Standards for Skill Training and Development

Lichia Yiu
Center for Socio-Eco-Nomic Development (CSEND), Switzerland

Raymond Saner
Center for Socio-Eco-Nomic Development (CSEND), Switzerland

INTRODUCTION

Human capital is seen as one of the key factor conditions contributing to national competitiveness and economic performance (Porter, 2002). Productivity performance of OECD countries tends to correspond to the skill levels of the workforce in specific countries. Hence, governments increasingly view human capital formation, both quantity and quality of workforce, as one of the key levers in ensuring sustained productivity gains and standard of living.

Skill development of the workforce requires major investments beyond formal schooling. It demands ongoing training investment in continued education and workplace training in order to help the workforce keep pace with technological innovations and continued adoption of new technology in the workplace. Private and public partnership in this context dictates both the government and private companies and organizations participate in the training effort.

Investment in training requires effective and efficient methods, which in turn calls for sound and robust management tools and standards at the micro (firm) level to ensure continuity and sustained efforts. This article examines two training related standards, "Investors in People" (IIP) and ISO 10015, in order to identify similarities and differences of these two instruments.

BACKGROUND

IIP is a socio-economic policy instrument launched by the UK government in the 1990's to improve the skill level of its workers. IIP works by encouraging the organizations (private and public alike) to provide adequate resources for the training and development of their employees in order to raise their skill levels and thus increase their respective organizations' productivity.

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

Productivity Deficiency

In comparative terms, the UK's labor productivity performance has been poor throughout the post-war years (HM Treasury, UK, 2001a). Labor productivity growth has been faster in France and Germany than in the UK for most of the post-war period, as shown in Table 1.

Despite efforts to raise the skill level of workers, UK productivity measured by "output per worker" remains behind that of other industrialized countries (HM Treasury, UK, 2001b) .

This persistent productivity gap in terms of output per worker can be attributed to two fundamental factors. One is the hourglass shaped skill composition of the labor force (see Figure 1). The other is the relative low investment in training by both public and private sector in the UK. 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, IIP has been devised as one of the public initiatives to spur awareness and action.

Skill Composition of the UK's Human Capital

In terms of composition of human capital, the UK has seen changes happen in the last 20 years according to

Table 1. Labor productivity growth rates (percent per annum) (Source: O'Mahony, 1999)

	1950-1973	1973-1996
UK	2.99	2.22
France	4.62	2.78
Germany*	5.18	2.56
U.S.	2.34	0.77

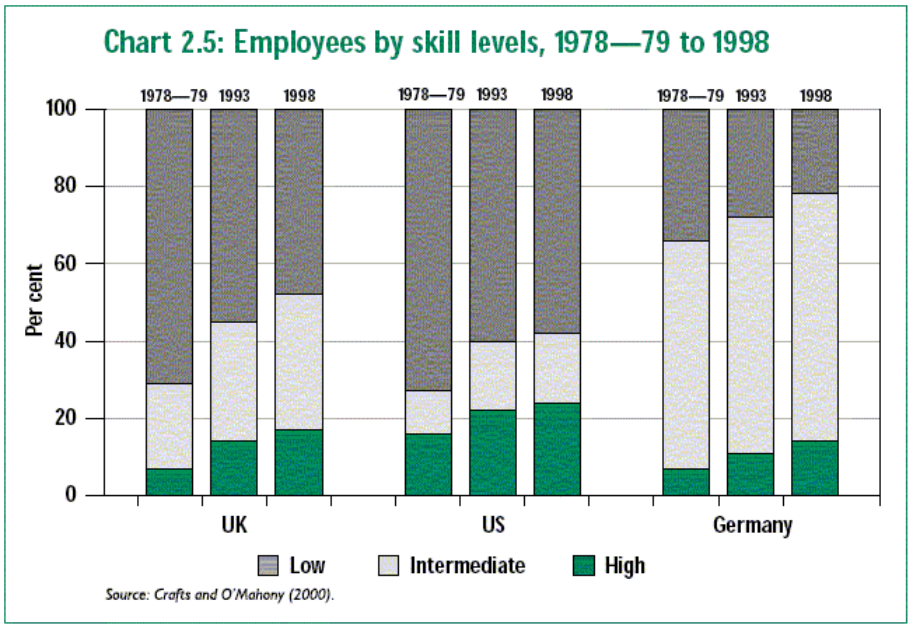
* *Figure refers to former West Germany only*

Table 2. Productivity comparison in 1999 (UK=100) (Source: OECD. Quoted in HM Treasury Budget, 2000)

	U.S.	France	Germany
Output per worker	145	119	107
Output per hour worked	126	123	114
Total factor productivity*	118	120	113

* *Total factor productivity (TFP) takes account not only of labor 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*

Figure 1. Chart demonstrating that 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) (Source: HM Treasury Report, 2001. Productivity in the UK: The evidence and the government approach)



the HM Treasury report (see Figure 1). In 1979, the majority of the UK workforce (approximately 70%) were highly skilled employees who achieved a tertiary degree or above, regarding educational attainment. Intermediary skill level, that is, graduates with a vocational qualification above high school but below degree level, constituted only about 25% of the workforce.

