

SKILL GAPS IN THE AUTOMOTIVE SUPPLY CHAIN IN THE WEST AND EAST MIDLANDS 2005

TRAINING AND WORKFORCE DEVELOPMENT

SKILL GAPS IN THE AUTOMOTIVE SUPPLY CHAIN IN THE WEST AND EAST MIDLANDS 2005



TRAINING AND WORKFORCE DEVELOPMENT

7.1 Introduction

The exhaustive evaluation of skill issues and needs undertaken in the previous sections illustrated the considerable evidence for changing expectations of the roles and responsibilities in the automotive and engineering sector, and therefore of the need for adjustments and additions to the existing portfolio of workforce competences. It is now timely to take a close look at what training and workforce development was under way or in the planning stages, and at any issues and problems encountered by businesses in locating, providing or accessing the training they needed.

This section commences with an outline of training plans and budgets, followed by an examination of the qualifications profile, and then moves on to a detailed appraisal of training activity both existing and proposed. Thereafter various issues are examined, including what training businesses would like to do but have not been able to, highlighting the barriers experienced and any support issues that were raised.

7.2 Written training plans and training budgets

Firms were asked if they had a written training and workforce development plan and a specified training budget. They were also asked to state the value of their training budget.

7.2.1 Written training plans

Whereas the vehicle manufacturers had written training and workforce development plans, it was much less likely among the suppliers to have a formalised plan (see Figure 7.1). Indeed:

- Six of the 11 1st tiers in the survey indicated that they did not have a written training plan, nor did 3 of the 7 interviewed SMEs.

Some suppliers pointed out that although they did not prepare anything as strategic as a formal training and workforce development plan, they did keep lists or matrices of training needs and courses undertaken. They had also prepared training plans specifically for obtaining certain standards or accreditation

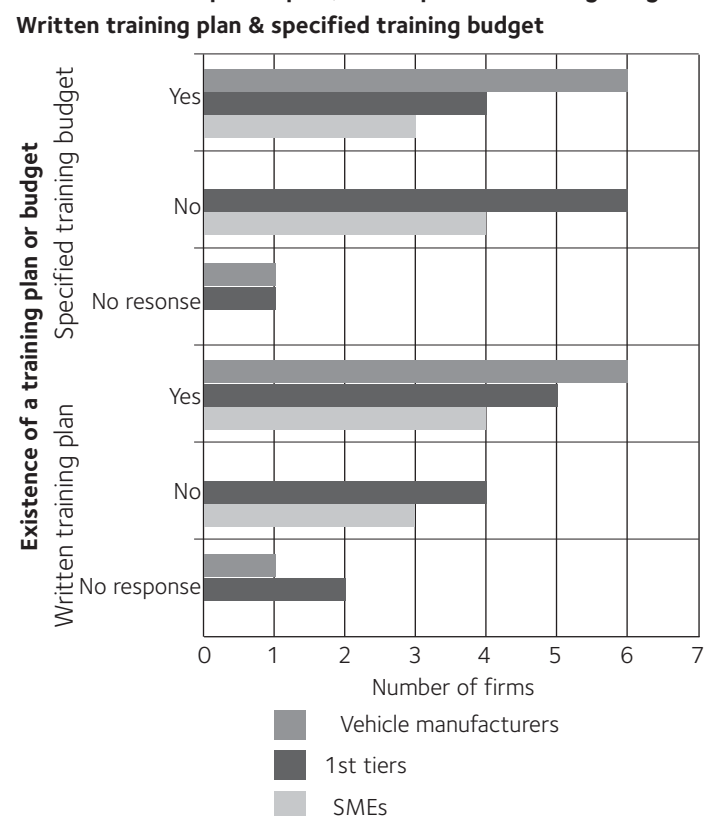
7.2.2 Specified training budgets

The likelihood of having a specified training budget was also less likely among the suppliers (though usual among the vehicle manufacturers), since:

- Four 1st tiers revealed that they did not have a budget set aside specifically for training and workforce development, nor did 3 of the SMEs.

This did not necessarily mean that no training or workforce development was undertaken, but that any training expenses were deducted from the central budget. For instance, an SME said: “We offer training to anyone on the workforce to do any training they want, and we will pay for it. Our training budget is open-ended. We do it as we need to do it.”

Figure 7.1: Existence of a written training and workforce development plan, and a specified training budget.



Cases: 7 vehicle manufacturers, 11 1st tiers, 7 SMEs.

7.2.3 Value of the training budgets

The value of the training budgets – for those firms which had one set aside solely for training and workforce development – is shown in Text Box 7.1 (overleaf).

(i) Vehicle manufacturers

The value of the training budget for vehicle manufacturers ranged from £250,000 to ‘millions’ (exact figure not specified). Two vehicle manufacturers expended less than £1 million a year on training. Another vehicle manufacturer match funded their £2.2 million training support to a combined total of £6 million a year. A figure of £1.4 million was mentioned by a fourth. The average training budget for these 4 firms was just over £2 million.

Text Box 7.1: Value of the annual training budgets

Vehicle manufacturers:

Maximum known: £6 million

Minimum known: £250,000

Average (4 firms): £2 million

1st tiers:

Maximum known: £102,000

Minimum known: £38,000

Average (4 firms): £57,5000

SMEs:

Maximum: £31,000

Minimum: £5,000

Average (4 firms): £19,000

(ii) 1st tiers

The value of the training budget for 1st tiers ranged from the lowest figure of £38,000 to a high of £102,000, but three of the four who supplied their annual figures had budgets of £50,000 or less. The much higher expenditure by a single 1st tier raised the average to £57,500.

All of the 1st tiers with a specified training budget employed between 250 and 475 people.

One of the firms without a specified budget was a small 1st tier firm. The remaining cases included 4 which were branch plants of very large groups, in 3 cases overseas-owned.

Two of these firms did not hold a central training budget because each department had its own. In another case, training funds came out of the Human Resources department’s budget.

(iii) SMEs

For the 4 SMEs with a specified training budget, the figures ranged from a low of £5,000 a year to £31,000 at most. The average for these 4 firms was £19,000.

Two of the 2 SMEs which did not have a specified training budget were the smallest firms in the survey, with fewer than 20 employees. Both were located in the East Midlands. The remaining SME was a West Midlands firm with over 100 employees and a turnover above £7 million.

7.3 Qualifications held and in course of study

It proved difficult to obtain comprehensive data on qualifications, particularly those already held. This kind of information is not always held in an easily accessible format, and it is time-consuming for firms to draw it together even when it does exist. Some information was obtained from the vehicle manufacturers and 1st tiers, but it tended to be piecemeal, often drawing on the individual recollections of survey participants and, sometimes, obliging colleagues. It was easier to obtain more precise details from the SMEs, simply because they were smaller and respondents were able to draw on their own knowledge.

For these reasons, the data on qualifications held and working towards should be taken as a guide rather than as definitive. A list of those specifically mentioned is given in Appendices 12 and 13.

7.3.1 Degrees and higher degrees

Little precise information was obtained on higher degrees held, though some details were supplied by vehicle manufacturers and 1st tiers on specific Masters degrees that people were currently working towards (see also section 7.4). These were all MSc degrees in engineering and MBAs in business administration. The exception was one PhD in quality management among the 1st tiers. It is important to note that:

- There was no indication that any personnel in the SMEs either possessed, or were studying for, any higher degrees.

Not surprisingly, engineering subjects were most prevalent among the first degrees held, and production engineering, mechanical engineering, and metallurgy were all mentioned. Numbers of engineering graduates in the vehicle manufacturers and 1st tiers were almost too high to count – 180 was mentioned by one 1st tier. In the electronics 1st tier, specialists possessed electronics rather than engineering degrees. Also mentioned were degrees in management, particularly among the vehicle manufacturers.

These subjects were also predominant among the subjects currently being studied. For instance, one vehicle manufacturer who had around 50 employees with degrees in engineering, management or technical specialisms, also had 15 people studying for engineering and other degrees. But it is notable that:

- Very few of the degrees in course of study were in design engineering.

Degrees in other subjects were minimally highlighted (but it cannot be presumed that they did not occur). For instance, degrees currently being pursued in Human Resource Management and Quality were mentioned by a 1st tier. One small 1st tier did single out the degrees in History and Economics that their staff held, perhaps because they were the only 2 degrees that any staff possessed.

The number of first degrees held within the SMEs was very low – only 7 were mentioned across the whole group of 7 firms – all in engineering subjects. Only one instance of an individual currently studying for a degree was noted, this also in engineering.

7.3.2 Other business and technical qualifications

Little information was obtained from the vehicle manufacturers and 1st tiers on other business and technical qualifications held, such as diplomas and higher certificates, though the SMEs were more forthcoming. Even here, though, there was considerable uncertainty by respondents as to precise topics studied and, in some cases, what people actually possessed.

The vehicle manufacturers tended to single out the possession of HNCs in technical subjects, as did some of the suppliers. Two firms – a vehicle manufacturer and a 1st tier – stated that 50 or more people had HNC qualifications.

The SMEs highlighted HNCs, HNDs, other technical certificates, and a range of specialist certificates and diplomas relating to functional competences such as accountancy, purchasing and supply (CIPS), and personnel and development (CIPD), and, to a lesser extent, business studies.

The only qualification in sales and marketing mentioned among these was a postgraduate diploma in marketing management held by one individual in a 1st tier firm.

The diplomas and certificates currently being studied were much the same as those already held, with HNCs, HNDs, ONCs and IMechE courses being pursued, mainly in technical and engineering subjects, though (in the case of one vehicle manufacturer) HNCs in business were being taken. Management qualifications were also noticeable among the few being pursued within the SMEs.

