

*training  
and labour:  
past  
and future*

International Labour Office



**CINTERFOR**

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## Introduction

At present, two themes seem to be central to the concerns of those involved in the problem of training and labour: the first, relating to the need to reformulate the existing concept of training in keeping with the requirements of the labour, production and educational systems; the other, related to the urgency of designing a new institutionality for training which encompasses the impact of the appearance of new players and actors within the framework of the national training effort. Looking at the problem from another angle, it can be seen that up until recently, the theme of training was almost exclusively the preservation of specialized national institutions; nowadays, on the other hand, training has become a subject of debate among the most varied economic, social, labour and educational sectors. As such, vocational training constitutes an important chapter in the social dialogue established among governments and employers' and workers' organizations; in national agreements on productivity, employment, competitiveness and/or quality; in the economic and social policies orchestrated from the ministries concerned with these matters; in the policies of State in the matter of labour relations and technological development; in sectorial agreements; in collective bargaining -by branch and by enterprise-, to name just some of those areas in which the dialogue on the theme of training is taking place.

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A series of transformations have occurred in the economic, social and labour environment in the countries of America. The processes of economic globalization and its corollary at national level of open policies; technological transformation and its repercussion on the processes of production; the regulatory role attributed to the State; the broadening of the scope of educational systems; the forms being acquired by the organization of labour are, among

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others, factors which directly impinge on the demands on training systems and programmes.

In this sense, a series of phenomena are being produced in the American region which are brought together in the hitherto unknown challenges which are appearing. Perhaps the most outstanding is that relating to the crisis of the monopolistic -or almost monopolistic- model of the national vocational training institution, to the extent that one is witnessing an explosion in the supply of training emanating as much from the public sector as from the private sector and, in many cases, the disappearance or weakening of the said national institution.

At the same time, it can be verified that the concept of vocational training which was in use for many years is losing its validity. As a consequence, if until recently it was thought that vocational training was nothing but the ordered and systematic transmission of skills and dexterities, and of technological know-how for workers in skilled and semi-skilled occupations, today one is witnessing an increasingly greater pre-occupation with other dimensions such as those connected with a new culture of labour and production, within the perspective of a process of continuous training.

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And, above all, it is being recognized that it is impossible to continue to provide training programmes which are not intimately linked with the basic institutions of the systems of labour relations (employment, remuneration, occupational health, working conditions and environment, social security, labour legislation, among others), the processes of technological transfer to the enterprises, and the concern for substantive articulation with the educational systems (principally with basic education and the processes of continuing education).

In this document, an attempt is being made at a first approach to these questions; gathered together are the experiences of vocational training agencies, accumulated over these many years, as well as the contributions of Ministries of Labour in the definition of public policies and strategies with respect to training; an attempt has also been made to incorporate the developments in the field of education and labour which the Ministries of Education and the agencies responsible for scientific and technological research in countries in the region have implemented. Not less important are the results achieved through the training actions undertaken by the employers' and workers' organizations.

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Recently the debate on the institutionality of training was opened, at continental level, in Ocho Ríos, Jamaica (3 to 6 October 1996), on the occasion of the 32<sup>nd</sup> Meeting of the CINTERFOR Technical Committee. At that meeting, representatives of governments and employers' and workers' organizations analyzed a document presented by the Centre, entitled *Training Horizons: a navigation chart for Latin American and the Caribbean*. That exercise constitutes a first attempt at systematizing these concerns.

In the seven chapters into which this document is divided, the topics considered the most solvent in this problematic issue are developed. In the first, an approach is made to the topic of the conditions and challenges being faced by countries in the region in this matter; the relationship between the work done by the training institutions, the consummation of one model and the emergence of a new training scenario. In the following is analyzed the strategic importance of the training and human resources scenario in the achievement of a productive transformation which permits a raising of the levels of competitiveness, productivity and social equity.

The innovations which indicate ways of readapting to the current reality are the subject of the third chapter: another concept of training; the institutional arrangements which, preferably, converge in the options of sectorialization, verticality and integrality; the changes with respect to the clients of the different units; from the supply of training to the demand for training. In the fourth chapter are examined the strategies for the informal sector, a sector which has irrupted as a permanent and unavoidable factor in the labour markets of the region and the innovative experiments undertaken in this regard in our countries.

Two themes of extremely current importance complete this document. The fifth chapter introduces the emphasis on job competencies, basis for the regulation of the internal and external commercial market and the manpower training policies; their relationship with the productive transformations of the decade of the eighties; regional experiences. And the sixth chapter presents four examples of modalities of articulation between the State and the private in the region; approaches and results. The document ends with a chapter of conclusions.

