

TRAINING AND ORGANISATIONAL LEARNING

The model described in the preceding section is a simplified picture placing concepts in a strategic outline, which enables us to justify training policies and programmes. We still need to develop the tools to shape a training strategy. In order to bridge the gap between the conceptual framework and the concrete training tools, we have resorted to the identification of the critical variables affecting the relationship between training and productivity. Those critical values are derived from an analysis of concrete contents, within the terms of reference of the conceptual frame.

One first important aspect of contexts is the greater interconnection of markets, and consequently the greater number of competitors enterprises have to face. The results are higher and more constant pressures to adapt to manifold market behaviours. Another consequence is the need for differentiation based on the organisations' intangible capacities, eg. those that are intrinsic in them and difficult to copy.

Another important aspect of contexts is the nature of new technologies, especially information, communication and organisational management technologies. The architecture of these technologies is open-ended and they contribute to the improvement of productivity and competitive advantage insofar as they are adapted to the specific needs of organisations.

A third important element is the declining price of one of the key inputs for productivity: information, mainly through electronic communications media. It is the main source in the generation of new knowledge, although not a sufficient factor, for information requires an intellectual (cognitive) process of understanding to turn into knowledge. "Information has value because someone has given it context, sense and a particular interpretation. It is a unique contribution in knowledge, ability and perspective, a highly subjective process that in the best of cases only can be facilitated by technology" (Cross; Israelit, 2000).

Organisational learning in the current context

“It is the effort to increase the fundamental intellect of the organisation day by day. To encourage personnel to learn because the excitement and energy they get from learning is enormous and it gives energy to the organisation (...) A learning environment must be promoted in work teams, where the sky is the limit (...) a struggle has to be fought every day against the bureaucracy that restricts learning (...) personal attitudes have to be banished such as “I know nine things and will teach you eight” and replaced by “I will teach you nine things today, and a tenth one tomorrow morning.”

J. Welch, former General Electric CEO, quoted in TechLearn TRENDS, N° 223, 28 November 2001, and in Latham, 2001.

A fourth relevant aspect is the growing concern and pressure of civil society about effects on the natural environment and working conditions, resulting from market deregulation and increasing competition. With the support of the mass media and a message of significance for the expectations of civil society, fundamental human rights have become a parameter to judge the behaviour of organisations in the context of globalisation. Both through State taxing mechanisms and forms of market self-regulation that have emerged -(like the codes of conduct for socially responsible companies, supervised by civil society organisations)- many aspects of decent work are now being included in the agenda of organisational learning.⁹ This kind of liability is also connected with the capacity for generating decent work.

Faced with a threat of loss of image with consumers, that in the last resort are the end users of the goods and services offered, companies operating in the consumer market of clients with high purchasing power have had to accept a commitment with decent work and other fundamental rights.

In the sphere of decent work, what generally gets priority attention are labour rights. Although there is still a conceptual discussion going on as to which labour rights must necessarily be present in a definition of decent work, a consensus already exists (and socially responsible enterprises are very careful about it) that at least the principles embodied in the fundamental ILO conventions must be

⁹ The garment industry in export processing zones of developing countries, like the Dominican Republic, Mexico and Central America, has been increasingly made to comply with social codes of conduct issued by their wholesale traders, holders of leading brands. Compliance is ensured through labour audits carried out by independent certifying agencies recognised by civil society.

respected, referring to: a) freedom of association, trade union freedom and effective recognition of the right of collective bargaining; b) banishment of all forms of forced or compulsive labour; c) effective eradication of child labour, and c) elimination of discrimination in employment and work.

These aspects have altered the traditional relation between training and productivity. In this new context productivity is seen as the result not only of the learning efforts of the group of “knowledge employees” in an organisation, but as the outcome of a collective learning endeavour by the organisational community. In this scheme, constantly learning and helping others to learn is a task shared by all personnel, including operatives. The aim is not only to share knowledge, but above all to create it.

Training of the working personnel is no longer seen as a closed cycle, whose main objective is incorporating individuals into the technological and organisational parameters of productive processes. The involvement of all employees as actors and not mere objects of change and organisational learning, makes the difference with the traditional approach to innovation and learning.

