colleges, there are huge resource implications, and there have been some comments about the mismatch between what colleges are teaching and what the industry is all about.

Employers commented that most new entrants are qualified at level 3/4, but that lower level qualifications would be adequate as long as the applicants were motivated, mature, self-reliant, and able to get to the fish farm. Once in work there are no real progression routes and learning takes place on the job. Some employers offer NPTC qualifications when necessary. One employer thought that the NVQ could be useful as an incentive for staff.

Environmental conservation

Several respondents highlighted the fact that not all environmental conservation posts require high-level skills and qualifications. The industry needs recruits with good practical skills and there is room for a level 1 award. This industry particularly attract a lot of career changers who have experience that they can bring to their learning, but possibly would benefit from a practical qualification. It was suggested that the advanced modern apprenticeship could be useful for new recruits and volunteers. There was a question about the need for training courses for volunteers with funding attached – interviewees were unsure of what was available. Some centres are starting to use the Awarding Body Consortium (ABC) practical environmental skills award.

There was some concern about the title of countryside management qualifications, with a feeling that it could be misleading to new entrants. ‘It is felt that “Countryside Management” is not the ideal name for a course about sustainable development, ecology, estate and game management. “Environmental Management” might be better – it might appeal equally to the general interest and vocational students.’

Some interviewees felt that the conservation qualifications were weak on particular areas.

These included:

- land use
- farming systems
- ecology
- habitat management
- livestock management as part of environmental conservation and not farming
- IT
- customer service
- administration and management.

Units can be found for all of these areas but training providers would rather not have to ‘bolt on’ units from other qualifications. In addition it was generally agreed that there is a need for environmental conservation awareness across all industries within the land-based sector and not just as a separate subject.

Equine

There are many horse care qualifications aimed at the leisure market. An informal survey of racecourse trainers found that the majority of courses, with apparent overlap, caused confusion. There seem to be too many qualifications and some confusion over titles, for example ‘Horse Care’, ‘Horse Management’ and ‘Equine’.

There is a substantial skill shortage in certain sectors of this industry, which impacts on its view of qualifications. There is a varied response to trainees and work experience with general stables not being well known for valuing training. There are few progression opportunities and often poor pay.

The situation is different in racehorse and stud stables, where vocational qualifications are more valued. The NVQ has a strong currency within the racehorse training community. It was also suggested that an NVQ at level 4 would be useful and that an emphasis on racehorse care would be particularly valuable. Other respondents said that there was the possibility of the development of a foundation degree linked to the broader area of leisure and tourism.

Some training providers had concerns about certain qualifications but felt compelled to offer them because employers recognise them and ask for them at recruitment. This increases the time and cost spent on assessment. There was a question about whether or not the awarding bodies could offer broader vocational courses that could have more currency outside of the equine industry.

The City and Guilds NVQs were praised as being much improved and excellent in their rigour. The ideal qualification route was perceived as the achievement of both a BTEC and NVQ qualification in order to enhance practical skills activity. Many training providers also offer BHS qualifications alongside full-time courses. It would be useful for many equine courses to include more units on IT, business and communication skills. It was also suggested that the first diploma would benefit from more input on racing and breeding issues.

Farriery

The farriery industry, because of its special position, is mostly well satisfied with the newly updated qualifications. There was some concern from apprentices that they do not have enough time to practise forge work: 'they forget you're students – we need a bit more time'.

However, the whole area of pre-entry is being reconsidered. The current alternative to GCSE is the entrance exam, which is based upon AB skill check papers. A new qualification is being developed to replace this route. If a young person does not have the four GCSEs A to C plus English and mathematics (which will be future requirements), an alternative will be to take a newly designed access course under the 'Entry to Employment' government guidelines. This will last from between six months to a year and include practical units at (notional) NVQ level 1 in such areas as horse handling, nutrition etc. A forge-work certificate will also be included, with key skills at level 2 in communication and number. This will prepare candidates for entry into apprenticeship.

Fencing

Entrants to this industry tend to be unqualified and are often over 25 making a job change. There is a tendency not to take on school leavers because of a lack of training in work skills, such as timekeeping and teamwork.

There was a feeling that NVQs are starting to be valued by employees and that employers will take more notice of them in time. The modern apprenticeship, however, does not seem to be appropriate for this industry. The Lantra FISS card is well used and appears to be appreciated by employers and employees. There was some suggestion that higher level vocational qualifications might be useful for supervisors/managers.

Fisheries management

The provision in this area has been amalgamated with environmental conservation in many of the new awards, which seems to meet industry needs. Employers value the short courses, often run by Sparsholt (the industry leader), which can be specifically designed to employees' needs. These are not generally accredited, but there is some desire from sections of the industry for them to be. It was felt that generally some IT skills input would be useful in most qualifications.

Some interviewees thought that there could be support for the modern apprenticeship route within this industry. Although other respondents felt that NVQs were not recognised as highly as degrees by the larger organisations. There was concern that there will be a gap in progression routes when the current HND in fisheries studies finishes in 2004.

Floristry

This is an area where a plethora of qualifications is available. Comments from specialist colleges, however, indicate that they feel floristry in general FE colleges 'is really only for amateurs and effectively flower arranging'. It was felt that there was a gap for level 1 professional courses.

This is one of the industries where changes to the qualification structure would not impact on retention because of the nature of the industry. There is no well-defined career structure and a need to promote the levels of qualification within the industry, for example, through the development of a skills matrix, which could illustrate the professional skills and job roles concomitant with each level.

There was a big push within the industry to promote and encourage take up of modern apprenticeships. However, in reality it 'doesn't fit' the needs of the industry and does not sufficiently train and test industry skills (this is another industry where key skills are having an impact on modern apprenticeship completion). Some informants were unsure about whether the current modern apprenticeship is teaching the appropriate skill levels with job relevance. There is a concern that colleges 'do not give a realistic picture of what working in a florists is really like', for example, the costs, running a business and working with the public. The big issue is that funding is dependent upon the achievement of the modern apprenticeship; therefore the industry has had to accept the NVQ. There was a suggestion that workbooks for the NVQ would help to standardise training across the UK.

One of the specialist colleges highlighted the importance of linking all professional qualifications to the Society of Florists, which has tremendous credibility and influence within the industry.

Game and wildlife management

There was some concern that the rationalisation had not achieved what it set out to, with the loss of good college/industry devised courses. Some interviewees are not confident that currently available courses meet national standards. Progression is a problem in this industry with no level 1 provision and few opportunities for development once in the workplace, where existing qualifications are not perceived as appropriate. One interviewee felt that there could be possible use for modern apprenticeship, but this was not a widely held view.

There are many mature entrants to gamekeeping looking for lifestyle changes for whom there are 'no real drivers to get qualified'. There was some agreement that qualifications are more valued in the deer industry with estate managers looking for higher level skills and qualifications.

Land-based engineering

It was suggested that, other than the modern apprenticeship (which is restricted in some areas to large manufacturers) there is no clearly defined progression route. There is an ageing workforce and some interviewees predicted a future skills shortage. There is very little certified provision that is seen as adequate for industry needs. However, another respondents felt that there was no need for a level 1 or level 4 qualification as neither were seen as appropriate for 'practical trainees'. Another respondent commented that the NVQ seems appropriate for this type of delivery, assessment of competence is appropriate, and it gives a good overview for trainees.

Many training providers use mechanical engineering courses and train alongside motor mechanics. It was suggested that there is a need for more full-time courses, including industry-specific courses. A consortium of specialist colleges has drafted a national diploma in land-based technology, which is currently going through the QCA approval process.

One college mentioned that it is currently providing an interesting new course in plant and agricultural engineering, which has been developed with European funding. The course is validated by City and Guilds and the British Agricultural and Garden Machinery Association (BAGMA) and accesses between 50 and 60 units. This has been very successful. Even more creatively, a parallel course, validated by City and Guilds and the Construction Industry Training Board (CITB) uses the same approach and 80 per cent of the content is the same. Training can thus be provided on the same course for agricultural engineers and construction equipment engineers with optional modules for their specialist needs. As a result, this course is very efficient to run, since different students can enter the same course.

Production horticulture

It was felt that there were several gaps in the qualification routes available for production horticulture. This included the need for a level 1 qualification for operatives, such as packers and pickers and more professional qualifications for those in employment. There was also a feeling that there is a need to get the modern apprenticeship right and to extend it to mature entrants within this industry.

There was some agreement that the new NVQ structure is more straightforward and easier to use, however, other respondents felt that the industry was still unsure about the NVQ/modern apprenticeship route. This was mainly because, in some areas, not all of the units are relevant and as a result workers may not get the full qualification.

Tree work and timber

One training provider commented that arboriculture is a poor term and that 'tree care' would be much clearer.

There is a significant shortage of qualified arboriculturalists both nationally and internationally. In many instances students do not need to finish their qualification in order to secure employment. 'Recruitment consultants are coming to try and sign up students with an awarding body as a benchmark. Students can get jobs quite easily without achieving a full qualification. They then go out into jobs and the culture is that they don't come back to finish. If they haven't finished their written work by that point they don't come back. Because of the skills shortage students find it is not necessary to attain the full qualification'.

This could explain why some centres are only offering short courses of 10 to 12 weeks in Tree Surgery that aim to provide people with the relevant qualifications to allow them to achieve their 'Blue Book'. Although students interviewed said that the 10-week course was 'too specialised and focussed' and they 'felt they need to know more', particularly those who had ambitions to progress in the industry. Training providers said that it is 'largely for people who have some work experience' and is often 'used as a career change qualification'.

Some employers use the International Society of Arboriculture certified arborist qualification as a base level for people entering the industry, then as they learn on the job they aim for the RFS certificate of arboriculture. Several issues were raised concerning progression difficulties within current provision. For this reason some employers felt that there could be a case for a higher level course.

There seemed to be some disagreement about which courses were the most important within this industry, probably differing between those needed for arboriculture and those for forestry. There was confusion between training providers and employers as to the most appropriate entry qualification. It was suggested that to a certain extent the industry understands the purpose of most qualifications but does not know how they measure up to the national diploma/HND route.

There was some agreement amongst employers that there was a need for a level 1 course to encourage entry into arboriculture; with the proviso that legislation covering the age limits for equipment use would make this difficult for people under 18 years old. Similarly there was some agreement that the industry needs to go back to apprenticeship training and that a modern apprenticeship could fill this gap. People in training need to be given the opportunity to redo a task on a regular basis in different situations and to be able to undertake more on-site specific risk assessment, which it was felt is currently lacking in full-time courses. However, other respondents felt that there were still concerns in the industry over the NVQ route, possibly because of lack of experience and understanding of this route.

There was specific concern that awarding bodies had moved to more generic qualifications, and this was affecting the credibility of the qualifications.

Veterinary nursing

Generally both employers and employees value the qualifications in veterinary nursing and find them to be both comprehensive and flexible. There was concern that the increase in evidence requirements and paperwork demand is likely to impact on the number of veterinary practices willing to offer training in the future.

There is no career structure for nurses, which leads to a significant regular loss of trained professionals. 'Qualifications mean nothing to vets where an individual nurse has natural ability: vets are very pragmatic. But many are now willing to allow their employees to train since they have difficulty in ensuring nurses stay with them; and unless they allow them to pursue a qualification route they are likely to leave for others practice'.

Entry to the industry is fairly inflexible and the current qualification route lacks choice, which has led some training providers and employers to ask the Royal College of Veterinary Surgeons (RCVS) for additional support material to fill gaps. In addition a number of respondents highlighted the need for more information technology training for work in modern practices. There is an advanced modern apprenticeship in development at both levels 2 and 3, which could address some of these issues.

There was a comment that this industry route neither wants nor needs a level 1 qualification, however, this would be useful for assistants in veterinary practices. The pre-veterinary nursing course has now been replaced with an animal nursing assistants course at level 1 (ABC/British Veterinary Nursing Association (BVNA)). The certificate in equine veterinary nursing has been incorporated as an evidence route towards the NVQ. There is a gap for a level 4 qualification.

Further issues

Issues specific to Wales

The situation in Wales is slightly different from that in England, in that there are still a lot of very small family-run businesses (particularly in agriculture). Because of the economic situation there is a need for fewer agricultural workers and more managers with a range of skills. There was a feeling that there is a need to inspire farmers to lifelong learning and this may be accomplished by a move towards linking funding in agriculture to training. Again, there were comments from employer representative groups that they like the idea of the development of some sort of CPD portfolio (possibly on the Northern Ireland model) to encourage the recording of on-the-job training and development.

Employer representative organisations commented that there was evidence from the regions showing that people are seeking more qualifications, but often in different areas, for example plumbing and fencing. Individuals can earn money as contractors as well as saving money being paid out by the farm to other small businesses.

It is increasingly difficult to attract modern apprentices in some areas despite good starting salaries and that funding is available post-25 for training in Wales. Powys is currently piloting a 'shared apprenticeship scheme', which may prove to be a useful example that could be used in agriculture. 'The scheme is owned by employers who then send trainees into a series of different businesses over a period of training. Informants were very keen on the idea, given its provision of breadth of training and the way it could apply to different types of farms. It could also ensure that the children of farmers do not train on their own premises – a regular fault!'

There was a feeling, particularly from ELWa, that some consolidation of provision is required within the Principality, as resources are inadequate to allow all colleges to develop provision in all areas. Better networking and responsiveness to local need could improve the situation. For this reason ELWa supports the use of OCN awards, which are considered to be flexible and responsive to customer needs – all qualifications have been awarded a credit value that allows credit accumulation and are nationally recognised. Some of the specialist colleges use these awards to respond to customer needs and feel that there should be more recognition of the hundreds of different awards available.

On the whole there was a feeling that the sector is well represented in Wales and that there are regular, well-supported forums for all interested parties to meet and discuss development. The Welsh Assembly, ELWa and other key organisations appeared to be proactive in their support for change and development of the environmental and land-based sector in Wales.

