



Briefing Note

ISO 10015: A Strategic Instrument in Human Capital Development

Dr. Lichia Yiu & Dr. Raymond Saner¹

CSEND, 2004

P.O. Box 1498, Mont Blanc, 1211 Geneva 1, Switzerland,
E-Mail: saneryiu@csend.org, <http://www.csend.org> and <http://www.adequate.org>

Why invest in training?

Globalisation continues despite the current economic downturns and political uncertainty. Competition for market shares and customer loyalty has pitted companies against each other competing on price, innovation and services. Global supply chain has become the business norm rather than the exception, even for smaller firms, in order to create greater value for the customers and to achieve business sustainability. This trend is best seen from the foreign direct investment (FDI) figures, which reached 1.3 trillion US dollars (2000).²

For the advanced industrial countries, the firm's competitive advantages are increasingly residing in its superior innovation capacity and the firm's intellectual properties and capital. The more traditional advantages of OECD countries in terms of production know-how and quality have been eroded by companies from newly industrialised countries (e.g., South Korea, Taiwan, Singapore) and developing countries (e.g., China, India).

Global competition coupled with technological innovation has shifted the European and North-American economies from industrial production to knowledge based production of goods and services. Knowledge based capital concretely means acquiring or generating patents and products through research and development, which in turn requires ensuring increasingly sophisticated skills and knowledge levels of human resources. While companies are applying varied strategies to stay ahead of the global competition, the value of human capital of the OECD countries would be put into jeopardy without continuously investing in their workforce's skills and knowledge capital.

Investment or Expenditure?

Keeping pace with the changing demands of market conditions and workplace practices, companies have to continuously re-invest and upgrade the competence profile of their human resources. Yet while most of the managers recognise the need to attract, develop and retain a

¹ The authors express their appreciation for the research on Investors in People provided by Kaori Yasuda.

² *World Investment Report*, UNCTAD, 2001

highly skilled and innovative workforce, few managers feel comfortable with the idea of investing in people, especially when the profit margins have dwindled and market conditions become increasingly tough and competitive. In times of economic stagnation or recession, investing in people is often seen as a luxury rather than an investment. Instead, cutting expenditures predominates top management's thinking and budgets for training get cut without taking into account the potential future erosion of its current competitive advantages.

This discrepancy between espoused value ("people are our most valued asset") and actual practice can be attributed to different sources. One reason being those enterprises are not requested to report on training investments to shareholders nor to society at large. Therefore there is no external accountability regarding managerial responsibility in safeguarding its human and intellectual capitals.

The other reason, even more important in terms of making investment decision, is the fact that most managers do not know how to assess the return on investment in training, nor are they equipped with the necessary management tools to monitor the decision making process of such investment. How can one know that the money paid for staff training will return in form of more efficient and effective work processes or new and more competitive goods or services? How can one measure the benefits of training and how could one amortise investments made in human capital? How can a organisation be sure that newly trained staff, the most important assets of today's working world, does not simply walk off and take with them the newly acquired knowledge and skills?

Major companies in North America and Western Europe that spend up to 2% to 3% of the total payroll³ on training amounting to millions of dollars in training for a large organization are not as thorough in scrutinising the training investment as investments made in other domains. Why is it? Is it because that training continues to be treated as expenses rather than as investment into organisation's capacity to compete and to innovate?

What benchmarking facts to consider?

The questions raised above are true for all of our companies. Managers are concerned with justifying and are anxious in safekeeping their investment. Their staff could leave the organisation without the organisation having already recuperated sufficient return on its investment in training. After all mobility and labour turnover is part of the labour market conditions.

Successful companies have to manage this dilemma and invest anyhow since the competition abroad does not stop investing in people! For example, US employers spent in average US\$ 677.00 per employee in 2000⁴ representing an average 2% of payroll or 10% if indirect costs are factored into the total costs. All this despite the seemingly relentless price competition and a highly mobile US labour market, which is much more flexible than is the case in Europe.

Example could also be found in Europe. In a recent survey of 1,200 companies in Ireland, one of the most dynamic economies of Europe, training constituted in average 3.01% of payroll in 2001⁵. This might partially help to explain the dynamism of the Irish economy.

