

History of Industry Training

Purpose

1. This report is the first report in the review of industry training led by the Ministry of Education. It provides information on:
 - the system that preceded the Industry Training Act 1992
 - the drivers behind the introduction of the current system
 - a description of the current institutional arrangements
 - a brief history of funding for industry training
 - the 2001 review of industry training
 - the drivers behind the introduction of Modern Apprenticeships
 - an overview of the performance of industry training
 - a summary of the recent operational policy changes.

The next report in the review will look at approaches to industry training in other countries and compare these with the New Zealand approach.

Executive summary

2. Up until 1992, the Government subsidised workplace-based training mainly through the apprenticeship system. This system was aimed at new entrants to industry, primarily school leavers, and was largely a time served model. Throughout the 1980s, apprentice numbers averaged 25,000. Government support for the apprenticeship system comprised tuition subsidies for off-job training (approximately \$20 million) and administrative support for apprenticeship committees. Off-job training for apprentices was purchased directly by the then Department of Education from polytechnics.
3. The requirements for apprenticeships, as well as apprentices' employment conditions, were set by New Zealand Apprenticeship Committees through apprenticeship orders. Local Apprenticeship Committees, which were attached to a NZ Apprenticeship Committee, monitored apprentice employment contracts in their region. These committees had equal union and employer membership and were chaired by a government official. In 1991, there were 36 NZ Apprenticeship Committees and 350 Local Apprenticeship Committees.
4. The apprenticeship system was highly regulated and lacked flexibility. This meant that it was difficult for new industries to gain entry into the system. The apprenticeship system was also slow to adapt to employers' changing training requirements, and these changed significantly in the 1980s along with the New Zealand economy. The lack of connection between on-job experience and off-job training in the apprenticeship system was also a problem. The establishment of the National Qualifications Framework in 1990 meant that on-job training and assessments could count towards national qualifications for the first time. The final impetus for change was provided by the passage of the Employment Contracts Act 1991, which abolished the entity (the Arbitration Commission) that issued apprenticeship orders.

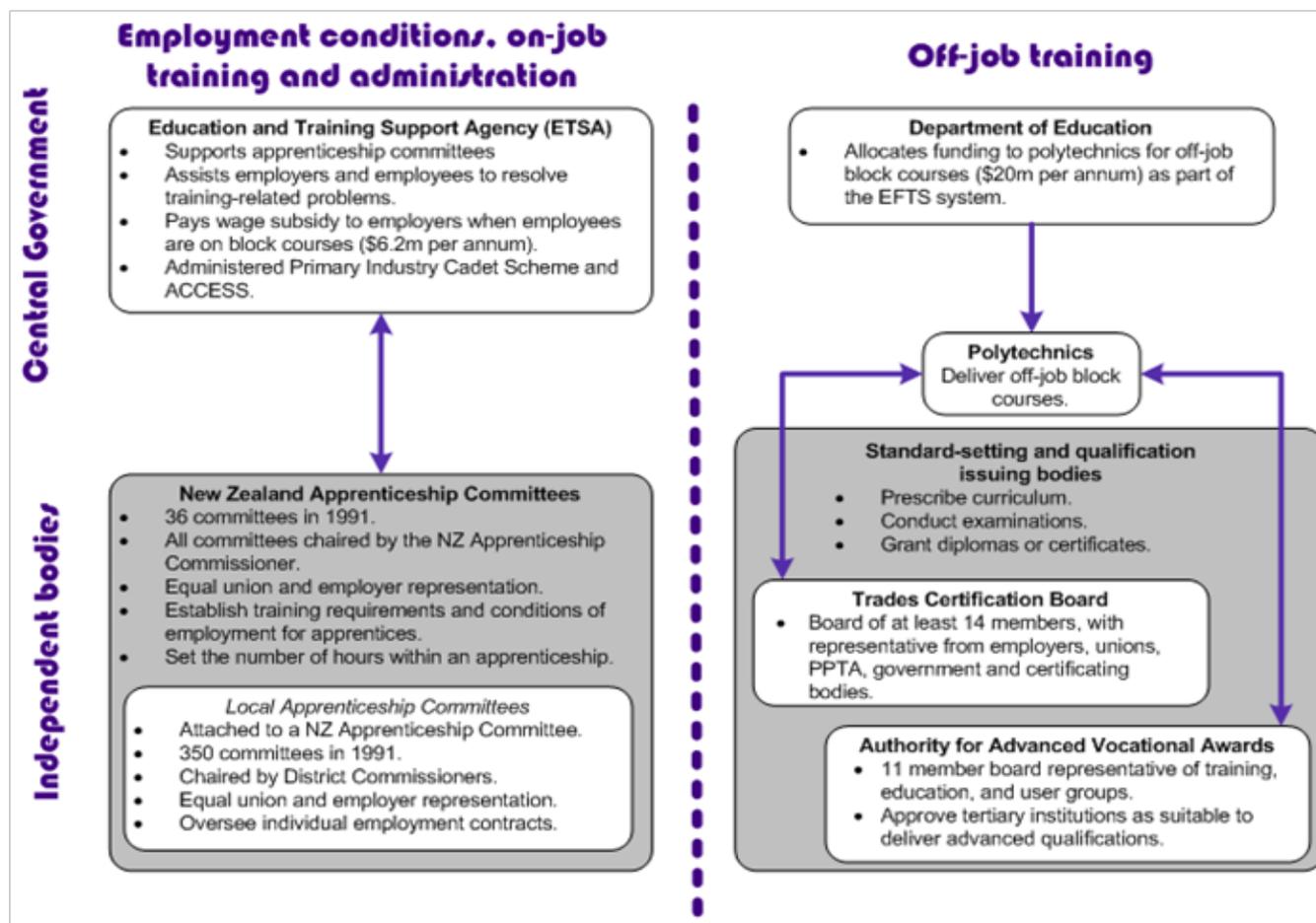
5. Government's aspirations for the new industry training system were that it should:
 - be industry-led
 - be founded on competency-based training
 - provide flexibility for employers and unions
 - allow expansion to include new areas of training.
6. The resulting system was progressively introduced from 1992 with the introduction of the Industry Training Act. The industry training system was formed around Industry Training Organisations (ITOs) that were representative of industry and whose functions were to set national standards and qualifications, purchase off-job training on behalf of trainees, and arrange assessment for trainees. Qualifications can be made up of unit standards gained in the workplace as well as those gained at tertiary providers. This system is voluntary for employers and industries.
7. The industry training system has expanded the reach of workplace-based training – in December 2010 there were just under 105,000 trainees. Industries that did not participate in the apprenticeship system, such as seafood and tourism, now take part in industry training. Government funding for industry training has also increased over the last 20 years (the baseline in 2011/12 is \$156.3 million).
8. The Modern Apprenticeship programme was introduced in late 2000 to address the under-representation of young people in the industry training system. The programme aimed to encourage employers to hire more young apprentices through offering a brokerage service. The brokerage service provides additional support for apprentices and employers. The Government subsidy for a modern apprentice is higher on average than for typical industry trainees. The current baseline for the Modern Apprenticeship programme is \$49.3 million, which includes the fees for the brokerage service as well as training subsidies.
9. The last comprehensive review of the industry training system was carried out in 2001. The review resulted in relatively minor changes to the industry training system. These included adding a leadership role to the core functions of ITOs, allowing ITOs to purchase training at levels 5 and above, requiring ITOs to involve employees in their decision-making, and introducing satisfactory past performance as a criterion for re-recognition.
10. Qualification completion and credit attainment in industry training is relatively low. The average five-year qualification completion rate is 26% for industry trainees and 29% for modern apprentices. Each year, the average industry trainee attains around 19 credits, while the average modern apprentice achieves around 33 credits. However, a significant number of trainees achieve no credits – between 2000 and 2010, an average of 53% of industry trainees and 36% of modern apprentices achieved no credits although they attracted a government subsidy.
11. In response to evidence of poor performance and non-compliance with funding rules, the TEC reviewed and revised the operational policy settings for industry training in 2010. This should improve the performance of industry training over time. Data for 2010 indicates that a higher proportion of trainees are achieving credits.

Industry training pre-1992: the apprenticeship system

12. Prior to the introduction of the Industry Training Act in 1992, the Government regulated and subsidised industry-based training through the apprenticeship system and the Primary Industry Cadet Scheme.
13. The apprenticeship system was defined by the Apprenticeship Act 1983, which set up committees and procedures that were primarily geared towards setting apprentices' employment conditions, including determining apprentices' wages in relation to qualified workers. The apprenticeship system was aimed at young people, particularly school leavers. Most apprenticeships included a component of off-job training at polytechnics. The on-job component of the apprenticeship system was a time served model – i.e. apprentices became skilled tradespeople once they had worked the number of hours specified in the apprenticeship order (usually around four years). Government support for the apprenticeship system was provided through funding for off-job training (approximately \$20 million per year), a wage subsidy for employers when the apprentices were attending off-job training (\$6.2 million per year), and support for apprenticeship committees. Apprentice numbers averaged 25,000 throughout the 1980s.
14. The Primary Industry Cadet Scheme¹ was the rural equivalent of the apprenticeship system. The Cadet Scheme offered supervised on-the-job training and a small component of off-job training. The Cadet Scheme operated in five industries: farming, horticulture, equine, pork, and forestry. There were 1,965 trainees involved in the Cadet Schemes as at March 1991. Farmers and producers provided support through services in kind; the Government provided \$2.54 million in funding for the Cadet Schemes in 1990/91. This was set to reduce to \$1.1 million in the following financial year and there were doubts about the ongoing viability of the Schemes.
15. The diagram overleaf illustrates the institutional arrangements supporting the apprenticeship system. These arrangements are described in further detail below.