Issues specific to Northern Ireland

The education and training situation in Northern Ireland is very different from that in the rest of the UK, primarily because of the importance and influence of DARD and the specialist colleges on provision. The concentration of influence will be enhanced when the three specialist colleges are amalgamated under one principal, which some feel will be an excellent move.

The situation is different from that in England in that there are still predominantly small family firms within the land-based sector (particularly in agriculture). For this reason it is difficult to provide the range of areas of experience for qualification and assessment needs of trainees. There appears to be little demand for level 1 qualifications in Northern Ireland with the focus being on level 2 awards. Given the difficulty of providing relevant opportunities for training and assessment it was suggested that some form of credit accumulation or flexible model (like that used in the United States) would be very useful. Interestingly several people commented that they do not want to encourage more people into farming in Northern Ireland because it is a shrinking industry.

There are several special initiatives that have been designed to address the situation in Northern Ireland, which could be good examples for the rest of the United Kingdom. These include the following.

The Greenmount challenge scheme

The college focuses not only on education for entry to the industry but also on the development of those in the industry. The Challenge programme formalises the delivery of this development within work and a group of developmental advisory staff has been set up across the province. The main focus of delivery is upon four main areas:

- Business challenge at level 3 and 4.
- Grass challenge at level 3 (both of these focus on the dairy industry).
- Diversification challenge at level 3 (using a NEBS award).
- Packaging for the food business at level 3.

All programmes are college-devised and linked to the strategic aims of DARD. All programmes are designed for qualification purposes and fit into the BTEC short-course framework. There are multiple delivery points in locations that are appropriate for their target groups. The development advisory staff are required to meet all the defined outcomes. They can develop programmes using their own delivery strategy; so there is real flexibility.

Take-up so far has been good with 400 students on the Grass programme, 170 on Business, 100 plus on Diversification and a pilot scheme on Packaging for 10 students to date.

The Good Farming practice scheme

This consists of a range of very basic courses, accredited by OCN, which focus upon the simplest of farming issues, such as keeping the books straight, issues of pollution, environment etc. DARD pays farmers £25 to attend and there is only limited paperwork associated with the course. It is aimed at less-favoured areas in the province. To date, the feedback is positive. Delivery is carried out in host farms, often delivered by the farmers themselves, who have been trained for this purpose.

Multi-skilling programme

This aims to provide young people with the opportunity to train in agriculture and another discipline 'so that they will have the necessary skills and knowledge to secure employment off the farm as well as farming part time'. For example, trainees can enter through the college job-skills scheme and combine an NVQ in a vocational area (like plumbing or bricklaying) with a skills-based agricultural education programme. The academic route combines a national diploma or AVCE with a national award in agriculture. Other examples of this approach are:

- Greenmount-devised awards such as the national diploma in agricultural mechanics.
- CCEA occupational studies awards at entry, level 1 and level 2.

It was suggested that for some units the focus was too 'English' and that some key areas were not covered. These include protected crops, garden centre retailing (a huge potential area) and amenity tree management (which focuses on tree management in gardens and parks). The new deal 25-plus programme offers funding for some qualifications in Northern Ireland, which could go some way to addressing issues for mature entrants.

Issues for awarding bodies

There were several issues raised in relation to the new awards that were developed during the rationalisation process. Using the same title for qualifications at different levels did not seem to make sense to many people (12). There was a feeling that the 'level should lead' in qualification titles and structure. The other connected issue is that some qualifications are all at level 3 but with different numbers of units, which again causes confusion for training providers, candidates and employers. There was some evidence that centres are beginning to choose a single awarding body in order to reduce choice and avoid confusion. There was one comment that this might sort itself out as UCAS points are awarded to the vocational qualifications.

A number of centres raised concern over several new qualifications and the quality of some of the units. There was a feeling that the new awards were rolled out too fast with insufficient time for piloting or evaluation of the new developments. Some training providers expressed the view that there was a lack of understanding about how courses actually run. This is related to the issue that there appeared to be no clear feedback mechanism to awarding bodies. Even some of those involved in the rewrites felt their views were not always listened to. Overall there was a feeling that there had been a loss of flexibility within the structure and content that previously enabled centres to adapt awards to local needs.

NVQ development

The other area that was commented on was that of the development of the NVQs. There were a number of issues raised and the main ones are outlined here.

- It was felt that NVQs were too dependent on detailed paperwork and too bureaucratic.
- Evidence demands are simply too great, this includes the emphasis on portfolio building and cross-referencing.
- They are difficult for small employers to implement.
- There is an overcomplicated structure with too many bodies involved and too much variation in the support given and the requirements demanded by external verifiers.
- There was some concern over level equivalence between the NVQs at levels 2 and 3 and the full-time vocational qualifications (particularly the national diploma).
- A minority of training providers felt that the NVQs were fairer to students, that they were a practical qualification with substantial rigour and that there had been fewer problems with delivery than in previous years (4).

Assessment strategies

The other issues raised for awarding bodies were mostly connected with assessment strategies. Those most often mentioned are outlined here.

- There was some concern about the quality of assessors and standardisation between individuals – this is crucial and was not always evident. There was a feeling that there had been some dilution of standards and rigour.
- Several training providers mentioned that the criteria for pass, merit and distinction for some awards were unfair. It seems the higher grades require ‘extra’ work rather than higher quality – the emphasis should be on quality and not quantity.
- Other externally developed assessments make it difficult for centres to integrate the key skills, causing some of the problems already outlined in this report. Students are failing tests because the demands are completely out of context and unfamiliar to them.
- Some training providers felt that the levels on external assessment units were being set too high and that they needed appropriate forms of external assessment to suit the learning styles of students on vocational courses.
- There was a plea for a common charging structure between the main awarding bodies.
- Several respondents felt that there was too large a gap between level 2 and level 3 awards and that for some candidates there was the need for an intermediate qualification (perhaps two or three units) to help bridge the gap.
- The issue of flexibility with the new awards applied as much to the assessment strategies as it did to the content and was commented on by several training providers.

The other comments that were made in relation to awarding bodies tended to be a reference to the perceived merits of individual awards and their suitability for more academic or practical students, respectively.

Issues for equine awarding bodies

Many training providers and employers had concerns about the scope of, and compatibility between, provision in this area. Detailed comments were provided in confidence and will be communicated to the relevant awarding bodies.

Issues from awarding bodies

The awarding bodies had some comments to make about the current system. Some of these resonated closely with what other respondents had said, for example, delivery models for NVQs are seen as complex, expensive and time-consuming. It is a concern for awarding bodies that the 'record on completion is generally poor'.

Often only those units are taken which have a legislative requirement for example, NVQs in Forestry. One major issue for awarding bodies and centres is how to deal with low registrations in a cost-effective manner.

The volume of work-based assessment required for NVQs is a significant problem in small businesses, which find this costly in terms of time. Any way of reducing the impact of work-based assessment would be welcome.

Other comments made by the awarding bodies were in direct opposition to the views expressed by other respondents, such as; 'there is a need for more direction on VRQs through reduced flexibility'. The range of flexibility has caused technical problems for certification for some awarding bodies.

Some of the other comments were more specific and are outlined here.

- 'Regarding assessment – possibly reduce the amount of assessment and even remove external assessment and accept the quality assurance of the awarding body. There may also be a case for e-learning for the underpinning theory and knowledge.'
- Concern was expressed by one of the smaller awarding bodies that the breadth and flexibility within the system is being lost, reducing the opportunities for small businesses to get involved.
- There was a question about the place of the SSC in conveying awarding body views to the regulatory authorities.
- 'When relevant issues/problems arise with the awards/structures/procedures, it is essential that the SSCs take back the views of the awarding bodies to the relevant government representatives. The awarding bodies are the experts in the field and so any feedback that is given is extremely important. Awarding bodies should be kept informed and updated with progress on such matters.'
- Key skills on the modern apprenticeship are an administrative burden for awarding bodies (this echoes the views of other respondents about the impact of key skills within the sector).
- Similarly, a view was put forward about the impact of the technical certificates on the modern apprenticeship within the environmental and land-based sector. 'The issue of technical certificates is problematic. The sector is not keen on having these. It will undermine and confuse users about the current structure.'
- There was some concern raised about the quality of some web-based non-NQF provision. This may be attractive to employers because of the lower cost both financially and in time off from work, but may not be the best route for the trainee.

There was a general comment that awarding bodies do not always know what each other are doing, which can hamper development. However, it was felt that there had been some improvement in relationships between provision and common standards in a few specific examples.

Issues for the regulatory authorities

Some respondents reported that the NQF was starting to have an effect. Several people commented that they like the idea of linking levels to titles and actually suggested that it could be made even clearer by using the title in the format 'NQF level 1' (8). There was some call for 'QCA to promote use of the levels' more widely and to promote the NQF. A number of respondents felt that promotion of the NQF would help to highlight the qualifications available within the sector (8) and a number suggested that progression maps would be very valuable. There still seemed to be some confusion about how the vocational qualifications compared to the academic route and it was felt that particularly for the national diploma (the sector-preferred entry award) its equivalence to three A levels needs to be made clearer to university admission departments: 'The introduction of the NQF was intended to clarify the relationships between qualifications. However, as there has yet to be any kind of marketing of the NQF it is highly unlikely that either employers or employees will have heard of it'.

There was a plea from training providers and employers for a period of consolidation/calm to allow the NQF to become established (16): 'The qualifications available for people wanting to enter the sector are clear, have benefited from the rationalisation, and now need a period of consolidation.'

Many commented that the constant change had been a problem and had caused confusion to candidates, parents and employers. On the whole it was felt that the current qualification offering met the need for entry to the sector and that any future changes should be slower, thoroughly thought out and tested. Training providers on the whole preferred to maintain the choice between awarding bodies and would not like provision rationalised to the extent that they are restricted for any industry to one awarding body. Having said this, a number of training providers are currently considering switching all their provision to one of the main awarding bodies because of the difficulties of dealing with multiple structures and assessment systems. In addition it was suggested that there is a need for a unified quality system across awarding bodies. Some providers felt that there are still too many awarding bodies involved in the sector, which has implications for progression routes and for quality in some instances.

Training providers and employers felt that the regulatory authorities should encourage awarding bodies to work more closely together to ensure provision is complementary and to reduce overlaps. This would also allow progression across awarding body routes. There was also a plea for the regulatory authorities to intervene in the confusion over the use of different titles for the same levels of qualification.

There was a substantial amount of discussion about what the final certificates should look like, which revolved around the issue of specific titles and how informative they were to prospective employers or other progression routes. Several training providers and employers felt that it would be useful to include the unit structure or some sort of explanation of what the qualification actually contained to enable people to make a decision about the suitability of a candidate.

Several employers talked about the need for new entrants to gain statutory or legislative awards to enable them to carry out their job. Some of the employer organisations questioned whether it could be possible for statutory qualifications to be made part of the NVQ framework at the appropriate level, thereby ensuring that all new entrants to any industry could be expected to have the skills required. This would also help to solve the difficulty for some training providers of providing the breadth of awards needed because of the cost of some of the competency and proficiency certificates.

We have put a lot of effort into the vocational qualifications system, however, there are all these statutory qualifications that lie outside the National Qualification Framework. For example, an employer might expect an NVQ level 3 candidate to be able to carry out all functions of their job, however, if they don't have the appropriate certificates they will not be able to spray or dip sheep, which are integral parts of the job at this level.

Is it not possible for the statutory qualifications to be made part of the NVQ at the appropriate level? This would help employers to judge the level/competence of the employee and they would not have to send them on additional training after they are employed.

There was a comment from one of the specialist colleges that the NVQ assessment regime does not accept even the best specialist college-based facilities as appropriate sites for assessment. There was a feeling that the regulatory authorities should encourage a more flexible approach to ensure existing facilities are used and that entrants to the sector get the full range of experience they require.

For several of the industries within the sector changes to the qualification framework would make no difference to recruitment or retention; they are affected by other outside issues. In these circumstances it is important for awarding bodies to offer flexible, relevant training that can be accessed as and when it is needed by means such as distance learning and on-site focused provision.

In some regions it appears that local LSCs are starting to support locally devised training to fill perceived gaps in the qualification offering. In some areas training providers appear to have a lot of scope for support from the local LSC to develop their own awards, which could affect their decisions on which qualifications to offer from the NQF. There appeared to be inconsistencies in the funding available from LSCs in different local areas, which allowed some training providers to develop and finance specific courses to suit their market.

A college lecturer quoted a particular case where a 'student who had completed A levels and had a degree in environmental management, but had gained no practical skills, was then unable to find a job. As a result he was now back at the college to take a course with practical elements. The tutor tried to patch together a National Award, but this had been difficult to put together. Instead, the college has had to manufacture a college certificate. Luckily, the local Learning and Skills Council was supportive and was prepared to fund such a college certificate'.

In order for local LSCs to be able to fund provision as they see fit, and as meeting local needs, the range of awards outside the NQF could potentially be increased. This could undermine the extensive work that has been undertaken in order to bring consistency and quality to the qualification framework.

Conclusions

1. The rationalisation process has made the qualifications and progression routes available for the sector more relevant and easily identifiable.
2. The existing framework needs to be consolidated and left to embed in the sector; awarding bodies might easily accommodate minor changes reflecting specific industry issues without further changes to the framework.
3. There is a need for school-level qualifications available pre-16 and some limited support for post-16 awards. These should fit within the VGCSE framework and emphasise practical skills as well as scientific knowledge.
4. Schools and colleges need to work closely together to deliver environmental and land-based qualifications and to make use of existing specialist facilities and expertise. The new increased flexibilities programme at key stage 4 should facilitate this process.
5. Training providers and employers identified the need for more entry-level and level 1 qualifications to encourage entry to the sector. In some instances more general pre-entry level awards would be useful for mature entrants and young people with learning difficulties.
6. Some industries still have too many qualifications available and too many different awarding bodies involved in delivery; there is a need for further rationalisation.
7. There is a need to recognise and accredit work-based learning and on-the-job training within a system that is not dominated by bureaucracy and paper-driven systems.
8. The NVQ and modern apprenticeship routes are not appropriate for all industries within the sector and for some they cause significant difficulties.
9. The large number of awarding bodies operating within the sector results in differences in procedures, processes and quality assessment.
10. Existing qualification titles are not easily understood; there appear to be anomalies in the way some qualifications are titled.
11. There is a fairly pervasive lack of knowledge and understanding of the NQF; such barriers make it difficult for those within the sector to navigate their way around the framework.
12. Higher education progression was not generally an issue across the sector, although certain industries requested a level 4 qualification to aid progression. These were amenity horticulture, fisheries management, fencing, veterinary nursing, equine and arboriculture.