³ The 2001 ASTD State of the Industry Report, American Society for Training Development.

⁴ ditto

⁵ Training Survey, 2001, Graphite HRM Ltd., www.hrmaster.com/hr-info/hr-practice/training/training-survey.htm

How to measure Return on Investment (ROI)?

Measuring return on investment in training is difficult but not impossible. ASTD (American Society for Training & Development) started to collect data on companies training investments since 1997 on a continuous basis in order to find answers to the question: does it pay to do training?

Data was collected from over 2,500 firms and measured against TSR (stockholder return) which is defined as the change in stock price plus any dividends issued in a given year. The findings were unequivocal. Firms with higher training investments in 1996, 1997 and 1998 showed higher TSR the following year⁶. The sample of firms' survey included some European companies who showed similar causal links between higher training investment and TSR.

These pioneering findings help to confirm the often intuitively held belief that training does pay off in terms of organisation performance. It supports the argument that investment in people could impact the bottom line. Like all investment portfolios, investment in training does not automatically result in organisational performance improvement without smart strategy and competent management. Training management also requires vision, strategy, expertise AND management tools.

Hence one key question remains unanswered but needs to be addressed -- how can a organisation ensure quality of training investments so that optimal return is guaranteed?

What about quality of training investment?

What quality system could best support a organisation or a government agency in improving the efficiency and effectiveness of training? Different quality standards and instruments exist in the market, such as ISO 9000, the European Foundation for Quality Management (EFQM), or some form of Total Quality Management systems.

Many companies have used either of the three quality instruments mentioned above with mixed results. Some felt these standards were sufficient, others considered the three instruments as being too bureaucratic, too industry oriented and not sufficiently adjusted to the peculiarities of the training process. A survey of seven countries indicated a trend away from the three traditional quality instruments.⁷

Responding to the growing demand for more sector specific quality instruments of training, new quality systems have been developed to target different elements of the training process. For instance EduQua⁸, a private and non-ISO based certification organisation operating within Switzerland, offers quality certification of training institutions in Switzerland focusing on training institutions' physical infrastructure, training curricula and teaching capacities. As means of ensuring adequate professional standards of trainers, tests and diplomas are being

⁶ L. Bassi, J. Ludwig, D. McMurrer, M. VanBuren; "Profiting from Learning: Do firms' Investements in Education and Training Pay Off?", Research White Paper, ASTD, Washington, September 2000.

⁷ Raymond Saner; "Quality Management in training: generic or sector-specific? ISO Management Systems, Geneva, July-August 2002, pp 53-62.

⁸ www.eduqua.ch

offered in Switzerland by the Swiss Federation of Trainers in Enterprise (FSFE)⁹ and by the Swiss Federation of Adult Education (FSEA)¹⁰

None of the quality instruments mentioned, however, address the actual pedagogical process itself and the interaction between organisational performance objectives and the training intervention within companies or public organisations. An alternative quality management and assurance tool has become available to respond to this need.

ISO 10015: the new solution to the quality question

Realising the need for more sector specific guidance of quality assurance of training, a working group was created within ISO to draft a guideline standard for training. Twenty-two country representatives developed the draft text over several years culminating in the publication of a final official standard ISO 10015 issued by the ISO secretariat in December 1999. The new ISO standard offers two main advantages namely:

- a) being based on the process oriented concepts of the new 9000:2000 ISO family of standards and being easily understandable for companies used to ISO related Quality instruments; and
- b) being a sector specific, that is pedagogical oriented, standard offering companies specific guidance in the field of training technology and organisational learning.

What follows is the description of two key features of the new ISO 10015 standard.

a. Linking training investment with organisational performance

While it can be useful to test the professional competence of trainers or certify the pedagogical concept of training programmes, the key to assessing return on investment of training is its link to organisational performance. When asked the question why do you pay for training, an organisation should be able to link the decision to conduct training with concrete performance needs of the organisation. In other words, the key client is the organisation, not only the persons being trained.