By 1998, the percentage shares of low skill and intermediary workforce had increased visibly. The former reached around 18%, the latter also expanded to about 34%. Compared to Germany, the UK has a larger proportion of high skill workforce than Germany but a much lower proportion of intermediate skill workforce (1978-1998). Compared to the U.S., the UK has a relatively smaller proportion of high skill workforce, but higher proportion of the intermediary level and muck less low skill level labor force. By 1998 the UK proportionally reduced its high skill workforce, but increased its proportion of intermediary skill workforce as well as low skill workforce.

Research has shown that the intermediary skill level of the workforce contributes most to productivity gains and provides the required skills for future learning (HM Treasury, UK, 2002). In light of the global competition ahead and threefold increase of the low skill workforce,

it was seen urgent by the UK government to identify the underlying cause of these workforce demographics and to devise corresponding policy initiatives to address this perceived disadvantage in sustaining national productivity gains.

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

Under-investment and under-participation in a worker's skill development have been identified as the primary causes of low productivity in a report published by The Industry Society. Spending for education across the UK rose by only 1.5% a year in real terms between 1978-1979 and 1996-1997 (Comprehensive Spending Review, 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%, compared to 4% increase in value added per worker (Dearden, Reed, & Van Reenen, 2000). It was thus self-evident that investing in the skill development of workers could yield exponential returns to both individual workers and to the economy. "Investors in People" (IIP) is one of the policy instruments devised to improve the labor productivity through greater skill investment by the employers.

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

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.

She went on to emphasis the importance of learning.

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's Press Release, 2001).

TWO TRAINING RELATED STANDARDS

"Investors in People" (IIP)

IIP is a "national standard which sets a level of good practice for training and development of employees to achieve business goals" (Investors in People, 2006). It is designed to ensure that individual's competence and motivation matches with organization's requirements. 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 reviews in order to determine whether the company could be granted the IIP award. The IIP award has no time limit but subject to regular reviews at 3 year intervals.

Brief Historical Overview of the Investors in People

IIP was the result of the UK government's reaction to a survey in the late 1980s that revealed a perceived deficiency in training levels in the UK. The survey also found that well-performing companies tended to be dedicated to their employees and linked training and development with their business objectives (Gilman, 1997).

The IIP standard was developed in 1990 by the National Training Task Force in partnership with leading national businesses, personnel, professional, and employee organizations 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.

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 organizations from all sectors of the UK economy, and the experiences were very positive. The IIP standard received the full endorsement of a 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 organizations have achieved certification and are recognized as "Investors in People," accounting for more than 27% of the total UK workforce.

Although "Investors in People" standard is well recognized among large firms, participation by small and medium-sized enterprises was much lower (The Work Foundation, 2006). It was observed that around 90% of UK companies employ fewer than 50 staff, only about half of IIP accredited organizations are of that size (Blythe, 2003).

ISO 10015 Quality Management Standard

ISO 10015 Standard is an international standard developed by a team of international experts and approved by ISO member states. ISO certification is an internationally recognized quality label, which demonstrates an organization's commitment to quality and a well functioning quality assurance system (Saner, 2002).

ISO 10015 Quality Standard for Training was published in December 1999. The Centre for Socio-Eco-Nomic Development (CSEND) is the first organization to become an accredited certification body based on ISO 10015. CSEND received its accreditation from the Swiss Accreditation Agency (SAS) in March 2003 (Academy for Quality in Training and Education, 2005).

ISO 10015 and IIP

ISO 10015 Quality Management: Guidelines for Training complements well the IIP as a performance enhancement instrument for training and development of the skilled workforce. While the IIP award focuses on recognizing organizations 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 organization.

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

When applying these two standards (one national, the other international) to skill training and development such as vocational education and training (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 process of continuous learning of the teachers as well as the validity and sustained relevance of their training programs.

The second aspect tends to be the shortcomings of many VET institutions. In accordance with the ISO 10015 requirements, VET institutions must demonstrate actual actions in responding to the labor market demands of requisite competencies (relevance). They need to document their efforts in periodically collecting market signals of employment patterns and subsequently adjusting their curricula and delivery methods within the defined parameters of VET authorities and employers. This continuous renewal of VET institutions concerning their curricula and content requires leadership commitment and institutional effort. The ISO 10015 standard in this regard serves as a safeguard against erroneous training and development investments which often lead to unemployable manpower supply and deteriorating earning capacity of the individuals and loss of national productivity.