Recommendations

The regulatory authorities, SSCs and awarding bodies should work together to address the following issues.

1. QCA/ACCAC/CCEA should encourage awarding bodies to work together, particularly where provision is complementary, and to standardise procedures and quality assessment.
2. The NQF is a positive development and should be more actively promoted. The importance of qualification level needs to be clarified and stressed. If the value of the NQF were recognised it might encourage awarding bodies to seek accreditation for all qualifications, including those used by the sector but not yet part of the Framework. Examples include BHS awards, Royal Forestry Society of England, Wales and Northern Ireland (RFS) professional diploma and NOCN awards (particularly for floristry and horticulture).
3. Qualification titles still require some further work in order to make them easily understood; this could be achieved by making content and units more transparent on entry and on final certificates. Titles used within equine (horse care/management), amenity horticulture (landscaping, sports turf, garden design), countryside management (environmental conservation, game keeping, fisheries management), animal care (animal management), and land-based engineering need to be standardised and clarified.
4. More level 1 and entry-level awards across the sector are required. Entry-level awards are not suitable for all industries and are explicitly not required in farriery, land-based engineering and animal technology. Level 1 qualifications would prove valuable in aquaculture, fencing, fisheries management, game and wildlife management, production horticulture and tree work and timber. In addition, a combined entry level for animal technology, animal care and veterinary nursing with different modules could be developed. Information received from awarding bodies indicates that a number of these awards are in development.
5. In general the regulatory authorities should ‘fast track’ awards that are aimed at filling gaps rather than accrediting more awards to compete in industries that are already well served, such as agriculture, amenity horticulture, environmental conservation and equine.
6. The regulatory authorities should work with the SSC and awarding bodies to devise a system that is able to respond swiftly to legislative and safety changes and to incorporate them into the relevant qualifications. Statutory qualifications should be incorporated into qualifications, particularly NVQs.
7. The regulatory authorities should encourage the SSC, NAPAE0 (representing the sector as a whole) and employer representative organisations (particularly the farming unions) to work together to develop a portfolio to record on-the-job learning and development, which is not paper based. This is part of a general need to increase the flexibility in qualifications and assessment and to use more innovative methods of delivering information and recording learning. Specifically to give credit for short courses and employer updates that are essential to an individual’s job.
8. There is overwhelming support for a vocational GCSE pre-16. The regulatory authorities should encourage awarding bodies to develop qualifications that fill a gap in the sector, are flexible, practical and easily understood by employers, employees, parents and training providers.
9. There is a good range of post-16 qualifications already available. These should be developed and marketed to encourage progression from school to further education or training. These include the level 1 and 2 NVQs, first diplomas and national certificates but not the advanced GNVQ. QCA/ACCAC/CCEA in partnership with DfES and the Welsh Assembly should encourage partnerships between schools and colleges to maximise the use of the existing qualifications, resources and expertise.

10. In order to aid progression in the sector the regulatory authorities should ensure that qualification routes are available for those industries that require them. The following industries expressed an interest in the development of level 4 qualifications: amenity horticulture (particularly landscaping and sports turf); equine (particularly racehorse care and management); fencing (for management employees); fisheries management (there was a concern that the loss of the HND in 2004 will leave a gap); veterinary nursing; arboriculture (to replace non-NQF accreditation with more accessible NQF provision); deer industry (for estate managers).
11. The regulatory authorities should work with LSCs and ELWa in Wales to ensure that accurate, current and easily accessible figures are available to illustrate take-up, retention and completion of all qualifications.
12. The methodology used for this research could be replicated by interested parties in two years' time to measure the impact of the NQF after rationalisation.

Appendix 1: Style and number of interviews conducted

Industry	Face to face (General)	Face to face (Students)	Phone	Total
Agricultural crops	8	1	1	10
Agricultural livestock	5	2	1	8
Animal care	6	3	1	10
Animal technologists	—	—	2	2
Aquaculture	2	—	1	3
Environmental conservation	9	1	2	12
Equine	6	1	1	8
Farriery	1	1	2	4
Fencing	1	—	1	2
Fisheries management	2	1	1	4
Floristry	3	—	1	4
Game conservation	3	—	1	4
Land-based engineering	2	—	1	3
Landscaping	7	2	1	10
Production horticulture	4	—	1	5
Tree work and timber	7	2	2	11
Veterinary nursing	4	2	1	7
Learning support departments	2	—	—	2
Work-based learning provider	—	—	1	1
Cross-sectoral organisations (Lantra, ELWa, DARD, Machinery Ring, CCEA, QCA (NI), NAPAE0)		4	3	7
Schools	4	4	—	8
Awarding bodies	4	—	13	17
Total				142

Appendix 2: Questionnaire data

Questionnaires returned by type of organisation

Organisation type	Number sent	Number returned late	Number completed	Number returned	Number completed
General FE college	114	3	3	35	30
Specialist FE college	25	—	—	11	11
Private training provider	122	1	1	24	21
School	76	—	—	26	26
Stakeholder and employer	160	4	3	49	42
Total	497	8	7	145	130

Full questionnaire data from employer respondents

Section A: You and your business

Number of employers responding to this questionnaire = 41 (of whom 11 gave their name).

Industry/business in which employer works

Industry	Frequency	Percentage
Agricultural crops	11	26.8
Agricultural livestock	10	24.4
Animal care	7	17.1
Animal technologists	3	7.3
Aquaculture	2	4.9
Environmental conservation	14	34.1
Equine	8	19.5
Farriery	1	2.4
Fencing	8	19.5
Fisheries management	1	2.4
Floristry	4	9.8
Forestry	8	19.5
Game conservation	3	7.3
Horticulture	11	26.8
Land-based engineering	6	14.6
Landscaping	13	31.7
Veterinary nursing	1	2.4
Other	5	12.2

*Percentages add to more than 100 because employers were asked to indicate **all** industries that applied to their particular activities.

Number of employees

Number of employees	Frequency	Percentage
1	2	5.9
2–9	9	26.5
10–49	9	26.5
50–249	7	20.6
250+	7	20.6

*Data from seven employers were missing.

Role of respondent within the industry

Role	Frequency	Percentage
Director	12	30.8
General manager	5	12.8
Owner manager	5	12.8
Training manager	8	20.5

*Data from two employers were given as 'other'.

Section B: Environment and land-based qualifications

Do you use qualifications for the environmental and land-based sector within your business?

Response	Frequency	Percentage
Yes	31	83.8
No	4	16.2

*Data from four employers were missing.

Qualifications used

This indicates the broad range of courses identified by the employers. By far the most common awarding body was City and Guilds (31.7 per cent).

Qualification	Awarding body	Level
Agricultural Machinery Service Engineers	Lantra	3
BHS	BHS	—
BSc Agricultural Engineering	University	—
BSc Horticulture/Environment	University/College	—
Certificate in Animal Technology	IAT	—
Certificate in Arboriculture	RFS	2
Certificates of Competence	NPTC	1–2
Certificate in Crop Protection	BASIS	4
D32 33 34	City and Guilds	—
Equine Studies	City and Guilds	2–3
Hawkesmoor First Aid Course	—	—
Hawkesmoor Hypnotherapy Course	—	—
Hawkesmoor Water Management Course	—	—
Health and Safety Workplace Assessor	LSC	—
HNC Floristry	City and Guilds	3
HND Floristry	City and Guilds	3
Key Skills	BHTB	—
Key Skills	City and Guilds	1–2
Land-based Construction/Management	Lantra, NPTC, FASTCO, CITB	—
Land-based Engineering	—	2–3
Modern Apprenticeships	City and Guilds	2–3
NC Agriculture	City and Guilds	2–3
NC Animal Care	City and Guilds	2
NC Science	Edexcel	—
NCPF	City and Guilds	2
ND Agriculture	Edexcel	3
NVQ	BHTB	3
NVQ	City and Guilds	1–3
NVQ Amenity Horticulture	City and Guilds	2
NVQ Animal Care	City and Guilds	1–3

Qualification	Awarding body	Level
NVQ Animal Technology	City and Guilds /NPTC	2
NVQ Commercial Horticulture	Various	1-3
NVQ Customer Services	City and Guilds	2-3
NVQ Floristry	City and Guilds	2-3
NVQ Production Horticulture	City and Guilds	2-3
NVQ Retail	City and Guilds	2-3
Pesticide Application	NPTC	3
Pesticides Certification	NPTC	1-6
Plant Protection Award	BASIS/CPA	5
Turf Management and Science	City and Guilds, SQA, FETAC, Edexcel	1-4
Veterinary Nursing	RCVS	2-3

Extent to which qualifications meet personal and employee needs

Needs met	Personal needs		Employee needs	
	Frequency	Percentage	Frequency	Percentage
Fully	10	34.5	12	38.7
Partially	17	58.6	17	54.8
Not at all	2	6.9	2	6.5

Reasons given for qualifications not meeting personal and/or employee needs

Factors relating to insufficiency of qualification	Frequency	Percentage
They take too long to complete	7	17.1
The content is not relevant to the industry	11	26.8
They are not presented in an interesting and engaging manner	4	9.8
They are not available at a convenient place and time	7	17.1
The level of the qualification is too low	3	7.3
The level of the qualification is too high	1	2.4

Extent to which there are gaps in current provision of qualification

Gaps in current provision	Frequency	Percentage
Significant gaps	8	22.2
Some gaps	15	41.7
Very few gaps	4	11.1
No gaps at all	3	8.3
Don't know whether any gaps exist	6	16.7

Nature of gaps

Nature of gaps	Frequency	Percentage
Appropriate qualifications not available at all	9	22.0
Appropriate qualifications not available in region	4	9.8
Appropriate level of qualification not available	8	19.5
Qualifications not specialist enough	4	9.8
Qualifications do not take account of working practices	14	34.1
Don't know	2	4.9

Overlaps in provision

Nature of overlap	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Overlaps in content between different qualifications	14	63.6	8	36.4
Overlaps in content between different levels of qualifications	11	61.1	7	38.9

How well is current provision meeting needs?

Current provision	Frequency	Percentage
Needs complete review	7	18.9
Fairly good but needs reviewing in parts	20	54.1
Provision is good	10	27.0

Specific issues which would ensure retention

Need	During study		Within industry	
	Frequency	Percentage	Frequency	Percentage
Support from employer	22	53.7	23	56.1
Time during working day for study	17	41.5	13	31.7
Recognition of achievement	13	31.7	25	61
Financial support during study	24	58.5	18	43.9
Financial reward on gaining qualification	8	19.5	20	48.8
Time off from work to attend training	14	34.1	14	34.1
Encouragement to take part in continuous professional development	11	26.8	27	65.9
Personal development planning	7	17.1	21	51.2

Issues of training and professional development

Issue	Agree		Disagree		No opinion	
	Freq.	%	Freq.	%	Freq.	%
There is a need for an NVQ at each level (1-4)	20	57.1	11	31.4	4	11.4
There is a need for part-time vocational qualifications at each level	22	64.7	6	17.6	6	17.6
There is a need for a GCSE qualification for the environmental and land-based sector	10	30.3	16	48.5	7	21.2
There is a need for a GNVQ qualification for the environmental and land-based sector	13	38.2	13	38.2	8	23.5
There is a need for flexible learning methods including distance learning	32	84.2	5	13.1	1	2.6
There is a need for more specialist continuous professional development within the sector	0	0	0	0	0	0
There is a need for more training in the workplace by the employer	32	88.9	2	5.6	2	5.6
There is a need for more training in the workplace by private training providers/colleges	22	61.1	8	22.2	6	16.7
There is a need for more transferable qualifications between industries within the environmental and land-based sector	15	45.5	9	27.3	9	27.3
There is a need to be able to release people from work for training	33	91.7	1	2.8	2	5.6
There is a need for other full-time vocational qualifications at each level	7	21.9	13	40.6	12	37.5

Current qualifications are a useful measure of competence and promotion

Are qualifications used to define recruitment and promotion needs?	Frequency	Percentage
Yes	29	65.9
No	9	22.0
Don't know	5	12.1

Industry-specific qualifications

When recruiting, industry-specific qualifications are sought	Frequency	Percentage
Always	7	17.1
Sometimes	13	31.7
Mostly	13	34.1
Never	7	17.1

To what extent are qualifications rewarded in business?

Qualifications rewarded	Frequency	Percentage
All qualifications are taken account of	14	42.4
Some qualifications are directly linked to pay	4	12.1
Qualifications may influence pay	10	30.3
Qualifications have little or no impact upon pay	5	15.2

Full questionnaire data from training provider respondents

Section A: You and your training organisation

Number of training organisations responding to this questionnaire = 62.

Type of training organisation

Type of training organisation	Frequency	Percentage
FE college	28	48.3
Private training provider	18	31
Specialist land-based college	12	20.7

*There were four responses categorised as missing.

Role of respondent within the training organisation

Role	Frequency	Percentage
Principal	3	4.9
Deputy/Vice/Assistant principal	8	13.1
Learning area manager/Faculty head/Head of school/Curriculum leader/Head of department	20	32.8
Programme leader/Lecturer	11	33.3
Training manager	7	18
Trainer	4	6.6
Other	8	13.1

Industries within environmental and land-based sector catered for

Industry	Part-time qualifications	Full-time qualifications	Short qualifications
Agricultural crops	20	13	17
Agricultural livestock	18	15	16
Animal care	17	15	16
Animal technologists	3	2	3
Aquaculture	1	1	1
Environmental conservation	16	17	16
Equine	12	14	11
Farriery	2		
Fencing	3	3	7
Fisheries management	1	2	1
Floristry	25	15	16
Forestry, trees and timber (Arboriculture)	15	11	20
Game conservation	7	5	1
Land-based engineering	12	11	13
Landscaping	26	20	24
Production horticulture	15	9	14
Veterinary nursing	10	5	8

Extent to which qualifications meet student needs

Needs met	Frequency	Percentage
Fully	33	55
Partially	27	45
Not at all	0	0

Section B: Environmental and land-based qualifications

The table below shows qualifications currently offered by training providers responding to the questionnaire. Titles are as written by respondents.