Qualifications relating to functional competences also dominated among those in course of study, including purchasing and supply (CIPS), personnel and development (CIPD), and accountancy and finance (e.g. ACCA, AAT, CIMA). A diploma in logistics was being studied by 4 people in Stores and Supply Chain Management. One administrator was undertaking a diploma in payroll. An individual in Technical and Engineering was studying design engineering.

Qualifications in quality were mentioned by 2 1st tiers, specifically an HND, and the Institute of Quality Assurance qualification (IQA).

Another 1st tier had someone currently studying Health and Safety Management (IOSH), though this appeared to be the exception. Indeed:

- It is perhaps remarkable that this was the only instance mentioned of study for this topic, or possession of existing qualifications, given the emphasis that firms were currently placing on skills relating to Health and Safety.

7.3.3 Apprenticeships, including City and Guilds and NVQs

The data on apprenticeships held within vehicle manufacturers was rather piecemeal.

One vehicle manufacturer provided 40 – 60 Modern Apprenticeships a year, another 20 a year. A distinction between adult apprenticeships and young people's apprenticeships was made in one case. Another stated that about 100 employees already possessed apprenticeships. Given the importance placed on the Maintenance function, it is not surprising to find one vehicle manufacturer providing 98 apprenticeships/NVQ3 level studies in this subject, but this was a rare occurrence. Again:

- The low overall priority given to Maintenance apprenticeships is perhaps surprising given the increasing emphasis on preventive maintenance, the need for multi-skilled Maintenance/Operators, and existing and future skill shortages.

Graduate apprenticeships, both held and in course of study, were only mentioned by the vehicle manufacturers. One firm provided 20 graduate apprenticeships a year.

Among the 1st tiers, apprenticeships in course of study included both mechanical and electrical engineering.

The SMEs, in particular, tended to speak of City and Guilds and NVQs in relation to apprenticeships and comparable qualifications held. They also cited a range of subjects – including IT, joinery, and customer service – rather than just production. The distinction between Modern and Advanced Modern Apprenticeships was only apparent among the SMEs.

7.3.4 Other NVQs (excluding apprenticeships)

Information on other NVQs, unrelated to apprenticeships, was again rather slight.

Among the vehicle manufacturers, possession of NVQ2 and 3 was most common, with 300 people holding this qualification. No information was provided by the 1st tiers. NVQs at levels 1 and 2 were most evident among the SMEs. The subjects studied were wide-ranging, including business administration, warehousing, manufacturing operations, and electronics, customer care, team leader training, and a pilot programme for supervisors.

One vehicle manufacturer had about 45 shopfloor employees doing NVQ2 in lean manufacture, and a total of 4,500 would do this within the next 3 – 4 years. They also intended to pilot an NVQ for engineers. Study for NVQ4 (equivalent to an HNC) in technical engineering was more unusual.

Some limited study for City and Guilds qualifications was noted, including autocad and electrical maintenance – both shortage subjects. Most of the NVQ study among SMEs was related to shopfloor competences.

7.3.5 Other certificates

Various other certificates were mentioned by firms – certainly just a flavour of the range of certification that was undertaken by firms at all levels. These were mentioned here mainly (apart from a small vehicle manufacturer) by the SMEs. They included a wide range of subjects, among them Health and Safety, first aid, basic computing, basic skills, and fork lift truck driving. Technical subjects included welding and non-destructive examination techniques.

Unusually, one SME had one individual studying networking. It is worth noting that:

- 'Networking' was the only explicitly 'soft' skill mentioned here among the qualifications either held or in course of study that was highlighted by any of the survey participants.

7.4 Training and providers used

This section discusses the training undertaken and the use of different providers, presenting:

- An overview of the courses and topics studied.
- An overview of definite plans for new courses and training topics.
- Leadership and management development training.

- Cultural values, continuous improvement and lean principles training.
- The use of different training providers, and
- E-learning.

A detailed list of any current training and workforce development activity that was mentioned by 24 firms is given in Appendix 14, and plans by 13 firms for training provision to commence during 2005 are listed in Appendix 15.

It should be borne in mind that the training listed for vehicle manufacturers gives but a flavour of all the training delivered or accessed since (except for the smallest VM surveyed) it does not represent the full extent or complexity of all their training and workforce development activity. Furthermore, although all 7 vehicle manufacturers provided some information, for 3 of these the details supplied were particularly limited due to time constraints. One of the 1st tiers supplied no training information at all, though they did indicate that their overseas-owned group did little workforce development.

7.4.1 An overview of courses and topics studied

An idea of the complexity and extent of courses and topics studied, at least among the vehicle manufacturers, was given by one firm which was doing 5,000 training interventions a year. They had 500 people studying for qualifications, and people were doing an average of 33 days training of their own, anything from NVQs to MBAs and PhDs. If they wanted to study at night school, for example for an HNC, they were able to. Others were doing short courses and industrial training programmes, technical courses (various), and 'people' courses (i.e. in 'soft' skills).

A similar arrangement was outlined by a second vehicle manufacturer who stated: "We have a company support for education scheme to do own-time learning, doing whatever qualification you apply for." A personal educational and development scheme (PEDS) was run by a further vehicle manufacturer from their Human Resources department, with the objective of helping people to improve themselves. They also had an assisted development programme (ADP) allowing all employees to apply for funding to do vocational and non-vocational training to the value of £250 and £125 a year, respectively. People could study their own interests such as

golf, scuba diving, or sewing.

Some of the suppliers also exhibited a wide spectrum of training activity, particularly among certain large and training-active 1st tiers though, due to the varying levels of detail supplied by individual suppliers, firm comparisons should be approached with caution. Nevertheless, with reference to Appendix 14 some general points can be observed:

- Training activity was particularly prolific for Managers (including Senior Managers and Directors), Manufacturing Operators and Technical and Engineering personnel, as well as Quality.
- Much of the training for Manufacturing Operators was process or materials related. An important exception is team leader training.
- Much of the training for Engineers related to advanced technical, production/process and design/software skills. Key exceptions are skills training in 'soft' skills for customer facing personnel e.g. in Development, and a few examples of training in leadership, management and team working skills. One 1st tier was intent on instilling knowledge of the Toyota Production System into its engineering staff.
- Little training activity was mentioned specifically for Purchasing staff. Only one firm – a 1st tier – highlighted practical negotiation courses, though this may also have been included in the communication skills provision of one vehicle manufacturer, and was also part of CIPS studies that a sprinkling of personnel were engaged in or had recently completed.
- Training for Stores, Warehouse, Despatch and Supply Chain Logistics personnel tended to be practical and functional, including IT/software tracking and handling systems. Exceptions included one overseas-owned vehicle manufacturer that needed Stores staff to possess language competence, and another that included this group in its ongoing development programme which partly involved communications training.
- Not surprisingly, training for Quality staff centred on quality tools and techniques, but also included a range of other activity such as problem resolution, lean manufacture, leadership skills, and processes. Quality staff were also included in some technical training for Engineering personnel.

- Training for Systems and IT staff was notable for its limited mention. Apart from the management training provided by a vehicle manufacturer, it concerned IT and system skills, reflecting the need to keep up-to-date.
- Similarly, very little training was supplied specifically to Sales and Marketing staff, and none was mentioned by either the vehicle manufacturer or SMEs (though these were probably included in general management and 'soft' skills training. Training they receive was mainly related to their customer facing role.
- Training for Finance and Administration covered a range of functional competences, legislative knowledge (e.g. financial regulations) and IT. No courses in leadership skills were mentioned for this group.
- Human Resources staff were receiving training in employment-related skills such as new legislation (notably Employment Law), discipline and dismissal procedures and recruitment skills. An exception was the training in consultation skills noted by a 1st tier engines manufacturer. No leadership training was specifically recorded.
- Very little training was provided specifically for Training staff, though it must be remembered that Human Resources staff were frequently also the trainers themselves. This is why e-learning appears among the training for HR rather than under Training in Appendix 14. Only one Trainer (in a vehicle manufacturer) appeared to be developing their existing skills in training delivery, but an SME had trainer training listed on the remaining elements of its Brilliance programme.

Much of this training was on an ongoing basis throughout the forthcoming year or more, but other proposals were aired for training courses or topics commencing in 2005.

7.4.2 An overview of definite plans for new courses and training topics

Definite plans revealed by 14 survey participants for new courses and training topics starting in 2005 bore strong similarities to existing training – for example in IT, NVQs, leadership training (though with less emphasis on team leaders and supervisors), and technical and process skills (see Appendix 15). But there were also a few major differences:

- A vehicle manufacturer was intending to roll out throughout the company their group's cultural values/continuous improvement way of working – the Toyota Way (see section 7.4.4 and Appendix 16). Another vehicle manufacturer expressed a desire to commence their own cultural values programme, funding allowing. And an SME with a Brilliance programme already under way was planning to progress through the remaining topics (see section 7.4.4 and Appendix 17).
- A vehicle manufacturer had plans for a Supply Chain Development Programme, possibly using consultants from the Society of Motor Manufacturers and Traders (SMMT)/Industry Forum.

This is an important development because, while formal supplier development programmes are not uncommon between the 1st tier and their supply chains, it is not something that historically has been customary among the vehicle manufacturers and their suppliers, at least among the non-Japanese-owned groups. How far it will reach into the supply chain, though, is not known. But, certainly, it could signify a growing and more widespread trend, since a small vehicle manufacturer had already taken upon itself a certain amount of lower tier supplier development recently, albeit reluctantly, in order to improve its entire supply chain competitiveness.

- Another vehicle manufacturer was intending to start a knowledge enhancing programme for their Senior (?and other) Managers on global economics through liaison with Professor Garel Rhys in Cardiff, the Technology Innovation Centre in Birmingham, and UCE also in Birmingham.
- There was also more evidence of training via in-house or intra-group training centres (see section 7.4.5 (i)).