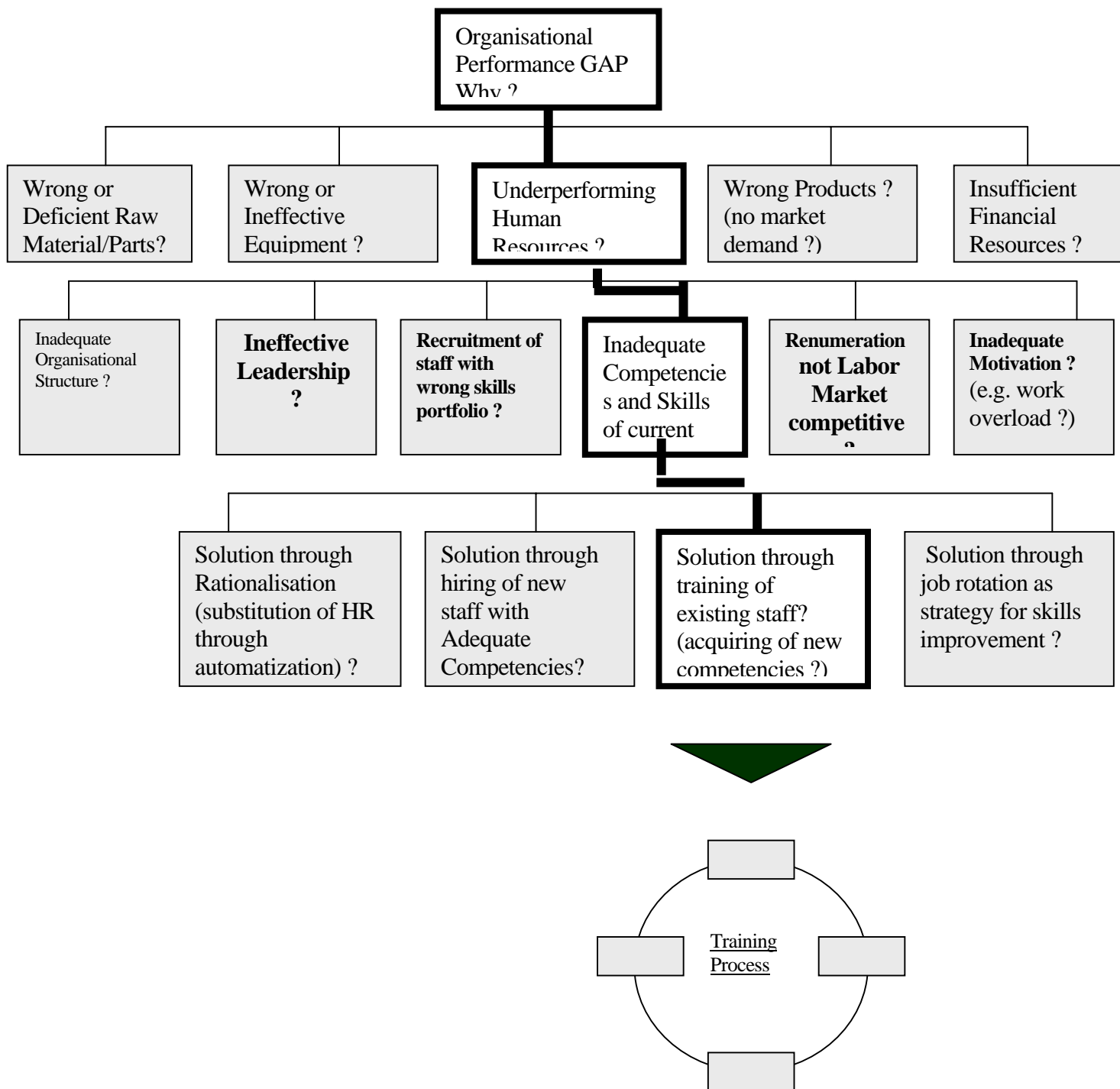
Looking at the diagnostic tree below (Figure 1), an organisation has to recognise first what is the performance challenge it faces and what are the causes of this challenge. For instance, if sales have diminished, an organisation should first attempt to find out why. Is it because the wrong products are being produced, or the right products are being sold to the wrong markets?

Is the quality of products deficient because the machines are old and often break down? Is it because the organisation is illiquid and cannot pay for the maintenance of its production equipment? Is the quality of services poor because the staff is not equipped to deal with customers' requirements and complaints?

