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CONCEPTUAL FRAMEWORK: APPROXIMATION TO A MODEL

Organisations often have a static view of the relationship between training and productivity, especially when they consider their operational personnel. This view is normally there in an implicit manner and does not respond to a strategic plan. It works unconsciously and evolves as it goes along, routinely.

It would be wrong to suggest that this static view is dysfunctional for organisations. It plays an important role, particularly in the incorporation of newly recruited personnel. It is also functional for keeping existing personnel updated in their knowledge and skills. Getting operatives to comply with the procedures deriving from the technical design of their productive process is in itself an achievement for many organisations, considering their current situation. The absence of clear-cut and/or updated procedures appears to be the rule rather than the exception in Latin American organisations. Systematic initiatives to train operational personnel in prescribed procedures is seldom part of their everyday practice.

In the present day context of rapid and unpredictable changes in market places, technologies and institutional frameworks, in which information is increasingly easier to obtain, a static view of the training/productivity relationship is necessarily limited. Faced with such limitation and the negligible development of conceptual structures capable of analysing that correlation dynamically, we shall put forward another proposal that for many years has been at the root of concrete applications by various organisations of the region.

a. Static approach: training/productivity

The training approach that has traditionally prevailed in organisations –especially for production workers– aims at teaching them how to perform the tasks

of their respective work posts. By complying with task descriptions as documented and/or handed down by colleagues, workers will then be doing what the organisation expects of them, in the way of productivity.

This has not always been easily put into practice. Reality has been more complex than the tasks described or the know-how passed on by fellow workers. Its foundations are to be found not only in Taylor's notions on the scientific management of work, at the beginning of the century, but on Schumpeter's theories, who was one of the most important theorists of modern capitalism. He established a link between innovation in microeconomics and macroeconomic development. For Schumpeter, the creativity and leadership of an entrepreneur are the source of innovation and productivity. Entrepreneurs can normally play this role during a certain period of their lives: "...they are only entrepreneurs when they effectively put new arrangements into practice, and lose that character when their business has been set in motion".

According to him, entrepreneurial leadership "...leads means of production along new paths. However, the employer does not do so by persuading men to implement his plans (...) but by buying them or their services to do as he sees fit" (Schumpeter, 1997). In this *schumpeterean* picture, operational personnel was envisaged as a passive rather than active subject in the process of innovation, which was in keeping with the entrepreneurial practices of the times.

Nowadays many organisations still adhere, implicitly or explicitly, to this principle in their training strategies for operational personnel. For the less developed segment of enterprises in Latin America –which generally lack uniform criteria for the performance of tasks and functions- the "mere" fact that personnel are trained in the correct performance of tasks in "normal" operational circumstances and according to parameters derived from a detailed analysis of the process involved, may represent a significant improvement of productivity.¹ In this way organisations may tap productivity reserves through training and according to the dictates of their technical management.

Figure 1 shows this in a simplified manner. There is a given value of technical labour productivity for each competency (qualification) required of personnel members, that only varies in time when technical or organisational changes are introduced. Raising labour productivity from its level at moment (t1) to that of moment (t2) means tapping the static labour productivity reserve existing in the organisation. How is this done? By deepening and broadening each one of

¹ The occurrence of changes in economic structures does not necessary mean that "old" methods for raising productivity have died out. They continue to be valid, specially in economically less sophisticated countries (ILO, 2000).

the competencies (qualifications) of the employed personnel according to previously defined standards, derived from the technical parameters of the process involved.