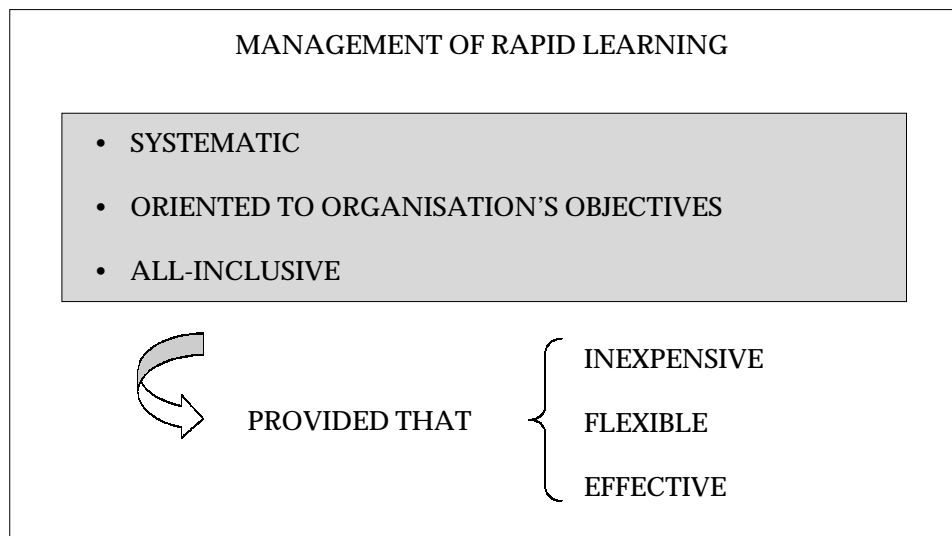
The novel aspect of this approach is the importance awarded to the tacit knowledge of employees, the uncoded know-how for carrying out functions and fulfilling objectives. Tacit knowledge is nowadays considered to be the main source of knowledge in organisations. The challenge is to tap this source by means of a collective goal, motivating personnel members to share, explain and try out their implicit knowledge consisting of experiences, feelings, associations, intuitions and assumptions (Weggeman, 1997). The wider this knowledge activation mechanism spreads, the greater its benefits will be for organisational learning and development.

In this perspective, employees will have to be constantly motivated to look for information and keep updated through other persons or computerised systems. The process encompasses all personnel, it is not sufficient to send down memos or explanatory notes from the management level. Employees have to assimilate the information and need time to understand it in relation to their own reality. It is only when they have had the opportunity to conclude that the changes in work systems are important, that knowledge will have been transferred and learning will occur about such changes.

Learning organisations are those where a collective learning process takes place. This is a situation in which several persons belonging to the same group employ themselves in individually or interactively enriching their knowledge in the same subject area or domain (Weggeman, 1997). This does not mean that they all learn the same things, or that the results of their learning are the same. Differ-

ences in information, experiences, abilities and attitudes will lead to a differentiation in ways of observing and interpreting.

From the organisations' point of view, their interest is to induce behaviour patterns consistent with objectives laid down, producing a shared mental attitude that may improve and stimulate synergy, among group members (ibidem). The important thing is that the learning process should point in the direction of what the organisation needs in a broad sense, including the employees' needs. To reconcile both needs, the self- awareness of personnel members should be focalised, clarifying the role and responsibilities that each one of them has in the organisation (Latham, 2001).



Long route strategy: Inclusive organisational learning

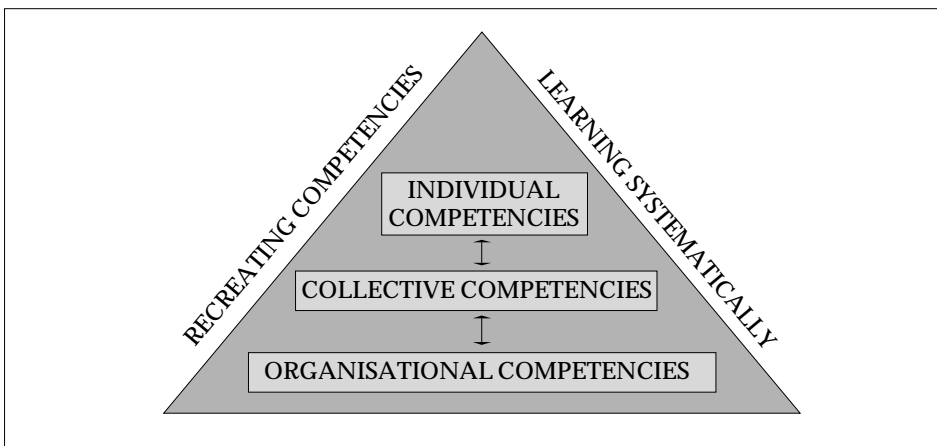
Present-day circumstances pressure organisations to adopt a learning strategy that in this paper we have called the long route, which channels personnel training towards the enhancement of productivity and competitiveness. Owing to the many points of screening and contingency prevention that exist along the road from the design of learning processes to their impact on productivity and competitiveness, a strategy will have to be defined for negotiating it.