⁹ www.fsfe.ch

¹⁰ www.alice.ch

Figure 1: Why Training?
 (Elucidation of ISO 10015 Training, 1999, Figure 1, p.V)



Following this differential decision tree, if the performance gap is linked to under-performing human resources, then the organisation should ask itself, why do our people under-perform -- Is it because their competencies do not fit the job requirements? Are they remunerated below labour market standards and hence de-motivated or ready to leave the organisation? Is leadership deficient and staff are simply de-motivated? If none of the above is applicable, it might be that their under-performance is due to the skills set of the current employees. Then training could be the right solution, provided that replacing of existing staff or hiring of new staff with the adequate skill set are considered unfeasible.

ISO 10015 in this regard offers a clear road map in guiding the organisation to make sound training investment decisions by asking the top management to connect training to performance goals and use it as a strategic vehicle for individual and collective performance improvement. As a result, the success of training is not only measured by whether individuals have improved their professional competence, but also whether individuals have positively contributed to the organisation's performance because they benefited from effective in-service training.

b. Organising training on the basis of pedagogical and organisational learning principles and processes

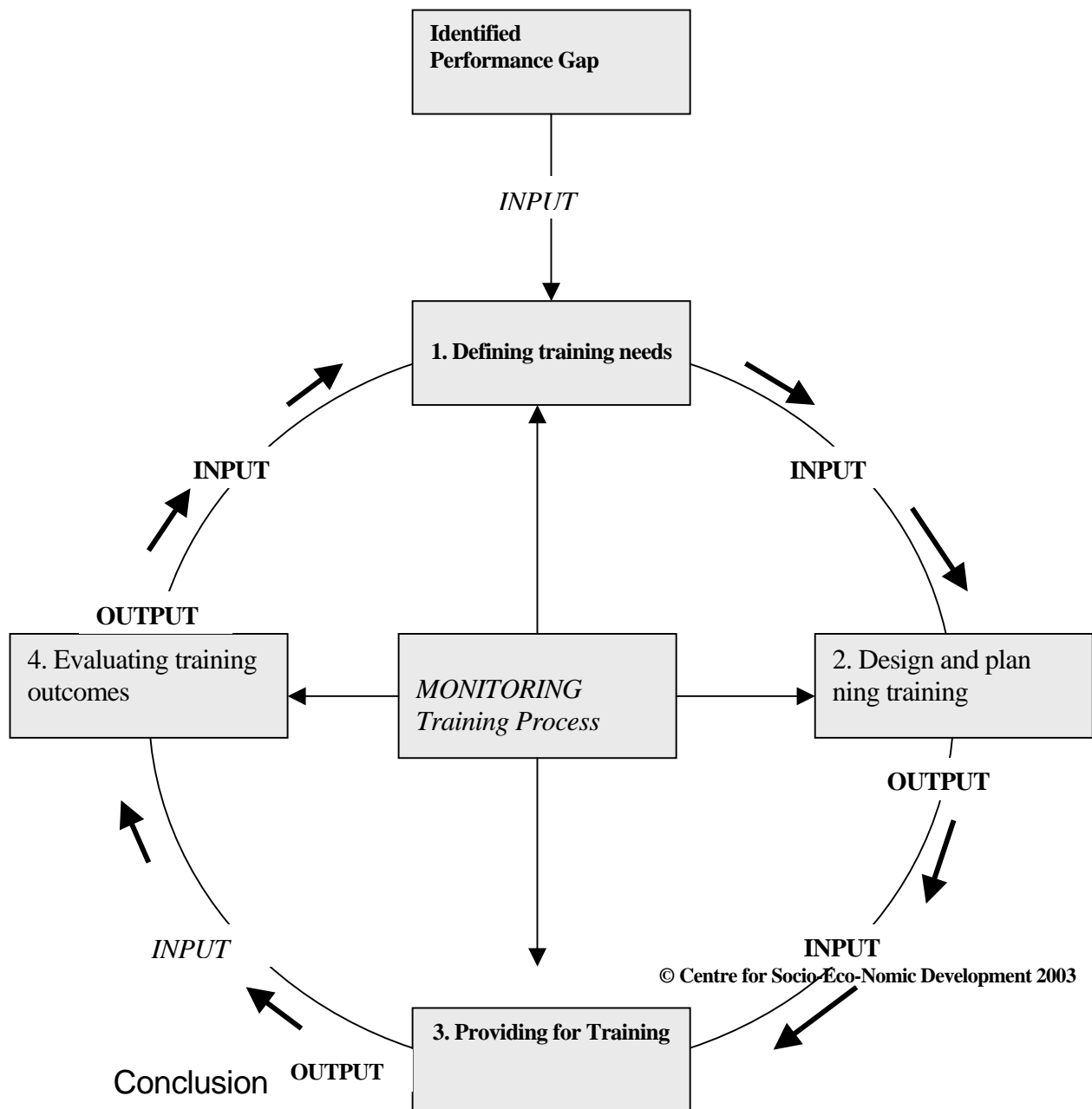
Training as an intervention strategy will be called into place once a organisation has determined that training of the current staff is the optimal approach to close the performance gap. Consequently, the next critical phase of investing in people is that of establishing an appropriate training design and effective learning processes. In this regard, ISO 10015 serves as the management tool to ensure that training is organised efficiently in its use of resources (finances, time and energy) and effectively in closing the performance gap.