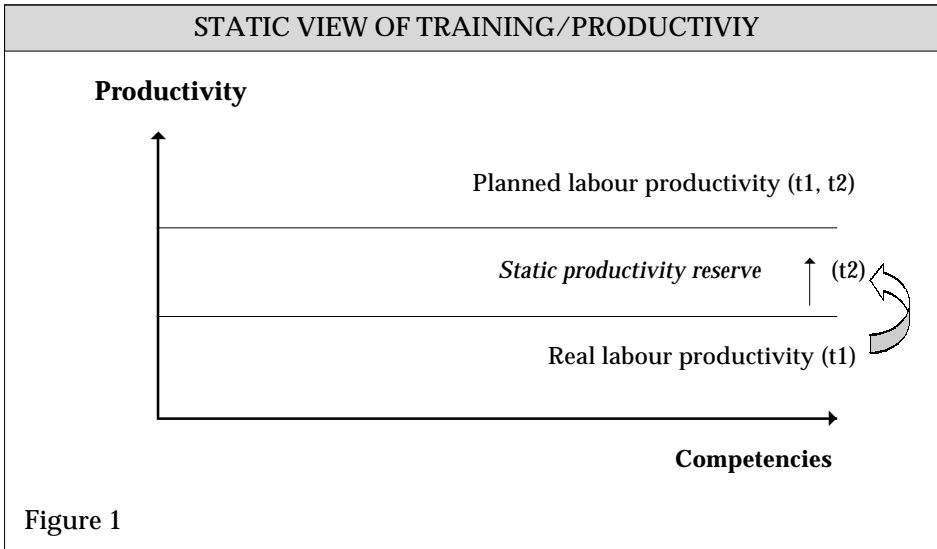


Figure 1

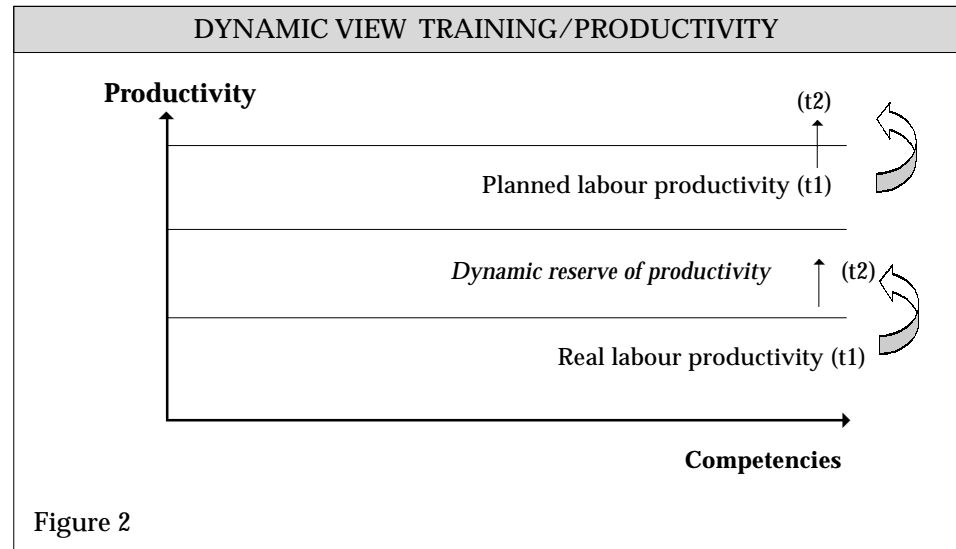
However, the current context of organisational dynamics and the relationship between training and productivity have a specific significance that goes beyond the technical description of the process in static and planned operational conditions. As a result of the globalisation of markets and the characteristics of new technologies the training/productivity equation acquires a more dynamic and less predictable dimension. The hypothesis has been put forward that the future of many leading (and non-leading) organisations of the region in their respective markets will to a good extent depend on their capacity to venture into the new relationship between training and productivity that is described below.

b. Dynamic approach: training/productivity

The dynamic approach to the relationship between training and productivity stems from the general and schematic principle that productivity enhancement is the basis for entrepreneurial competitiveness, for a country's competitive capacity and the welfare of its population. If we accept that productivity enhancement is the result of innovation, defined as the successful application of new

knowledge to organisations, we have established its dynamic/interactive relationship with training and occupational competencies (learning).²

In this perspective, developing competencies in workers leads to an increase of the technically desired labour productivity, through innovation and the constant improvement of processes deriving from training efforts (Figure 2).



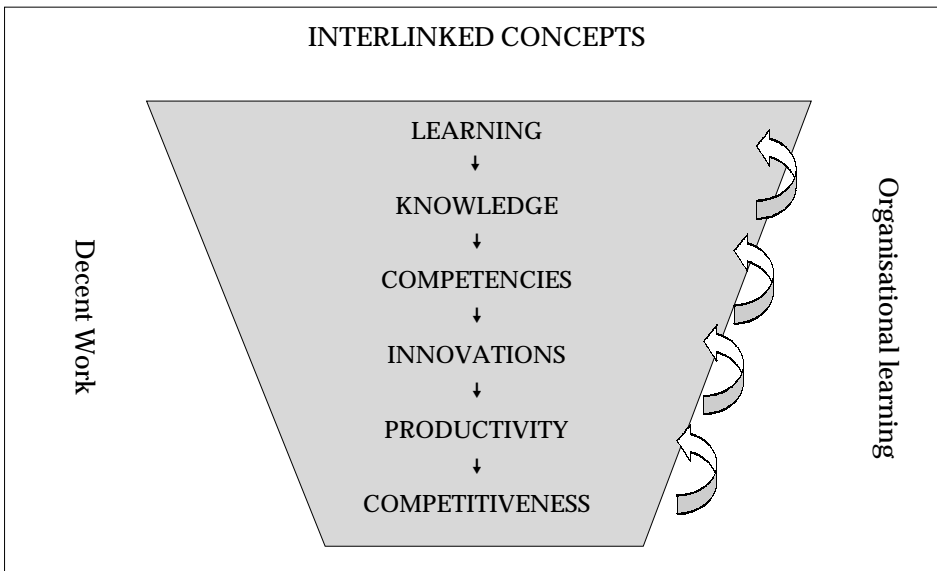
As raised productivity allows for -and also requires- improving the working conditions under which it is generated, we have established a conceptual and dynamic relationship between improved productivity and training and decent work³ (ILO, 2001).

“The literature of organisational culture has not yet managed to keep its promise of explaining soundly how to create organisations that are pleasant to work in, passionate for their personnel and yield a profit” (Galunic ; Weeks 2001).