¹ Information on the Primary Industry Cadet Scheme sourced from p13 and p36, Paper B, *Report of the Interdepartmental Working Party on skills training*, April 1991.

Figure 1: Organisational arrangements of the pre-1992 apprenticeship system



16. The Education and Training Support Agency (ETSA) was a Crown agency set up in 1990 that took over the training functions previously undertaken by the Department of Labour. ETSA became Skill New Zealand in 1998, which in turn became part of the Tertiary Education Commission (TEC) at the beginning of 2003. One of ETSA's roles was to support the employment side of the apprenticeship system and it carried out the following activities:

- Liaison with employers and their apprentices to monitor the quality of on-job training and difficulties in the contractual relationship between employers and apprentices.
- Mediation of disputes concerning training and employment matters.
- Directing apprentices to off-job training.
- Administration of apprenticeship contracts.
- Administering block course wage subsidies to employers (\$6.2 million per year) and travel assistance to apprentices.
- Servicing New Zealand Apprenticeship Committees and local Apprenticeship Committees.²

² p12, Paper B, *Report of the Interdepartmental Working Party on skills training*, April 1991.

ETSA also administered the Primary Industry Cadet Schemes and ACCESS (the predecessor of the Training Opportunities Programme). ETSA employed 375 full-time equivalent staff and had a departmental budget of \$4.4 million, though much of their resources were devoted to supporting the ACCESS scheme.

17. The New Zealand Apprenticeship Committees determined the requirements of apprenticeships through apprenticeship orders, which were ultimately issued by the Arbitration Commission (formerly the Arbitration Court). The apprenticeship orders prescribed the skills to be taught and acquired through an apprenticeship, apprentice wages, and the conditions of employment for apprentices. The role and membership of NZ Apprenticeship Committees were tightly defined in the Apprenticeship Act 1983. All NZ Apprenticeship Committees were chaired by the Commissioner of Apprenticeship, who was appointed by the Government under the State Services Act 1962 and employed by ETSA. Each NZ Apprenticeship Committee was made up of four members from the relevant employer association(s) and four members from the relevant union(s). In 1991, there were 36 NZ Apprenticeship Committees³.
18. Sitting below each NZ Apprenticeship Committee were Local Apprenticeship Committees. Local Apprenticeship Committees were chaired by a District Commissioner of Apprenticeship and were made up of one member from the employer association and one member from the union. The function of Local Apprenticeship Committees (and their subcommittees) was to actively monitor employment contracts of apprentices (including the quality of on-job training), assist employers and apprentices to ensure continuity of apprenticeship contracts, and generally promote apprenticeships. In 1991, there were 350 Local Apprenticeship Committees.
19. Off-job training was delivered by polytechnics and funded by the Department of Education. Government funding for off-job training for apprentices was approximately \$20 million per year. Each occupation specified the number of weeks in off-job training that was required as part of the apprenticeship and these were highly variable between occupations. The most common was 9 weeks in off-job training over the course of a four-year apprenticeship (17 of the 36 occupations), but some occupations required more than 20 weeks of off-job training and for others there was no off-job training at all.⁴
20. The Trades Certification Board and the Authority for Advanced Vocational Awards (AAVA) were responsible for setting the curriculum for trades qualifications, certifying institutions as suitable for delivering those qualifications, and setting examinations and issuing qualifications (either independently or in conjunction with other examining bodies). The Trades Certification Board was focused at entry level trades qualifications (what became level 3 and 4 qualifications on the National Qualifications Framework). AAVA determined the standards for New Zealand Certificates, which were at diploma level (i.e. equivalent to level 5 and 6 qualifications on the National Qualifications Framework). These two bodies were replaced by the New Zealand Qualifications Authority (NZQA), which was set up in 1990.

³ These Committees represented the following occupations: aircraft engineering; baking; boiler making; bricklaying; carpentry; clothing; coach building; general electrical; electronics; flat glass; footwear; furniture; hairdressing; heating and ventilation; horticulture; hotel/catering; industrial instruments; leather/saddlery; masonry; mechanical engineering; moulding; motor; painting; photo-engraving; plastering; plumbing/gas; printing; refrigeration; retail meat; sheetmetal engineering; shipbuilding; signwriting; timber; watch/jewellery; woollen. Source: p37, Paper B, *Report of the Interdepartmental Working Party on skills training*, April 1991.

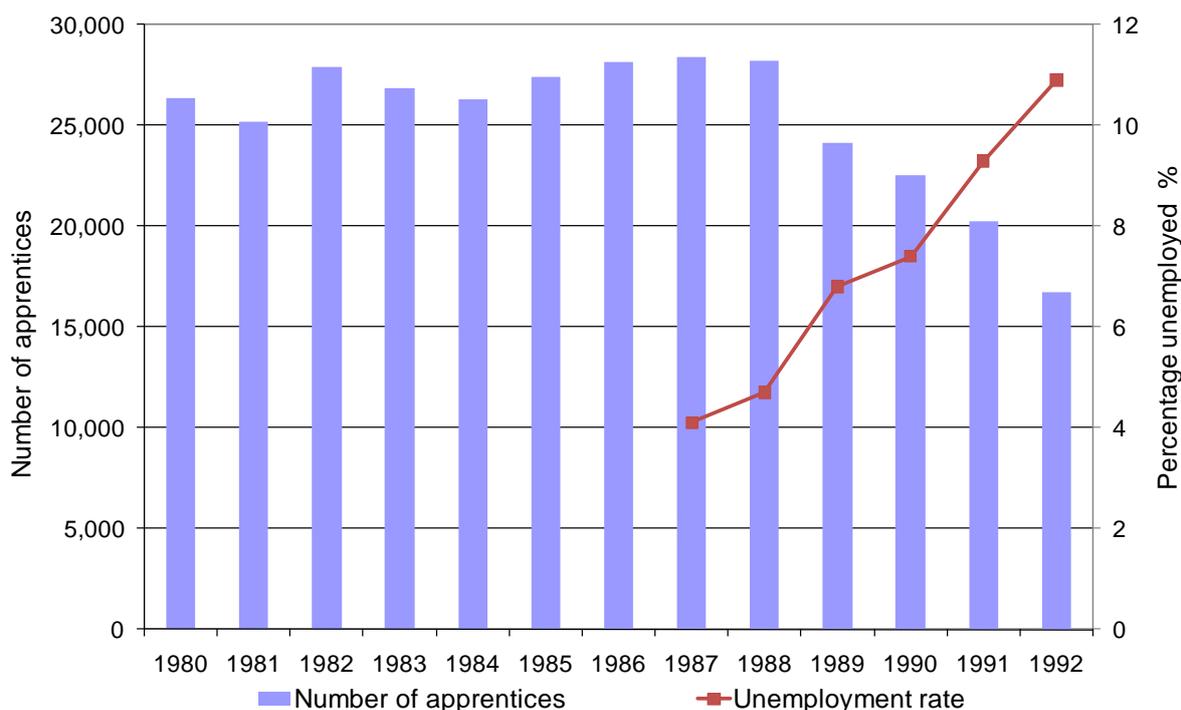
⁴ Five occupations required more than 20 weeks of off-job training (e.g. aircraft engineering required 25 weeks, plumbing/gas required 24 weeks) and four occupations had no off-job training requirement. Source: p37, Paper B, *Report of the Interdepartmental Working Party on skills training*, April 1991.

Reforming the apprenticeship system – rationale and options for change

Rationale for replacing the apprenticeship system

21. The change in New Zealand's economy and the lack of adaptability of the apprenticeship system were the most important drivers behind the disestablishment of the apprenticeship system. There was also a general desire to expand training to lift New Zealand's productivity and skill levels as well as to reach a wider range of industries. The introduction of the National Qualifications Framework was also important in enabling a different approach to training for employees. However, it was the introduction of the Employment Contracts Act 1991 that provided the final impetus for change. These factors are described in more detail below.
22. In 1991, there were approximately 20,000 apprentices. The number of apprentices had been declining since 1988 (see figure 2 below). Problems with the apprenticeship system, including a lack of responsiveness to employer needs, contributed to the decline in apprentices in the late 1980s. However, the most important factor in the decline was the changes in New Zealand's economy.

Figure 2: Number of apprentices, 1980-1992, and unemployment rate, 1987-1992



Number of apprentices sourced from p9, *A brief history of Government funding for industry training 1989-2002*, Industry Training Federation, 2003. Apprentice numbers are as at March from 1980 to 1988, and as at June for 1989 to 1992.

Unemployment rate sourced from the Household Labour Force Survey.

23. In the 1970s and 1980s, New Zealand moved from a protected economy to an open economy. Britain joining the European Economic Community in the 1970s and the removal of import barriers in the 1980s exposed New Zealand to international economic shocks. Unemployment and rising inflation were problems at the beginning of the 1980s, and unemployment increased after the 1987 share market crash. By 1992 the unemployment rate was over 11%, and higher for young people – 23% for 15-19 year olds and 18% for 20-24 year olds. Technological changes and changes in demand for

New Zealand's products also led to a decline of over 80,000 jobs in the manufacturing sector between 1980 and 1990. It was believed that to retain a relatively high wage economy, New Zealand's workforce would need to develop skills to use new technologies and production processes.