The main objective is the accelerated learning of new knowledge in organisations, aiming at the sustained enhancement of productivity and com-

petitiveness, based on the interaction between individual and collective learning, encouraged by a constant improvement of the quality of employment.

The learning strategy involves systematic efforts aiming at the general objectives of the organisation and including all its personnel. For the strategy to be viable in current contexts it must at least fulfil the requirements of low costs, flexible application and high impact.

Learning and knowledge generation efforts have to be strategically oriented. Unless they are focalised, organisations learn according to *mainstream* trends, evolving towards markets and capacities below optimal level. Tracking the surrounding environment and formulating active policies that acknowledge the importance of learning and knowledge, help to offset such trends.

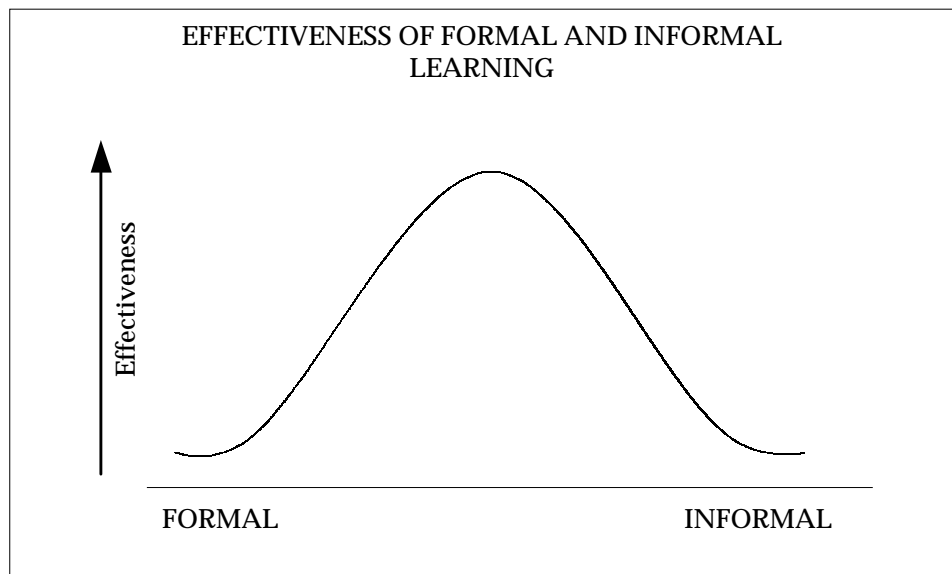


The key word is flexibility. “Organisations that learn quickly, at low cost and accurately are characterised by a high degree of flexibility in their operation, which distinguishes them from those that learn slowly, laboriously and expensively or are just destined not to learn at all. While inner momentum is a very functional characteristic for organisations in stable and foreseeable contexts, it can be extremely destructive when it prevents learning in moments of significant changes (Langlois; Robertson, 1996).

Flexibility is a prerequisite for training strategies to have an impact. Individual learning needs to migrate to collective, group level, and to organisational level through some type of social interaction. The important thing is to achieve

learning that entails action, which means modifying and/or transforming existing processes through generated competencies. This calls for flexibility in learning processes and instruments.

Inversely, an organisation's context is subject to constant changes, which necessitates changes in the collective processes and competencies required, that in turn extend to individual competencies and learning. They are tides flowing in opposite directions, whose coordination requires organisational flexibility.



Informal learning manifests itself in many different ways in organisations. There are several challenges for influencing it effectively, that can be summarised as follows: informal training is complex, its results depend on its context and its management is difficult. In some cases workers have expectations of access to learning and occupational development through their job. In other cases they have few opportunities for learning and career development. The scenario becomes more depressing when they have few possibilities of occupational progress, and the feeling is reinforced by the low aspirations of their bosses (Rainbird, 2000).

The answer to the above is a flexible learning proposal responding from the training area to the requirements of a rapid, all-inclusive and effective learning strategy. To prevent that flexibility from weakening learning efforts, it is essential to anchor them in competencies aiming at productivity and competitiveness objectives. "An approach based on competencies helps organisations to identify and turn into goals important forms of knowledge, that are necessary for their future success. This is an important planning process, as critical knowledge is not developed in the course of everyday activities" (Cross; Israelit, 2000).