Following the well-known Deming Cycle, ISO 10015 defines training in a four-step process, namely, Analyse-Plan-Do-Evaluate. Each step is connected to the next in an input and output relationship (see Figure 2). As a quality management tool, ISO 10015 helps to specify the operational requirements for each step and establishes procedure to monitor the process. Such transparent approach enables training management focusing more on the substantive matter of each training investment rather than merely controlling of the expenditure.

Unlike other quality management systems, ISO 10015 helps an organisation link training pedagogy to performance objectives and link evaluation with the latter as well. Such a training approach provides companies with constant feedback regarding its investment in human competencies. Similarly, at a higher aggregate level, ISO 10015 offers companies the opportunity to examine their training models and to validate their training approaches and operating premises by the use of comprehensive data.

Figure 2: Input-Output Process of Training

(Elaboration of ISO 10015 Training, Figure 2, p. 2)



For sustainable business development, companies need more urgently than ever to invest in people. Only the quality of organisation's human capital can ensure long term competitive advantage in knowledge economy. In a knowledge based economy, training is “mission critical” and should not be considered as an activity “nice to have” and therefore dispensable at times of economic difficulties.

Training, as one of the most frequently-used approach to invest in people, needs to be managed carefully like any other major investment. ISO 10015 offers a new and sector specific quality management tool to ensure the link between training and organisational

performance needs. It also offers a transparent and easy to follow process in ensure the sound logic between the four steps of any training process.

Compatability with Other Instrument, e.g., Investors in People

Background of Investors in People Programme

"Investors in People" (IIP) is one of the socio-economic policy instruments launched by the UK government in the 1990's to improve the skill level of its workers. IIP works by encouraging the organisations (private or public alike) to provide adequate resources for the training and development of their employees in order to raise their skill levels and to increase the organisation's productivity.

Worker's productivity has been a standing concern of the UK government regardless which political party has been in government. Successive governments since Margaret Thatcher have undertaken a series of macroeconomic reforms in order to sustain a "stable trend" of economic growth through productivity growth and employment generation.

Productivity Deficiency

In comparative terms, the UK's labour productivity performance has been poor throughout the post-war years.¹¹ Labour productivity growth has been faster in France and Germany than in the UK for most of the post-war period as shown in the following Table 1.

	1950-73	1973-96
UK	2.99	2.22
France	4.62	2.78
Germany ¹⁾	5.18	2.56
US	2.34	0.77

1) figure refer to former West Germany only
 Source: O'Mahony, M. 1999. Britain's Productivity Performance 1950-96: An International Perspective. *NIESR*. London. Quoted in HM Treasury Report, Nov. 2000

Despite of efforts to raise the skill level of workers, UK productivity measured by "output per worker" remains behind that of other industrialised countries (OECD, 1999).¹²

	Productivity Comparison in 1999		
	US	France	Germany
Output per worker	145	119	107
Output per hour worked	126	123	114
Total factor productivity ¹⁾	118	120	113

(UK= 100)

1) Total factor productivity (TFP) takes account not only of labour inputs, but also of capital. TFP is an estimate rather than direct measure. It requires accurate measure of the capital stock, which is often not available. Therefore TPF should be used with care.