24. Difficulties in responding to changing skills needs and a lack of flexibility were identified as problems with the apprenticeship system in a review carried out in the late 1970s. Minor adjustments were made to the Apprenticeship Act, but the system remained fundamentally the same. The apprenticeship system remained highly regulated and bureaucratic. This made it difficult for new industries to enter the system. The tripartite structure (of union, employer and Government) and the prescriptive nature of the Apprenticeship Act also made it difficult for employers to change the nature of training to reflect changes in industry needs. The apprenticeship system was also occupationally based, and there was a desire from some industries that straddled more than one of the apprenticeship occupations for a more integrated approach to training.
25. In the apprenticeship system on-job training and experience were separate from off-job training, with only off-job training and assessments leading to qualifications. The establishment of NZQA and the National Qualifications Framework in 1990 enabled the development of competency-based qualifications. This meant that on-job training and assessment could lead to nationally recognised unit standards, and that these standards could be incorporated along with unit standards gained in off-job training into vocational qualifications.
26. The Employment Contracts Act 1991 removed the exclusive rights of unions to negotiate employment conditions on behalf of employees and it disestablished the Arbitration Commission. Some functions of the Arbitration Commission were taken over by the Employment Court. However, the Arbitration Commission's function of central wage fixing and determining relativities between and within occupations disappeared, and this included the Commission's role of issuing apprenticeship orders.
27. The introduction of the Employment Contracts Act therefore meant that the apprenticeship system, which relied on the issuing of apprenticeship orders, had to at least be significantly modified. However, given the other problems with the system, the Government decided on fundamental change rather than simply finding another vehicle for issuing apprenticeship orders.

Options considered in changing the apprenticeship system

28. In 1990, the Minister appointed an apprenticeship and on-job working party to provide advice on the future model for the apprenticeship system. This working party considered that Government should continue to have a role in funding industry training because high quality systematic training:
 - confers wide benefits on the economy and society, beyond those which accrue to employers and firms
 - assists the development of a flexible workforce
 - helps reduce the adjustment and retraining costs that occur as workers move between employment.⁵

⁵ p5, *Apprenticeship and industry based training: report to the Minister of Education Dr. the Hon Lockwood Smith on the model developed by the working party on apprenticeship and on-job training*, January 1991.

This working party recommended that the new system should be industry-led, founded on competency-based training, should provide flexibility for employers and unions, and should allow for expansion to include new industries and areas of training. These are the key principles underpinning the design of the industry training system.

29. Final options were presented to Ministers by the inter-departmental working group in 1991.⁶ The options for both administrative support for industry training and for off-job training were a modified status quo, volume-driven funding, or contestable funding. All options assumed replacing the prescriptive Apprenticeship Act 1983 with enabling legislation. The options were assessed as to how well they would:

- extend coverage of systematic, industry-relevant training to a wider range of occupations and industries
- improve the responsiveness to industry needs
- provide incentives for efficient provision, particularly the split between on-job and off-job provision
- contain the costs for Government.

30. The inter-departmental working party recommended that government assistance for the administration of industry training (i.e. ETSA's liaison roles) was not required in the long term, though transitional arrangements would need to be made. For off-job training, the inter-departmental working party recommended that contestable funding would protect the viability of desirable elements of off-job training, while providing industry control and incentives to seek more efficient provision. A contestable fund would also contain the fiscal pressures better than a volume subsidy. The contract would include clear performance indicators. A key feature of the system was that it would be voluntary – industries and employers could choose to opt in or out of the system.

31. Treasury disagreed with the inter-departmental working party recommendations and recommended that Government target its funding directly to trainees in the form of vouchers or tuition rebates, which could be redeemed against training on the National Qualifications Framework. This proposal was rejected by Government, because it disregarded the role of employers in workplace training.

The result – the industry training system

32. The industry training system was progressively introduced from 1992 with the passage of the Industry Training Act. The training organisations are industry-owned and are responsible for purchasing training and arranging assessment. These arrangements are aimed at ensuring responsiveness to industry needs. The greater flexibility of the industry training system and the increasing levels of investment from Government have resulted in expansion in industry coverage and an increase in the number of trainees. The elements of the industry training system are described below.

⁶ Paragraphs 19-21 sourced from: *Paper B, Report of the Interdepartmental Working Party on skills training*, April 1991.

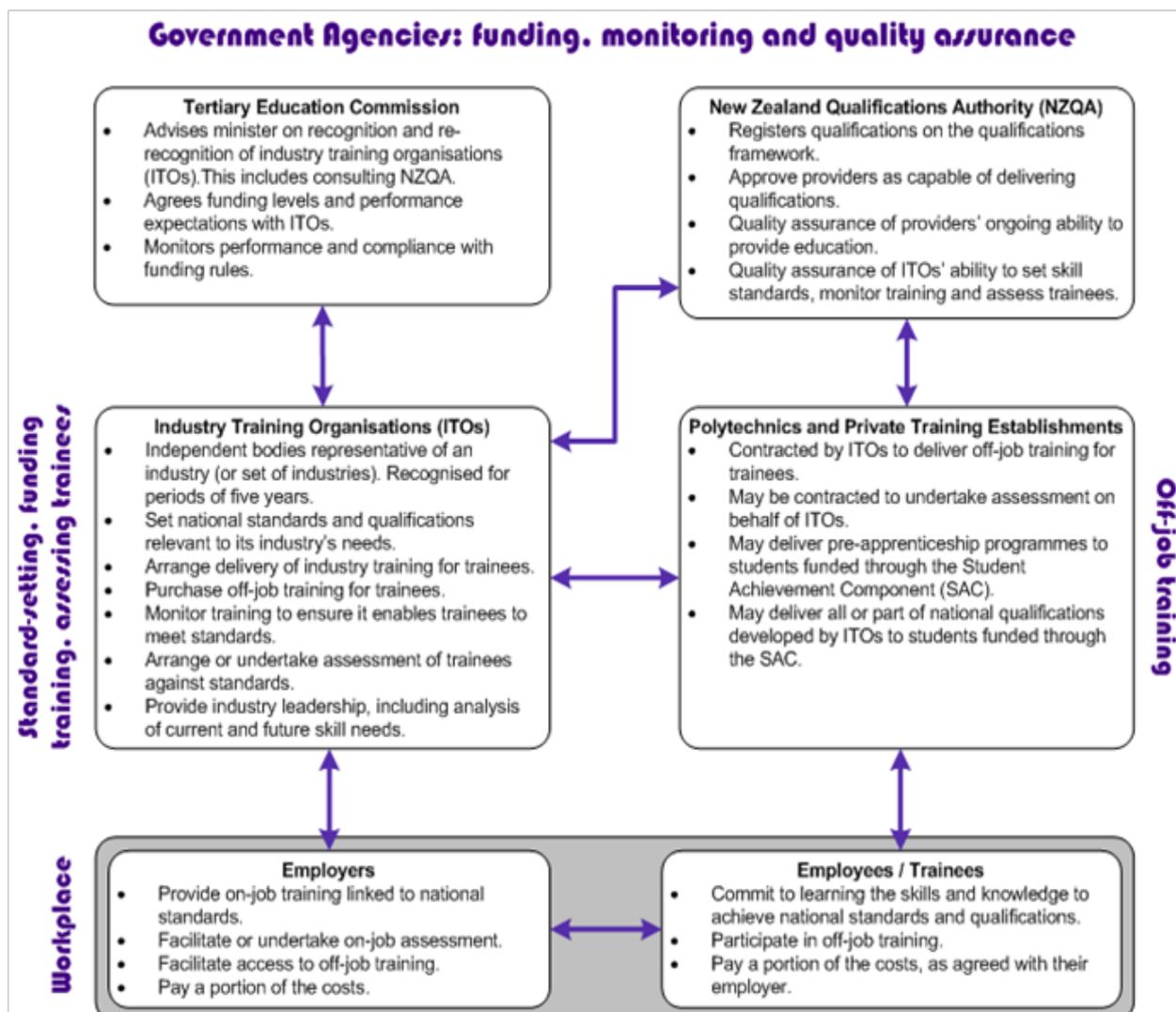
The Industry Training Act 1992

33. The Industry Training Act 1992 repealed the Apprenticeship Act 1983 and in contrast was shorter and less prescriptive. It described the roles of industry training organisations (ITOs), which were to set nationally recognised skill standards for the industries they represent, and to develop arrangements for the delivery of training, including arrangements for monitoring the quality of training and assessing trainees. The Act did not specify the governance arrangements of ITOs or how ITOs had to be organised.
34. The ETSA Board had the role of recognising ITOs when the Industry Training Act was first introduced. In 2004, it became the Minister for Tertiary Education's role to recognise ITOs. To gain recognition, and access to government funding, ITOs had to show they were representative of, and funded by, employers in their industries. The ETSA Board also had to take into account the organisation's level of skill and knowledge in recognising and re-recognising an organisation as an ITO.