A detailed reference list of all the training and development activity undertaken by each occupational group is given in Appendix 14, and of future plans in Appendix 15. It is now proposed to give an overview of existing and proposed training on leadership and management development, followed by an examination of cultural values, continuous improvement and lean principles, which contrasts the training provision among the survey participants and across the range of occupational groups.

7.4.3 Leadership and management development training

Some striking points emerge when juxtaposing the data on training provided and planned on leadership skills and management development (Table 7.1). For instance, this training comprised a sizeable tranche of that overall, and a wide variety of training providers was used, including commercial providers and consultants, Government and other agencies, Further and Higher Education, and vehicle manufacturers' own staff.

Among future plans for leadership training, one of the vehicle manufacturers singled out Sandhurst Military College to train its Senior Management, as well as using a PhD student from Aston University.

More particularly, three observations stand out:

- Leadership training for team and line leaders, supervisors and other junior managers in Manufacturing Operations is markedly more prevalent than for Senior Management, or for managers overall, among existing provision, but was not specifically mentioned among future plans.
- Leadership training for management and staff in Technical and Engineering disciplines including Quality is also notably present.
- Leadership training is evident among both vehicle manufacturers and 1st tiers, but is almost wholly absent among the SMEs (though there were a few cases of individual managers studying for management qualifications in their own time). The only SME providing leadership training for employees was a prototype sheet metalworker using Sutton Coldfield College to supply team leader training to 2 Manufacturing Operators. And only one SME was among the few firms to indicate any fresh plans to embark on new leadership skills training.

Table 7.1: Leadership and management development training.

Course or training	Provider	Company and occupations trained
Existing leadership and management development training:		
Leadership development	Not specified	Vehicle manufacturer: Managers, team leaders
Leadership skills	Various, including UCE	Vehicle manufacturer: ?any occupations
Leadership development	UCE ?and own staff	Vehicle manufacturer: Managers
Situational leadership	Company's own staff	Vehicle manufacturer: Managers
Team leader training	Company's own staff	Vehicle manufacturer: Team leaders
Team leadership/mgt. skills for supervisors	Independent consultant	Vehicle manufacturer: Manufacturing supervisors
Team leader training	LMR (commercial training Provider)	Vehicle manufacturer: Manufacturing team leaders
Leadership skills	Rand (commercial tp) and HE institutions	Vehicle manufacturer: Engineering
Management training /individual coaching	John Matchetts (commercial training provider)	Vehicle manufacturer: Quality and other Mgrs.
Leadership development (Group's programme)	Ashridge Management College (commercial tp)	1st tier: any Managers
Leadership and management skills	Government skills agency (unspecified)	1st tier: Production Line Manager
Leadership course	Industrial Society, via Leading edge (Commercial)	1st tier: Quality staff
Supervisory skills	Skillspath (commercial training provider)	1st tier: Managers and supervisor
Management skills	STC (Sandwell College's training provision)	1st tier: Managers
Leadership skills	Chamber of Commerce, Northampton	1st tier: Line leader, Manufacturing
Leadership skills (ILM qualification)	LearnDirect, co-ordinated by ASSA	1st tier: Grade 1 + 1st Line Mgrs, Materials, Quality, Manfr., Maintenance
Team leader training	Sutton Coldfield College	1st tier: Manufacturing Operators
Team leader training	Sutton Coldfield College	SME: 2 Manufacturing Operators
Planned leadership and management development training:		
Supervisory procedures (internal processes)	Company's own staff	Vehicle manufacturer: Other supervisors
Leadership for senior managers	Consultant from Sandhurst Military College; Aston Univ PhD student	Vehicle manufacturer: Senior Managers
Leadership skills	Commercial training provider	Vehicle manufacturer: Senior Managers
Leadership skills	Institute of Leadership Mgt	1st tier: Not specified
NVQ3 in Management	Protec or MOST (commercial tp)	1st tier: Level not specified
Runge leadership course	Industrial Society	1st tier: Engineering
Leadership and team work (part of a Brilliance Prog.)	Not specified (?own staff)	SME: Any/all in the company

Note: FE/HE study for management qualifications is not included in this table.

Refer to Appendices 14 and 15. tp = training provider

7.4.4 Existing and proposed training on cultural values, continuous improvement, and lean principles

Three firms spoke of their existing, ongoing, or proposed cultural values or cultural improvement programmes (see Table 7.2 and Appendices 14 and 15). Two of these were vehicle manufacturers, the remaining firm was a machining and fabrications supplier employing 111, with a turnover of £7.3 million and located in the East Midlands.

One of the vehicle manufacturers commented that they would like to set up a cultural values training programme if funding allowed (no details were supplied). But another vehicle manufacturer was definitely on track to (or perhaps had already begun to) roll out its own cultural values/continuous improvement way of working – The Toyota Way – throughout the company (see Appendix 16). Its cultural values and improvement programme consisted of:

1. Forming a long-term vision, and meeting challenges with courage and creativity.
2. Kaizen, or continuous improvement, including building lean systems and structure, as well as promoting organisational learning.
3. Genchi Genbutsu, or going to the source to find the facts to make correct decisions, build consensus and achieve goals at our best speed.
4. Respect for others, including mutual trust and mutual responsibility.
5. Teamwork, including a commitment to education and development, and respect for the individual; realising consolidated power as a team.

The Toyota Production System was said to comprise a part of the Toyota Way. Therefore, while some firms were benchmarking the Toyota Production System, or variants such as the Ford Production System, and were intent on applying lean principles or focusing on lean manufacture particularly on the shopfloor, the Toyota Way was apparently concerned with instilling a much broader cultural values and continuous improvement programme. The company's determined ability for the self-critical appraisal of its systems, processes and procedures appeared to be a key element of its competitive advantage.

Table 7.2: Existing and planned training on continuous improvement and lean principles.

Course or training	Provider	Company and occupations trained
Existing training on cultural values, continuous improvement and lean principles:		
Lean principles/manufacture	Professor Dan Jones, Lean Enterprise Academy	Vehicle manufacturer: Extended leadership group
Lean NVQ2: applying lean principles	Not specified	Vehicle manufacturer: Manufacturing Operators
Lean manufacture	Not specified	Vehicle manufacture: Manufacturing Operators
NVQ in business improvement techniques	ASSA, commercial training provider	1st tier: Manufacturing Operators
Toyota Production System	Own staff, based at group's other plant	1st tier: Technical and Engineering
Lean Manufacture	Commercial training provider	Vehicle manufacturer: Quality staff
Lean manufacture	Technology Innovation Centre, Birmingham	SME: Office staff and Manufacturing Operators
Brilliance programme: own cultural improvement prog.	Company's own staff	SME: entire company
Planned training on cultural values, continuous improvement and lean principles:		
The Toyota Way	Company's own staff	Vehicle manufacturer: ?all employees
Cultural values programme	Not specified	Vehicle manufacturer: ?all employees
Lean manufacture	Company's own staff	Vehicle manufacturer: Manufacturing Operators
Lean production development	Company's own staff ?and other providers	Vehicle manufacturer: Technical and Engineering
The lean office	Commercial training provider	Vehicle manufacturer: Technicians, Purchasing, Quality staff
Brilliance programme: remaining elements	Company's own staff	SME: entire company

This table excludes performance improvement and quality training.

Refer to Appendices 14 and 15.

Unusually, one of the SMEs had developed its own cultural improvement programme, which it termed its 'Brilliance Programme' (see Appendix 17). This also had at its heart total organisational development though was perhaps more prosaic. In addition to a series of practical competences relating to increased efficiency and productivity and waste elimination, the Brilliance programme also included topics such as:

- Effective meetings.
- Customer care.
- Problem solving.
- Capacity planning and scheduling.
- Strategy and planning.
- Effective purchasing.
- Leadership and teamwork.
- Business.
- Negotiating.
- Project management, and
- Train the trainer.

This was an ongoing programme which was evidently delivered mainly by its own staff. Indeed, the problem of finding people in-house to deliver the training was noted by the company.

7.4.5 The existing and proposed use of training providers

The use of training providers discussed here comprises:

- In-house and intra-group training.
- Further and Higher Educational Institutions.
- Commercial training providers and consultants.
- Equipment and software suppliers.
- Trade associations and societies, and
- Government and other agencies.

(i) In-house and intra-group training

All firms provided in-house training delivered by their own staff (see Appendices 14 and 15), but among some there was an increasing interest in establishing in-house or intra-group training centres to supply specialist training, aided in certain cases by the availability of Government funding. It was evident that:

- The formation of training centres occurred where bespoke training was required, and better control of its quality, content and delivery, or because training in specific skills was non-existent in the market-place.

Certain larger vehicle manufacturers already had their own training or development centres but there were also indications of some plans to expand this area of provision. For instance, one vehicle manufacturer was planning to set up its own Lean Centre of Excellence 2 years ahead. Another overseas-owned VM sent their Manufacturing Operators and supervisors to their group training centre at a nearby plant. They were also establishing development centres for management and staff (this part of the programme had already commenced) in order to conduct formal appraisals of their skills and potential. This company also had the benefit of training supplied at its plant by group trainers from head office overseas.

Another vehicle manufacturer had its own training centre based at its Midlands plant with a suite of training rooms where they trained people in office functions, and was also intent on rolling out their group's continuous improvement way of working.

A suite of dedicated training rooms was precisely what was on the 'wish list' of a further VM that had an active workforce training and development programme but limited in-house facilities.

Mentioned by another vehicle manufacturer was its formation of a training school for dealerships and associated businesses, focusing on sales techniques including 'soft' skills.