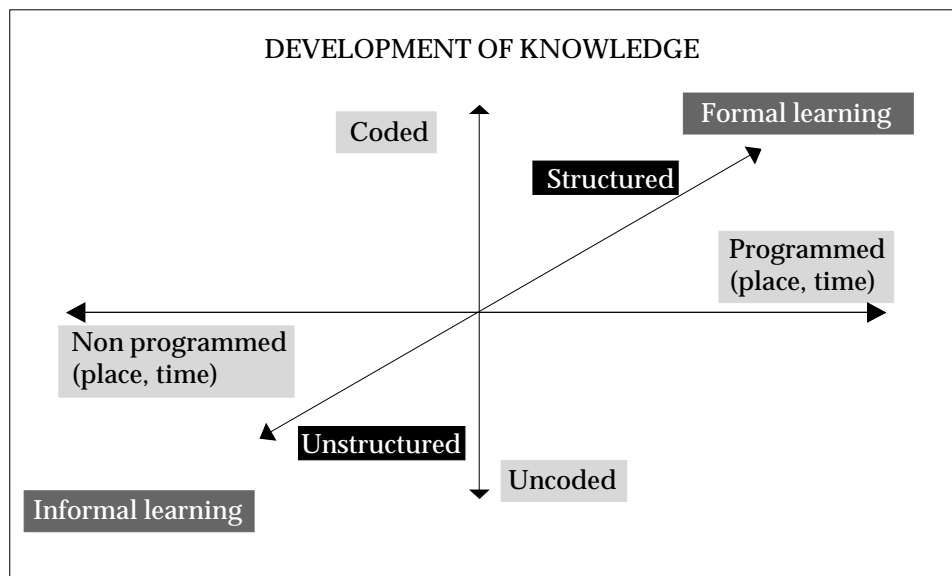
Flexible learning strategy

Flexible learning is closely connected to the way in which contemporary enterprises operate. It includes new approaches to the planning of training, its structure and contents, the methods it utilises and access to it. Training needs to centre on well defined applicable targets, and to go further in the development of legitimate and valid knowledge (Jakupec; Garrick, 2000).

Flexible learning is based on two parallel concepts: informal and formal learning. Flexible learning is the capacity of organisations for steering a course between formal and informal realms according to their own needs and convenience. The premise being that the effectiveness of an organisation's learning efforts increases insofar as it can manage to combine formal and informal procedures.

Organisations are beginning to recognise informal learning as a source of new knowledge and personnel development, and a strategic field for their training policies. In part because it allows them to cut down on training costs. But the most powerful reason is that it enables them to act upon intangible knowledge areas, that formal training cannot reach or can only cover in a limited way. This is a two-way channel between individuals and organisations. On the one hand, employees learn in their concrete work context, and on the other hand organisations gather together their individual potential and profit by it.

Formal training based on coded knowledge is too limited in scope and objectives in an economic context requiring dynamic organisations with distinctive market identities. This in no way means the disappearance of formal learning, but a limitation of its fields of action. It signifies that organisations will have to develop appropriate mechanisms and instruments for effectively influencing informal learning.



“As society becomes more complex, so do personnel training requirements, and there is growing demand for flexible learning. There is therefore an inverse relationship between the complexity of selection and the flexibility of learning. This is particularly so as on the one hand work becomes fragmented, and on the other there are unforeseeable changes.

Traditional divisions of labour vanish, differences become blurred between everyday life and work, between learning and working, the community and the enterprise.

Abilities are required for applying knowledge and experience in unfamiliar circumstances, and flexible learning offers fruitful and varied possibilities in that field”.

(Jakupec; Garrick, 2000)

Informality denotes that neither the contents, place, form or persons involved in the learning process are predetermined. The management of informal learning emphasises self-organisation and self-determination.

As frequently stated, the idea is not to replace formal by informal learning but to give the latter a much more explicit place than it has been assigned tradi-

tionally. Both formal and informal learning modes are often not very effective in their ultimate expression (totally formal or totally informal). It is preferable to combine the two, perhaps leaning slightly towards the informal side. In some occasions the contents of the learning process are not predetermined, in others its place or the personnel taking part in it. Going to extremes – a complete absence of predetermination, or predetermination of the whole learning process – is not considered an effective strategy.

From the viewpoint of managing rapid and effective learning, informality ensures success, for it guarantees the flexibility, low cost and impact of the learning efforts. The other aspects of speedy learning are covered by its formal component: the systematic part of the process, orienting it towards the organisation's objectives, specially client satisfaction, and coverage of all the personnel.