Institutional arrangements

35. ETSA's role changed when the Industry Training Act was introduced. Instead of being directly involved in the employer-employee relationship and providing administrative support for apprenticeship committees, ETSA became a funding body that negotiated with and administered funding to ITOs. ETSA was removed from the employment relationship. As noted earlier in this paper, ETSA became Skill NZ in 1998 and was then incorporated into the newly-formed TEC in 2003. The sector saw the incorporation into the TEC, and the application of the new Charter and Profile system to ITOs, as recognition that industry training was part of the wider tertiary education system.
36. The role of purchasing off-job training was transferred from the Ministry of Education to ITOs. The rationale behind this was to make off-job training more responsive to the needs of industry by giving industry more direct control of what is purchased.
37. The diagram overleaf illustrates the current institutional roles within the industry training system. Polytechnics and Private Training Establishments (PTEs) may play both complementary and competitive roles in relation to ITOs, as many provide off-job training as well as offering vocational qualifications (either partly or fully developed by ITOs) to students enrolled under the EFTS system.
38. Employers and employees also have an active role in industry training. The training agreement that employers and employees sign and register with ITOs forms part of an employee's employment agreement.

Figure 3: Organisational arrangements of the current industry training system



Note: excludes roles associated with Modern Apprenticeships. Excludes the Ministry of Education's role in monitoring the TEC and providing the Minister with policy advice.

Increase in industry coverage and trainees

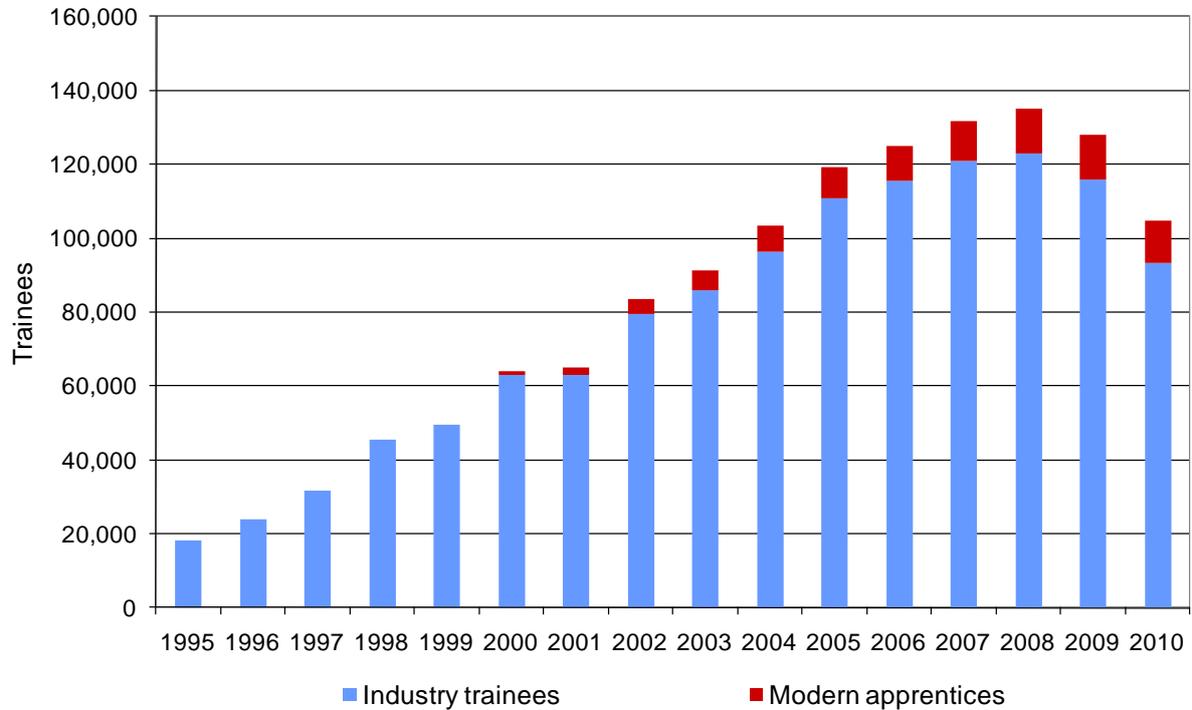
39. Several industries that were not covered under the apprenticeship system joined the industry training system. These included seafood, plastics, sport, fitness and recreation, and tourism. The number of ITOs has fluctuated over the years – in 1996 there were 52 ITOs, which has now decreased to 38. Most ITOs cover a number of industries, so the decrease in ITOs does not necessarily mean a decrease in industry coverage.

40. The number of employers involved in industry training has grown: in 2002, around 24,600 employers had trainees active in industry training; by 2009, just under 38,900 employers had trainees taking part in industry training.

41. The number of trainees also increased – by 1998 there were over 45,000 trainees (see figure 4 below). However, during the 1990s there was no data on completions and therefore the value of the increased number of trainees was unknown. To focus ITOs on ensuring qualification completions, Skill NZ began collecting data on completions in the

year 2000.⁷ We do not know how much industry training activity in the 1990s related to actual training and how much related to recognition of prior learning.

Figure 4: Number of industry trainees and modern apprentices, 1995 to 2010



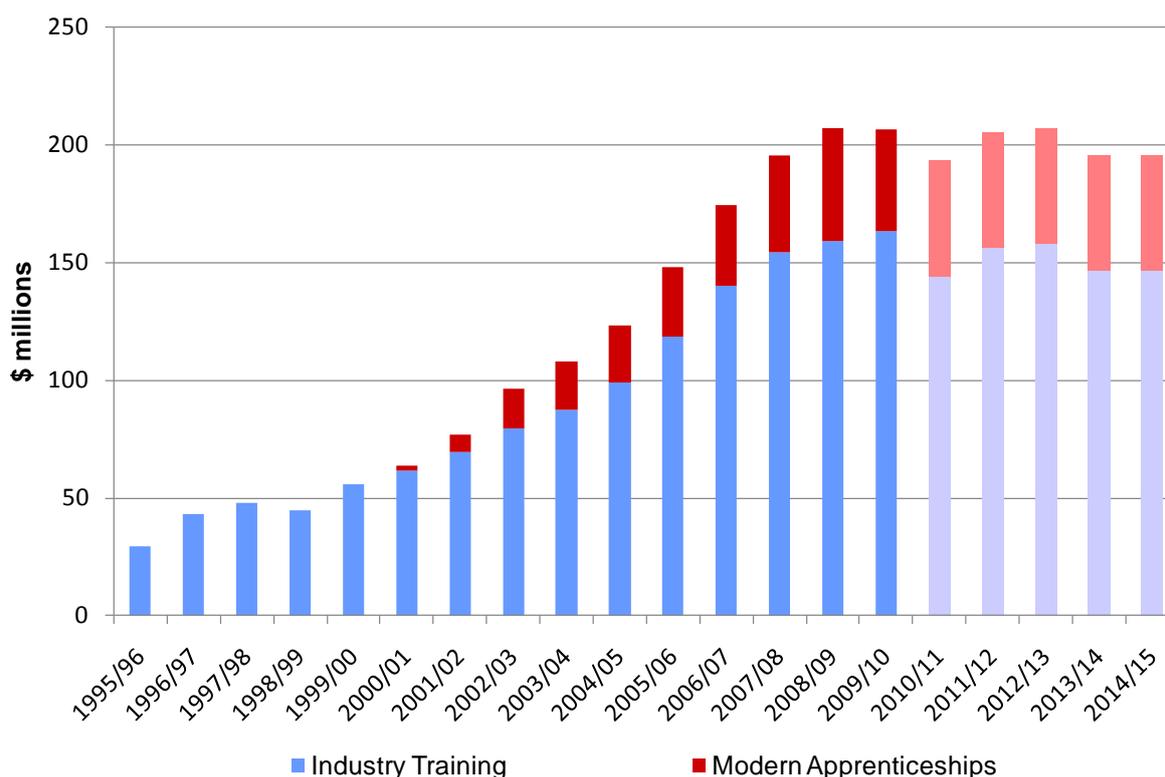
Note: figures for 1995 – 1999 are as at 30 June; figures for 2000 onwards are as at 31 December.

⁷ This data reflected aggregate completions for a year, so cohort completion rates could not be calculated from it.