- 2 Training is not the only determining factor in the application of new knowledge in organisations. Another source is new equipment that brings along fresh knowledge.
- 3 The meaning and purpose of the term 'decent work' cannot be conveyed in a single phrase or definition. It comprises the employment and future prospects of workers; their working conditions; the balance of work and family life; the schooling of children and avoidance of child labour; gender equity, egalitarian recognition of men and women; personal abilities to compete in labour markets, keeping updated in the skills of new technologies, and in health preservation; participation at the workplace, letting the voice of workers be heard; it is the path from survival to existence, ensuring human dignity (ILO, 2001).

The mutually reinforcing nature of the various aspects that make up the notion of decent work, and the fact that it is an eminently systemic concept, has been emphasised in most of the literature on decent work. In that sense, regarding the link between training and productivity (both of them essential components of decent work), we may conclude that “there is basic consensus that it is not possible to introduce or use efficiently any new technique or modern plan for that purpose (enhancing productivity) without well trained and properly instructed personnel at all levels of a country’s economy”.⁴

This model describes how concepts are interlinked. It is a form of visualising and representing organisations through a breakdown of the organisational learning process, which in practice is seen as a whole.



The breakdown of the model as analysed below enables us to identify the incidents occurring most frequently in each link of the chain. This clarifies on which aspects organisations must focus when they invest in personnel development to promote the generation and application of new knowledge.

| 4 Cinterfor/ILO: Training for decent work; Montevideo, Cinterfor, 2001.

Learning

Learning is the basis of the link between training and the productivity of organisations. The theory is that in order to have an effect on productivity, organisations should concentrate on how to learn rather than what to learn. “Learning can only be improved when we think on how we do it” (Román Diez, 1999).

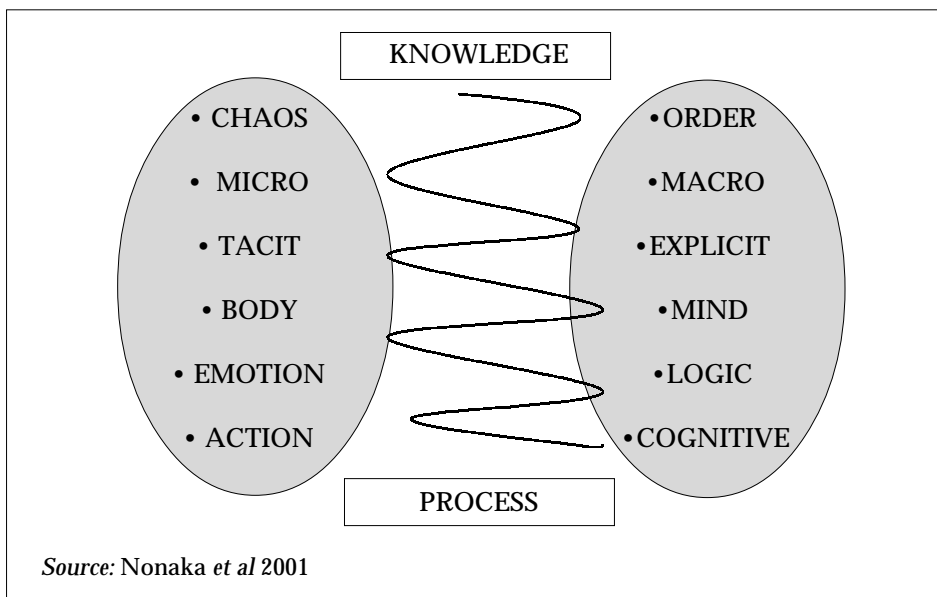
Learning is rather a vague concept, as it is used in various contexts with different meanings. It refers both to processes and to results. “Learning is a process that modifies the stock of knowledge of an individual or organisation” (Sánchez; Heene 2000).

This process can take place in two stages: a primary moment and a target stage. The first one leads to new knowledge. The target stage leads to grasping how to improve the process of knowledge generation that results in higher productivity and competitiveness for organisations. It can be termed ‘organisational learning’ aimed at learning to learn.

It would be naïve to think that learning processes in organisations will be harmonious and linear. In organisations the dilemmas, conflicts, inconsistencies and special interests of individuals and groups are part of learning processes (ibidem). Management instruments and procedures intended to influence organisational learning will have to face the challenge of adequately dealing with the social factors that may emerge.⁵ It is not unusual to see innovative and well designed productivity-related training proposals go down due to mishandling of social and power relations within organisations.

Application of the methodologies presented in this document has successfully passed those contingency aspects that in each organisation manifest themselves differently. It can be held that such contingency factors shape up the path of organisational learning (ibidem).

⁵ The significance of influencing organisational culture – including management, power and policy – cannot be overemphasised in the application of learning. In this manner, learning is invested with a technical dimension, as well as a political and cultural one (Jakupec; Garrick, 2000).



It follows from the above that organisations must focus on the process of “learning to learn” in introducing these methodologies. It is the most intensive and energy-consuming stage of the whole process of development and application.