Unusually, too, a few suppliers had their own training schools. A number of larger 1st tiers had the benefit of access to their group's training facilities or specialist trainers. A supplier of powertrain components was part of a large multinational group which had an international technical university (overseas) to which they could send their people for technical training, e.g. on rubber materials technology. A 1st tier supplier of steering and suspension components was forming a technical centre at its West Midlands plant (with regional development agency assistance), and also intended to send its Purchasing staff to the group's Purchasing Academy which was due to be set up during 2005 at another plant.

The lack of external process skill training in cold forging methods underlay the decision of an SME to establish its own training centre during 2005 to deliver this training, through support from Skills4Auto. Conceivably:

- There will be a growing need for this kind of in-house process training provision to occur as external organisations fold or cease to provide training because it is uneconomic to do so.

It is also pertinent to consider that:

- The training of trainers will become more of an issue, and demand constant attention to ensure that their competences are refreshed and constantly updated, in order to keep firms at the forefront of knowledge.

(ii) Further and Higher Educational Institutions

Numerous local universities and colleges were used including Coventry, Warwick and UCE, also City College in Coventry, Dudley College, Sutton Coldfield and Matthew Boulton (see Text Box 7.2, overleaf). Birmingham University was not mentioned. Neither were institutions mentioned in the north of the West Midlands such as those in Shropshire and Staffordshire, including Keele University. However, few firms

were interviewed from that part of the region, and one of those that was located in that area did not provide any training information.

Firms tended to use local educational institutions if they provided the training and support they required. For instance, a vehicle manufacturer spoke of their “business partnership” with Sutton Coldfield and City Colleges to deliver NVQ training at their plant, and they had been there for the last 4 years (see Appendix 14 for other links).

Text Box 7.2:

The Use of Further and Higher Educational Training Providers

Midlands Universities

Aston

Coventry

De Montfort, Leics

Derby

Harper Adams

Leicester

Loughborough

Nottingham

UCE

Warwick

Wolverhampton

Worcester College of Technology

Universities outside the Midlands

Henley Management College

London Business School

Cardiff Business School

Sandhurst Military College

Midlands FE Colleges

Bromsgrove

Burton

City College, Coventry

Dudley

First College, Louth

Hinckley and North Warwick

Matthew Boulton, Birmingham

North Birmingham

North [East] Worcestershire

Sandwell

Solihull

Sutton Coldfield

Tresham College, Corby

Colleges outside the Midlands

Sheffield

A few outlying providers were listed, and these were important exceptions. They included:

- Henley Management College and London Business School which a 1st tier powertrain components manufacturer used for online/distance learning MBAs undertaken by their Directors.
- One individual from a 1st tier in south Leicestershire was studying part-time at Nottingham University (or FE college) for a CIPD in personnel and development.
- A Derbyshire-based SME operating from the Peak District had closer links with Sheffield than with Derby, and used Sheffield College for a production machinery foundation course for shopfloor apprentices. They also used Brimsworth Training Centre for training on how to use machinery. The college was also their NVQ assessor.
- A vehicle manufacturer had plans to acquire knowledge of global economics through liaison with Professor Garel Rhys at Cardiff as well as from the Technology Innovation Centre, Birmingham.
- Another proposed to use consultants from Sandhurst Military College for leadership training.

Study for qualifications at Midlands universities and colleges was noted, as well as a wide range of management, business and technical courses, whether delivered at university or college, face-to-face in the workplace, or (in some instances) by online/distance learning.

Training needs assessments were also mentioned by an SME, using Sutton Coldfield College prior to the college’s delivery of the necessary training. FE colleges also had an important role to play in NVQ training and assessment. For example, Dudley

College was the assessor for NVQ training in customer care which was undertaken by 4 staff in a tube components SME. Worcester College of Technology monitored the adult NVQ training undertaken by Manufacturing Operators at a vehicle manufacturer's plant. Sutton Coldfield College provided NVQ support (including team leader training and apprenticeship training) to a 1st tier batteries manufacturer. This training was free through a grant from the LSC.

In a few cases, the delivery of courses in 'soft' skills was highlighted. Due to the lack of precise information supplied it is difficult to be certain which universities or colleges delivered this type of training. One exception is UCE, which supplied training in leadership skills and interpersonal skills to a vehicle manufacturer.

(iii) Commercial training providers and consultants

Relatively few commercial training providers or consultants were named, or their locations, but it is clear from the topics mentioned by survey participants that a very wide spectrum of training was supplied for all and any occupations, whether face-to-face in the workplace, at hotel or commercial conference venues, or at the training provider's own training centre if they had one.

a) Specific technical and operational skill training

This included:

- Quality training, accreditation and process documentation: for example, SGS was mentioned in relation to QS 9000 internal auditing. Iquentis was specified for Global 8D and 6 Sigma training, and as one provider for FMEA training. XR Training was named for PPAP (pre-production parts approval) training.
- IT training, such as Microsoft Outlook, Excel etc, running an IT system. Providers included Pitman.
- Software training, e.g. Co-create 3-D solid modelling delivered by CSI, at Newbury.
- Forklift truck driving.

b) Manufacturing and process training

This was mentioned by a few firms, for example in respect of:

- Welding training, delivered by MGTS at their own training centre in Coventry, as well as in the workplace. This cost £500 per person for a 3 – 5 day course.
- CAD enhancement training, delivered by Rand.

c) Certain NVQ training or study for vocational diplomas

This was delivered or assisted by commercial providers, such as:

- NVQs in stores and warehousing.
- A diploma in logistics.
- An NVQ in business administration, delivered by Hereford and Worcester Group Training.

d) Training in ancillary skills.

This included:

- Health and Safety/risk assessment.
- First Aid.
- Fire Marshall training.

e) Specific business-related, communications and interpersonalskill training and one-to-one coaching

Examples included training in:

- Languages.
- Strategic thinking/management: one provider was Ashridge Management College.
- Public Relations.
- How to speak on TV.
- Vendor training, delivered by Swisslog.
- The use of assessment and personality profiling, and aptitude testing tools.
- Leadership development and management skills, including for team leaders and supervisors: one named provider was LMR. John Matchetts was another named consultant, used by a vehicle manufacturer for all their management training.
- Supervisory skills on the shopfloor, e.g. dealing with unacceptable behaviour.
- Problem resolution, training delivered by PMI.

(iv) Trade associations and societies

Few trade associations were mentioned as training providers but among these the Engineering Employers Federation was most prominent. This organisation delivered training both in the workplace and at their own training centre in Leamington Spa. Not only did they train people in technical skills (including for apprenticeships) but also in other skills which enabled individuals to develop their interpersonal effectiveness and knowledge of the business environment. EEF courses undertaken and planned included:

- Employment legislation, supplied to 50 managers of a 1st tier engine manufacturer.
- Consultation skills, delivered to the same 1st tier's line managers, employee representatives and Human Resources staff.
- Discipline and dismissal procedures, delivered to a 1st tier steering and suspension component's Human Resources staff.
- Statistical process control, delivered to Quality staff.
- Hydraulics and pneumatics training proposed for delivery to a 1st tier's engineers.
- Reading engineering drawings, for a 1st tier's setters.

Other trade associations included the IPC, a US printed circuit association which did not deliver the training directly, but supplied training materials on CDs and DVDs which were used by a 1st tier's staff to train operators in technical skills (see section 7.4.3).

The Weld Institute was intended to be used by a 1st tier for welding training to Manufacturing and Engineering trainees.

Other societies and specialist interest organisations included:

- The Institute of Operational Management: production/business management training.
- The National Fluid Power Company: a hydraulics and systems quality programme for Manufacturing Operators and other personnel delivered at the NFPC training centre, Derby, and in the workplace.
- The Industrial Society: leadership skills, delivered to Quality staff via Leading Edge.

- Institute of Leadership Management: their leadership skills qualification, delivered to junior production management, Quality and Maintenance personnel via ASSA/LearnDirect.
- The Project Management Institute: mentioned by a vehicle manufacturer.
- The Lean Enterprise Institute/Academy (Professor Dan Jones), delivering a seminar on lean to a vehicle manufacturer's extended leadership group.

Trainees for the ILM qualification received a partial grant from the LSC which reduced the cost to a £230 administration fee per candidate.

(v) Equipment and software providers

Generally, details of equipment or software suppliers providing training were rather scant, but some useful information about delivery methods and costs was recorded by a few firms.

a) Training on machinery

Various suppliers indicated that training on production equipment was obtained from equipment suppliers. An SME sheet metalworker in Lincolnshire highlighted the training on Trumpf machines, for which their Manufacturing Managers had to go to Trumpf's base in Luton, Bedfordshire. The cost (excluding accommodation and subsistence) was £2,000 as part of a purchase package for 3 trainees.

This compared with the charge of £1,000 to train a 1st tier's 12 Manufacturing Operators in powerpack cylinder appreciation, and the cost incurred by another 1st tier of £15,000 for training 28 Operators on new machines to manufacture steering and suspension components. In the case of another 1st tier, Technical and Engineering personnel had to go to Germany to undergo training on specialist machines (Chiron, Hessapp and Index) by the machine suppliers. The cost ranged from £4,000 – £6,000 for groups of 4 – 6 trainees.

Welding training was supplied by BOC, the gas supplier, which had its own training centre at Wolverhampton, costing £500 per person for a 3 – 5 day course.

Free training on hydraulics and pneumatics equipment was supplied by unspecified equipment suppliers to Manufacturing Operators at a vehicle manufacturer's plant. Conjecturally, the smaller the purchase value, the higher the likelihood of training charges.

b) Software training

Some firms also pointed to training received from software providers either delivered at the software supplier's own training centre, or in the workplace. This included:

- 3-D modelling (CAD) software, training delivered in the workplace.
- Exel software training, delivered at the supplier's training centre in Nuneaton and in the workplace.
- SAP production tracking software training, delivered in the workplace to operators and logistics.