Qualification	Awarding body	Level	No. of current enrolments
7802-69 CI Skills	C&G	2	7
9383 Certificate Horticulture	C&G	E/L	25
9383 Certificate Horticulture	C&G	1	11
AA/ABC Certificate Arboriculture	ABC	3	60+
ABA/AA Technical Certificate Arboriculture	ABC	3	25
Advanced Certificate Horticulture	RHS	3	20
Advanced Certificate Floristry	C&G	3	8
Advanced National Certificate	C&G	3	23
Advanced National Certificate Floristry	C&G	3	4
Agriculture	C&G	1-4	58
Agriculture	C&G	2	24
Agriculture	Edexcel, NPTC	1-3	60
Agriculture	NPTC	ENTH	8
Agriculture/Horticulture	Lantra	2	7
Amenity Horticulture	C&G	1-3	120
Animal Care	C&G	1-3	26
Animal Care	Edexcel	2	25
Animal Care	Edexcel	2, 3-4	58

Qualification	Awarding body	Level	No. of current enrolments
Animal Care	Edexcel	3	—
Animal Care	GMOCN	1	14
Animal Care/Management	Edexcel, NPTC	1–3	100
Animal Management	Edexcel	3	75
BASIS (full)	BASIS	—	2
BSc Animal Management	UoL	5	5
Certificate Arboriculture	RFS	2	18
Certificates of Attendance	Lantra	—	—
Certificates of Competence, e.g. Safe Manual Handling, Brush Cutting Operations, Safe Use of Elevated Platforms, Safe Use of Pesticides	Lantra	—	—
Certificate of Competence – Tractor Driving	NPTC	2	17
Certificate Gardening	C&G	1	60
Chainsaw Maintenance X-cut and Felling	Lantra	—	4
Chain Saw Operations	Lantra, NPTC	Units	96
Countryside	Edexcel, NPTC	1–3	20
Diploma Countryside and Environment	Edexcel	2	14
Engineering/Motor Vehicle	Edexcel, NPTC, C&G	1–3	75
Environmental Conservation	Edexcel	2	15
Equine	Edexcel, NPTC	1–3	55
Equine Management	Edexcel	2-3	21
FD	Edexcel	2	—
FD	Edexcel	2	17
FD Agriculture	Edexcel	2	12
FD Animal Care	Edexcel	2	55
FD Animal Care	Edexcel	2	20
FD Countryside and Environment	Edexcel	2	15
FD Countryside and Environment	Edexcel	2	5
FD Horticulture	Edexcel	2	6
FD Equine	Edexcel	2	14
First Aid	H&S	—	20
Fisheries Management	Edexcel	2	14
Floristry	C&G	2	23
Floristry	OCN	1–2	15
Floristry Skills	C&G	2	30
Flower Arranging	OCN	—	50
Flower Arranging	—	—	15
Food Hygiene	CIEH	—	16
Gamekeeping and Wildlife Management	C&G	2	10
Garden Design	OCN	1–2	20
GC Horticulture	RHS	1	24
GC Horticulture	RHS	1	30
GNVQ Foundation Land and Environment	Edexcel	1	10
GNVQ Intermediate Land and Environment	Edexcel	2	10
Health and Safety	Training	—	50
HNC/Ds	Edexcel	4	49
HND Animal Care	University of Glamorgan	—	7
HND Animal Management	Edexcel	4	38
HND Countryside Management	Edexcel	4	7

Qualification	Awarding body	Level	No. of current enrolments
HND Equine	University of Glamorgan	—	7
Horticulture	C&G	1–3	37
Horticulture and Floristry	C&G	2	54
Horticulture and Floristry	Edexcel, NPTC, C&G	1–3	80
In-house certificate	—	1	—
Introduction to Floristry – General Skills	OCN	—	6
Introduction to Garden Design	OCN	—	11
Introduction to Professional Floristry	ABC	1–2	26
Lantra Awards	Lantra	—	200+
Lift Truck Operator	Lantra	—	150
Manual Handling	Lantra	—	50
NAFAS Floral Art and Design	NAFASI / NOCN	2	6
NC	C&G	2	63
NC	C&G	2	12
NC	C&G	2–3	22
NC	Edexcel	3	25
NC Agriculture	G&G	2	11
NC Agriculture/Equine	C&G	2	10/10
NC Environmental Conservation	C&G	2	17
NC Floristry	C&G	2	39
NC2 Floristry	C&G	—	25
NC3 Floristry	C&G	—	8
NCFE	—	1-2	15
ND	Edexcel	3	—
ND	Edexcel	3	112
ND Agriculture	Edexcel	3	21
ND Agriculture	Edexcel	3	13
ND Agriculture	Edexcel	3	2
ND Agriculture	Edexcel	3	70
ND Animal Care	Edexcel	3	70
ND Animal Management	Edexcel	3	120
ND Animal Management	Edexcel	3	35
ND Countryside Management	Edexcel	3	6
ND Countryside Management	Edexcel	3	8
ND Countryside Management	Edexcel	3	32
ND Equine	Edexcel	3	29
ND Equine	Edexcel	3	20
ND Fisheries Management	Edexcel	3	20
ND Forestry	Edexcel	2	16
ND Horticulture	Edexcel	3	15
ND Horticulture	Edexcel	3	10
ND + NC Horticulture	Edexcel	2	6
NPRA Horticulture	AQA	1	13
NPTC Assessments	NPTC	—	100+
NVAIs	C&G	1–3	—
NVQ	C&G	2	20
NVQ Agriculture	C&G	1	4
NVQ Agriculture	C&G	1	10

Qualification	Awarding body	Level	No. of current enrolments
NVQ Agriculture	C&G	2	12
NVQ Agriculture	C&G	3	3
NVQ Agricultural Livestock	C&G	1-3	18
NVQ Agricultural Livestock	NPTC	1-3	777
NVQ Amenity Horticulture	C&G	1	6
NVQ Amenity Horticulture	C&G	1-2	25
NVQ Amenity Horticulture	C&G	1-2	6
NVQ Amenity Horticulture	C&G	1-2	20
NVQ Amenity Horticulture	C&G	1-2	5
NVQ Amenity Horticulture	C&G	1-3	50
NVQ Animal Care	C&G	1	45
NVQ Floristry	C&G	2	13
NVQ Floristry	C&G	2	4
NVQ Floristry	C&G	2	1
NVQ Floristry	C&G	3	8
NVQ Horticulture	C&G	1	15
NVQ Horticulture	C&G	1-3	—
NVQ Land-based engineering	C&G	2-3	35
NVQ Livestock Production	NPTC/C&G	1-4	1220
NVQ Production Horticulture	C&G	1-3	4
NVQ Stock Production	C&G	2	29
NVQ Stock Production	C&G	3	8
NVQ1 Floristry	G&G	—	—
NVQ2 Conservation	Edexcel	2	4
NVQ2 Horticulture	C&G	2	12
NVQ2 Floristry	C&G	—	1
NVQ2 Forestry	C&G	2	16
NVQ2 Sports Turf	C&G	2	25
OCN Farm Enterprise L3	OCN	3	10
OCN Farm Mechanisation L2	OCN	2	11
OCN General Agriculture	OCN	2	30
Pesticide Application	NPTC	—	6
Pesticides PA1,PA2,PA6	NPTC	2	30
Plant	CITB	—	9
Pre-vet Nursing	BVNA	2	—
Quad bike operation	Lantra	Basic	12
RFS Professional Diploma in Art	RFS	3-4	16
RHS Gardening	C&G	1-2	47
RHS Gen Exam in Horticulture	RHS	2-3	20
Safe Use of Pesticides	NPTC	2	25
Safe Use of Pesticides	NPTC	2	30
Service Engineering	C&G	3	6
Skills for Working Life	NPTC	3	20
Sprayer Operations	NPTC	Units	24
Streetworks	C&G	—	4
Telescopic and Fork-lift Truck Operations	Lantra	Basic	48
Tractor Driving	Lantra	—	40
Tractor Driving	NPTC	Units	20
Veterinary Nursing	C&G	2-3	26
Veterinary Nursing	RCVS	2-3	26
Veterinary Nursing	RCVS	3	—

Nature of difficulty in accessing qualifications

Nature of difficulty	Frequency	Percentage
They take too long to complete	6	9.7
The content is not relevant to the industry	10	6.1
They are not presented in an interesting and engaging manner	4	6.5
The number of contact hours is too low	7	11.3
The number of contact hours is too high	1	1.6
They are not available at a convenient place and time	4	6.5
The level of the qualification is too low	2	3.2
The level of the qualification is too high	5	8.1
The methods of assessment are inappropriate	4	6.5
Other	7	11.3

Extent to which there are gaps in current provision

Gaps in current provision	Frequency	Percentage
Significant gaps	4	8.3
Some gaps	17	35.4
Very few gaps	20	41.7
No gaps at all	5	10.4
Don't know	2	4.2

Nature of gaps

Factor	Frequency	Percentage
Appropriate qualifications not available at all	5	8.1
Appropriate qualifications not available in region	2	3.2
Appropriate level of qualification not available	7	11.3
Qualifications not specialist enough	9	14.5
Qualifications do not take account of working practices	8	12.9
There is insufficient student demand to justify offering qualifications	13	21.0
Other	7	7.0

Are there significant overlaps in provision?

Overlaps in current provision	Frequency	Percentage
Overlaps in content between different qualifications	14	22.6
Overlaps in content between different levels of qualifications	7	11.3
Don't know	9	14.5
Other	10	16.1

Is current provision of qualifications meeting the needs of curriculum areas?

Current provision	Frequency	Percentage
Meeting needs	2	3.9
Provision is good	1	2.0
Fairly good but needs reviewing in parts	19	37.3
Needs complete review	29	56.9

Which non-NQF recognised provision meets the needs of users?

Provision (non-NQF recognised)	Why the provision meets the needs of users
All Lantra training courses	Results in a certificate of competence or attendance which make excellent evidence
Farm accounts C&G phase 3	Syllabus focused on commercial agriculture
Farm enterprise management phase 3	Syllabus focused on commercial agriculture
RFS professional diploma in art	Premier, work-related and industry-recognised qualification
Short skills courses, for example dry stone walling	Limited requirement for training in specific skills
Angling coaching certificate (NFA)	Good self-employment prospects
Quad bike operation	Job requirement
FEPA spraying	Registration required for the job
Health and safety courses	Helps in organisations
Operation and maintenance of small machinery	Small machinery is responsible for most downtime if not maintained properly
BHS stage exams	Recognised professional exams
Short courses	People often cannot give up work for full-time courses
NCFE horticultural certificate	Specially developed in northeast England to the requirements of the Houghall Horticultural Training Centre
OCN	We use OCN for our special needs learners
Many NPTC qualifications	Appropriate level and practical style
Farm Connect (ELWa) ICT	Training provision to meet the needs of working farmers and managers
Dairy development demonstrations	Meet local needs and form mutual support groups
Flower arranging and RHS gardening	Flexible course suitable for domestic and industrial use
RHS general certificate in horticulture	Many students see this award as a higher qualification than the NVQ
ABC introduction to floristry	Many students find it difficult to complete the in a year – we have written an introduction to floristry to establish basic floristry knowledge and skills
OCN general skills in floristry	This is an ideal first step to encourage candidates to go further with their learning

Specific issues which would ensure retention

Need	During study		Within industry	
	Frequency	Percentage	Frequency	Percentage
Support from employer	28	45.2	25	40.3
Time during working day for study	12	19.4	15	24.2
Recognition of achievement	13	21.0	22	35.5
Financial support during study	34	54.8	17	27.4
Financial reward on gaining qualification	24	38.7	25	40.3
Time off from work to attend training	18	29.0	20	32.3
Encouragement to take part in continuous professional development	9	14.5	22	35.5
Personal development planning	9	14.5	22	35.5

How could lifelong learning be encouraged through the qualification framework?

Factors identified	Frequency	Percentage
Incentives for learning	45	72.6
Relevant qualifications at progressive levels	27	43.5
Flexible methods/modes of learning	41	66.1
Clarity about qualification levels and their relation to job roles	28	45.2
Availability of information	25	40.3
System of accreditation for short course attendance/assessment or modules	43	69.4
Other factors	11	17.7

Statements about the foundation and intermediate level GNVQs in land and environment

Statements	Agree		Disagree		Don't know	
	Freq.	%	Freq.	%	Freq.	%
Attract sufficient students to justify offering this course at our college/training centre	6	13.6	14	31.8	24	54.5
Meet the needs of these students well	9	23.7	7	18.4	22	57.9
There are barriers to take-up and access	12	30.0	5	12.5	23	57.5
There are already alternative qualifications if they were no longer available	10	23.8	7	16.7	25	59.5
There is a need for an alternative general qualification	7	16.3	14	32.6	22	51.2

Statements about the former advanced GNVQ

Statements	Agree		Disagree		Don't know	
	Freq.	%	Freq.	%	Freq.	%
The absence of an advanced GNVQ for the environmental and land-based sector implies a gap in provision for some students	7	16.3	14	32.6	22	51.2
The absence of an advanced GNVQ for the environmental and land-based sector has resulted in some students being unable to access a qualification most suitable for them	5	22.6	13	30.2	25	58.1
There is a need for a general, advanced level qualification (an AVCE) for the environmental and land-based sector	9	22.0	14	34.1	18	43.9
It is probable that student demand would be sufficient to make the delivery of such a qualification economically viable in this college	1	3.1	13	40.6	18	56.3

Statements about GCSEs in vocational subjects

Statements	Agree		Disagree		Don't know	
	Freq.	%	Freq.	%	Freq.	%
There are barriers to the take up of, or access to, GCSE Agricultural and Rural Science	9	23.1	0	0	30	76.9
A GCSE in a vocational subject could provide the model for a general qualification for the environmental and land-based sector at level 2	12	30.8	4	10.3	23	59.0

Full questionnaire data from school-based respondents

Section A: You and your school

Number of schools responding to this questionnaire = 26.