Knowledge

In accordance with the conceptual model, learning from experience and/or study generates new knowledge in organisations. This is the first screening or selection mechanism: not all learning processes lead to new knowledge. In the viewpoint of organisations, it is necessary to lay stress on that screening to ensure that learning efforts are not in vain.

Knowledge is a broad notion that includes depth in understanding phenomena, interpretation and information. It is distinguished from information by the inclusion of interpretation, beliefs and a higher level of validity. Organisational knowledge refers to the sum of knowledge and information that organisations have and share in full or in part; it is normally stored in operational procedures, routines and regulations. In a pragmatic perspective we can say that organisational knowledge emerges through learning in experiences of problem solving (Schultz, 2001).

...knowledge cannot be managed... only the technological, organisational and social environment can be managed that causes knowledge to be shared and recreated...

A social dimension is also included in the concept of knowledge we have adopted here: a justified and true belief (Nonaka *et al*, 2001).

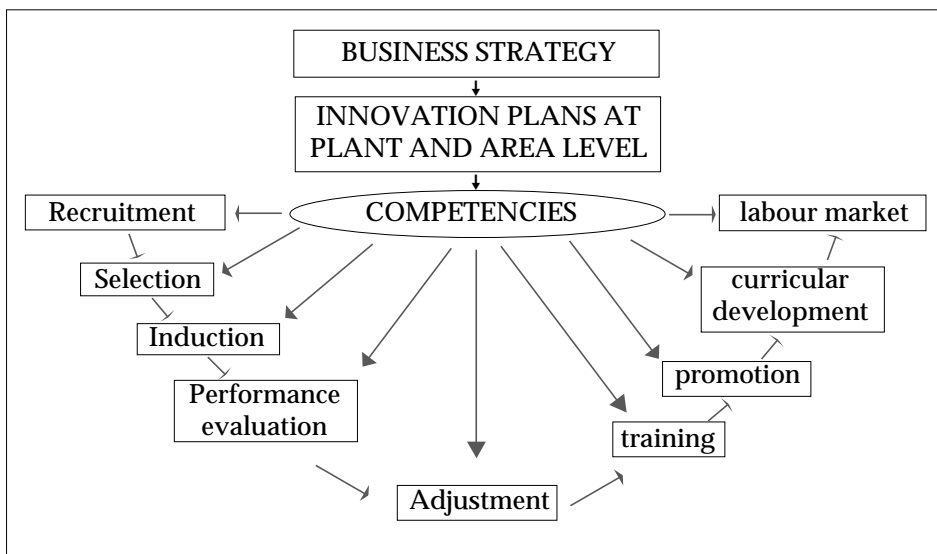
Knowledge is dynamic and it is created in the social interaction between individuals and organisations. It is specific to a context: devoid of that context it is just information, not knowledge. It is humanistic because it pertains to the behaviour of men. With these appurtenances, knowledge can be defined as a dynamic and humanistic process justifying personal belief towards the 'truth' (ibidem).

Knowledge may be tacit or tangible: the knowledge based on subjective points of view, intuitions or perceptions versus coded knowledge expressed in a formal and systematic language, that can be shared in the form of data, formulae, specifications and manuals. Learning instruments will have to point in the direction of these two spheres of knowledge in order to influence the productivity or organisations. This should be the thrust of knowledge management.

Knowledge management can be defined as "the way in which organisations obtain, share out and gain commercial advantages from their intellectual capital", and intellectual capital would be "the value of the knowledge and experience of the organisations' labour force and their accumulated memory" (Warner, 2001).

The paradox of this definition is that knowledge is not managed directly because it is part of persons, their intellectual capital. It is managed indirectly through social, organisational and technical mechanisms that enable knowledge to be shared and recreated.

Technical aspects taken from practice have to be generated, and inversely, theoretical aspects have to be introduced into practice. It is not just an exchange between practice and theory; it also implies acting on the learners' subjectivity in coordination with the targeted knowledge. "Knowledge is mainly generated through the interaction of tacit and explicit knowledge, and to a much lesser degree only from tacit or explicit knowledge" (ibidem).



Competencies

The following “link” are the competencies or qualifications, i.e. the capabilities shown by workers or the results of the knowledge they have put into practice at organisational and individual levels. It is not the summation of all their abilities but only of those that reflect the organisation’s objectives in the performance of each one of its collaborators. It is again a screen and a selection process. Not all knowledge leads to the desired and/or expected results, and very little of it makes the organisation stand out or be exceptional. There is a risk that organisational memory may be neglected and that some know-how be lost.

Competencies are an important stage in the organisational learning process because they can be managed and acted upon directly. Neither learning nor knowledge can be managed in a direct way: they are intrinsic processes in individuals and organisations. But competencies can be handled directly and from there we can measure the organisational learning process and secure organisational memory as well. In general, the assessment of competencies is fundamentally qualitative, whereas productivity – just in terms of efficiency- is normally measured in a quantitative manner. Competencies are a complex phenomenon, in which a person’s performance is evaluated in relation to previously formulated expectations, but also according to certain perceptions of client satisfaction and other positive intangibles results (Del Bueno, 2001).