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

Domain of Application

The ISO 10015 standard is a sectorial standard and applicable at both micro and meso levels. At the micro level, it can be used as a quality management tool for training within an organization, or as a quality assurance tool for a specific training product.

At the meso level, ISO 10015 can be used as a quality management tool to ensure the compatibility between VET and the labor market demand. Hence, it provides an opportunity to increase the assurance for employability of VET graduates by requiring the VET institutions to engage in VET needs analysis within a curriculum defined by the government. Since ISO based management systems require 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. Applying an ISO 10015 based training management system at the meso level can help close the gap of the supply and demand and correct the frequent mismatch within the labor market. Most importantly this information based management system can provide comprehensive feedback

Table 3. Comparison of investors in people with ISO 10015

	ISO 10015	Investors in People
Level of Instrumentality	Micro and meso	Micro
Objectives	Improves the organizational performance and ensures appropriate use of training. Enhances the efficient and effective functioning of training.	Ensures that everyone in the organization 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	A true "customer" oriented training function; More effective training service; Higher return on investment in training and improved company's performance.	Provides bottom line business benefits; Better planning; Increased motivation and higher skill levels.

to the VET policy makers for policy evaluation. The ISO 10015 standard offers an effective policy management tool for the respective government to monitor its policy implementation and to gather useful information to assist the VET institutions to deliver better learning outcome.

CONCLUSION

Workforce development related 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 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/organizations.

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

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 organization or for the vocational education and training sector. IIP awarded companies signify employers' commitment in developing its workforce and in turn motivate and facilitate their workforce for productivity improvement.

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 emphasizes management rigor in ensuring a minimum level of ROI and a structured approach to the workforce development. Both would contribute to the national competitiveness in a global economy.

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KEY WORDS

Human Capital: The term 'human capital' has two different levels, personal and systemic. At the individual level, OECD (2001) defined it as "the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic well-being." Therefore, personal human capital refers specifically to individual possession of human capital and the development of 'whole individuals'. At the systemic level, 'human capital' is the collection of the skills and knowledge (and attitudes) of all workers in an organization or all the people of a nation.The latter sense has increasingly been seen as an engine of national economic and social growth and development.

ISO 10015 Quality Management (1999): It is an international standard that provides guidelines to assist organisations and their personnel to address issues related to training. It is applicable to all types of education and training. It is a part of the ISO 9000 family of standards focusing on quality mangement system.

Productivity: Productivity captures the relationship between production of an output and inputs used in accomplishing the assigned task. It is measured as a ratio of output per unit of input over time. It is a measure of efficiency and is usually considered as output per person-hour.

Quality Assurance (QA): QA is the activity of providing evidence needed to establish confidence among all concerned, that quality-related activities are being performed effectively. It consists of all planned or systematic actions which are necessary to provide adequate confidence that a product or service will satisfy given quality requirements defined by customers and stakeholders. QA assures the existence and effectiveness of procedures that attempt to make sure—in advance—that the expected levels of quality

will be reached. It covers all activities from design, development, production, installation, and servicing to documentation. It introduced the sayings "fit for purpose" and "do it right the first time."

ROI of Training: Management wants to know that the money they are spending on training is well spent. They want to know that they are getting a sufficient return on their training investment (ROI). Improvement factors include increased productivity, reduction of waste, and improved employee retention. The basic factor in measuring the return-on-investment for training is the definition of "what the training is to achieve." Measuring the amount of money generated by a group before and after the training, or the amount of money wasted by a group before and money saved after, and then comparing that improvement with the cost of the training is the way to measure the ROI.

Skill Levels: In the context of a national occupational classification system (NOC), skill level corresponds to the type and/or amount of training or education required for the work of an occupation. Each skill level is intended to reflect commonly accepted paths to employment in an occupation. Where there are several paths to employment, the skill level most commonly identified by employers is used, considering the context of the occupation and the trends in hiring requirements. This criterion also reflects the experience required for entry and the complexity of the responsibilities involved in the work, compared with other occupations. In most cases, progression to skill level A from B, is not usually possible without completion of additional formal education, whereas progression from skill level D to skill level C is often achievable through on-the-job training and experience.

Workforce Development (WFD): WFD is a multifaceted, systemic approach to building the capacity and sustainability of the workforce. It offers a comprehensive way of thinking about and responding to the complex interplay of issues that affect the workforce. A workforce development approach means moving the focus from individual workers to organizations and systems. It shifts the emphasis from skills deficit to systems enhancement by: a) identifying and influencing the high-level systems that shape the workforce (e.g., legislation, policy, resources), b) identifying and addressing systems and structures that affect performance and outcomes (e.g., support, resources and supervision), c) developing strategies to support and improve individual performance (e.g., education, training, best practice guidelines) as well as workers' wellbeing, and d) implementing strategies to ensure a sufficient pool of skilled workers for the future. The foundations of WFD rest on the recognition that a range of interactive factors impact on effective work. The key components include: knowledge, skills, and experience of the workforce; organizational structures, systems, and culture: government policies and strategies; work conditions and opportunities.