Type of school

Type of school	Frequency	Percentage
11–18 comprehensive	21	95.5
11–18 selective	0	0
11–18 independent	1	4.5

Role of respondent within the school

Role	Frequency	Percentage
Headteacher	3	12.5
Deputy or assistant headteacher	4	16.7
Senior teacher	2	8.3
Head of department	8	33.3
Teacher	3	12.5
Other	4	16.7

Section B: Qualifications

Qualification title	Qual. type	Awarding body	No. candidates	% pass rate ¹	% ret. ²
Agriculture and horticulture	GCSE	AQA	16	100	100
Award scheme	—	AQA	100	—	85
Environmental science	A level	AQA	5	100	20
Environmental science	GCSE	AQA	8	100	100
Environmental science	A level	AQA	3	66	50
Land and environment	A level	Edexcel	3	33.3	66.6
Land and environment	GNVQ	Edexcel	16	75	81
Land and environment	GNVQ	Edexcel	15	50	100
Land and environment	GNVQ	Edexcel	10	—	—
Land and environment	GNVQ	Edexcel	20	52	81
Certificate in skills for working life	—	NPTC	23	—	91
Vocational skills	NVQ 2	NPTC	12	100	100
Rural and agricultural science	GCSE	OCR	24	45.8	100
Rural and agricultural science	GCSE	OCR	43	100	98
Rural and agricultural science	GCSE	OCR	24	100	100
Rural and agricultural science	GCSE	OCR	25	92	97
Rural science	GCSE	OCR	20	75	95
Rural science	GCSE	OCR	14	100	100
Rural science	GCSE	OCR	15	90	98
Rural science	GCSE	OCR	12	83	92
Rural science	GCSE	OCR	20	100	95
Rural science	GCSE	OCR	34	100	100
Rural science	GCSE	OCR	20	95	100
Science – rural	GCSE	OCR	15	100	100
Science – rural and agricultural	GCSE	OCR	16	88	100
Science – rural and agricultural	GCSE	OCR	50	100	80
Science – rural and agricultural	GCSE	OCR	20	100	100
Science – rural and agricultural	GCSE	OCR	14	95	100
Science – rural and agricultural	GCSE	OCR	32	100	100

Qualification title	Qual. type	Awarding body	No. candidates	% pass rate ¹	% ret. ²
Science – rural and agricultural	GCSE	OCR	7	85.7	100
Science – rural and agricultural	GCSE	OCR	80	100	100
Science – rural and agricultural	GCSE	OCR	20	75	100
Science – rural and agricultural	GCSE	OCR	25	100	100
Agriculture	RSA	RSA	45	95	100
Land studies	COEA	WJEC	8	100	100

¹ Percentage of those starting course who achieved a GCSE G or above or pass GNVQ grade in the final year 2001–2.

² Percentage of those starting a course retained until end of course in the final year 2001–2.

Difficulties experienced in delivering these qualifications in school

Response	Frequency	Percentage
Yes	10	38.5
No	16	61.5

Nature of difficulties

Response	Frequency	Percentage
Finding appropriate staff to teach programmes	2	7.7
Finding appropriate buildings, space and equipment to support the qualification	4	15.4
Lack of consistent demand from students to take the qualification	7	26.9
Lack of support from other teachers or school management	0	0
Lack of space in timetable	4	15.4
Difficulties of coordination with appropriate partners, for example colleges, employers	1	3.8
Other	5	19.2

Extent to which qualifications meet student needs

Needs met?	Frequency	Percentage
Fully	8	30.8
Partially	17	65.4
Not at all	1	3.8

Reasons given for qualifications not meeting student needs

Nature of difficulty	Frequency	Percentage
Qualifications take too long to complete	1	3.8
The content is not relevant to employers	3	11.5
They are hard to present in an interesting and engaging manner	3	11.5
The number of contact hours is too low	2	7.7
The number of contact hours is too high	1	3.8
Access to appropriate accommodation and resources is not available	3	11.5
The level of the qualification is too low	2	7.7
The level of the qualification is too high	3	11.5
Assessment methods are inappropriate	6	23.1
Other	11	42.3

Adequacy of current provision

Current provision	Frequency	Percentage
Current provision is inadequate – a new approach is needed	6	23.1
Existing provision should be developed and improved	15	57.7
Existing provision is inadequate to meet current demand	4	15.4
Unsure	1	3.8

Statements about the foundation and intermediate Level GNVQs in land and environment

Statements	Agree		Disagree		Don't know	
	Freq.	%	Freq.	%	Freq.	%
Attract sufficient students to justify offering this course at our college/training centre	2	10	7	35	11	55
Meet the needs of these students well	3	15.8	4	21.1	12	63.2
There are barriers to take-up and access	8	40	2	10	10	50
There are already alternative qualifications if they were no longer available	1	5	7	35	12	60
There is a need for an alternative general qualification	7	35	3	15	10	50

Statements about the former advanced GNVQ or AVCE

Statements	Agree		Disagree		Don't know	
	Freq.	%	Freq.	%	Freq.	%
The withdrawal of the advanced GNVQ for the environmental and land-based sector implies a gap in provision for some students	7	33.3	1	4.8	13	61.9
The withdrawal of the advanced GNVQ for the environmental and land-based sector has resulted in some students being unable to access a qualification most suitable for them	6	31.6	0	0	13	68.4
There is a need for a general, advanced level qualification (an AVCE) for the environmental and land-based sector	7	35	0	0	13	65
It is likely that there would be sufficient demand from students in this school to make the delivery of such a qualification economically viable	4	20	3	15	13	65

Statements about GCSEs in vocational subjects

Statements	Agree		Disagree		Don't know	
	Freq.	%	Freq.	%	Freq.	%
There are barriers to the take up of, or access to, GCSE agricultural and rural science	13	54.2	10	41.7	1	4.2
A GCSE in a vocational subject could provide the model for a general qualification for the environmental and land-based sector at level 2	17	17	0	0	7	29.2

Issues of retention

Factors that would aid retention	Frequency	Percentage
Improved information about such qualifications	13	50
Improved careers advice	14	53.8
Improved resourcing for such programmes	16	61.5
Support from the senior management team	10	38.5
Recruitment of appropriately qualified staff	9	34.6
Retention of appropriately qualified staff	7	36.9
Successful partnerships with colleges	13	50
Successful partnerships with the industry sector	18	69.2
Other	6	23.1

* Percentages add up to more than 100 due to multiple response choice.

Barriers to take-up of environmental and land-based qualifications

Response	Frequency	Percentage
Yes	10	41.6
No	7	29.2
Don't know	7	29.2

Would development be appropriate at key stage 3?

Response	Frequency	Percentage
Yes	17	68
No	5	20
Don't know	3	12

Most frequently used awards by type

All qualifications currently being used by training providers responding to the questionnaire

Qualification	Freq.	Awarding bodies	Level	Number currently enrolled
NVQ	65	C&G, Edexcel, NPTC	1-4	1,567
Diplomas including national diplomas	36	RFS, Edexcel, BTEC	1-4	952
Certificates including national certificates	34	NPTC, ABC, C&G, RFS, H&S, CIEH, CITB, BASIS, OCN, NCFE, Edexcel, RHS	1-3	1,143
Lantra awards	10	Lantra	2	507
HNC/HND	6	Edexcel, BTEC	4	59
RCVS	2	RCVS	2-3	26

Appendix 3: Qualifications available

This appendix is an overview of available qualifications including both those that are accredited to the NQF and those that are not. The appendix is organised alphabetically by industry group. For each industry there is a list of qualifications arranged by awarding body, level and qualification title. There is also an indication of NQF status and the age ranges. There is a summary for each industry that highlights the qualification coverage for that industry and any gaps and/or overlaps in provision. This summary also includes reference to the findings of the *Lantra qualification routes report* (2000), *Lantra skills foresight report* (2001) and other relevant sector research.

The list of available qualifications for each industry was compiled using the list of accredited qualifications for the environmental and land-based sector. Additional information for qualifications outside the NQF was researched using internet sources and telephone contact with some awarding bodies. Several awarding bodies also provided complete lists of all the qualifications that they offer. Relevant sections were also shown to employer representatives and training providers, who commented on the qualifications listed as well as the summary sections. The information contained in this appendix is a 'snapshot' of the qualifications that appear to be available for each industry within the land-based sector, as at January 2003.

Agriculture crops

(Including qualifications in general agriculture)

There are **no gaps** in the provision of awards for agricultural crops. There may still be **some overlaps** in the range of City and Guilds and Edexcel national certificates and first diplomas at level 2 and the advanced national certificates, national certificates, national diplomas and national awards at level 3. The take-up of NVQs by the industry is low; the most used being intensive crop production at level 2 (see table below for details). The *Lantra qualification routes report* (2000) found that the most used qualification was the City and Guilds national certificate at level 2, which has since been revised and remains on the NQF.

Most of the specialist sector colleges offer a range of provision at every level for the agricultural industries, which is complemented by a range of provision offered by private training providers. Not all courses are award bearing some only offer certificates of attendance for legislative purposes or skills updating.

The *Skills foresight report* (2001) identified the following areas of change within the agricultural sector that will require new forms of training and development: farm management, scientific, environmental and technical skills. In addition as a result of the changes in farming in general there has been an increased interest in diversification and farm-based tourism, which will promote the need for a different range of qualifications for the industry.

Certificates awarded for NVQs in agriculture crops to September 2002

NVQ title	Level	Certificates awarded
General Agriculture	1	564
Agriculture – Intensive Crop Production	2	1,196
Agriculture – Intensive Crop Production	3	248
Mixed Farming	2	456
Mixed Farming	3	86

Data provided by QCA, February 2003.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
1	NVQ Agriculture	Yes	Yes	Yes	Yes
2	National Certificate in Agriculture	No	Yes	Yes	Yes
2	NVQ Agricultural crop production	No	Yes	Yes	Yes
2	NVQ Mixed Farming	No	Yes	Yes	Yes
3	Advanced National Certificate in Agriculture	No	No	Yes	Yes
3	Advanced National Certificate in Countryside Management	No	No	Yes	Yes
3	NVQ Agricultural crop production	No	Yes	Yes	Yes
3	NVQ Mixed Farming	No	Yes	Yes	Yes
Edexcel					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	BTEC First Diploma in Agriculture	Yes	Yes	Yes	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
3	BTEC National Award in Agricultural Production	No	Yes	Yes	Yes
3	BTEC National Award in Agriculture	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management (Rural Tourism)	No	Yes	Yes	Yes
3	BTEC National Certificate in Agriculture	No	Yes	Yes	Yes
3	BTEC National Certificate in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Agriculture	No	Yes	Yes	Yes
3	BTEC National Diploma in Countryside Management	No	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in All Terrain Vehicle Handling (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in Chain Saw and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Fork Lift Truck Operations (TA)	No	No	Yes	Yes
2	Certificate of Competence in Granular Fertiliser Application	No	Yes	Yes	Yes
2	Certificate of Competence in Machine Maintenance and Related Operations	No	No	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes
2	Certificate of Competence in Safe Use of Pesticides	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Abrasive Wheel Machines	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Hedge Trimmers	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Plant Machinery	No	Yes	Yes	Yes
2	Certificate of Competence in Tractor Driving and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Vertebrate Pest Control	No	Yes	Yes	Yes
1	Vocational Foundation Certificate Level A <i>Withdrawn as of December 2001; certification available until end December 2004</i>	Yes	Yes	No	No

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
1	Vocational Foundation Certificate Level B <i>Withdrawn as of December 2001; certification available until end December 2004</i>	Yes	Yes	No	No
OCR					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	GCSE Rural and Agricultural Science (1979)	Yes	Yes	No	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
Entry	National Skills Profile	Yes	No	No	Yes
WJEC					
Entry	Certificate in Skills for Life and Work	Yes	Yes	No	No
Entry	Entry Level Certificate	Yes	No	No	No

Agriculture livestock

(Including qualifications in general agriculture)

There are **no gaps** in the provision of awards for Agricultural Livestock. There may still be **some overlaps** in the range of City and Guilds and Edexcel advanced national certificates, national certificates, national diplomas and national awards at level 3. The take up of NVQs by the industry is low; the most used being livestock production at level 2 (see table below for details). The *Lantra qualification routes report* (2000) found that the most used qualification was the City and Guilds national certificate at level 2, which has since been revised and remains on the NQF.

Most of the specialist sector colleges offer a range of provision at every level for the agricultural industries, which is complemented by a range of provision offered by private training providers. Not all courses are award bearing some only offer certificates of attendance for legislative purposes or skills updating.

The *Skills foresight report* (2001) identified the following areas of change within the agricultural sector that will require new forms of training and development: farm management, scientific, environmental and technical skills. In addition as a result of the changes in farming in general there has been an increased interest in diversification and farm-based tourism, which will promote the need for a different range of qualifications for the industry.