At organisational level, competencies contribute to the development of an organisational memory, i.e. internal structures that store up knowledge in one way or another, like databases, work procedures and the architecture of products and services.

Organisations learn because they have infrastructures that go beyond the cognitive process of an individual and expanded social networks. The important thing is that in organisations knowledge is translated into processes, reports' structures, performance management and processes for the comparison of resources that provide guidance for company directors.

In the field of training, competencies are not limited to the training process in the strict sense of the word. They make it possible to attune all the subsystems of personnel (human resources) management to global results, without divesting them of their individual dynamics and internal characteristics. Competencies unify and focalise sub-processes of personnel selection, training, evaluation and careers plans, as well as recognition (certification), so as to reinforce each other and enhance organisational learning.

There are different views of competencies, as there are of knowledge and learning. The one we have adopted here is that building capabilities by means of competencies has its own pragmatism. In present-day contexts it implies teaching individuals to think and act in the world. Personnel in general and workers in particular must not only rethink their tasks and functions, but think about themselves. They have to develop a capacity for responding to unforeseen market situations at any moment. "They have to turn from passive into active subjects, working with and against the strains of new workplaces". (Garrick, 2000).

To instil in persons this capacity for thinking, competencies should not only guide them in the tasks and functions that markets require in "normal" or planned situations, but must endow them with "surplus" knowledge and understanding enabling them to act appropriately in changing situations. Establishing that "surplus" will depend on organisational vision and culture. However, in current contexts it is considered a "not negotiable" extra that persons in an organisation must comprehend how they contribute to generating the value of that organisation, who its clients are and the factors for their satisfaction, and with whom they must maintain horizontal as well as vertical communication.

Competencies also make it possible to include aspects for enhancing the quality of employment, such as safety and health, communication, values and attitudes. The development of competency profiles and self-training as an important component of learning imply the participation of the workers involved in

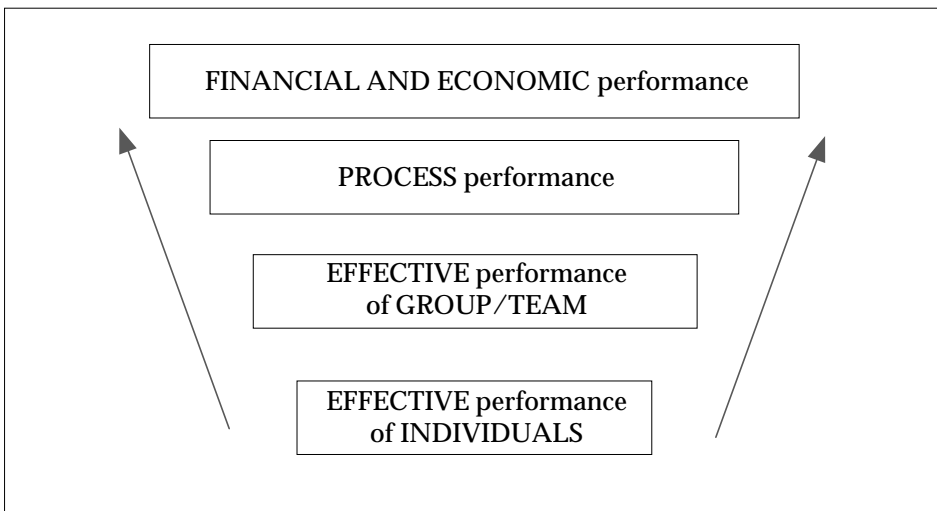
the design and application of instruments. Coverage of such fields –stemming from competencies’ management– will in the last resort depend on the organisational culture.

“Keeping personnel focused on what they know well is a good way of reproducing the ideas an organisation already has, but a bad way of promoting innovation (Galunik; Weeks, 2001).

Innovations

Innovations can be defined as the application of new knowledge and/or new interpretations and permutations of existing knowledge to productive processes (Johnson, 1992). Competencies express knowledge put into practice, which does not necessarily mean the application of new knowledge. Here we come to another screen or selection mechanisms in the chain of learning.

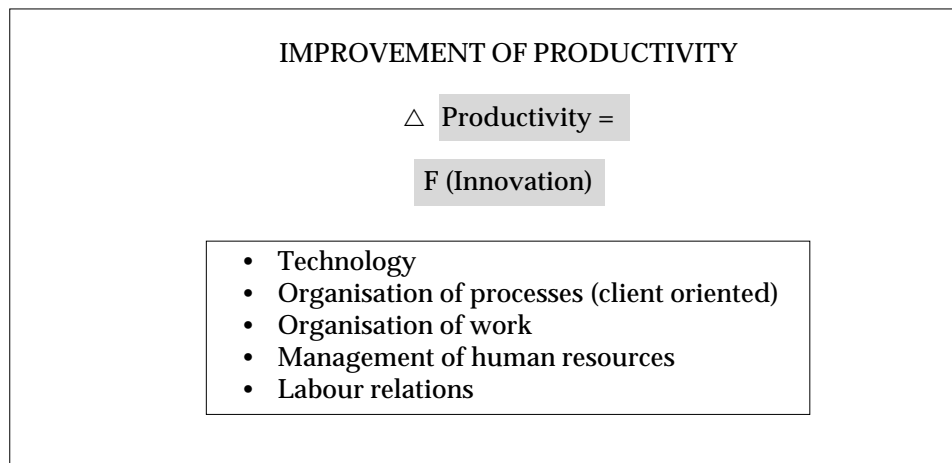
The process of innovation implies a moment of “creative destruction of knowledge” and existing competencies, specially in the case of radical changes (Langlois; Robertson, 1995). This does not mean breaking up with all the organisational memory but only with some of its aspects. Organisations are faced with the alternative of exploiting existing routines or exploring new ones (Cohendet; Lerna, 1997).