Expenditure

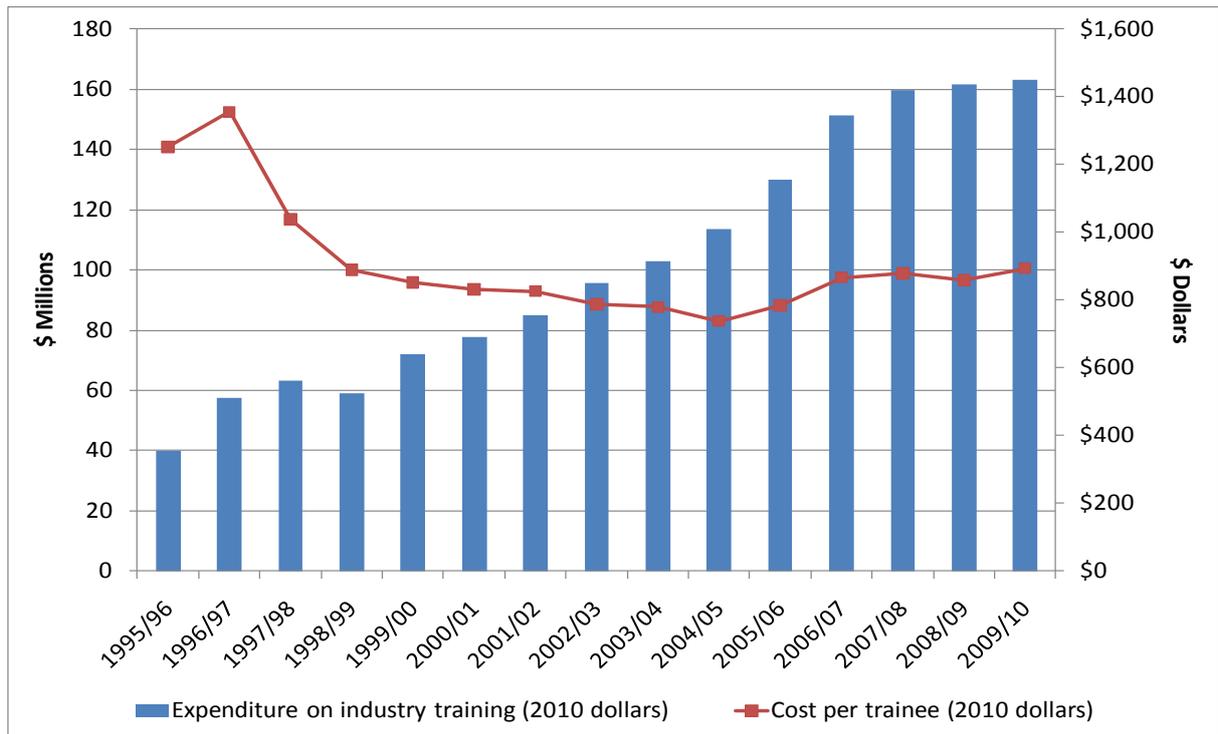
42. The level of government investment for industry training has increased over the last 20 years (see figure 5 overleaf). In 2009/10, the Government spent \$163.2 million on industry training; the baseline for industry training in 2011/12 is \$156.3 million (both figures exclude Modern Apprenticeship funding).
43. Expenditure on industry training (excluding modern apprentices) has increased in real terms by over 300% since 1995/96 (see figure 6). The inflation-adjusted subsidy per trainee has declined from approximately \$1,200 in 1995/96 to \$916 in 2009/10. The high cost per trainee in the first few years of the industry training fund likely reflects transition costs associated with the new system.
44. Expenditure on the Modern Apprenticeship scheme has increased in real terms by almost 400% between 2001/02 and 2009/10 (see figure 7). The cost per modern apprentice has remained relatively flat from 2003/04 onwards. In 2009/10, the cost per modern apprentice was \$2,947.

Figure 5: Government expenditure on industry training and Modern Apprenticeships, 1995/96 to 2009/10, and baselines for industry training and Modern Apprenticeships, 2010/11 to 2014/15



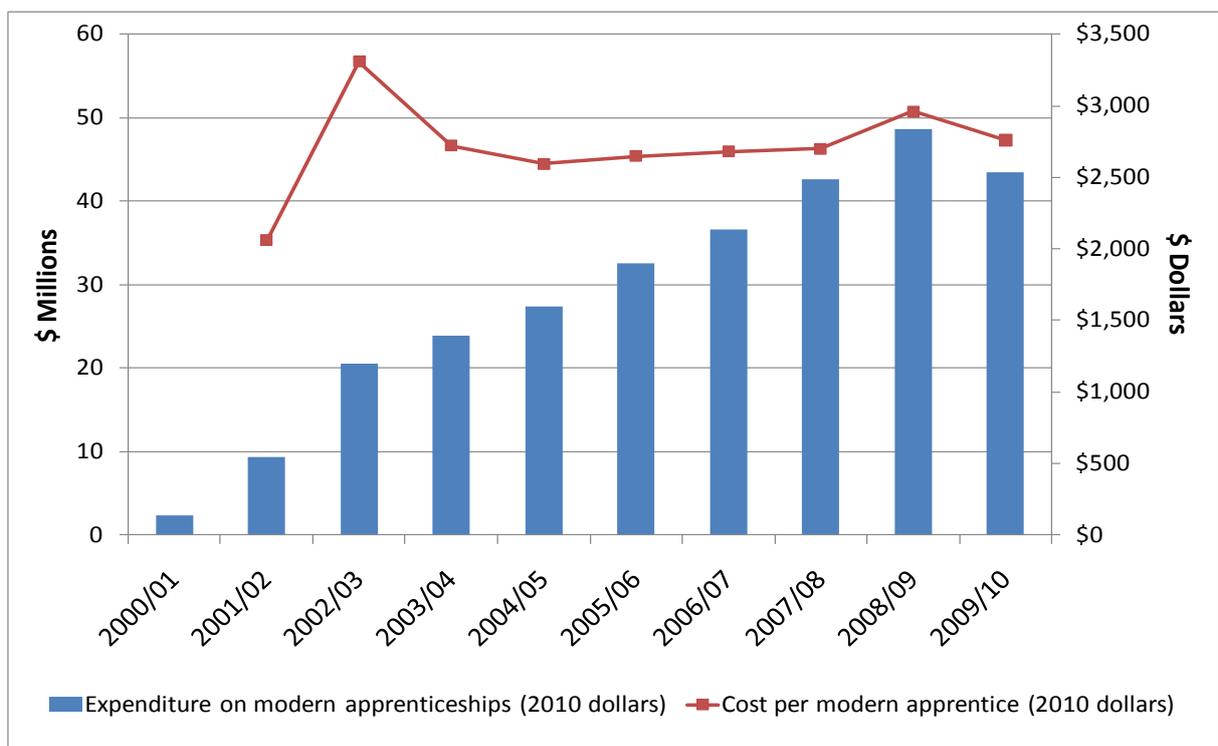
Baseline appropriations from 2010/11. GST exclusive.

Figure 6: Inflation-adjusted expenditure on industry training and inflation-adjusted cost per trainee, 1995/96 to 2009/10



Note: excludes modern apprentices. The number of trainees 1995-2000, on which the cost per trainee is based, is an estimate based on June year stock. Cost estimates per trainee may be inaccurate as a consequence.

Figure 7: Inflation-adjusted expenditure on modern apprentices and inflation-adjusted cost per modern apprentice, 1995/96 to 2009/10



History of funding for industry training⁸

45. The funding system has changed four times since 1992. In addition to funding for the core roles for industry training, the initial funding system included development funds to aid transition to the new system. A 1995 review of the funding system resulted in the establishment of the Industry Training Fund and the introduction of a relatively complicated benchmarked cost system, which divided the funding into six cost components. In 2000, the funding moved to a bulk funding model and the six cost components were replaced with a single funding formula based on number of trainees, qualification size and qualification length. At this time ITOs were funded at different rates based on historical factors, such as length in the industry training system. In 2004, the Government moved to a single funding rate for all industries. These changes are described in more detail below.

Funding system 1992-1995

46. The initial industry training funding system comprised three elements:

- **The Training Support Fund:** which provided assistance to ITOs with the costs of administering apprenticeships, Primary Industry Cadetships, and new training arrangements.
- **The Off-job Training Fund:** which enabled ITOs to purchase off-job requirements (or appropriate on-job equivalents), and to assist in the delivery of systematic training. The Fund was also used to support administration of apprenticeships.
- **The Industry Training Development Fund:** which provided resources to assist industry groups establish as ITOs or to become integrated into existing ITOs, and to develop systematic training linked to the National Qualifications Framework. This fund was \$1.5 million and funding was capped at \$200,000 per ITO.

47. ITOs placed bids with ETSA regarding how much off-job training they would provide. The size of ITOs' bids and officials' projections of costs often varied significantly, and it was difficult to predict growth in training or the costs to Government.

Funding system 1996-1999

48. A 1995 review of funding for industry training resulted in the setting up of the Industry Training Fund (in 1995) and a benchmarked cost system in 1996. The review identified the following problems with the initial funding system:

- **Perverse incentives** created by the difference in funding levels between EFTS funding and industry training rates. This meant employers had an incentive to shift training to EFTS-funded tertiary providers and ITOs had incentives to develop training arrangements using more government-funded off-job training rather than seeking an efficient and effective mix between off-job and on-job training.
- **Pressure to increase funding levels** in line with increases in the number of eligible trainees. This made it difficult for Government to control costs.

⁸ Information on funding systems 1992-1999 is sourced from: *A brief history of government funding for industry training 1989-2002*, Industry Training Federation, January 2003.

- **Pressure to address ITOs in financial difficulty.** It was felt clearer signals about expected funding levels would reduce the pressure on Government to resolve ITOs' difficulties.

49. A new benchmarked funding system based on six cost components addressed these issues. It reduced the unit cost of industry training for Government, increased ITO efficiency and effectiveness as a result of the increased scrutiny of costs, and increased training numbers and the range of occupations covered by ITOs. However, it was complex, had high transaction costs, focused ITOs and ETSA on inputs and costs rather than results, and encouraged ITOs to organise their funding bids to maximise public funding.

50. The benchmarked funding system divided industry training into six input components and asked ITOs to submit bids for these components. The total costs for each component were added together and then averaged across all ITOs – this became the benchmark for that component. A different subsidy rate was struck for each component and applied to the benchmark. Each ITO's bid for each component was then compared to the benchmark, modified by the subsidy rate. Where the ITO's costs were higher than the benchmarked subsidy rate, the subsidy rate was paid; where the ITO's costs were lower, the lower rate was paid. The subsidy rates were then summed and multiplied by the volume of training that ITOs intended to deliver. The table below details the six input components and the subsidy rates that were applied to the benchmarks.