Certificates awarded for NVQs in agriculture livestock to September 2002

NVQ title	Level	Certificates awarded
General Agriculture	1	564
Agriculture Production – Poultry	2	75
Agriculture Production – Poultry	3	204
Mixed Farming	2	456
Mixed Farming	3	86
Livestock Markets (Droving Livestock)	2	468
Livestock Production	2	1,691
Livestock Production	3	921

Data provided by QCA, February 2003.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
1	NVQ Agriculture	Yes	Yes	Yes	Yes
2	National Certificate in Agriculture	No	Yes	Yes	Yes
2	NVQ Livestock Production	No	Yes	Yes	Yes
2	NVQ Mixed Farming	No	Yes	Yes	Yes
3	Advanced National Certificate in Agriculture	No	No	Yes	Yes
3	Advanced National Certificate in Countryside Management	No	No	Yes	Yes
3	NVQ Livestock Production	No	Yes	Yes	Yes
3	NVQ Mixed Farming	No	Yes	Yes	Yes
Edexcel					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	BTEC First Diploma in Agriculture	Yes	Yes	Yes	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
3	BTEC National Award in Agricultural Production	No	Yes	Yes	Yes
3	BTEC National Award in Agriculture	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management (Rural Tourism)	No	Yes	Yes	Yes
3	BTEC National Certificate in Agriculture	No	Yes	Yes	Yes
3	BTEC National Diploma in Agriculture	No	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in All Terrain Vehicle Handling (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in Chain Saw and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Fork Lift Truck Operations (TA)	No	No	Yes	Yes
2	Certificate of Competence in Granular Fertiliser Application	No	Yes	Yes	Yes
2	Certificate of Competence in Machine Maintenance and Related Operations	No	No	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes
2	Certificate of Competence in Safe Use of Pesticides	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Abrasive Wheel Machines	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Hedge Trimmers	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Plant Machinery	No	Yes	Yes	Yes
2	Certificate of Competence in Tractor Driving and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Vertebrate Pest Control	No	Yes	Yes	Yes
1	Vocational Foundation Certificate Level A <i>Withdrawn as of December 2001; certification available until end December 2004</i>	Yes	Yes	No	No
1	Vocational Foundation Certificate Level B <i>Withdrawn as of December 2001; certification available until end December 2004</i>	Yes	Yes	No	No

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
OCR					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	GCSE Rural and Agricultural Science (1979)	Yes	Yes	No	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
Entry	National Skills Profile	Yes	No	No	Yes
WJEC					
Entry	Certificate in Skills for Life and Work	Yes	Yes	No	No
Entry	Entry Level Certificate	Yes	No	No	No

Amenity horticulture/landscaping

Amenity horticulture is a term that covers a large and diverse industry including amenity horticulture, green keeping, interior landscapes and arboriculture, as well as ‘gardening’. Not surprisingly there is a wide range of qualifications available to the amenity horticulture industry at a variety of levels offered by a number of different awarding bodies. Despite the breadth of awards there may be a **gap** at entry and level 1 where there is only the GNVQ and one NVQ accredited on the NQF and the RHS General Certificate. There are a number of awards available at levels 2 and 3, but as these are offered by a range of specialist bodies and cover several areas of amenity horticulture, there does not appear to be an **overlap** in provision. The industry makes good use of the NVQs available to it; the most used being amenity horticulture at level 1 (see table below for full details). The *Lantra qualification routes report* (2000) found that the most used qualification was the City and Guilds certificate in gardening, which is not a professional award but might have provided a route into the industry. This qualification does not appear on the current list but new developments are in progress to replace it.

Most of the specialist colleges as well as a number of general FE colleges offer qualifications for this industry. In addition private training providers offer a wide range of programmes for all aspects of amenity horticulture. Many large organisations have also developed their own training schemes, such as the RHS Careership.

The *Skills foresight report* (2001) found that there is increasing demand among public- and private-sector clients for higher level skills in contract management and the craft areas. In addition there is an increasing need for awareness of environmental conservation and management, as well as skills in interior landscaping, historic gardens and restoration projects. The industry also has to respond to the need for increasing skills in customer care, self-management, health and safety and legislative requirements.

Certificates awarded for NVQs in amenity horticulture to September 2002

NVQ title	Level	Certificates awarded
Amenity Horticulture	1	4,536
Amenity Horticulture	4	49
Amenity Horticulture (Arboriculture)	2	54
Amenity Horticulture (Arboriculture)	3	6
Amenity Horticulture (Cemetery and Graveyard Maintenance)	2	18
Amenity Horticulture (Decorative Horticulture)	2	3,222
Amenity Horticulture (Decorative Horticulture)	3	262
Amenity Horticulture (Hard Landscape)	2	1,168
Amenity Horticulture (Hard Landscape)	3	53
Amenity Horticulture (Interior Landscaping)	2	58
Amenity Horticulture (Nursery)	2	912
Amenity Horticulture (Sports Turf)	2	2,071
Amenity Horticulture (Sports Turf Maintenance)	3	719

Data provided by QCA, February 2003.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
ABC					
2	Certificate in Arboriculture (Theory)	No	Yes	Yes	Yes
3	Technicians Certificate in Arboriculture	No	Yes	Yes	Yes
BHTB/ Jockey Club/Institute of Groundsmanship					
1	Foundation Course for Racecourse Groundsmen	No	Yes	Yes	No
2	Intermediate Course for Racecourse Groundsmen	No	Yes	Yes	No
3	Advanced Course for Racecourse Groundsmen	No	No	Yes	No
City and Guilds					
1	NVQ Horticulture	Yes	Yes	Yes	Yes
2	National Certificate in Horticulture	No	Yes	Yes	Yes
2	NVQ Amenity Horticulture	No	Yes	Yes	Yes
3	Advanced National Certificate in Horticulture	No	No	Yes	Yes
3	NVQ Amenity Horticulture	No	Yes	Yes	Yes
Edexcel					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	BTEC First Diploma in Horticulture	Yes	Yes	Yes	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
3	BTEC National Award in Forestry and Arboriculture	No	Yes	Yes	Yes
3	BTEC National Award in Horticulture	No	Yes	Yes	Yes
3	BTEC National Certificate in Horticulture	No	Yes	Yes	Yes
3	BTEC National Certificate in Forestry and Arboriculture	No	Yes	Yes	Yes
3	BTEC National Diploma in Forestry and Arboriculture	No	Yes	Yes	Yes
3	BTEC National Diploma in Horticulture	No	Yes	Yes	Yes
Institute of Groundsmanship					
2	National Intermediate Diploma in Turf Culture	No	Yes	Yes	No
2	National Practical Certificate	No	Yes	Yes	No
3	National Diploma in Turf Culture	No	Yes	Yes	No

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in Brushcutting Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Brushwood Chipper Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Chain Saw and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Granular Fertiliser Application	No	Yes	Yes	Yes
2	Certificate of Competence in Machine Maintenance and Related Operations	No	No	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes
2	Certificate of Competence in Pedestrian Controlled Vehicles (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in Safe Use of Pesticides	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use and Operation of Mobile Elevated Work Platforms	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Hedge Trimmers	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Mowers (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Plant Machinery	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Turf Maintenance	No	Yes	Yes	Yes
2	Certificate of Competence in Tractor Driving and Related Operations	No	Yes	Yes	Yes
OCR					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	GCSE Rural and Agricultural Science (1979)	Yes	Yes	No	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
Entry	National Skills Profile	Yes	No	No	No
RHS					
1	RHS Level 2 General Certificate in Horticulture	No	Yes	Yes	No
2	RHS Level 3 Advanced Certificate in Horticulture	No	Yes	Yes	No
3	Diploma Examination in Horticulture	No	Yes	Yes	No
3	Master of Horticulture (RHS) Award	No	No	Yes	No
3	One Year Certificate in Practical Horticulture	No	Yes	Yes	No
3	One Year Specialist Option Certificate	No	Yes	Yes	No
3	Wisley Diploma in Practical Horticulture	No	Yes	Yes	No

Animal care

The animal care industry is extremely varied encompassing businesses as diverse as veterinary practices, boarding kennels, pet shops and zoos. The industry has expanded rapidly in response to young people's demands for qualifications in this area, possibly as a result of increased media interest in, and awareness of, animal care. The *Skills foresight report* (2001) suggested that there could be a slow down in this growth as the reality of many jobs is discovered. There is a range of qualifications available from four awarding bodies, of which only two have qualifications accredited to the NQF. Provision is mainly concentrated at levels 2 and 3 where there could be **some overlap** in the range of NVQs, national certificates, national diplomas, advanced national certificates, national awards and other certificated awards. There could be **a gap** in provision at level 1 with only one NVQ and an introductory certificate. There is an NVQ available at level 1–3, however, the latest data from QCA indicates that only four candidates have taken up the NVQ level 1 (with nil take up at levels 2 and 3). The *Lantra qualifications routes project* (2000) found that the most used qualifications were the City and Guilds certificate in caring for animals (no longer available) and the Edexcel first diploma in animal care.

The current regulatory authorities' research (*Establishing qualification requirements: environmental and land-based sector*) indicates that increasing numbers of young people are progressing to HE qualifications within this industry (one college indicated that 50 per cent of its national diploma students progress to higher level awards).

Future skill requirements will include a high level of animal husbandry skills to comply with legislative standards as well as customer care and communication skills as these posts increasingly bring employees in contact with the public.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
ABC					
2	Certificate in Small Animal Care	Yes	Yes	Yes	Yes
3	Certificate in Small Animal Care	No	Yes	Yes	Yes
ABC/BVNA					
1	Animal Nursing Assistants' Course	No	Yes	Yes	Yes
Animal Care College					
2	Introduction to Small Animal Care	Yes	Yes	No	No
2	National Small Animal Care Certificate <i>OCN accreditation applied for</i>	No	Yes	No	No
3	Veterinary Nursing Correspondence Course	No	Yes	Yes	No
City and Guilds					
1	NVQ Animal Care	Yes	Yes	Yes	Yes
2	National Certificate in Animal Care	No	Yes	Yes	Yes
2	NVQ Animal Care	No	Yes	Yes	Yes
3	Advanced National Certificate in Animal Care	No	No	Yes	Yes
3	NVQ Animal Care	No	Yes	Yes	Yes
Edexcel					
2	BTEC First Diploma in Animal Care	Yes	Yes	Yes	Yes
3	BTEC National Award in Animal Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Animal Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Animal Management	No	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Veterinary Medicines	No	Yes	Yes	Yes

Animal technology

The animal technology industry is relatively small and very specialist. Therefore the awarding bodies have developed few qualifications in this area in response to industry demand and so there is little provision overall. There are no awards at level 1 or below, which could constitute a **gap** in provision, however, young people considering entry to this industry could follow qualifications in animal care. There are two newly approved NVQs, one each at level 2 and 3, in addition to three BTEC awards at level 3. There could be **some overlap** in the content of the NVQ, national certificate, national diploma and national award at level 3.

The Institute of Animal Technology (IAT) also has three levels of award that did correspond to BTEC levels 1–3, although some of the awards they were aligned with have been rationalised. These are designed for Institute members working in the industry and are offered at some specialist colleges. The QCA data show no uptake for the NVQs to date, but they were only approved for use from August 02. The *Lantra qualification routes project* (2000) found that the most used qualification in the IAT suite was one that was being withdrawn. It was thought that the new NVQ at level 2 would help to fill a gap in provision.

The *Skills foresight report* (2001) highlighted the need for skills in the care and welfare of animals, animal production and conducting scientific experiments. In addition generic skills such as IT, management and budgeting will become increasingly important.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
2	NVQ Animal Technology	No	Yes	Yes	Yes
3	NVQ Animal Technology	No	Yes	Yes	Yes
Edexcel					
3	BTEC National Award in Animal Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Animal Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Animal Management	No	Yes	Yes	Yes
3	Applied Science (Laboratory and Industrial Science)	No	Yes	Yes	No

Aquaculture

There is very little provision for the aquaculture industry. The only qualifications currently on the NQF are the BTEC first diploma at level 2 and the BTEC national at level 3. There are two fish farming certificates available at level 1, but neither of these is accredited; evidence suggests that they are not used by the industry. There are **gaps** at every level in provision and consequently no **overlaps**. QCA has approved NVQs at levels 2 and 3 but to date no awarding body has picked them up and research evidence suggests that no awarding body is planning to offer this provision in the future. The *Lantra qualification routes project* (2000) found that the most used qualification was an SQA national certificate, which is not included in this report. However, it is relevant, as qualifications uptake for aquaculture tends to be concentrated in the areas where the businesses are located, which for many is in Scotland.

The *Skills foresight report* (2001) highlighted a need for an increased level of scientific, husbandry and quality assurance skills. In addition there will be a need for staff to have an understanding of technological and IT-based operations as fish farms become larger and more automated. In addition to job-specific skills, managers highlighted the need for employees to improve their communication, problem-solving and teamwork skills and to be increasingly flexible.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
Edexcel					
2	BTEC First Diploma in Fish Husbandry	No	Yes	Yes	Yes
3	BTEC National Diploma in Fish Management	No	Yes	Yes	Yes
IFM					
1	Fish Farming Certificate	No	Yes	Yes	No
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes
2	Certificate of Competence in the Safe Use of Plant Machinery	No	Yes	Yes	Yes
Scottish Agricultural College					
1	Fish Farming: Introductory Business Analysis, Planning and Control	No	Yes	Yes	No
<i>Distance learning course aimed at practitioners</i>					

Environmental conservation

The area of environmental conservation and sustainable development is central to many of the land-based businesses and as such shares a variety of qualifications with other industries, such as arboriculture and amenity horticulture. Consequently there are a large number of vocational awards available to people working in this industry in addition to the range of academic higher level qualifications that many employees and volunteers possess. The majority of qualifications are offered at levels 2 and 3 and so there might be **some overlap** in content at these levels. There is little provision at level 1, other than the GNVQ, the future of which is uncertain and the NCFE certificate.

Therefore there is a **potential gap** at level 1 and below with no NVQ at this level and no accredited vocational qualifications. The *Lantra qualification routes project* (2000) identified the ABC certificate in environmental skills as the most used qualification. There was a predicted NVQ level 1 in land-based maintenance skills, which City and Guilds and NPTC were developing. However, the QCA data indicates a nil take up for NVQ at level 3 and only 75 certificates awarded at level 2, for the year to September 2002, which could indicate that they are not the best form of vocational qualification for this industry.