The important point here is that an effort is made to break up with the accepted idea that learning processes are generally very conservative and tend to reinforce existing frames of reference, continuing with existing knowledge. Much more difficult and less accepted by organisations is the strategy of reaching a qualitatively higher level of knowledge and going beyond what already exists. Part of the strategy consists of motivating the personnel to move in the direction of this transcendental learning (Weggeman, 1997).

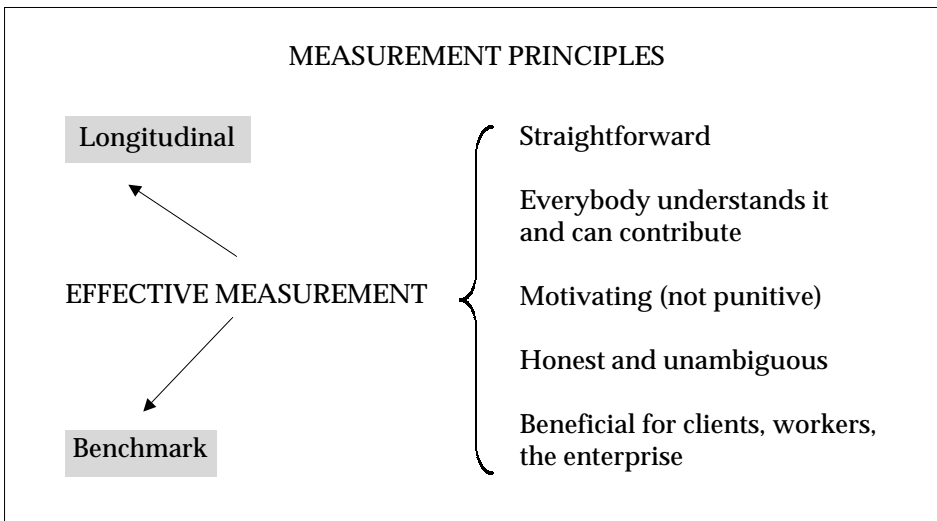
Competencies frequently refer to the organisational memory and are not always an instrument for innovation. Some authors have characterised competencies as intrinsically conservative and bound within existing limits.

Work, learning and innovation have traditionally been considered conflicting activities. Work practices and routines have been deemed conservative and resistant to change. Learning has been visualised apart from work and with difficulties for change. Innovation has been envisaged as a necessary imposition of change that interrupts work and learning routines. Interconnecting these three activities and making them mutually complementary requires recognising the importance of practice (Brown; Duguid, 2000).



The traditional divergence of these activities is due to abstract representations of practices and even to the negation of current practices. Correcting this requires a modification of work and the way competencies are defined, as well as learning forms, which are often confined to formal descriptions. If conceived as learning communities, organisations can shorten the distances between work (competencies), learning and innovation (ibidem).

For innovations to be translated into effective productivity improvements in organisations, innovative initiatives should not be limited to just one sphere. Empirical studies have shown that "...in order to achieve good performance, large organisations have to be good in many of their small subsystems" (Marsh 2001; Mertens 1997). Innovations must occur simultaneously in the areas of technology, the organisation of processes (specially client orientation), the organisation of work, the different subsystems of human resources' management and labour relations. From the point of view of innovation management, this means in practice that when launching a project or initiative in any one of these areas, coordination with all the others will be required to obtain an overall impact on the organisation.



Point of view 1:

“Measurement leads to change. It may well begin with audits and then proceed to more complex programmes”

ILO/ Productivity Forum, 2001.

Productivity

Productivity improvements are the result of innovations added to the maintenance of successful existing practices. Here there are also screens and selection. Not all innovations necessarily lead to an improvement of overall productivity: there may be innovations in products and processes that improve one aspect but overlook others. For example, a new and innovative design can turn out to be too costly when producing it, or some innovation in the productive process may limit the possibility of introducing new product designs.

Productivity is nearly synonymous with measurement. It is measurement implying an assessment of organisational and individual learning, as it relates results to inputs. It is the point in the learning chain where measurement is most evident. There is a well known saying according to which the mere fact of beginning to measure raises productivity. Measurement encourages learning, which in turn enhances productivity.