(vi) Government and other agencies

Government and other agencies supplying a range of training and workforce development on performance improvement, lean manufacturing, as well as business, leadership and management development, included:

- SMMT/Industry Forum: productivity improvement and NVQ delivered to the shopfloor and Production Management of a 1st tier batteries manufacturer; also mentioned by a vehicle manufacturer for existing training and proposed assistance by another on supply chain development.
- Skills4Auto: training for charge hands at a vehicle manufacturer.
- Technology Innovation Centre, Birmingham: training on lean manufacture delivered to a tube components SME in the workplace, in worktime; also global economics knowledge acquired through consultation with Professor Peter Rayson.
- LSC support for NVQ training and for leadership courses.
- Northampton Chamber of Commerce: training in leadership skills for a small 1st tier's shopfloor and line leader.
- LearnDirect: including a business management certificate studied by online/distance learning, and leadership skills training co-ordinated by ASSA; also Health and Safety.
- Centre for technology and excellence, Edwinstowe, Nottinghamshire: IT training supplied to an SME at their own training centre.
- Nottingham Business Venture, Edwinstowe: proposed assistance sought by an SME using their consultants for ICT services – installation of an IT system.

7.4.6 E-learning and online/distance learning

The use of online and distance learning methods to undertake courses run by external providers is not a new phenomenon, but:

- There were some indications among a small minority of large firms which were part of overseas-owned groups of growing interest in their own development and supply of e-learning courses.

All of these courses appeared to be directly related to functional competences.

We might distinguish this in-house provision of e-learning courses from the traditional online and distance learning methods using external providers which have now been around for years. Overall, three different methods of e-learning or online/distance learning were used:

- *E-learning using the group's own training materials.*
- *Distance courses provided by external suppliers, studied online, and*
- *Distance courses provided by external suppliers, studied using CDs or DVDs.*

E-learning was described by one vehicle manufacturer as becoming "a significant training tool". It was being extended to include 'soft' skills and other skills such as languages (e.g. French) for online study. This was clearly stretching their existing capabilities as, significantly, they also spoke of having a skill gap among their training staff in e-learning methods.

Another vehicle manufacturer was fortunate in having a large e-learning/online library of courses, developed by their group head office's university in the USA, which people could access 24 hours a day including from their homes. The offering included 800 different skill-specific courses as well as Harvard Business School courses. These could be studied by suppliers and customers as well. They considered their e-learning was a particular strength.

The extent to which e-learning courses could be pursued in work time, or were expected to be undertaken by people in their own time, was not divulged. But it is clear that the online/distance learning method more generally is chosen because it gives individuals the flexibility to study courses outside the working day when otherwise they would not find

the time. For instance, an injection moulder SME had two key individuals – Commercial and Production Directors – studying for business management qualifications by online/distance learning methods at home. RDI (a specialist or commercial provider) and LearnDirect were the providers.

Two 1st tiers, both parts of large multinational groups, had Directors or Senior Managers studying for MBAs at prestigious specialist/Higher Educational providers using distance learning means, in some cases in conjunction with other methods (e.g. at university evening classes). Providers mentioned were the London Business School, Henley Management College, Aston University and the Institute of Operational Management.

In contrast, a vehicle manufacturer's Technical and Engineering staff took online/distance learning courses supplied by a local college and university (Coventry) as one element of a comprehensive training programme involving a range of courses and providers. Similarly, a CIPS (purchasing and supply) certificate was being undertaken by a Purchasing staff at college and university in their own time and by distance learning. A 1st tier seating supplier also indicated that 4 people in Stores and Supply Chain Management were taking a Diploma in Logistics by online/distance learning both in work and own time, through a commercial training provider. Another 1st tier (of wiring harnesses) had one Administrative/Human Resources staff studying for the CIPD (personnel and development) via a mix of online/distance learning by a commercial training provider and formal course attendance methods at an educational institution. Their training cost £2,500 a year.

A 1st tier electronics firm had the benefit of membership of a US electronics trade association, the Printed Circuit Association (known as the IPC), from whom they acquired distance training materials – CDs and DVDs – using the 1st tier's own staff to deliver technical training to people on the shopfloor, in their rework and development departments, and in Quality Assurance. Courses included advanced/new soldering methods, and another on electrostatic damage (ESD). Membership cost £3,000, with no additional charge for training materials.

7.5 Strengths and limitations of the training provision

Prompting firms about the strengths and limitations of their training provision contributed many positive views as well as identifying a range of detractors. These are examined in turn.

7.5.1 Strengths of the training provision

Interviewees' positive comments are listed in Table 7.3. Individuals identified 5 main strengths:

- They ensured that any training fitted the business objectives/needs.
- The mode and suitability of training that was delivered internally.
- The quality of the training done by internal trainers from within the company.
- The personal development and promotion opportunities it gave to individuals, and
- The use [and calibre] of specific external training provision and support.

Table 7.3: Strengths of the training or workforce development undertaken.

Strengths of the training provision	Number of firms		
	VMs	1st tiers	SMEs
Ensure training fits business objectives/needs: Total:	4	3	1
Training is developed to a purpose	1	-	-
Each case for training has a stated investment return	1	-	-
Evaluate post-training benefits + further training needs	1	-	-
Training mgr does prior checks that it fits our needs	-	1	-
Internal training is specific to the company	-	1	-
Our training is integrated with the business plan	-	-	1
Recognition of a changing market/business conditions	-	1	-
Leadership course is in line with the business	1	-	-
Mode/suitability of training done [internally]: Total:	1	3	0
Most training is done internally	1	-	-
Run univ/college courses here in/outside work time	1	-	-
Large e-learning library of courses accessible 24 hours	1	-	-
Teach IT courses here after work	1	-	-
Flexibility of ASSA training: on day/night shifts	-	1	-
Convenience of our systems training	-	1	-
Training mgr ensures right training techniques for topics	-	1	-
Quality of training done by our trainers/staff: Total:	0	0	4
Cascade internally so sure trainers know what doing	-	-	1
Our apprenticeship training is very good	-	-	1
Internally we have good people to do the training	-	-	1
Our training is successful	-	-	1
Personal development advantages: Total:	2	2	0
Gives people confidence to deliver more added value	-	1	-
Personal promotion opportunity	-	1	-
Training is linked to promotion	1	-	-
Training triggers enthusiasm in others to train	1	-	-
The use/calibre of external provision/support: Total:	2	4	2
Good, free LSC support + info on courses via hotline	1	-	-
Flexibility of ASSA training: on day/night shifts	-	1	-
Edwinstowe CTE: flexible, content, exceptional delivery	-	-	1
Welding and FLT driving training is hands-on, real	-	1	-
CNC/machine training by equipment suppliers	-	-	1
Leadership training is a contemporary attitude to work	1	-	-
Leadership training from the Chamber of Commerce	-	1	-
Leadership and mgt training: reasonably resourced	-	1	-

Cases: 6 vehicle manufacturers, 9 1st tiers, 6 SMEs. Multiple responses were possible.

Looking at Table 7.3 above, certain differences are apparent between the vehicle manufacturers, 1st tiers and SMEs.

- The SMEs were much less likely to state that they ensured that their training met their business objectives, or was linked to the business plan, than the vehicle manufacturers or 1st tiers.
- Whereas one vehicle manufacturer and 3 1st tiers commented on the mode and suitability of training undertaken/provided in-house, the SMEs emphasized the quality of training supplied by their own staff. In fact, this was the most frequently stated opinion by the SMEs more generally.
- Three firms singled out leadership/management training, but none of these were SMEs.
- Very few firms commented on the personal development advantages of training, and none of these were SMEs.
- Two firms (a 1st tier, and an SME) could not identify any strengths at all.

(i) Ensuring that training fitted the business objectives/needs

Over one quarter (7 firms) considered that a particular strength of their training was in ensuring that it was linked to the business plan or needs of the company. Some pointed out the strategic link: "We develop training to a purpose," said one vehicle manufacturer, and another commented: "Each case for training has a stated return on its investment." Exceptionally, one of the particularly training-active SMEs also spoke of the strategic link, stating: "We spend a lot on training, but it is all linked to/integrated with the business plan."

A 1st tier electronics firm had pointed out that the training they did internally was specific to their business, and added: "The problem with external courses is that they cover a lot of material that is not applicable to our business and processes."

Rather cryptically, a 1st tier responded about the "...recognition of a changing market and environmental conditions" when asked to comment on specific strengths of their training, adding: "We need to position ourselves to meet requirements." This seemed to echo a remark made earlier by a vehicle manufacturer who spoke of their intended knowledge development in 'global economics' and their comments on the importance of gaining an understanding of this. This same

vehicle manufacturer also pointed to their leadership course (delivered by UCE) as being: "in line with the business".

(ii) The mode and convenience of training delivered internally

Some firms considered the mode of delivery, timing and convenience of their internal training to be a particular strength. In some cases the training employed the company's or group's own training materials, like the vehicle manufacturer possessing a large library of e-learning courses which people could study at any time, including at home, who clearly approved that most training was done internally, including university and college courses running in and outside work time. They also taught IT at the factory after hours.

The flexibility of training supplied by ASSA was commended by a large 1st tier seating supplier, because the provider came in on both day and night shifts to deliver the training. Indeed, one of the vehicle manufacturers had also commented earlier that they looked for flexibility from training providers.

A small wiring harnesses 1st tier highlighted the convenience of their software systems installation and training by Exel because their key concern was to ensure that it was implemented without disruption to their business contact with customers and suppliers. This company was installing a direct link with their key customer to enable online design/development collaboration.