¹¹ HM Treasury, Productivity in the UK: The Evidence and the Government Approach, Nov. 2000.

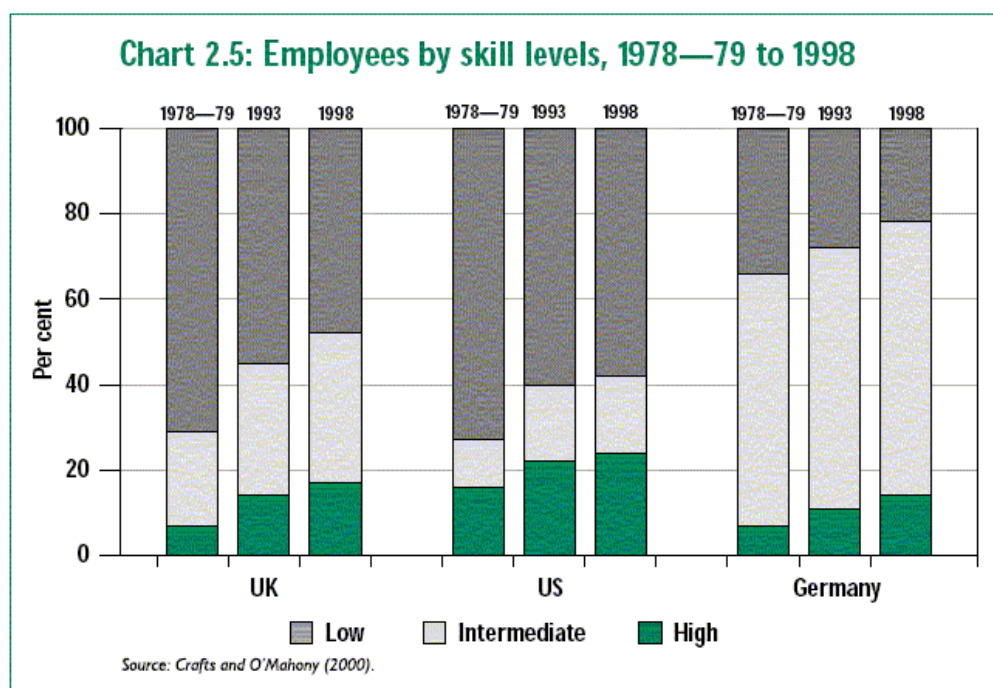
¹² HM Treasury, Productivity in the UK: Progress towards a productive economy, April 2001.

This persistent productivity gap in terms of output per worker could be attributed to two fundamental factors. One is the hour glass shaped skill composition of the labour force (see Figure 1). The other is the relative low investment in training by both public and private sector in UK. IIP is one of the measures to encourage the private sector to invest in the skill upgrading of its human capital and to distinguish the high performers in this regard from the laggards.

Skill Composition of UK's Human Capital

In terms of human capital, UK has a larger proportion of high skill workforce (obtained a tertiary degree or above) than Germany but much less proportion of intermediate skill workforce (with a vocational qualification above high school but below degree level) (see Figure 1). Research has shown that the intermediary skill level of the workforce contributes most to productivity gains and provides the required skills for future learning.¹³

Figure 1: Employees by skill levels, 1978-79 to 1998¹⁴



Insufficient Investment in Human Capital in UK by Public and Private Spending

In the report from The Industry Society¹⁵, it is said that under-investment and under-participation in the worker's skill development are the primary causes of low productivity. Spending for education across the UK rose by only 1.5 per cent a year in real terms between 1978-79 and 1996-97 (UK HM Treasury, 1998).¹⁶

¹³ HM Treasury, Developing Workforce Skills: Piloting a new approach, April 2002.

¹⁴ HM Treasury, Productivity in the UK: The Evidence and the Government's Approach, Nov. 2000.