Table 1: Components of the benchmarked funding system and the subsidy rates applied to each component, 1996 – 1999

Input component	Subsidy rate 1996 & 1997	Subsidy rate 1998 & 1999
1: Providing information and advice to trainees/employers	40%	30%
2: Arranging on-job training	80%	50%
3: Arranging on-job assessment	50%	50%
4a: Purchasing off-job training	82%	75%
4b: Arranging off-job training	76%	65%
5: Arranging the monitoring of training quality.	70%	50%

Funding system 2000 to present day

51. In 2000, industry training funding moved to a bulk funding model. The six cost components of the benchmarked system were abolished and the Standard Training Measure (STM) rates were frozen at 1999 levels. The STM rate is modified by credits in a qualification and the expected duration of a qualification. The funding formula is:

$$STMs\ delivered = \frac{\left[(Number\ of\ trainees) * \left(\frac{Credits\ in\ a\ qualification}{Expected\ duration\ of\ a\ qualification} \right) \right]}{120}$$

For each qualification, ITOs nominate how long they expect the average trainee to complete this qualification.

52. Moving funding between components had proved difficult for ITOs under the benchmarked system. The change to bulk funding meant that ITOs could use their

funding as they saw fit in order to achieve the contracted service levels. The Industry Training Fund is allocated by the TEC based on historic demand patterns through the Plan system.

53. A major sticking point, however, was that ITOs had varying STM rates, usually based on historical factors, such as when the ITO entered the system. The lack of equity in funding rates between ITOs was raised as an issue in the 2001 review of industry training. As a result of the review, \$1 million of the Industry Training Fund was set aside each year to narrow the range of STM rates. The TEC targeted ITOs at the top and bottom of the STM range, with those at the top being offered an increase in volume to compensate for the decrease in subsidy rate. This successfully decreased the gap between the highest and lowest STM rate – from \$2,229 in 2001 to \$1,328 in 2004.⁹
54. In 2004, Government decided to introduce a single STM rate. At that time there were 26 different STM rates. The rationale for this decision was to provide greater certainty about funding, create clear signalling about the expected level of industry contributions, and address the lack of transparency in the funding system. The Ministry and TEC recommended moving to a single STM rate of \$3,200 (GST inclusive) over three years, which would cost \$13.7 million in the transition phase and increase the Industry Training Fund by \$11.6 million per annum in outyears. The STM rate of \$3,200 was recommended in part because it had a higher number of winners than losers – 24 ITOs would have an increase in their STM rates, and 15 would have a decrease. This option would also minimise the risk to ITO viability.
55. The Treasury argued that increasing the funding rates for some ITOs would not clearly lead to improved outcomes at these ITOs, and therefore did not represent good value for money. The Treasury recommended moving to the weighted average of \$2,972 over a longer timeframe, so that the change would be fiscally neutral. The Industry Training Federation argued for a single STM rate of \$3,700, which would mean that 38 ITOs would have an increase in their STM rates and one ITO would have a decrease.
56. The Government opted for the option recommended by the Ministry and the TEC [SDC Min (04) 7/2 refers]. In Budget 2004, the Government appropriated \$25.3 million over four years to move to the single STM rate. The STM rate for 2011 is \$2,919 (GST exclusive).

Review of Industry Training in 2001

57. The main focus of the 2001 review was working with stakeholders (primarily ITOs, but also business and unions) to understand how the system should be amended to better meet their needs. The review endorsed the policy settings for industry training and the changes made did not alter the fundamental shape of the system.
58. A number of changes were made to the Industry Training Act as a result of the review, including giving ITOs an additional leadership role and introducing additional tests in the recognition and re-recognition process. The review also resulted in ITOs being allowed to use a small amount of funding to arrange training for qualifications at levels 5 and 6. The industry training fund was also increased by \$8 million from 2001/02 and another \$8 million from 2002/03 – to ‘catch the knowledge wave’. The problems identified by the review and the changes that were made are discussed in more detail below.

⁹ In 2001, the lowest STM rate was \$1,736 and the highest was \$3,965. The average STM rate was \$2,800. In 2004, the lowest STM rate was \$2,637 and the highest was still \$3,965. The weighted average rate was \$2,972. All figures include GST.

Responsiveness of training

59. The relatively large number of ITOs was highlighted as a problem by the review (in 2001 there were 47 ITOs). It meant that firms that encompassed several occupations had considerable transaction costs through dealing with multiple ITOs. It was also difficult for employers to switch ITOs, which led to some firms opting for training through the more expensive SAC system. Two measures were introduced to address this:

- The Industry Training Act was changed to give employers the flexibility to change ITO (section 10A). The employer has to show that either the current ITO is not supplying a satisfactory service or the employer faces significant costs because it is covered by more than one ITO.
- Skill NZ was asked to encourage alliances and amalgamation of ITOs.

60. Another problem identified by the review was difficulties in extending coverage to small firms and firms outside the main centres, particularly firms new to industry training. To address this, Skill NZ was asked to foster the extension of ITOs into regions where they did not currently offer services. A small amount of the industry training fund (\$100,000) was also set aside in 2002 to fund industry training initiatives for small and medium-sized enterprises in industries where there is no training culture.

61. The uneven engagement of employees in ITO decision-making was identified as a barrier to the responsiveness of training. To address this, the Industry Training Act was changed so that ITOs were required to develop arrangements for collective representation of employees in the governance of the organisation (section 6(d)). Demonstrating how the ITO would engage employees also became a requirement for recognition (section 7(d)).

62. A new leadership role was added to ITOs' core functions (section 6(c)), to balance the pressure from employers to focus on skills specific to their businesses rather than industry-wide skills. This required ITOs to identify current and future skill needs, develop strategic training plans to assist the industry to meet those needs, and to promote training that meet those needs to employers and employees.

63. The review also proposed strengthening the management of the industry training system and a stronger focus on performance. As a result, satisfactory past performance became a criterion for re-recognition (section 7(g)). Skill NZ was also required to work with ITOs who are not adequately fulfilling their core functions to help them improve their performance.

Funding

64. The level of industry contribution was highlighted as a problem where industries are made up of a large number of small firms. This leads to lower investment in training than is beneficial for the industry as a whole and a lack of a co-ordinated approach to training. To remedy this, Part 5 was added to the Industry Training Act, which allowed ITOs to impose a levy on firms in an industry based on the voluntary balloted agreement of the majority of employers in an industry or sub-industry. Levies arrived at through this balloting procedure would be used to fund industry leadership and qualifications design, but could not be used to purchase training. This arrangement has never been used.

65. The lack of subsidies for industry training above level 4 inhibited the development of pathways to upper level qualifications. From 2002, ITOs were able to access funding for training at level 5 and above. This was capped at no more than 10% of their funding

allocation, so that higher level training would not squeeze out access for trainees with high educational needs.

66. The lack of equity in funding across industry training was highlighted by ITOs as a problem. In response, part of the industry training fund (\$1 million) was set aside to reduce funding differences between ITOs, and ITOs with particularly low funding rates could make a case to Skill NZ for higher funding.

Introduction of Modern Apprenticeships

Problem

67. By the late 1990s, the overall level of work-based education in New Zealand appeared to be relatively high: over 56,000 employees were participating in industry training in 1999; and the International Adult Literacy Survey found that 47% of New Zealand employees had received job-related training in the past year, compared to an unweighted average of 34% across OECD countries. However, the number of young people receiving structured industry training was fairly low. In December 1999, 10% of trainees were aged 16-19 years and 24% were aged 20-24 years.
68. The main reason behind this was thought to be that employers preferred to offer industry training to workers who had been employed for several years and proved their reliability, rather than take the risk of training younger people. It was also hypothesised that industry training might not provide sufficient support for young people engaged in work-based training. At the time, there was a strong public perception that apprenticeships were no longer available, perhaps in part due to the use of the term 'trainee' and in part due to the reduction in apprenticeships for young people, particularly school leavers [DEV (00) 4 refers].

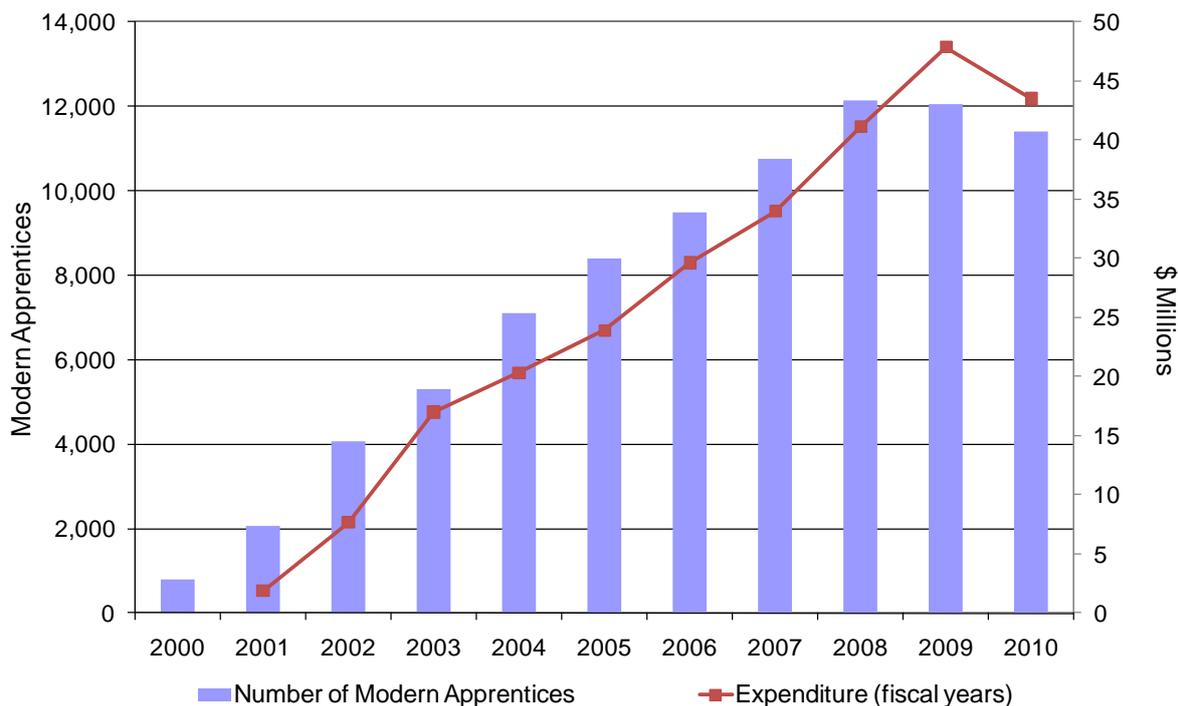
Modern Apprenticeships: rationale and design