(iii) The quality of the training done by in-house trainers

Over half of the SMEs were keen to praise the quality of the training supplied by their own capable and experienced staff. A prototype and sheet metal worker saw the advantage that: "You are certain the people who are cascading [the training] know what they are on about - not just on the shopfloor, but anything," and contrasted this favourably with what a consultant could do. An East Midlands machining and fabrications supplier applauded their own apprenticeship training: "Because we cover such a wide customer base and stuff we do."

(iv) Personal development and promotion opportunities

A few points were raised about the personal development and promotion opportunities for trainees. A 1st tier batteries supplier commented on the heightened confidence that

accrued from training, perceiving knock-on effects on the business when that individual was able to deliver more added value in their work.

A small vehicle manufacturer was the only respondent to note the snowball effect that training can have in motivating others to train, saying: "Once the workforce see some people being trained it triggers off other people to ask for it, so it triggers enthusiasm for doing courses."

(v) The use and calibre of specific external training provision and support

Leadership training was among the strengths identified. A 1st tier interior trim firm was exceedingly enthusiastic about their leadership training from Northampton Chamber of Commerce, saying: "We get a very positive reaction from trainees, and are looking forward to doing more."

The vehicle manufacturer who had earlier commended their leadership training as "in line with the business" also commented that it was: "A contemporary attitude to work and the workplace, and has brought in 'emotional intelligence' to the training."

An exhaust systems 1st tier supplier highlighted the strengths of their training in welding and forklift truck driving because it was: "real, and hands-on, and you get a certificate at the end", contrasting the lack of hands-on experience of those who did FE courses.

A gearbox discs SME enthused about the IT training from Edwinstowe Centre for Technology and Excellence due to its: "Structure, presentation, content, facilities, and exceptional delivery," saying: "We will do more of this."

7.5.2 Limitations of the training provision

The reservations voiced by respondents about their training and workforce development are shown in Table 7.4. There were 6 themes to the limitations they identified:

- *Issues about the lack of sufficient finance and/or other training resources.*
- *Time pressures and/or an inability to cover for people while training.*
- *Deficiencies in the suitability or content of training undertaken or available.*

- *Issues about inadequate training materials and delivery.*
- *Problems experienced in locating suitable training, or in completing courses.*
- *Issues about the eligibility of people (trainee selection), appraisal of training needs, and evaluation of the training undertaken.*

The recurring themes were:

- The lack of finance for training, or its cost (7 firms).
- Time pressures, and/or the inability to cover for people while they trained (7 firms), and
- The unsuitability or inadequacy of the content of the training undertaken or available (9 firms).

Looking at Table 7.4, certain differences are apparent between the vehicle manufacturers, 1st tiers and SMEs.

- Issues about the lack of sufficient finance to conduct all the training they wished to were raised by 3 of the vehicle manufacturers (this certainly affected a fourth, though they did not comment) and over half of the 1st tiers. But it was not an issue raised by any of the SMEs.
- Issues about the unsuitability or quality of training undertaken or available were raised by 1st tiers and SMEs, but hardly at all by the vehicle manufacturers.
- Of the few firms that highlighted issues about training materials and delivery, none were vehicle manufacturers.
- Only the SMEs spoke of problems in locating or maintaining suitable training.
- Issues about the eligibility of employees for training, appraisal of training needs, and post-training evaluation were raised by several firms, but none of them were SMEs.

Table 7.4: Limitations of the training or workforce development undertaken.

Strengths of the training provision	Number of firms		
	VMs	1st tiers	SMEs
Issues about finance and training resources: Total:	3	6	0
Size of training budget/finance/cost	3	4	-
Internal training resources – rooms, equipment, staff	1	1	-
High level training not given to sufficient numbers	-	1	-
Time pressures/lack of cover for trainees: Total:	3	2	2
Lack of time to train/too busy	1	2	2
Cover for trainees/given limited time off work to train	3	1	-
Have to rearrange training around customer needs	-	-	1
Suitability/content of available training: Total:	1	5	3
Training is not 100% fitted to our needs	1	1	-
Available training varies in quality	-	1	-
People trained to NVQ2, but were capable of NVQ3	-	1	-
FE trainees understand theories but lack real experience	-	1	-
Supervisory training by Skillspath was too basic	-	1	-
Leadership skills training was too advanced	-	1	-
Use of IPC's DVD's entails time to extract relevance	-	1	-
Poor IT training/organization by West Notts Tech.	-	-	1
Not in favour of Business Link	-	-	1
Post-apprenticeship quality training: organize better	-	-	1
No apprentices on day release, now do 6 month block	-	-	1
Issues about training materials and delivery: Total:	0	2	1
Issue of the quality of training delivery by specialists	-	2	-
Need formal syllabus for operating bespoke machinery	-	-	1
Need to develop own standards and materials to train	-	1	-
Issues to locate/maintain suitable training: Total:	0	0	2
Difficult to locate providers doing training we need	-	-	1
There is no cold forging training anywhere	-	-	1
Govt funding for colleges doing apprenticeship courses	-	-	1
Difficult to keep the training going if courses cease	-	-	1
Issues re eligibility, appraisal and evaluation: Total:	2	1	0
The company needs an appraisal scheme re promotion	1	-	-
No development of individuals not business focused	1	-	-
Don't evaluate success/benefits of training to company	1	1	-
People not promoted may not receive any training	1	-	-

Cases: 6 vehicle manufacturers, 9 1st tiers, 6 SMEs.
Multiple responses were possible.

(i) Issues about the lack of finance or other training resources

From the points raised by respondents it is clear that:

- Issues about limited training budgets or access to funding were exacerbated by an urgency to get people through the training that was needed, in order to raise the competency levels of businesses overall.

Issues were raised the lack of finance and in some cases other resources including training rooms and equipment. One of these was a vehicle manufacturer who asserted that their inability to do the training they needed would eventually exert competency issues for the company. Their problem was due to:

“The volume of learning requirements against the number of staff to train, and rooms and equipment to meet the volume of need/demand. The training budget is constrained because of the size of turnover. We need to do 4 times as much training so we need the resources and budget to do it.”

A large 1st tier powertrain supplier was generally satisfied with the resources available in the company for leadership training, but wanted to use an external supplier for this as it would enable them to “deal with the critical mass...We are doing some very high level training for some people but not very big numbers (2 people a year).” Money and time were a restraint in getting this organised and moving people through. They, too, warned about the repercussions on their company of not progressing this training speedily, saying: “We are not going to change things very quickly, therefore that is an inhibitor.”

An exhaust systems 1st tier also spoke of needing more hands-on training, saying: “The cost of training is an issue. We can’t afford to send all the people all the time out on training.”

Another 1st tier commented that they had tried to get grants for training, but was usually unsuccessful.

A vehicle manufacturer was very up-front about their funding problem, asserting that: “Skills are not my problem. I know what skills we need, I know where to find them. I need funding.” Even a very large multinational vehicle manufacturer revealed that they, too, needed help with funding for training.

(ii) Lack of time or cover

The lack of time to conduct training due to business pressures was noted by 5 firms, and several highlighted problems about providing cover to enable people to train. One of these was a

busy forgings manufacturer, another a vehicle manufacturer who indicated that their work commitments only allowed a certain amount of time off to train.

Clearly, issues about lack of time and finance were linked. An overseas-owned vehicle manufacturer, for example, stated that their limitations concerned both their: “Budget and ability to take people off the job to be trained.”

Another vehicle manufacturer cited issues about: “Release, finance, time.” So they looked for flexibility in the timing of courses supplied by colleges and universities.

Their point was reiterated by a 1st tier glazing supplier who said simply that: “Time, cost and manning levels [created a] releasability factor.”

(iii) Deficiencies in the training undertaken or available

Many deficiencies were noted in the training undertaken or available. Some merely pointed out that training was generic, or not wholly fitted to their individual company’s needs. A vehicle manufacturer sent a direct message to Skills4Auto, saying:

“Skills4Auto need to ask ‘what are your problems’ and ‘let us find a solution for you’. Instead they come and try to supply us with specific training e.g. NVQ2.”

They also had a message for the Automotive Academy (actually unsure of the distinction between these two bodies), and berated the link-up made for them by the AA with Cambridge University - “it was no good” - and adding:

“The Automotive Academy need to be more subtle in their analysis and presentation of the spectrum of requirements by the automotive industry, and differentiate OEMs [from suppliers] and between OEMs.”

Getting the level of the training right was also problematic. For example, a 1st tier company criticised Birmingham City College’s team leader training supplied to one of their production cells because they had under-trained them to NVQ2, when they were actually capable of achieving a level 3. The leadership skills training provided by an unidentified skills agency was described by a 1st tier interior trim supplier as “too advanced” for the person who did it. And a wiring harnesses supplier described as “too basic” the supervisory training their production manager and supervisor did with Skillspath, which included dealing with unacceptable behaviour. An SME based in

the East Midlands was scathing about the computer driving licence training provided by the Fullwood Centre, part of West Nottinghamshire Technical College, because:

“The facility was there but the local business community didn’t use it. The helper was frequently not there when you rang up to make an appointment. I am not very impressed with West Nottinghamshire Tech. I want to find some other way of doing IT training,” they stated, adding that they intended to proceed with another provider.

An exhaust systems 1st tier contrasted their welding and forklift truck driving training with the FE college education that others took, because the former was “real” and “hands-on” while the latter gave people: “...an understanding of theories (which was a good point) but lack of hands-on experience.”