Informal learning has *flexibility* because the purpose, place and participants in the process are not predetermined in a rigid manner. Flexibility in the management of learning is required to be consistent with the progression of change in the organisation of processes and work. Nevertheless, there are also structural aspects of substance that do not necessarily change rapidly, like basic procedures, for example. Learning such aspects acquires more formal dimensions, especially for those who come to an organisation or job for the first time.

The balance between formality and informality refers not only to the contents but to the place and space where learning takes place. It is a topic that has given rise to polemics in connection with new learning techniques, like multimedia and the Internet.

For example, learning via *internet or intranet* is characterised by its capacity to offer contents exactly at the moment when they are required, which the traditional planning of classroom courses does not have. It is also flexible in the adaptation of contents, rapid and of low cost considering the number of persons it can reach, and allows for learning at a personalised tempo (Festa, 2000).

However, these advantages do not make this training technique displace the traditional ones. To determine which training technique is most effective we must first understand how persons and organisations learn. It is essential for the success of a training programme to ensure that the training media or techniques are in consonance with the abilities to be developed (*ibidem*).

“Training by means of the Internet or Intranet works better when it is used as a complement to traditional techniques. For instance, it is ideal for getting students acquainted with the theory before practising it in a group or class environment. When all participants have devoted some time to reviewing the relevant information on the internet or intranet before the lesson, they will start the practical session with some notion of basic principles, and will all have a similar level of knowledge. This will enable facilitators to develop the trainees’ knowledge, as they already have a grounding of basic principles”. (Festa, 2000).

There are situations in which training techniques can only be applied in a group or schoolroom environment. For example, interaction with other persons is a significant technique for understanding and appropriating the required abilities and knowledge. It enables several persons with similar experiences to agree about how to relate coded knowledge to real work situations, and even to extrapolate conclusions to other situations that had initially not been contemplated in the coding. This offers transcendental learning opportunities for organisations.

Consequently, any training programme that omits direct contact among students runs the risk that they will spend their time and efforts relating to the machine instead of other persons. Group techniques, the possibility of collaborating with other learners and practising a technique are very valuable learning tools that cannot be replaced by the machine (ibidem).

To attain the objective of making learning more effective in the context of constant change that organisations have to live with, the proposal of replacing or recombining formal by informal training seems too simple. Between the formal and the informal there is a wide range of options and modes, blending aspects characterised as formal with other, informal ones. Optimal learning efficiency lies probably in one or another of these combinations.

The main thing about the proposal is that it breaks away from the idea that learning processes are necessarily conservative and tend to reinforce existing frames of reference, reinforcing only the knowledge already incorporated into the organisation. Much more difficult and less accepted is a strategy aimed at attaining a qualitatively higher level of knowledge, transcending and transforming what already exists. Part of this strategy is to motivate employees to move in the direction of such transcendental or transformation learning (Weggeman, 1997).

Transcendental learning consists of processes in which individuals and/or organisations are capable to reflect in action upon the practice undertaken. This

is called “reflection in action”. The knowledge thus generated goes beyond what already exists in the organisation, i.e. current explicit and tacit knowledge. This self-transcendental knowledge reflects the energy driving new know-how in the organisation, and consequently, the strategic value it has. Regarding the other two areas of knowledge, explicit knowledge represents reflection without action, while tacit knowledge is reflection after action (Sharmer, 2001).

The consequences for training are significant. We may suggest that an initial step in the direction of transcendental knowledge is to set in motion the capabilities and know-how that are frozen inside the organisation. To that end, a great deal of attention has to be paid to the subjective nature of learning and the idiosyncrasy of all the personnel involved, to the social and individual processes of learning in the organisational context. “What we learn is closely connected with the conditions in which we learn” (Brown; Duguid, 2000).

It will be necessary to recognise and promote the subjectiveness of individuals in the workplace. To visualise employees as active learners but also as self-regulating subjects that wish, think, feel and act; that strive to reconcile their own objectives with those of the enterprise.

Learning to be flexible and self-regulated imply a number of values and attitudes leading to adaptability, constant modification and acceptance of the fluency between certainty and uncertainty as a permanent precondition for subjectivity. A contingent rather than monolithic subjectivity, in constant change, forever finding answers and obstacles. Autonomy, self-management and individual responsibility, so that persons can make their own project out of their workplace and furnish added value to the organisation (Usher, 2000).