¹⁵ Full report "Not very qualified – raising skill levels in the UK workforce costs - 10" available on the web at www.indsoc.co.uk

¹⁶ HM Treasury, Comprehensive Spending Review: new public spending plans 1999-2002, July 1998.

According to a study done by the Institute for Fiscal Studies of the UK, a 5 percentage point increase in the proportion of trained workers in an industry leads to average wage gains of 1.6 per cent, compared to 4 per cent increase in value added per worker.¹⁷

On the tenth anniversary of IIP on October 2002, Estelle Morris, the Secretary of State for Education and Skills said¹⁸:

“Investors in People lies at the heart of the government’s plans to increase the skills and productivity of our workforce. The UK still lags behind many international competitors in these areas – a gap that we are keen to address. If we can increase productivity by just 0.1% every year, the economy could generate around 10 billion pounds more output over the next ten years”.

“It is clear that learning is key to our economic success. Only by raising the skill levels of our workforce and investing in training and development can we begin to match the levels of the best in the world”.

“Investors in People (IIP)”¹⁹

IIP is a national standard which sets a level of good practice for training and development of employees to achieve business goals. It is designed to ensure that what people can and want to do matches with what the organisation needs them to do. The IIP standard is based on a four-stage cycle of Commitment, Planning, Action, and Evaluation, and is reviewed and updated regularly.

Certified assessors conduct in-house review in order to determine whether the organisation could be granted the IIP award. The IIP award has no time limit but subject to regular reviews at three years intervals.

Brief Historical Overview of the Investors in People

“Investors in People” was the result of UK government’s reaction to a survey in the late 1980s which revealed a perceived deficiency in training levels in UK. The survey also found that well-performing companies tended to be dedicated to their employees and linked training and development with their business objectives²⁰.

The IIP standard was developed in 1990 by the National Training Task Force in partnership with leading national businesses, personnel, professional and employee organisations such as the Confederation of British Industry (CBI), Trade Union Congress (TUC) and the Institute of Personnel and Development (IPD). This development of IIP was supported by the Employment Department of the government.

¹⁷ Dearden, Reed and van Reenen, 2000, Who Gains When Workers Train? Training and Corporate Productivity in a Panel of British Industries. London: Institute of Fiscal Studies.

¹⁸ Investors in People’s Press Release on 30 October 2001. Available on the web at www.iipuk.co.uk

¹⁹ Source taken from Investors in People’s website. www.iipuk.co.uk

²⁰ Source taken from Gilman, M.W. (1997). Is “Investors in People” solving the UK training problem? London: IRRU, Warwick Business School

Initially, the standard was administered through a section in the Department for Education and Employment. In 1991, Training and Enterprise Councils, and Local Enterprise Councils pilot tested the standard. The initial samples represented some of the UK's most successful large and small organisations from all sectors of the UK economy, and the experiences were very positive. The IIP standard received the full endorsement of wide range of interested parties.

In 1993, "Investors in People UK" was established to take national ownership of the standard, protect its integrity and ensure its successful promotion and development. It is a non-departmental public body, but reports to and receives funds from the Department for Education and Skills.

Since 1991, over 34,000 UK organisations have achieved certification and are recognised as "Investors in People", accounting for more than 27 % of the total UK workforce.

Although "Investors in People" standard is well recognised among large firms, participations from small and medium-sized enterprises are much lower²¹. It was observed that around 90 per cent of UK companies employ fewer than 50 staff, only about half of IIP accredited organisations are of that size²².

ISO 10015 Standard

ISO 10015 Standard is an international standard developed by a team of international experts and was approved by ISO member states. ISO certification is an internationally recognised quality label which demonstrates an organisation's commitment to quality and a well functioning quality assurance system.

ISO 10015 Quality Standard for Training was published in December 1999. The Centre for Socio-Eco-Nomic Development (CSEND) is the first organisation to become a certification body for ISO 10015. CSEND has received its accreditation from the Swiss Accreditation Agency (SAS) in March 2003.