A comment was made about Government funding to FE colleges for apprenticeship training, evidently because they had been affected by course closures by colleges unable to keep courses running without sufficient numbers. “Colleges are a business to make money, not serve needs” they said, clearly not in agreement with this situation. The issue was: “...keeping the training going because courses fold or they don’t get the numbers.” They also raised the inability to send apprentices on day release these days, instead now it entailed a 6 month block release.

(iv) Issues about inadequate training materials or poor delivery

Three firms, all suppliers, highlighted issues about training materials or the quality of training delivery, or both. Two firms had found that the training delivered within their company by their own specialists was not as good as it needed to be. A 1st tier said that their IT training was not being delivered very well, because it was being done by: “...an Excel guy who is an ex-user, so is not a very good deliverer of training.” A 1st tier engines supplier, too, said candidly: “There is an issue about the quality of the training we can provide ourselves. The people who train in-house are specialists in their field but are not trainers.” They believed that they needed to develop standards as well as materials for training.

An SME considered that they needed a more formal syllabus for training people on how to operate bespoke items of equipment.

(v) Problems in locating or maintaining suitable training

Two firms, both SMEs, had encountered problems in locating or maintaining suitable training. One firm’s problem apparently lay with finding suitable FE colleges for technical training, part of the problem lying with the lack of trainee numbers and therefore courses not running. The other firm was a forgings specialist affected by the lack of forgings training anywhere in the UK. There used to be one at the Confederation of British Metalformers, but this stopped because it was undersubscribed. The SME was due to set up their own training school shortly.

(vi) Issues about eligibility, training needs appraisal and evaluation of training completed

An overseas-owned vehicle manufacturer commented that since their training was linked to promotion, they needed to have an appraisal scheme. They also pointed out that some people who were not promoted might not receive any training at all, because the company only allowed training against “...a deliberate identified purpose.” They clearly saw this policy as limiting, not least because they did no development of individuals that was not business focused, attributing this situation to “lean manning.”

Another vehicle manufacturer was also self-critical in identifying limitations in their evaluation of the training carried out, and the application of the new skills and knowledge when back in the workforce. They were certain that they needed to measure the success of it.

7.6 Training needs, barriers and support issues

This final section on training looks at the training that firms would have liked to do, and the reasons that had prevented them from doing it. The discussion is rounded off with an analysis of interviewees’ views on what would enable them to do more training, and any support needs they identified.

7.6.1 Training that firms had been unable to do, and the reasons why

Those who named specific training that they would like to do comprised 3 vehicle manufacturers, 7 1st tiers, and 5 SMEs. The training they identified, the occupations they wished to train, and the reasons that had prevented them from training these people are listed in Appendix 18.

Another 6 firms stated that there was no training that they had not been able to do. This group consisted of one vehicle manufacturer, 3 1st tiers, and 2 SMEs, though the vehicle manufacturer pointed out that they might have to proceed more slowly than they wished and do the training over a longer term than they would have done due to the limitations of their budget. A similar comment was made by several other firms including a 1st tier exhaust systems supplier. Indeed, this raised an important issue, namely:

- The need for speed to get as many people trained as possible in as short a time as possible, because it was holding back their ability to change, and therefore limiting their competitiveness.

This applied to a 1st tier exhaust systems and fuel tanks manufacturer who needed to get all their welders trained in one go, but was unable to do so. The same point underlay the comment by a vehicle manufacturer who needed to do 4 times as much training as they were currently able to. And a multinational 1st tier powertrain supplier had earlier stated that they wanted to put many more people through leadership training than they were able to.

An SME was also aware of the link between lack of training and lack of competitiveness, noting the: “fine balance” between the training they could provide, and “remaining competitive.”

(i) Leadership and management training, and the changing business environment

A few comments were voiced about the inability to provide the right kind of leadership and management training. It is important to note that this training and development need was not confined to Directors and Senior Managers. For instance, a vehicle manufacturer wanted to provide leadership training for senior managers, some junior managers and team leaders. They stated that the existing training did not suit their needs very well, but did not divulge specific reasons why, but were also affected by lack of time and cover, and lack of interest by people in training. Team leader training was also highlighted by an SME prototyping and sheet metalworker. A 1st tier engines supplier wanted to provide management development opportunities to their junior engineers, as well as project management training for engineers more generally.

Managing change was a topic that one of the vehicle manufacturers thought their Directors and Senior Managers needed training in, but they had been short of time to develop a programme for internal delivery. Indeed:

- It is interesting to speculate, given the comments aired earlier about changes in the business environment and the changing competences needed, that training in how to manage change could have much broader relevance for the industry more generally.

Certainly, appreciation of this fact is probably behind the identification of training needs in company awareness and cultural values aired among the vehicle manufacturers. One firm had encountered some resistance from their employees in training in this field, but also thought that the existing training was not well suited to their needs. Issues about time and lack of cover were also a factor.

A vehicle manufacturer spoke of “rolling out new working practices”, and needed leadership within the company to do this.

(ii) Training needed for Manufacturing Operators and team leaders

Looking at the training ‘wish list’ against the occupational breakdown and the reasons for not training people, shown in Appendix 18, one particularly striking feature stands out:

- The majority of training that firms had not been able to do was for the shopfloor, mainly for Manufacturing Operators in processes and skills in working with specific equipment and materials.

Training needed for the shopfloor included:

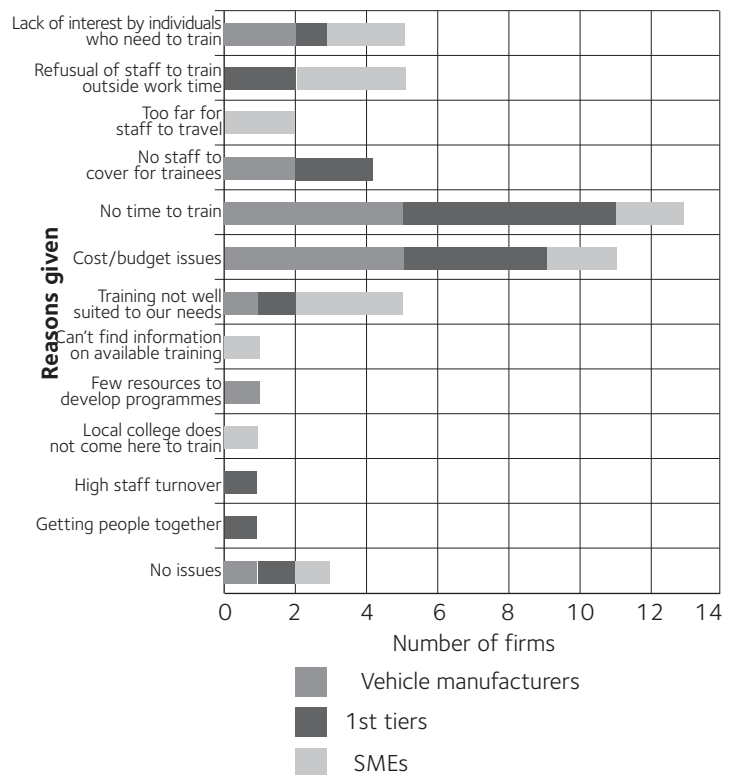
- Training in welding and tube manipulation: some was being conducted, but this 1st tier needed to get everyone trained in one go. A second 1st tier also identified a need for welding training.
- Training for setters to teach them how to do machine setting more efficiently: an injection moulder SME required specialist training which was only available at considerable distance, and prohibitive cost. They were injection moulding not only plastics, but also metals and ceramics.
- Training in composite materials: this SME could only find an 8 week course in Plymouth.

- The same SME – a prototypes and sheet metal worker – had encountered difficulty in locating the right kind of training in specialist hand skills for manufacture for both their team leaders and apprentices.
- A machining and fabrications SME in the East Midlands also stated that existing training was not well suited to their needs. What they wanted was training in multi-functional process and team working skills for people working in production cells, to learn about customer liaison, quality, planning, and improvement and to be able to do these things themselves.
- Another East Midlands SME thought it would be helpful if their local FE college conducted training in the workplace, rather than expecting people to go to them.

Clearly production pressures and lean workforce levels were creating problems for firms in freeing people to train, since they had no time nor any cover for trainees. Cost issues were also a factor, not just for shopfloor training, but overall (see Figure 7.2).

Figure 7.2: Barriers to training.

Reasons for not training



Cases: 7 vehicle manufacturers, 10 1st tiers, 5 SMEs. Note: cases in above chart may not accord with reasons in Appendix table 18 as some firms gave reasons for not doing training they wanted, but did not identify specific training or occupations, so they are not listed in Appendix 18. Some issues were actually highlighted in relation to support needs.

Also of note:

- Particularly significant is the frequency with which firms cited 'lack of interest or enthusiasm', or even 'refusal of staff to train outside work time' among the reasons preventing them from doing the shopfloor training they wanted to.

It was particularly an issue that affected the SMEs. But one of the 1st tiers that was intending to move to become a sales and distribution organisation raised the need for their shopfloor to understand that they needed new skills, saying they would: "...try to instil a culture of awareness on the shopfloor of the need for new skills, so this will therefore lead to them becoming more socially aware of the need for NVQ2."

Another factor worth singling out because it may indicate a more broadly based problem, and may become an acute problem which threatens firms' ability to upskill and to compete well globally, concerns:

- The lack of appropriate technical/process training within a manageable timescale and cost and at a reachable distance.

We have already noted that an SME prototypes and sheet metalworker had looked for training in composite materials and only found precisely what they required in Plymouth. They also needed specialist hand skills in manufacturing, and commented: "Training in specialist hand skills for manufacturing on machines does not exist." Nevertheless, they were currently trying Sutton Coldfield College but said it was "early days." We have seen earlier, too, that training in cold forging was not available anywhere in the UK. An injection moulder of ceramics, metals and plastics was also finding it too far to send their setters to the machine suppliers for training.