It is important to emphasise this point because it explains a fundamental difference between the two methodologies for linking training/learning with productivity. The measurement of productivity can encourage and promote training and learning. Or the other way round, training and learning efforts are evaluated and guided by the results of productivity measurement.

“Traditional instruments for measuring productivity, like labour or capital productivity, expressed in terms of output per man hour, space, speed, etc. do not convey the essence of productivity ratios. Larger consistent frameworks are required”.

ILO/ Productivity Forum, 2001.

Point of view 2:

“The sole measurement of productivity does not promote changes in management. Change itself has to be managed to complement measurement and turn organisations into learning organisations”.

ILO/ Productivity Forum, 2001.

Measurement need not be restricted to quality and efficiency aspects but may also include the concept of socially responsible productivity, or sustainable productivity (ILO, 2001).

The increasing complexity of objectives that organisations pursue leads them to go from partial to general instruments in their search for a systemic approach for managing essential activities to improve productivity. This overall approach in turn breaks down into subsystems, each one with its respective degree of complexity and specificity. One breakdown proposal could be: individual or group activities, based on processes or on a global view (economic and financial, central objectives).

The problem is the following: to have a global effect on organisations, a training/learning effort at the level of individuals would have to be coordinated with changes or adaptations at subsequent levels (groups, processes). By contrast, if organisations introduce modifications entailing learning and knowledge at the level of processes, their impact on economic and financial aspects and on central objectives is more immediate (Mertens, 1997).

Point of view 3:

Measurement is the second stage after awareness. There are sophisticated measurement systems and others evolved through teamwork; the latter have the advantage that people believe in something that they themselves have built. When it is integrated into the management of an organisation, measurement leads to change and learning. Objectives have to be defined and measured, a systematic improvement system has to be devised and a logical remuneration system put in place”.

ILO/Productivity Forum, 2001.

That is the reason why most organisations centre on learning based on the introduction of new processes. They are less inclined to go up the ladder from “down below”. Nevertheless, in view of changes in the work environment and

technological trends, some organisations are adopting the “long route” that starts with learning dynamics at individual level and subsequent collective coordination to achieve a significant impact on results and general objectives.

Employees generally associate the concept of productivity with costs reduction, starting by personnel cutbacks and increased workloads. This is indeed a real problem that has its impact and effects on the organisations’ learning culture. When enterprises have laid stress on drastic costs reductions, the long route may be rather complicated. However, “productivity focalised exclusively on bringing down costs is possible and viable for a short while, but difficult to maintain in the long run. It would seem that client satisfaction has a different emphasis than just cutting costs, at least in the perspective of employment quality” (ILO/Productivity Forum, 2001). Insofar as this implies a change in the organisational culture it will cause resistance, in some cases based on short-term strategic views: “there is a tension between short-term views to get direct and immediate results *versus* change of culture instruments with a delayed effect” (ibidem).

Competitiveness

Competitiveness appears as the penultimate link in the learning chain. Its meaning differs for profit-making market organisations and non-profit ones. In both cases, however, regardless of their nature, they have elements in common that refer to client satisfaction: opportunity price; quality of products and processes; design and timeliness (flexibility, response capacity) of the goods or services offered. “Competitiveness is the ability always to secure the most advantageous position or niche in rapidly changing markets. The main determinant of this capacity to sell goods and services in the international market is no longer just the edge of relative costs. Competitiveness is increasingly based on quality, speed of response, technological superiority, product or service differentiation (Tolentino, 2000).

The screen and moment of selection is that improved productivity does not necessarily mean an improvement of competitive positioning in the market, or the achievement of proposed general objectives. Productivity is an intermediate expression between a result and an input. We have to establish if the result is accepted by the market and perceived as an improvement by customers.⁶ Productivity is not synonymous with competitiveness, although the latter may re-

⁶ In the case of the sugar industry, that has to compete with high corn fructose, customers are looking not only for price but for food health, since high fructose has the advantage that its process is cleaner than that of cane sugar.

quire the former:⁷ “the underlying determinant of competitiveness –either at national, sectoral or entrepreneurial level- is an increase in overall productivity blending the notion of efficiency with effectiveness” (ibidem).

Competitiveness is basically connected with the organisational ability of constantly creating added value for its customers. This in turn depends on the creativity of individuals and the support that the organisation of work can offer them for interacting and learning. When creativeness is the main determining factor of competitiveness, the relationship between an organisation’s social capital and its productivity is almost self-explanatory. However, it is not sufficient to maintain or raise levels of capability or knowledge to enhance this kind of productivity. It is a necessary ingredient, but by itself it will not result in creativity or added value for customers. What this type of sustained productivity requires is something mysterious, intrinsic in the organisation itself and not easily definable⁸ (ILO/Productivity Forum, 2001).

From the viewpoint of business management, one main concern is to develop future competitive advantages. The absence of a strategic approach might lead to learning processes following current standards and methods, which would entail non-optimal capabilities. Once the fields of knowledge that are critical for competitive success have been identified, appropriate learning strategies can be formulated that may be developed internally or externally – mergers, alliances, consultancies – (Cross; Israelit, 2000).