ISO 10015 and IIP

ISO 10015 quality standard for training complements well the government's initiative to start an "IIP" award in Taiwan. While IIP focuses on recognising organisations that have invested in the development of their human resources, ISO 10015 goes deeper into the actual training process and ensures an adequate return on investment in terms of productivity gains and performance improvement of the organisation.

While the IIP award signals to the market that a specific organisation is committed to the training and development of its workforce, the ISO 10015 certification signifies that a specific organisation has installed and consistently applies a quality assurance system for managing its training investment.

²¹ Not very qualified – raising skill levels in the UK workforce costs. Available on the web at www.indsoc.co.uk

²² Blyth A. (2003). *Is Investors in People an appropriate and worthwhile scheme for small businesses – or is it just another quality scheme aimed at large firms?* First Voice. August/September 2003 issue.

When applying these two standards to VET institutions, the following main difference can be observed. The IIP examines these institutions' actual investment in skill upgrading of their personnel (including teachers), while the ISO 10015 focuses on the continuous learning of the teachers as well as the validity of their training programmes. In accordance to the ISO 10015 requirements, VET institutions have to demonstrate actual actions and periodically collect market signals and adjust its curricula, competence sets and delivery methods within the defined parameters of VET authorities.

A more detailed comparison between IIP and ISO 10015 is summarised in Table 3.

Table 3: Comparison of Investors in People with ISO 10015

	ISO 10015	Investors in People ¹⁾
Level of Instrumentality	Micro and meso	Micro
Objectives	<ul style="list-style-type: none"> Improves the organisational performance and ensures appropriate use of training. Enhances the efficient and effective functioning of training. 	<ul style="list-style-type: none"> Ensures that everyone in the organisation shares common goals and values with the right skills to achieve them.
Scope	Training system and products	Human resource development function
Structure	A process and a documentation system, based on the Deming cycle (Plan-Do-Check-Act) and sound management decision process.	A framework, based on four principles of good practice that ties the planning of people development into business planning.
Benefits	<ul style="list-style-type: none"> A true "customer" oriented training function; More effective training service; Higher return on investment in training and improved organisation's performance. 	<ul style="list-style-type: none"> Provides bottom line business benefits; Better planning; Increased motivation and higher skill levels.

1) Source: Investors In People website: <http://www.iipuk.co.uk>

Domain of Application

The ISO 10015 standard is a sectoral standard and applicable at both micro and meso levels. At the micro-level, it could be used as a quality management tool for the training function/service within an organisation, or a quality assurance tool for a specific training products.

At the meso level, ISO 10015 could be used as a quality management tool to ensure the compatibility between VET and the labour market demand. Hence it provides opportunity to increase guarantee of employability of the VET graduates by requiring the VET institutions to engage in VET needs analysis within a curricula defined by the government. Since ISO requires documented proof of actions taken at each step of the value chain, a detailed information system and rich data set can also be used for policy research. Consequently, ISO 10015 applied at the meso level helps to close the gap of the supply and demand and frequent mismatch within the labour market and provides feedback to the VET policy makers. The ISO 10015 standard offers an effective policy management tool for the EVTA to monitor its policy implementation and to gather useful information to assist the VET institutions to deliver better learning outcome.

Conclusion

VET policy concerns consist of quality, accessibility, resources, and investment strategy. At the final end what counts is whether the VET (including on-the job training) contributes to national competitiveness. Installation of the ISO 10015 quality assurance system will help to explain these policy issues in the context of developmental needs and alleviate some of the potential investment imbalances due to gender, literacy, existing skill level and size of the firms/organisations.

IIP at the micro level could encourage private investment in the continued development of their employees and help the investors link the development of people with the business.

The ISO 10015 standard offers concrete practice to ensure higher return on investment (ROI) and to provide the needed transparency for continuous improvement, either within an organisation, or for the vocational education and training sector.

IIP and ISO 10015 are two different but complementary instruments. Each tackles the question of productivity and performance improvement from different dimensions. The former highlights the necessity for investing in people, the latter emphasises the management rigour in ensuring a minimum level of ROI. Both would contribute to the national competitiveness in a global economy.

Organisations interested in ISO 10015 Certification and Registration may contact AdeQuaTE/CSEND at: www.adequate-international.org
Swiss Accreditation Nr. SCES 081