A 1st tier raised a key point about the affordability of the available technical training, saying:

"Business Schools, e.g. Cranfield, Warwick, etc are all expensive. This area of the marketplace has been driven by very big companies that have used it. Therefore there is a need for low cost business training."

A vehicle manufacturer believed that process and technical skills were declining, saying:

"We need to do something to keep a high level of practical knowledge alive. Not everyone is degree level. We have got to stop channelling everyone into degrees that don't make sense."

Another point worth highlighting concerns flexibility on the shopfloor, specifically:

- The need for multi-skilling in production cells.

In part this was related to the more general capability needed to free people for training, but it was an issue raised by a vehicle manufacturer specifically in relation to cell working:

"We need them to operate consistently and flexibly, so they could move into a team leader role if needed and that cells/units operate flexibly and move around so we could take people off for development activities."

An important point was made by a machining and fabrications SME who also organised people to work in cells when they had a suitable project, and envisaged doing more production this way:

"We need people to be multi-skilled, in teams. But we need them to almost work as a business within a business e.g. liaise with customers, do quality, planning, improvement etc themselves. But we can't do this by continuing to recruit people at year 11. We need graduates."

These points bring us neatly to the specific factors and support to enable more training activity.

7.6.2 Factors and support that would enable more training activity

Asking firms to identify what conditions or support would induce them to conduct more training or workforce development not surprisingly brought some key issues to the fore once more, such as more time, cover for trainees while off-the-job, and – of course – the cost/budget/funding issue, which was raised by 15 firms in all (see Table 7.5). Generally, their points covered:

- Issues about finance and training resources (18 firms).
- Issues about conducting training, or in-house support (10 firms), and
- Issues about specific training topics or skill needs (4 firms).

One of the smaller vehicle manufacturers could not identify anything that would enable them to conduct more training, as they were quite content with their LSC support which meant that all their training was free.

Amongst the repetition, various new and pertinent points appeared which merit brief discussion.

(i) Issues about finance and training resources

Among the issues about funding and training budgets appeared 4 concerns or suggestions:

- *The negative effects of existing funding ceasing imminently.*
- *The case for receiving funding.*
- *Funding for a 'floater' to cover for people while they are training.*
- *Funding to hire someone to do the training they need.*

Vehicle manufacturers benefiting from large training grants from the Government have found these crucial in helping to equip their workforces with the skills they need to operate in a modern global business environment. But there is still much work to be done, and workforces must be continuously developed, if firms are to strive successfully to compete. One firm said: “When our DTI/DfES funding runs out in early 2005 we won’t be able to replace it from our own budget.” They were working with a particularly large financial deficit but were

going down some new and progressive routes in their workforce development activities. They highlighted, for example, how crucial it was for them to install the most advanced digital technology/software throughout the company, with training consequences. They were also learning about ‘soft’ skills and conducting leadership development. But they had a concern about the negative response from their shopfloor when they were unable to afford to continue their training, saying there was an issue about “managing expectations.”

Table 7.5: Support and other factors that would enable firms to do more training.

Support and other factors that would enable more training activity	Number of firms		
	VMs	1st tiers	SMEs
Issues about finance and training resources: Total:	6	9	3
More finance/bigger budget, cost/profitability issue	6	6	3
Govt removal of age-related caps for funding e.g. 25 yrs	1	-	-
Level playing field with SMEs re funding e.g. NVQ2	1	-	-
More training staff	1	4	1
Issues about doing training/in-house support: Total:	1	5	3
More time to do/prepare training/identify training needs	-	3	2
Senior mgt support to ensure we identify training needs	-	1	-
More people resources to provide cover for trainees	-	2	2
More flexibility about timing of training by providers	-	1	-
Trainer to come on site to deliver training, not externally	-	1	2
Leadership to roll out company’s new working practices	1	-	-
Issues about training topics or skill needs: Total:	1	1	2
Must set objectives for suppliers re apprentices dev.	1	-	-
Must do something to keep practical knowledge alive	1	-	-
Flexible, multi-skilled shopfloor to move people around	1	-	1
Team working skills for working in cells	1	-	1
We must try to instill awareness in our shopfloor of their skill/training needs	-	1	-
No training in specialist hand skills/use of machines	-	-	1
Want to do vocational training at higher level: NVQ3/4	-	-	1
Must stop channeling people into degrees [not relevant]	1	-	-
Need to recruit graduates for higher vocational work in cells	-	-	1
Want more support from schools re pupils into manfr.	-	-	1
Better partnership between suppliers-VMs, VMs-VMs	1	-	-
No issues or further support needs: Total:	1	-	-

Cases: 7 vehicle manufacturers, 10 1st tiers, 7 SMEs.
Multiple responses were possible.

Another vehicle manufacturer has not been seen as in need of Government support for training, but pointed out that they, too, needed support, saying: “The Government need to recognise that large manufacturers like us aren’t necessarily different to SMEs. It doesn’t mean we are making more money and wouldn’t welcome some funding.” They called for a level playing field with the SMEs for NVQ funding, but also wanted to see the removal of age-related caps on Government funding, which prevented it being used for employees over 25 years old.

The various concerns about financial support also included a suggestion by a 1st tier seating supplier that funding would enable them to recruit more people, so freeing employees up to undergo training. The same issue was raised by a small injection moulding supplier. Clearly, in order to cut costs to a minimum, workforces are so lean that there is no spare capacity to fill in when others are not at their stations or posts. It is also an issue in cell working and prompted the identification of a need for multi-skilled employees so that they can be moved around. A machining and fabrications supplier pointed out, for instance:

“We want to train people to do multi-functional self-managed teams not just working on their machine tool. We need another type of attitude/motivation. We need time and the ability to pay someone to do something. We want to bring someone in, e.g. a postgraduate on a year’s contract, but would need financial support to hire someone, and also send them out.”

They also wanted to offer to their workforce the opportunity for their vocational training to go up to a higher academic level, but said:

“We need to be able to afford the cost of allowing someone to leave their station while they are out training. There is also cost re that person’s time. The question is: how do you do it? Plus the whole workforce work in teams of 3. If one person was out training how would you operate with a team of 2? It is not possible.”

(ii) Issues about conducting training, and in-house support

Many of the issues raised about conducting training relate to finance and cost issues, such as the cost to the business of work not done at all, or done less effectively by stand-ins, while these people are away being trained. Clearly it becomes a problem in relation to fulfilling customer obligations, too. But

there were also other issues related to business pressures, such as the lack of time to do any training, to prepare any training, or to identify training needs – a point raised by 5 suppliers. A 1st tier interior trim supplier stated, for example, that: “Resources are stretched to enable the identification of training needs and what training is available.” They also wanted to see more support from Senior Managers.

Clearly, it was difficult to give training the time and attention it merited. For instance, a forgings SME said: “We struggle to use our people to train others. They/we have not even got time to talk to the service provider.” They had to take people out of the work environment to do this, and to train them. A 1st tier glazing firm was also pushed for time, and spoke of general recruitment issues taking priority. The Human Resources department was currently one member short. They were aware they needed to move “from the reactive to the proactive” and also thought that it would help if they themselves had a recognised qualification.

An electronics 1st tier intended to review the timing of their training activity in order to be more flexible in delivering it during evening training sessions in the production area.

Several firms wanted training providers to come out to them to deliver the training. These included an exhaust systems 1st tier who was candid about the problems encountered by their employees going off site to train. What they wanted was to have: “An individual who could come on site to deliver the training so they would get a captive audience who doesn’t wander away.”

(iii) Issues about specific training topics or skill needs

Some of the issues raised about specific training topics or skill needs have appeared in other sections in conjunction with issues about costs and training delivery. For instance, the vehicle manufacturer and SME that wanted their shopfloor to be multi-skilled also both highlighted the need for Manufacturing Operators to have team working skills for operating in production cells. The VM wanted to move people around, and be able to take people off for development activities, but also move them into a team leader role if needed. The same VM also considered that they should do more to set the objectives for their suppliers with regard to the development of apprentices, and perhaps spoke more generally

when they asserted: “We don’t set the directions for apprentices.” They also called for a better partnership approach between vehicle manufacturers and suppliers, and between vehicle manufacturers themselves.

Several points raised by these 2 firms concerned issues about higher level qualifications.

The SME considered that what they really needed was a higher calibre of recruit and training to NVQ3 or 4 level. After their foundation course, their apprentices learnt a particular sector of work in-house, either cascaded internally, or assessed by an external provider. Some could proceed to NVQ3 – a 1st tier had also spoken earlier of their employees being capable of NVQ3. The SME observed that: “NVQ3 – 4 is our need for the modern world.” They went on to say, in relation to higher vocational work in cells: “We need graduates,” because people needed to learn a range of different skills, to deal effectively with customers on plant visits to inspect their projects, and to be proactive in making quality improvements. They also thought that local schools could do more to encourage or provide contact with employers about the potential of vocational training, highlighting the “useless degrees” that were now done by people that might once have opted to work at the factory. This sentiment was echoed by the VM who stressed that: “We must stop channelling people into degrees that don’t make sense.”

This completes the examination of training and workforce development activity and needs which saw a particular emphasis on technical and process training provision, leadership and management training at all levels, not just for Senior Managers and Directors but including for team leaders and supervisors on the shopfloor. Soft skills, and lean principles/manufacturing, were also prominent among the current and planned training activity. There were growing signs of the place for e-learning, and of firms taking things into their own hands (in some cases with external support) in establishing, or intending to set up, their own in-house training or development centres.

The final evaluation section (prior to the conclusions and recommendations) is devoted to best practice in the supply chain (section 8).