69. The aim of Modern Apprenticeships was to encourage employers to hire more and younger apprentices. Ensuring employers are prepared to hire young people was seen as the largest barrier to increasing the number of young people in industry training. The Modern Apprenticeship programme sought to do this through a brokerage scheme, which would overlay the industry training subsidy. The role of Modern Apprenticeship brokers (now called co-ordinators) was to:
- screen potential apprentices and arrange work placements with employers
 - work with employers and apprentices to produce an individual training plan
 - manage training arrangements and ensure that training leads to assessment for credits towards a national qualification
 - ensure systems are in place to guarantee training quality
 - support the apprentice by providing advice and resolving problems as they arise, and if necessary, arrange for the apprentice to complete a national qualification with another employer [DEV (00) 4 refers].
70. The purpose of brokers was to reduce the costs and risks to employers in employing and training young people. The pastoral care and additional support offered to apprentices would also address the risk of non-completion of training. An additional benefit of the

Modern Apprenticeship brokers would be raising the profile of industry training within local labour markets and with employers.

71. The Modern Apprenticeship programme was generally restricted to those aged 16 to 21 years¹⁰ and for study at levels 3 and 4 on the National Qualifications Framework. Study at levels 1 and 2 was excluded as the programme did not intend to provide a pathway for second chance learners who had not succeeded in gaining lower level qualifications.
72. Modern Apprenticeship Co-ordinators receive a fixed sum per modern apprentice. The rate differs depending on whether the co-ordinator is an ITO or not. In 2010, the rate for ITO co-ordinators was \$1,777 (GST exclusive) and for non-ITO co-ordinators it was \$1,956 (GST exclusive).
73. The Modern Apprenticeship programme was introduced in the latter part of 2000 and enrolled 800 participants. In 2010, Government subsidised just over 11,623 modern apprentices (see figure 8 below).
74. The baseline has also increased since the programme was introduced and is now \$49.3 million, which includes both the subsidy for industry training as well as the subsidy for Modern Apprenticeship Co-ordinators.

Figure 8: Number of modern apprentices, 2000-2010 and expenditure on Modern Apprenticeships, 2000/01-2009/10



Note: Number of apprentices as at 31 December each year.

¹⁰ A small number of older apprentices have access to Modern Apprenticeships.

TEC review of Modern Apprenticeship programme in 2010

75. The TEC reviewed the efficiency and effectiveness of the Modern Apprenticeships programme during 2010 as a part of its review of industry training. The review was driven by the need to seek value for money in a tight fiscal environment. The review found that the Modern Apprenticeship programme has been effective in increasing the number of young people undertaking industry training, and at re-establishing apprenticeships as a career pathway for young people.
76. However, the programme produced disappointing educational performance relative to the size of Government's investment. While the five-year completion rate for modern apprentices was higher than that of the wider industry training system (37% compared with 31%), modern apprentices are more costly on average to the Government. In addition, there was significant variation of performance across industries and co-ordinator organisations, and the time for the average modern apprentice to complete their qualification was generally longer than the expected four years, which increases the cost of the programme to Government overall.
77. The review has resulted in the TEC developing output-focussed contracts with Modern Apprenticeships co-ordinators to take effect from January 2012. It proposed new performance incentives, including the introduction of performance-linked funding and financial incentives, to encourage timely completions of apprenticeships. Work to identify how incentives could improve the performance of Modern Apprenticeships co-ordinators without creating an overly complex system has not been completed. The Ministry will look at Modern Apprenticeships as part of the current industry training review.

Performance

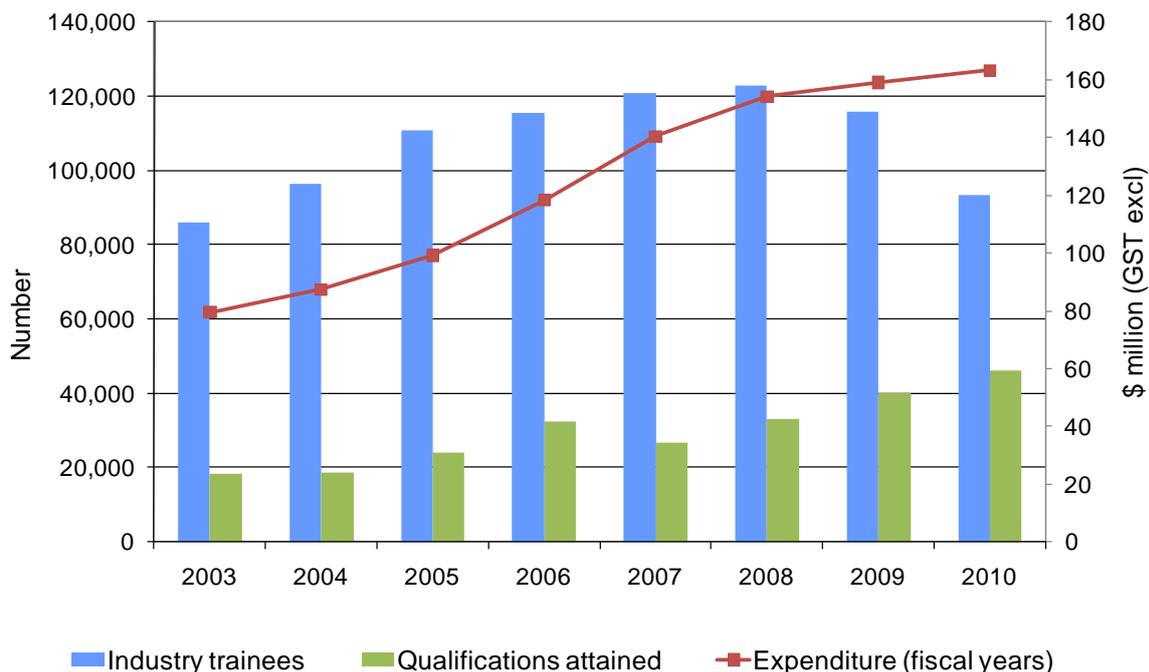
Qualification completions

78. We have reliable information on completions from 2003 onwards. Figures 9 and 10 (overleaf) show the number of trainees and the number of qualification completions from 2003. In 2003, there were 18,919 qualification completions; in 2010, there were 50,855 qualification completions from industry training and modern apprenticeships.
79. Qualification completions include completions from learners in training from previous years as well as those taking part in the current year. A cohort approach to completion rates is therefore more indicative of the performance of industry training. Table 2 below shows the qualification completion rates for the cohorts that entered industry training between 2002 and 2005. As trainees are working as well as undertaking formal training, the completion rates have been calculated over relatively long intervals (from 5 years to 8 years). The average five-year qualification completion rate of industry trainees is 26%, while the average for modern apprentices is 29%.

Table 2: Qualification completion rates for industry trainees and modern apprentices who entered industry training between 2002 and 2005

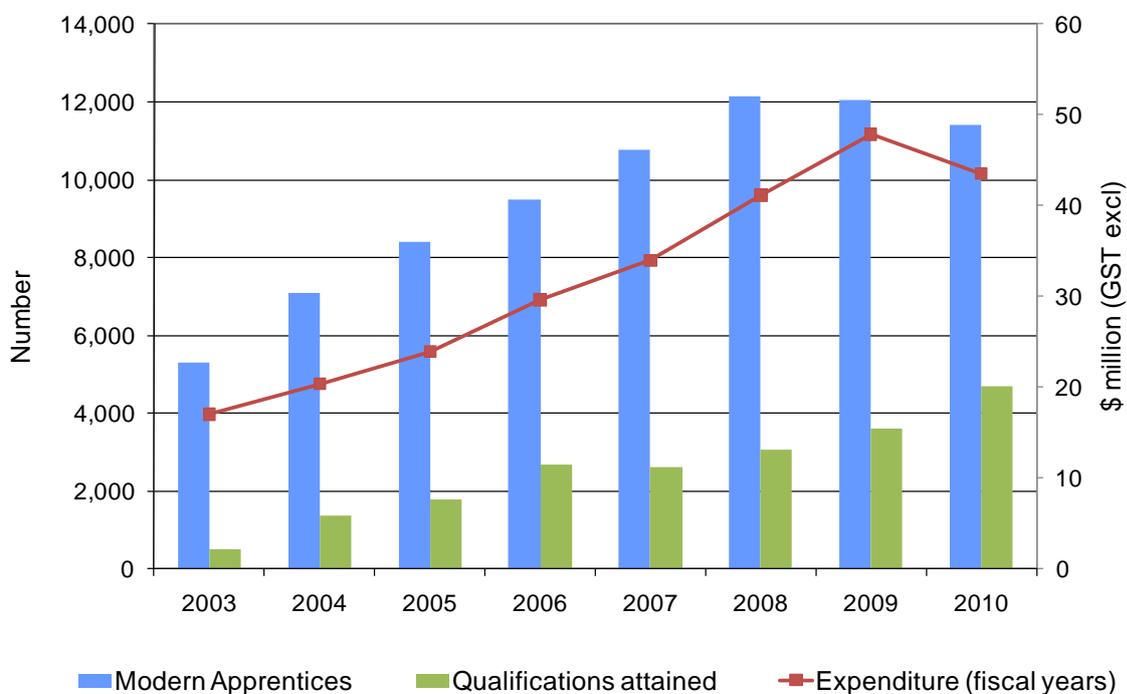
	% learners starting for the first time in year and completing at least 1 national qualification after specified interval									
First start year	2002				2003			2004		2005
Interval	5 year	6 year	7 year	8 year	5 year	6 year	7 year	5 year	6 year	5 year
Industry trainees	21%	23%	23%	24%	29%	30%	31%	26%	28%	28%
Modern apprentices	25%	27%	28%	29%	29%	32%	34%	29%	33%	31%

Figure 9: Number of trainees & qualification completions from industry training, 2003 – 2010, and expenditure on industry training 2002/03 – 2009/10



Note: Excludes modern apprentices. The number of trainees are a snapshot as at 31 December each year and is lower than the total number of trainees who participate in any given year.