Management of the learning process must help persons to learn in an effective way and concentrate on the social processes that turn knowledge into action. In other words, not to confine learning to individuals but make sure that it is applied at the level of the organisation.

What does this mean in terms of curricula, teaching material, teaching methods, participative practices, financial and administrative procedures? These questions do not yet have definitive answers. Collective, homogeneous conventional courses can hardly meet the needs of people with different life stories, at different stages in their career and in differing economic branches and sectors. The ensuing queries are: how to be flexible with learners? and how can trainees be made to learn flexibly? Trainees or learners are the customers; their needs and contexts must be understood. Nevertheless, learners have to be taught how to be flexible in their learning process, how to utilise teaching materials, how to plan and prepare themselves for study, to use computers, etc. (Evans, 2000).

Two points seem to be fundamental in the search for answers to these questions. The first one is that the curriculum of flexible learning derives from work and not disciplinary knowledge. Both capacity and knowledge are flexible in connection with contents. This leads to a shift from theoretical and disciplinary knowledge towards knowledge related to problem solving. Training by competencies, that we will describe further on, stems from the concept of curricula based on practice.

The second point is that the subjectivity of learners is more forceful in the transforming learning model. It would be over-simplistic to think that all the personnel in an organisation is likely to be equally motivated, inspired and prepared to play the role of learners, ready to take active part in the process of generation and application of transcendental knowledge. And this, for a number of reasons, some of them internal policy motives, others caused by adverse intuitions and/or feelings, others through the insecurity of feeling ridiculous or the fear of losing a safe or privileged position, and others yet by the sheer fatigue and exhaustion of learning.

According to Edgar H. Schein, the well known researcher in organisational learning, it is not infrequent to see that 80% of the personnel in an organisation behave passively and only react to the coercion of management or a critical market situation. They rationalise the effort and weariness of learning and learn just what they are supposed to know. The remaining 20% are persons who always feel the need to take action: about half of them will actively support the suggestions made by the management or by the group that has taken the lead in transforming the learning model; the other half will take any kind of action to oppose the proposals (Coutu, 2002).

Therein lies the challenge for managing the sort of training intended to have an effect on productivity. "We know how to improve the learning of an individual or a work team, but we do not know how to intervene systematically in the collective culture to prompt a transforming learning process throughout an organisation" (ibidem).

Paradoxically, according to Schein, effort, exhaustion and coercion seem to be at the root of the learning progression, both for individuals and organisations. The process of unlearning habits, customs and practices that have ceased to be valid can be very painful. Learners will accept that effort and "pain" provided that the fear of apprehending something new is less than the fear or concern of "surviving" economically and socially in the organisation (ibidem).

Insofar as training management may succeed in dispelling fears by creating a safe and reliable environment for unlearning some things and relearning others, it will stimulate the process. Many organisations will try to encourage learn-

ing by increasing the fear of “survival” in their personnel, because it is the easiest way. According to Schein, this is completely wrong because it often awakens resistance, an attitude of “wait and see” in the personnel, faced with the many reorganisation plans presented by management to keep up the “pressure” on them (ibidem).

The opposite also applies: management has to gain credibility by fostering a healthy and positive desire to learn in a psychologically safe learning environment. There will always be resistance to learning, but once employees have accepted the need to learn, the process can be facilitated by means of good teaching materials, group support, feedback, surveys, etc. Stress must be laid on the validity of what is being taught. Insofar as validity is justified and workers feel at ease with the learning process, coercive persuasion will appear to be not only effective but also legitimate (ibidem).

This support/resistance dynamics among personnel regarding application of the transforming learning instruments that we describe below is partly due, on the one hand to the combination of effort and pain that learning implies, and on the other to the concern for survival within the organisation. However, over and above this is the psychological safety that individuals should feel in applying such instruments. When workers with minimal schooling levels feel safe to give opinions, ask questions and raise objections in the presence of engineers/middle managers, the latter have to make an effort to unlearn and leave aside prejudices that workers are ignorant. At this point, pressure on middle managers is necessary by facilitators and high management, as otherwise a psychologically safe atmosphere could not be created for workers.¹⁰

10 The socio-psychological mechanism is much more complex. Workers can suffer reprisals from middle managers for their participation in transforming learning initiatives, in which case pressures from high management or project leaders have no effect. In the cases analysed in this paper it also happens that one or several workers may take advantage of a lack of leadership of middle managers to question their decisions and cause splits among them. Another situation is that the interests of some workers coincide with those of some middle managers to keep certain problems or dysfunctions in the dark (for example privileges or overtime).