Workforce Productivity: This term is used synonymously with "labor productivity." In economics, productivity is the amount of output created (in terms of goods produced or services rendered) per unit input used. Workforce productivity calculates the output of goods and services in the economy or in an industry from the effective use of skilled workers, managerial know-how, and entrepreneurial activity to produce those goods and services. Therefore, labor productivity is typically measured as output per worker or output per labor-hour.

Workplace Training: Also known as workplace learning. Workplace learning at the entry level of career is a systematic approach in providing workplace opportunities to students in order to assist them making a successful transition through school, and from school to further education, training, employment, and active participation in the community. This structured work placement is usually a component of a vocational education and training (VET).

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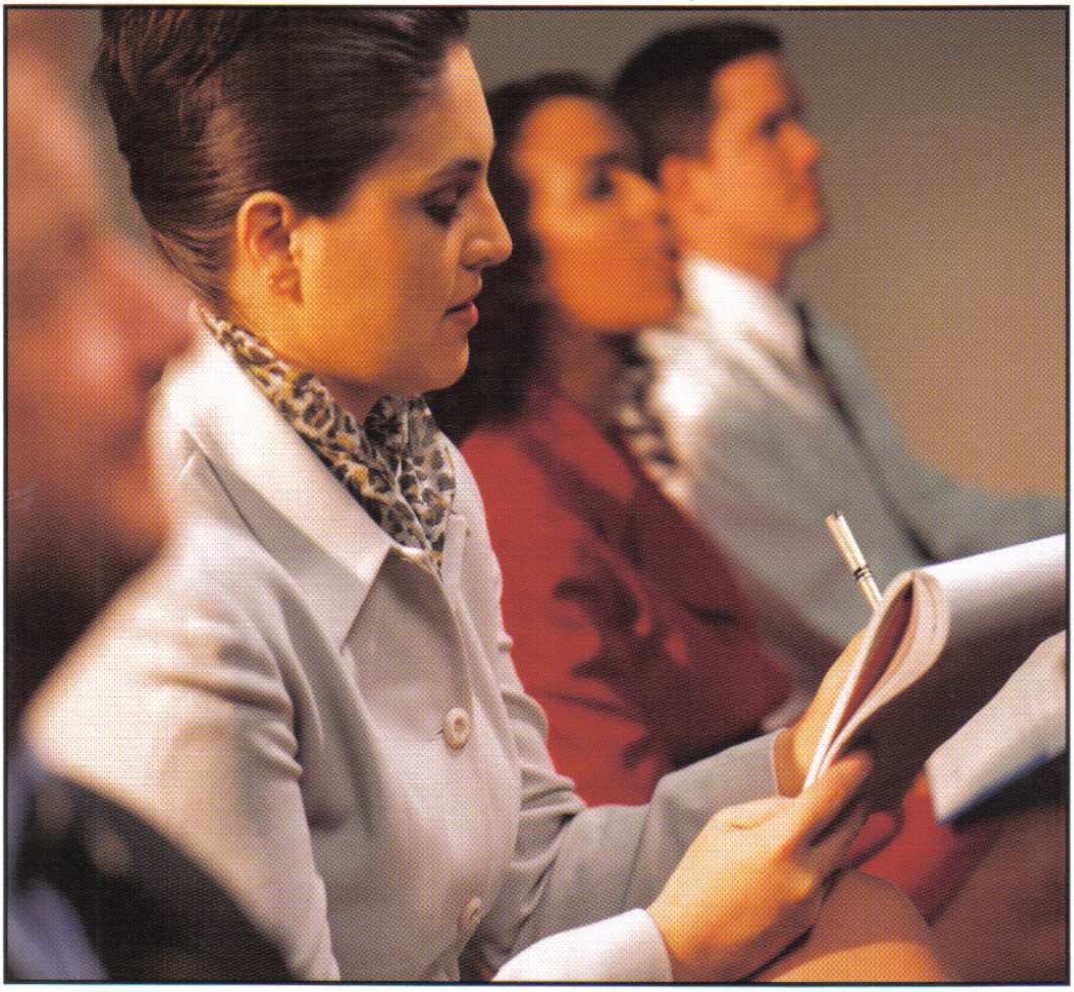

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Teresa Torres-Coronas
Universitat Rovira i Virgili, Spain

Mario Arias-Oliva
Universitat Rovira i Virgili, Spain

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