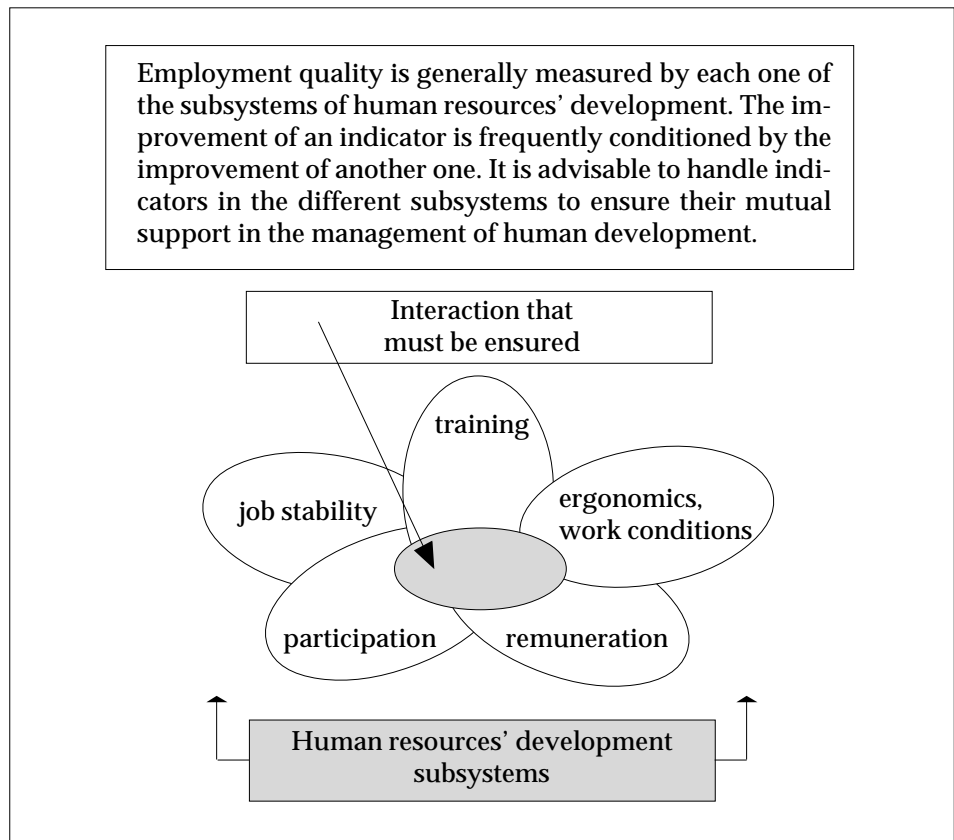
Organisational Learning and Quality of Employment (Decent Work)

The last link in the learning chain, that is also the end and the beginning of an imaginary cycle in the constantly moving process between learning/training and productivity competitiveness, is feedback, both regarding the effectiveness of learning in market terms and in improving conditions for decent work.

This is the process of “learning to learn” in the organisation, which is a learning process at another ontological level: meta-learning. One of the basic principles of meta-learning is that policies and programmes to improve productivity/competitiveness should be applied in a systematic manner.

7 It is worth noting that the competitiveness of enterprises may depend on factors other than productivity, such as an oligopolistic position or “natural” competitive advantages.

8 For instance, knowing to do what the competition cannot do, a capacity to innovate more rapidly than competitors, a suitable work environment, a company’s entrepreneurship, its trademark or image, its quality as perceived by the public, customer loyalty, flexibility to adapt to drastic changes, etc.



Another principle is the necessary connection that learning must keep with practice. This has the advantage that efforts are always justified by the fulfilment of an objective or need. The difficulty for organisations is that the trajectory of learning results is less clear-cut when learning is defined as a process wherein knowledge is created through the transformation of experience (Kolb, 2000). In this case, the ultimate experience is the competitiveness position of the organisation.

Having an experimental connotation, in this definition knowledge and occupational competency are envisaged as transformation processes, constantly created and recreated, instead of independent entities to be acquired and transmitted. This process of creating and recreating knowledge and competencies through learning refers to the two dimensions of knowledge and competencies: their objective and subjective aspects, what is tacit and what is explicit.

A third element conditioning the learning capacity of organisations is assessment of the improvement of decent work in them (employment quality). Enquiries among personnel members, effective communication, shared information and involvement help to create the mutual trust and understanding, shared values and goals that are required for concerted organisational learning actions (Tolentino, 2000).

This is yet another example that decent work is a concept whose components are mutually reinforcing. Social dialogue, one of the four dimensions of decent work and *sine qua non* condition for a job to merit the qualification of “decent”, makes it possible for enterprises to attain maximum relevance between their training actions and the specific needs of an organisation which -as seen earlier- is a powerful factor for promoting work productivity.

A fourth element is the support and resources necessary for learning to occur. An entity defining itself as a learning organisation will have to bring about a social, organisational and technical environment conducive to learning, based on facilities and structures supporting personal development (Warner, 2001). After all, knowledge is generated by and through persons.