The *Skills foresight report* (2001) identified the need for people working in environmental conservation to develop skills of project management, people management, communication and information technology. In addition more people are likely to need skills of fund raising and project budgeting. These skills are in addition to a high level of environmental skills and expertise. Further research in 2002 (*Establishing qualification requirements: Environmental and land-based sector*) indicated that in fact there is also a need for people with good practical skills at the lower levels and therefore an entry-level qualification would aid progression in the industry.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
ABC					
2	Certificate in Arboriculture (Theory)	No	Yes	Yes	Yes
2	Practical Environmental Skills	No	Yes	Yes	Yes
3	Technicians Certificate in Arboriculture	No	Yes	Yes	Yes
AQA					
2	GCSE in Environmental Science	No	Yes	No	Yes
3	Advanced Subsidiary GCE in Environmental Science	No	Yes	Yes	Yes
3	Advanced GCE in Environmental Science	No	Yes	Yes	Yes
City and Guilds					
2	National Certificate in Environmental Conservation	No	Yes	Yes	Yes
2	NVQ Environmental Conservation	No	Yes	Yes	Yes
3	Advanced National Certificate in Countryside Management	No	No	Yes	Yes
3	NVQ Environmental Conservation	No	Yes	Yes	Yes
Edexcel					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	BTEC First Diploma in Countryside and Environment	Yes	Yes	Yes	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
2	NVQ Environmental Conservation	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management (Rural Tourism)	No	Yes	Yes	Yes
3	BTEC National Award in Forestry and Arboriculture	No	Yes	Yes	Yes
3	BTEC National Certificate in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Forestry and Arboriculture	No	Yes	Yes	Yes
3	BTEC National Diploma in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Forestry and Arboriculture	No	Yes	Yes	Yes
3	NVQ Environmental Conservation	No	Yes	Yes	Yes
NCFE					
1	Foundation Certificate in Sustainable Development	Yes	Yes	Yes	Yes
3	Advanced Certificate for the Environmental Practitioner	No	No	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in Brushcutting Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Brushwood Chipper Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Chain Saw and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Machine Maintenance and Related Operations	No	No	Yes	Yes
2	Certificate of Competence in Safe Use of Pesticides	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Mowers (Transport)	No	Yes	Yes	Yes
OCR					
1	GNVQ Foundation Land and Environment	Yes	Yes	Yes	Yes
2	GCSE Rural and Agricultural Science (1979)	Yes	Yes	No	Yes
2	GNVQ Intermediate Land and Environment	Yes	Yes	Yes	Yes
WJEC					
Entry	Vocational Certificate	Yes	Yes	No	No

Farriery

Farriery is a closely regulated industry controlled by an Act of Parliament (Farriers' Registration Act 1975) and overseen by the Farriers Registration Council (FRC). Training to enter the industry is similarly closely regulated and controlled by the FRC with advice from the Farriers Training Committee (FTC). The FTC, or Farriers Training Service as the NVQ assessment centre, approves the colleges and the exams, and the FRC approves the Approved Training Farriers (ATFs). The BHTB approves the internal verifiers. There are currently only four colleges approved to offer farriery training; they are Warwickshire, Hereford, Myerscough and Oatridge in Scotland. There are discussions underway with Enniskillen College in Northern Ireland to enable it to offer farriery qualifications. There are currently only four civilian qualifications relevant to the industry. Two of those are gained during initial training as part of the modern apprenticeship; they are the NVQ at level 3 and the diploma of the Worshipful Company of Farriers (WCF). The WCF Diploma is also the only technical certificate currently accredited on the NQF as part of the modern apprenticeship.

In addition there are three British Army recognised qualifications, which are the BI, BII and BIII. Once qualified, and with the appropriate amount of experience, farriers can take qualifications to become either an Associate or Fellow of the Worshipful Company of Farriers. There are no qualifications below level 3 which could indicate a **gap** in provision. There is **no overlap** in the existing level 3 awards as they are complementary. Some colleges run 'pre-farriery training' courses, which tend to be blacksmithing and equine qualifications; these might be useful to apprentices but do not act as entry qualifications.

The *Skills foresight report* (2001) found that job-specific skills are the most important in farriery but that they can be supported by good business and management skills, as most farriers are self-employed.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
BHTB					
3	NVQ Farriery	No	No	Yes	Yes
British Army					
1	British Army BIII Farriery	No	Yes	Yes	No
2	British Army BII Farriery	No	Yes	Yes	No
3	British Army BI Farriery	No	No	Yes	No
WCF					
3	Worshipful Company of Farriers Diploma	No	No	Yes	Yes

Fencing

The fencing industry is quite small, although many other industries use fencing skills and might access short courses in fence erection. There are currently only two NVQs in fencing, which doubles the provision since the *Lantra qualification routes project report* (2000) was written. There is not really a culture of gaining qualifications in the fencing industry with many people learning 'on the job'. There is obviously a **gap** at level 1 for entry to the industry and there is **no overlap** of qualifications, with only one at each level. Lantra has also developed the Fencing Industries Skills Scheme (FISS) card, which is used by the industry and ensures health and safety training and encourages take-up of the NVQ at level 2.

The *Skills foresight report* (2001) identified job-specific skills as the most important for fencing operatives. However, they increasingly need to develop product knowledge, health and safety and awareness of new legislation. Lead erectors also need some management and customer care skills.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
Lantra					
2	NVQ Fencing	Yes	Yes	Yes	Yes
3	NVQ Fencing	Yes	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes

Fisheries management

There is very little provision for the fisheries management industry. There are two fish farming certificates available at level 1, but neither of these is accredited; research suggests they are not used by the industry. There is significantly more provision at level 3 for fisheries management than there is for aquaculture and there may be **some overlap** in the Edexcel national awards, national certificates, national diplomas and NVQs. There are **potentially gaps** at level 1 in provision. QCA has approved an NVQ but to date no awarding body has decided to develop it and research indicates that no awarding body is planning to develop this provision in the near future. The *Lantra qualification routes project (2000)* did not differentiate between aquaculture and fisheries management and therefore the results are the same. It was found that the most used qualification was an SQA national certificate, which is not included in this report.

The *Skills foresight report (2001)* highlighted a need for an increased level of scientific, husbandry and quality assurance skills. In addition there will be a need for staff to have an understanding of technological and IT-based operations as fish farms become larger and more automated. In addition to job-specific skills, managers highlighted the need for employees to improve their communication, problem-solving and teamwork skills, to be increasingly flexible.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
2	NVQ Gamekeeping and Wildlife Management	No	Yes	Yes	Yes
3	NVQ Gamekeeping and Wildlife Management	No	Yes	Yes	Yes
Edexcel					
2	BTEC First Diploma in Countryside and Environment	Yes	Yes	Yes	Yes
2	BTEC First Diploma in Fish Husbandry	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management (Rural Tourism)	No	Yes	Yes	Yes
3	BTEC National Award in Fish Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Fish Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Fish Management	No	Yes	Yes	Yes
IFM					
1	Certificate in Fisheries Management	No	Yes	Yes	No
2	Diploma in Fisheries Management	No	Yes	Yes	No

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
Scottish Agricultural College					
1	Fish Farming: Introductory Business Analysis, Planning and Control	No	Yes	Yes	No
<i>Distance learning course aimed at practitioners</i>					

Floristry

Many of the specialist agriculture and horticulture colleges currently offer qualifications in floristry and floral design. This is one of the areas, along with horticulture, that is also offered at different levels by many general FE colleges. The floristry industry has a number of qualifications available at levels 2 and 3, including an NVQ. There could be **some overlap** between the level 3 national certificate, national diploma, advanced national certificate and national award. There are potential **gaps** at entry level and level 1 and there is a gap for a level 4 qualification to allow progression. New qualifications in development will help to address some of the gaps at entry and level 1. However, there is support from the industry for the modern apprenticeship route and the *Lantra qualification routes project* (2000) found that by far the greatest number of awards were for the NVQs. Current QCA data show that the level 2 NVQ has the greatest take up with 4,170 certificates awarded to March 2002 (only 31 are shown for level 3).

The *Skills foresight report* (2001) found that there is an increased demand for a high level of specific floristry skills as well as customer service and communication skills. In order to remain competitive small florists will have to develop business management, IT and higher level retailing skills.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
2	National Certificate in Floristry	No	Yes	Yes	Yes
2	NVQ Floristry	No	Yes	Yes	Yes
3	Advanced National Certificate in Floristry	No	No	Yes	Yes
3	NVQ Floristry	No	Yes	Yes	Yes
Edexcel					
2	BTEC First Diploma in Floristry	Yes	Yes	Yes	Yes
3	BTEC National Award in Floristry	No	Yes	Yes	Yes
3	BTEC National Certificate in Floristry	No	Yes	Yes	Yes
3	BTEC National Diploma in Floristry	No	Yes	Yes	Yes
NCFE					
1	Foundation Certificate in Practical Craft (Floristry) <i>Accredited to the NQF for one year</i>	Yes	Yes	Yes	Yes
2	Intermediate Certificate in Practical Craft (Floristry) <i>Accredited to the NQF for one year</i>	Yes	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
OCR					
Entry	National Skills Profile	Yes	No	No	No

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
Society of Floristry					
1	Society of Floristry Intermediate Certificate	No	No	Yes	No
2	Society of Floristry Diploma	No	No	Yes	No

Game and wildlife management

Game and wildlife management is a very small and specialised industry that is supported by some specialist colleges as well as by employers offering foundation and advanced modern apprenticeships to trainees. The industry has aspects in common with the fisheries and environmental management industries and as such shares some qualifications with them. There are a number of qualifications at levels 2 and 3 that can be accessed by this industry, including an NVQ at each level. There are no industry-specific qualifications at entry or level 1, which could indicate a **gap** in provision. Respondents to this research indicated that the NVQ in land-based operations filled some of the gaps at level 1; however, information from City and Guilds is that this qualification has been withdrawn.

There could be **some overlap** in the qualifications content in the Edexcel level 3 national certificates, national diplomas and national awards and the City and Guilds Advanced national certificate. The QCA data to March 2002 show the take up of NVQs at 214 for level 2 and 36 for level 3. The *Lantra qualification routes project (2000)* found that the most used qualification was the gamekeeping NVQ at level 2. The current QCA data (to September 2002) do not show any certificates awarded for gamekeeping and wildlife management. The Deer Management Qualifications (DMQ) were also found to be popular with the industry.

The *Skills foresight report (2001)* found that the game conservation industry was being forced to consider and raise awareness of more environmental, health and safety and animal welfare issues. This legislation and codes of practice are expected to increase requirements for formal training and certification in the areas of pest control, gun handling, use of vehicles and machinery and handling of chemicals.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
2	National Certificate in Gamekeeping	No	Yes	Yes	Yes
2	NVQ Gamekeeping and Wildlife Management	No	Yes	Yes	Yes
3	Advanced National Certificate in Countryside Management	No	No	Yes	Yes
3	NVQ Gamekeeping and Wildlife Management	No	Yes	Yes	Yes
DMQ					
1	Deer Stalking Certificate	No	Yes	Yes	No
2	Deer Stalking Certificate	No	Yes	Yes	No
Edexcel					
2	BTEC First Diploma in Countryside and Environment	Yes	Yes	Yes	Yes
3	BTEC National Award in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Award in Countryside Management (Rural Tourism)	No	Yes	Yes	Yes
3	BTEC National Award in Fish Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Fish Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Countryside Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Fish Management	No	Yes	Yes	Yes

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in All Terrain Vehicle Handling (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in Machine Maintenance and Related Operations	No	No	Yes	Yes
2	Certificate of Competence in Vertebrate Pest Control	No	Yes	Yes	Yes

Horse care

There has been a significant expansion in the provision of equine courses over the last few years. Some specialist colleges have invested considerable sums of money in the development of facilities including stables, indoor riding areas and equine physiotherapy pools (most of which now have Centre of Vocational Excellence status). This is an area, similar to animal care, that has been driven to expand by demand from prospective students and the same questions of destination and retention within the industry apply. The industries involved with horse care are very well served with a range of qualifications from a number of well-respected awarding bodies. There are awards at levels 1, 2 and 3, including an NVQ at each level. There are **no gaps** in the provision for this industry, although a respondent to this research indicated that it would be useful to have a pre-level 1 course for the less able students. There may be **some overlaps** in the level 3 provision from Edexcel and City and Guilds with a national certificate, national diploma, national award, NVQ and advanced national certificate; in addition to the vast number of BHS awards available. The QCA data illustrate that the NVQs in this industry are not the major qualifications; level 1 is the most used (see table below for full details). The *Lantra qualification routes project* (2000) found that the most used qualification was the BHS horse knowledge and care at notional levels 1 to 4 (including riding at level 3).

Certificates awarded for NVQs in horse care to September 2002

NVQ title	Level	Certificates awarded
Horse Care	1	585
Horse Care	2	478
Horse Care and Management	3	42
Racehorse Care	2	181
Racehorse Care and Management	3	78

Data provided by QCA, February 2003.