Figure 10: Number of trainees & qualification completions from Modern Apprenticeships, 2003 – 2010, and expenditure on Modern Apprenticeships 2002/03 – 2009/10



Note: The number of modern apprentices is a snapshot as at 31 December each year and is lower than the total number of trainees in any given year.

Credit attainment

80. Credit achievement data is available from the year 2000 onwards. The average industry trainee achieves 19 credits per year and the average modern apprentice achieves 33 credits per year (see Table 3 below). However, a sizeable number of industry trainees and modern apprentices each year achieve no credits. Each year around 53% of industry trainees and 36% of modern apprentices achieve no credits. When these trainees are removed, the average credit attainment each year increases to 41 credits per industry trainee and 51 credits per modern apprentice.

81. The proportion of trainees achieving credits appears to be improving. In 2010, the proportion of industry trainees achieving at least one credit increased by six percentage points (from 45% to 51%) compared to 2009. Similarly the proportion of modern apprentices achieving credits increased by four percentage points (from 68% to 72%). While it is too early to say whether performance will continue to improve, the recent changes in operational policy (described in the section below) mean that a higher level of performance is expected from industry training.

82. Average credit achievement for modern apprentices has improved in 2009 and 2010. Again, it is too early to say whether this is a trend.

Table 3: Credit attainment of industry trainees, 2000-2010, and of modern apprentices, 2001-2010

	Industry trainees				Modern apprentices			
	Total credits	Avg per trainee	Avg per trainee that achieved credits*	% of trainees who achieved no credits	Total credits	Avg per trainee	Avg per trainee that achieved credits*	% of trainees who achieved no credits
2000	23,154	17	Not avail.	Not avail.	N/A	N/A	N/A	N/A
2001	1,875,791	20	45	54%	43,347	22	41	46%
2002	1,934,567	19	40	52%	111,712	25	46	47%
2003	2,291,705	19	40	52%	206,986	34	49	32%
2004	2,318,829	18	39	54%	279,254	32	53	40%
2005	2,777,704	19	40	54%	372,701	35	53	33%
2006	3,398,106	21	44	52%	440,830	36	54	33%
2007	3,182,773	19	40	54%	454,683	33	51	34%
2008	3,267,303	19	41	55%	506,204	32	49	35%
2009	3,410,293	19	42	55%	622,168	38	55	32%
2010	3,727,318	21	41	49%	698,851	44	62	28%
2000-2010	28,207,543	19	41	53%	3,736,736	33	51	36%

* This is the average credits attained by trainees that achieved credits (i.e. the denominator excludes trainees that achieved no credits in the year).

Note: The denominator is the total number of trainees each year rather than the snapshot of trainees as at 31 December that is used elsewhere in this report. The 2010 credit achievement data for Plumbing, Gasfitting, Drainlaying, Roofing (PGDR) ITO is provisional.

Changes to operational policy

83. In 2010, the TEC reviewed the industry training policy framework. At the same time, the TEC also reviewed the operational policy for industry training in response to issues of poor performance and poor trainee management systems at ITOs. Both these reviews

resulted in changes that will require a higher level of performance from ITOs. The changes are summarised below according to the year they will be implemented.

84. Over the last two years the Government has required much better accountability from ITOs for the use of public funds. This will continue with the introduction of regular, in-depth monitoring and auditing of ITOs. In addition, the TEC is introducing the Industry Training Register (ITR), which will offer near real-time reporting of industry training activity. The ITR will support the implementation of the operational policy changes.

Changes in effect from 2011

85. From 1 January 2011, the TEC will automatically lower the funding that ITOs receive for enrolments in programmes where the nominal duration of qualifications is lower than the actual rate of progress of trainees. This addresses the problem that the TEC identified where the nominal duration of qualifications does not match the actual rate of progress of trainees enrolled in these qualifications. Where this is occurring the funding rate for these trainees is inflated, resulting in over-funding¹¹. In 2009, the estimated annualised level of over-funding of ITOs associated with this practice was \$20.9 million (GST exclusive). In proactively managing this issue during 2010, the TEC has reduced this annualised level of over-funding to an estimated \$4.8 million (GST exclusive).
86. The funding that may be claimed for each individual trainee is now limited to 70 credits per annum. The funding regulations indicate that a 70 credit funding limit for trainees in full time work is reasonable in any given year. This is on the basis that a credit equates to 10 notional hours of learning. Through its regular monitoring, the TEC found that there were 15,573 trainees enrolled in more than 70 credits per annum during 2009. In 2009, ITOs attracted \$10 million in funding, over and above the equivalent of 70 credits per year.
87. From 2011, ITOs will only be funded for trainees where there has been some evidence of credit achievement in the preceding 12 month period, unless at least 80% of the trainees enrolled by an ITO over the preceding two years had evidence of credit achievement.

Changes in effect from 2012

88. Performance-linked funding will come into effect in 2012. This will mean that up to 5% of an ITO's funding will be at risk and will be allocated on the basis of qualification and credit achievement.
89. ITOs will not be funded for training primarily designed to fulfil regulatory compliance or health and safety requirements unless it is part of a wider, substantive industry qualification. This will ensure that the Government does not fund training that is the responsibility of businesses to fund. In 2010, an estimated 15% of industry trainees were involved in health and safety programmes. Very few modern apprentices are involved in health and safety programmes.

¹¹ An example of this is the 60 credit National Certificate in First Line Management. This programme has a nominal duration for funding purposes of one year. This means that each year a trainee attracts up to \$1,459 of funding, and in 2009 the ITO received \$81,772 of funding for this programme. Analysis of the actual average length of time that trainees are enrolled in this programme shows that on average trainees are enrolled for two years. The TEC has worked with the ITO concerned to change the duration of the National Certificate to two years. This means that a trainee can attract up to \$729 of funding, and, assuming the same number of trainees are enrolled in 2011, will mean that the ITO will receive \$40,866 of funding for this programme in 2011.

Changes in effect from 2013

90. From 2013, ITOs will be expected to achieve 30% industry cash contribution. The re-recognition of ITOs may be affected if ITOs consistently fail to achieve this level, and persistent poor performance may also affect funding allocations. This should incentivise ITOs to arrange training that employers are willing to invest in.
91. From 2013, training at levels 1 and 2 must be toward qualifications of 40 credits or more, and must include embedded literacy and numeracy training. This should improve the quality and relevance of foundation-level industry training arrangements.

Conclusion

92. The apprenticeship system that preceded the current industry training system was bureaucratic and slow to adapt to the changing training requirements resulting from economic and technological shifts. The on-job component of the apprenticeship system was a time served model, while qualifications could only be gained through off-job training and assessment. The apprenticeship system lacked incentives for off-job training to be relevant to the skills required by employers or to the workplace experience of apprentices.
93. The current industry training system was established in 1992. The Industry Training Act 1992 was introduced to extend training to a wider range of industries and to make the delivery of training more responsive to employers' needs. Employer ownership was to be achieved by devolving governance to industry groups, with Government taking a limited regulatory and purchase role. The National Qualifications Framework, established in 1990, allowed ITOs to develop competency based qualifications that could be delivered in a range of settings.
94. The new system achieved its intent. The range of industries covered by ITOs expanded far beyond the traditional apprenticeship occupations. Qualifications design became more responsive to employer needs, driven by ITOs' need to develop qualifications that they can use to attract trainees. And the number of trainees grew – from around 25,000 apprentices throughout the 1980s to 105,000 trainees and modern apprentices in December 2010. However, the cost to Government of industry training also rose.
95. The last major change to the industry training system was the addition of Modern Apprenticeships in 2000. They were intended to provide a clear pathway for young people into workplace training, and to support attainment of level 3 and 4 certificates within 4 years.
96. In 2010, the Government made a number of changes to operational policy to improve accountability for funding and improve the performance of industry training. These are being progressively introduced between 2011 and 2013. Changes include aligning funding rates with the actual progress of trainees, requiring credit achievement for trainees to maintain eligibility for funding, the introduction of performance-linked funding, and the removal of funding for training designed primarily to fulfil regulatory compliance and health and safety requirements.