The *Skills foresight report* (2001) found that the industries involved with horse care prize practical skills (learnt ‘on the job’), strong understanding and empathy with horses above all others. It was felt that in the future employees in some positions would need to develop skills of business administration and management. In addition customer care and IT skills could become increasingly necessary as businesses diversify.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
ABRS					
1	ABRS Grooms Certificate	No	Yes	Yes	No
1	Preliminary Horse Care and Riding Certificate	Yes	Yes	No	No
2	ABRS Grooms Certificate	No	Yes	Yes	No
2	ABRS Grooms Diploma	No	No	Yes	No
2	Preliminary Horse Care and Riding Certificate	No	Yes	No	No
3	ABRS Initial Teaching Award	No	Yes	Yes	No
BHS					
1	NVQ Horse Care	Yes	Yes	Yes	Yes
2	NVQ Horse Care	No	Yes	Yes	Yes
3	NVQ Horse Care and Management	No	Yes	Yes	Yes
BHTB					
1	NVQ Horse Care	Yes	Yes	Yes	Yes
2	NVQ Racehorse Care	No	Yes	Yes	Yes
3	NVQ Racehorse Care and Management	No	Yes	Yes	Yes
City and Guilds					
1	NVQ Horse Care	Yes	Yes	Yes	Yes
2	National Certificate in Horse Care	No	Yes	Yes	Yes
2	NVQ Horse Care	No	Yes	Yes	Yes
3	Advanced National Certificate in Horse Management	No	No	Yes	Yes
3	NVQ Horse Care and Management	No	Yes	Yes	Yes
Edexcel					
2	BTEC First Diploma in Horse Care	Yes	Yes	Yes	Yes
3	BTEC National Award in Countryside Management (Rural Tourism)	No	Yes	Yes	Yes
3	BTEC National Award in Horse Management	No	Yes	Yes	Yes
3	BTEC National Certificate in Horse Management	No	Yes	Yes	Yes
3	BTEC National Diploma in Horse Management	No	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in the Transport of Livestock by Road	No	No	Yes	Yes
1	British Horse Society British Equestrian Tourism – Assistant Ride Leader	No	Yes	Yes	No
1	British Horse Society Horse Owners Certificate – Level 1	Yes	Yes	Yes	No
1	British Horse Society Stage 1 Horse Knowledge and Care Certificate	No	Yes	Yes	No
1	British Horse Society Stage 1 Riding Certificate	No	Yes	Yes	No
2	British Horse Society British Equestrian Tourism – Ride Leader	No	Yes	Yes	No
2	British Horse Society Horse Owners Certificate – Level 2	Yes	Yes	Yes	No
2	British Horse Society Riding and Road Safety Test	Yes	Yes	Yes	No
2	British Horse Society Stage 2 Horse Knowledge and Care Certificate	No	Yes	Yes	No
2	British Horse Society Stage 2 Riding Certificate	No	Yes	Yes	No
2	Equine Industry Technical Certificate	No	Yes	No	No

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
3	British Horse Society Assistant Instructor Certificate	No	No	Yes	No
3	British Horse Society British Equestrian Tourism – Centre Manager (<i>Candidates must be over 22 years old</i>)	No	No	Yes	No
3	British Horse Society Horse Owners Certificate – Level 3	Yes	Yes	Yes	No
3	British Horse Society Horse Owners Certificate – Level 3	Yes	Yes	Yes	No
3	British Horse Society Instructor Certificate	No	No	Yes	No
3	British Horse Society Intermediate Instructor Certificate	No	No	Yes	No
3	British Horse Society Preliminary Instructor Certificate	No	Yes	Yes	No
3	British Horse Society Stage 3 Preliminary Teaching Test	No	Yes	Yes	No
3	British Horse Society Stage 3 Groom's Certificate	No	Yes	Yes	No
3	British Horse Society Stage 3 Riding Certificate	No	Yes	Yes	No
3	British Horse Society Stage 4 Intermediate Stable Manager Certificate (<i>According to the BHS this is a level 4 award</i>)	No	Yes	Yes	No
3	British Horse Society Stage 4 Intermediate Teaching Certificate (<i>According to the BHS this is a level 4 award</i>)	No	No	Yes	No
3	British Horse Society Stage 4 Riding Certificate (<i>According to the BHS this is a level 4 award</i>)	No	Yes	Yes	No
3	British Horse Society Stage 5 Equitation and Teaching Certificate (<i>According to the BHS this is a level 5 award</i>)	No	No	Yes	No
3	British Horse Society Stage 5 Stable Manager Certificate (<i>According to the BHS this is a level 5 award</i>)	No	No	Yes	No
3	Equine Industry Technical Certificate	No	No	Yes	No
3	Fellow of the British Horse Society (<i>According to the BHS this is a level 5+ award</i>)	No	No	Yes	No
4	British Horse Society Horse Owners Certificate - Level 4	Yes	Yes	Yes	No

Land-based engineering

The agricultural and garden machinery industry is quite strictly regulated and therefore most employees are encouraged to follow NVQs, many of them as part of a modern apprenticeship. There is an NVQ at level 2 and one at level 3, but no qualifications at notional level 1 or below or at level 4. There are **significant gaps** in provision for this industry at entry, level 1 and level 4, which could make progression into and through the industry difficult. This research has established that industry representatives feel there is progression through the industry and that a level 1 award could be too low level for this sector. In addition there is some agreement that a level 4 qualification is not suitable for practical trainees. There are **no overlaps** in provision.

The industry does make use of qualifications in retail and sales operations as well as the engineering awards. Many manufacturers insist on constant updating of skills for those selling and repairing their machinery and many provide training themselves. The biggest issue for the industry is the fast-changing pace of technology, which means that qualifications can soon become out of date. Training tends to be provided by specialist colleges that have good relationships with manufacturers, otherwise the costs of supplying and updating machinery would be prohibitive.

The *Skills foresight report* (2001) indicated a shift in skills needed by the sector from agricultural to garden machinery and for more ‘soft’ skills such as business skills, people management and IT. The most crucial industry-identified skill gap was for job-specific skills.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
2	NVQ Land-based Service Engineering	No	Yes	Yes	Yes
3	NVQ Land-based Service Engineering	No	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in All Terrain Vehicle Handling (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in Chain Saw and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Fork Lift Truck Operations (TA)	No	No	Yes	Yes
2	Certificate of Competence in Machine Maintenance and Related Operations	No	No	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes
2	Certificate of Competence in Pedestrian Controlled Vehicles (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Abrasive Wheel Machines	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Mowers (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Plant Machinery	No	Yes	Yes	Yes
2	Certificate of Competence in Tractor Driving and Related Operations	No	Yes	Yes	Yes

Production horticulture

There are two distinct sides to the production horticulture industry, food crops (for example fruit, vegetables, glasshouse crops, herbs, mushrooms) and ornamentals (for example flowers, bulbs, trees), which have some training needs in common as well as some specific industry technical skill needs. This is one area of horticulture that is less well served by specialist qualifications; the most used awards are all in the areas of general horticulture (for example City and Guilds certificate in gardening) rather than production specialisms. There is an NVQ at levels 1, 2 and 3 available to the industry. The QCA data do not cover all relevant NVQs, but show data for commercial horticulture level 1 with 1,058 certificates awarded to September 2002. There are no other specific qualifications at level 1, which highlights a **gap** in the routes into the industry. The HTA has been asked to develop professional certificates to fill perceived gaps in the qualification routes. The WJEC vocational certificate does have a module on production horticulture developed with industry support. There is a possibility of **some overlap** in the level 3 qualifications offered by Edexcel, but as there is only one of each type this is unlikely to be a problem.

The *Skills foresight report* (2001) identified a number of areas where increased training and qualifications will be needed at various levels within the production horticulture industries. The report particularly highlights the need for the development of production skills, such as quality control, packing and labelling. Depending on the size and type of business there could be an increased need for skills in information and production technology. All businesses will need to ensure that to some degree they have current skills in business management, marketing and customer care.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
City and Guilds					
1	NVQ Horticulture	Yes	Yes	Yes	Yes
2	National Certificate in Horticulture	No	Yes	Yes	Yes
2	NVQ Production Horticulture	No	Yes	Yes	Yes
3	NVQ Production Horticulture	No	Yes	Yes	Yes
Edexcel					
2	BTEC First Diploma in Horticulture	Yes	Yes	Yes	Yes
3	BTEC National Award in Horticulture	No	Yes	Yes	Yes
3	BTEC National Certificate in Horticulture	No	Yes	Yes	Yes
3	BTEC National Diploma in Horticulture	No	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in Fork Lift Truck Operations (TA)	No	No	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes
2	Certificate of Competence in the Safe Use of Plant Machinery	No	Yes	Yes	Yes
WJEC					
Entry	Vocational Certificate	Yes	Yes	No	No

Tree work and timber

The industries represented by tree work and timber are many and diverse and include aspects of other industries such as amenity horticulture and environmental management. Colleges often offer qualifications in combination with another land-based industry, such as agriculture or horticulture. Many people within the industry are trained by large organisations such as the Forestry Commission. There are NVQs available at levels 2 and 3, but not at level 1. There is no provision at all at level 1, which highlights a **gap** in the routes into the industry. There is a range of provision at levels 2 and 3. There may be **some overlap** in the content of level 3 awards offered by Edexcel, ABC, RHS and RFS, but they are all designed to serve a different clientele so this is unlikely to be a problem. The QCA data show that the greatest number of certificates awarded for NVQs is at level 1 (2,445 to March 2002); there is limited take-up at level 2 (158); and none at all at levels 3 and 4. This could indicate that at the higher levels individuals are choosing to take other vocational qualifications or specific NPTC certificates of competence. The *Lantra qualification routes project* (2000) indicated that the most used qualification was an SQA national certificate, which is not included in this review, but might be significant as the forestry industry is well represented in Scotland.

The *Skills foresight report* (2001) found that there could be an increasing need for those working in the forestry industry to be trained and certificated as a result of changes in regulatory requirements and mechanisation. In addition some employees will need skills in ICT, business, risk assessment and contract planning. Specific training skills were identified in harvesting operations where it was felt there could be a shortage of skilled machine operators.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
ABC					
2	Certificate in Arboriculture (Theory)	No	Yes	Yes	Yes
3	Technicians Certificate in Arboriculture	No	Yes	Yes	Yes
City and Guilds					
2	NVQ Arboriculture	No	Yes	Yes	Yes
2	NVQ Treework	No	Yes	Yes	Yes
3	NVQ Treework	No	Yes	Yes	Yes
Edexcel					
3	BTEC National Award in Forestry and Arboriculture	No	Yes	Yes	Yes
3	BTEC National Certificate in Forestry and Arboriculture	No	Yes	Yes	Yes
3	BTEC National Diploma in Forestry and Arboriculture	No	Yes	Yes	Yes
NPTC					
1	Certificate of Competence in Safe Manual Handling – Operator	Yes	Yes	Yes	Yes
2	Certificate of Competence in All Terrain Vehicle Handling (Transport)	No	Yes	Yes	Yes
2	Certificate of Competence in Arboricultural Works within Proximity Zone of Overhead Lines up to and Including 400k V – Tree Work Operations	No	No	Yes	Yes
2	Certificate of Competence in Brushcutting Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Brushwood Chipper Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Chain Saw and Related Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Forest Machine Operations	No	Yes	Yes	Yes
2	Certificate of Competence in Fork Lift Truck Operations (TA)	No	No	Yes	Yes
2	Certificate of Competence in Machine Maintenance and Related Operations	No	No	Yes	Yes
2	Certificate of Competence in Manual Handling Operations – Risk	No	No	Yes	Yes
2	Certificate of Competence in Stump Grinding Operations	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use and Operation of Elevated Work Platforms	No	Yes	Yes	Yes
2	Certificate of Competence in the Safe Use of Plant Machinery	No	Yes	Yes	Yes
2	Certificate of Competence to Climb Trees and Perform Aerial Rescue	No	No	Yes	Yes
3	Certificate of Competence in Arboricultural Works within Proximity Zone of Overhead Lines up to and Including 400k V – Tree Work Operations	No	No	Yes	Yes
RHS					
3	One Year Specialist Option Certificate	No	Yes	Yes	
Royal Forestry Society					
3	Professional Diploma in Arboriculture	No	No	Yes	

Veterinary nursing

The British Veterinary Nursing Association (BVNA) is the main body overseeing training for veterinary nurses. It works closely with the Royal College of Veterinary Surgeons to ensure standards are met. The BVNA approves all centres offering training for veterinary nurses. The approved colleges also have responsibility for monitoring the veterinary practices where training/work experience is offered, which means that there are fewer centres with the resources to offer this provision. The industry has an NVQ at levels 2 and 3, which are the main qualifications used by veterinary nurses. The latest QCA data show that the number of certificates awarded at level 2 is the highest (1,814), with 630 at level 3 as at March 2002. There was a pre-veterinary nursing qualification at notional level 1 offered by the BVNA, which is now incorporated as an evidence route for NVQs. The main concern for veterinary nurses in the *Lantra qualification routes report* (2000) was the lack of opportunities for qualifications at levels 1 and 4, which made progression within the industry difficult. There **are gaps** in provision for entry into and progression through the profession. There are **no overlaps** in provision.

The *Skills foresight report* (2001) highlighted the need for continual updating of job-specific skills to take account of changes in treatments and equipment. In addition some generic skills such as communication, problem solving and ICT could be needed.

Level	Qualification title	Age range			NQF
		< 16	16–18	19+	
ABC					
2	Certificate in Animal Nursing Assistants	No	Yes	Yes	Yes
Animal Care College					
3	Veterinary Nursing Correspondence Course	No	Yes	Yes	No
NPTC					
2	Certificate of Competence in the Safe Use of Veterinary Medicines	No	Yes	Yes	Yes
3	Certificate of Competence in Planning and Supervising the Safe Use of	No	Yes	Yes	Yes
RCVS					
2	NVQ Veterinary Nursing – Small Animal and Equine Evidence Routes	No	Yes	Yes	Yes
3	NVQ Veterinary Nursing – Small Animal and Equine Evidence Routes	No	Yes	Yes	Yes
3	Certificate in Equine Veterinary Nursing	No	No	Yes	Yes

Appendix 4: NQF and non-NQF qualifications available by industry

Industry and qualification level										
	Entry level		Level 1		Level 2		Level 3		Total	
	NQF	Non-NQF	NQF	Non-NQF	NQF	Non-NQF	NQF	Non-NQF		
Agricultural crops		3	4	2	19		12		40	
Agricultural livestock		3	4	2	19		9		37	
Amenity horticulture/ Landscaping		1	4	1	21	4	9	7	47	
Animal care			2		5	2	6	1	16	
Animal technology					1		4	1	6	
Aquaculture			1	2	3		1		7	
Environmental conservation		1	4		16		14		35	
Farriery				1		1	2	1	5	
Fencing			1		2		1		4	
Fisheries management			1	2	3	1	8		15	
Floristry		1	2	1	4	1	5		14	
Game and wildlife management			1	1	6	1	9		18	
Horse care			4	6	6	9	8	18	51	
Land-based engineering			1		11		1		13	
Production horticulture		1	2		6		4		13	
Tree work and timber			1		16		5	2	24	
Veterinary nursing					4		1	2	7	

Key: Possible gaps



Potential overlap