Finally, it must be recorded that the work presented here originally circulated under the title *La construcción de una nueva institucionalidad para la*

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***formación*** (*The construction of a new institutionalality for training*), (Montevideo, Cinterfor/ILO, 1995). It incorporates some of the valuable contributions made at the aforementioned meeting in Ocho Rios, and also seeks to retrieve in extended form those themes which deserve more detailed treatment. Today, it takes on, with new additions, its “definitive” form, with the relativities of these dynamic times. Responsible for the development of this text were Pedro Daniel Weinberg, Director of Cinterfor/ILO, and Fernando Casanova, a consultant at the Centre.



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## Vocational training: continuity and change

### **1. Relationship with the past: development or rupture**

Those who attempt to understand the conditions and challenges currently being faced by countries in the region in the area of training and human resources development, are often tempted to conceive the new social and economic context in which it is located as something which breaks radically with the past.

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Hence the constant alert signals with respect to: obsolescence, both of categories of thought and of institutional aspects; the need to devise new forms of organization and new methodologies; the absolute necessity of incorporating change as a permanent factor in any activity, or the routine of permanent change.

It is precisely because it is interesting to focus attention on the consequences and implications of the transformations which have occurred and which are still taking place, that this brief approach to the theme of the relations between the State and the private sector in the training of human resources is being undertaken, looking at the current situation as a point in the process of change, profoundly linked to an historic development which offers more recourses than one would have at first thought.

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## **2. Permanence and novelty in training and human resources development**

Many of the forms of traditional action of the State have been questioned, and specifically, one is witnessing a process of critique and review of the forms of public action in the field of training. The issues and alternatives raised are, in effect, new; on the other hand, it is not a new thing that the training systems and institutions should be the subject of profound debates and questionings.

The training institutions, originally conceived as non-formal training entities, independent of the regular systems of education and provided with major autonomy and fluid links with the labour market, made their first appearance at the beginning of the forties.

Since then, they have been plunged in the profound changes experienced in the economic, social, political, cultural and technological context, putting to the test their capacity to adapt and their real institutional validity. They have survived successive and various crises, and have managed -with adequate success- to revalidate their role whenever the circumstances and pressures emerging from the new national situations cast doubt on them.

## **3. The first challenges**

The world crisis of 1930 dramatically overturned the terms under which the countries of Latin America and the Caribbean were inserted in the world economy. The impact of the reduction of exports, basically of agricultural and mineral raw materials, which provided the incomes necessary to pay for the imports of manufactured products, occurred, with the consequences which we already know, according to the degree of openness of the national economies and their high vulnerability to the crises and changes in international trade.

The development strategy, appropriately baptized “import substitution” by ECLAC, consisted basically in a reaction to the new conditions. The strengthening and expansion of State action, as promoter and protagonist of the new development strategy, was then a fitting and inevitable component, since our countries had neither a modern business sector, nor the skilled human resources, nor the sufficiently extensive internal consumer markets to play a leading role, by themselves, in the process which was beginning to take place.

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It is from that time onwards -with differences according to the moment and conditions under which the various countries and regions begin the said industrializing efforts- that the social, political and institutional forms which we know today as distinctive or identifying features begin to take shape in different planes, and especially, in labour relations and in the training of human resources.

What was the challenge posed then for the new training institutions? Nothing less than to respond to the “bottle neck” of the new development strategy: the lack of skilled manpower for the incipient national industry. It was a question, to say it schematically, of a panorama which was inverse to the current one, where the demand for human resources outweighed supply, where the problem was not the creation of work places but the provision of skills to the human resources which were going to be employed.

Today it can be said that the challenge was met with success; among other reasons because the lack of skilled human resources does not figure among the causes of the crisis in that model.

It is also important to point out another challenge faced by the training institutions: that of democratizing agent of educational, training and employment opportunities. Even with the expansion of matriculation at the secondary and higher levels of regular education, vast sectors found themselves excluded from educational opportunities. This was not, moreover, a residual problem, since the very industrializing process provoked effects such as the massive migrations from the country-side to the cities and the explosive increase in the rates of demographic growth.

It is from the proper fulfillment of this mission that the stigma attached for a long time to vocational training as the “education of the poor” has emerged. This, in addition to demonstrating the contagiousness of the stigma from the principal recipients of vocational training to the institutional system which catered to them, is evidence of social prejudices such as the under-valuation of manual labour as against the intellectual, and is one of the chronic components of a problem which still exists: the separation between formal education and vocational training. It is also evidence of another important aspect, which is that the training institutions constituted the **instrument** of public action in the educational plane towards the most disadvantaged.

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It is unnecessary to point out that the State-market relationship was rather different from what it is conceived to be today. As previously indicated, there was no modern business sector capable of leading the effort at industrialization. The State then had to “play both sides” through an arsenal of public policies: it assumed one of the roles that is most questioned today, that of State-entrepreneur and producer; it generated the first “business incubators” on a national scale (although fundamentally urban) through subsidies and direct and indirect incentives to production and the incorporation of technology; wage, health and social security policies leading towards the development and consolidation of an internal market capable of demanding and absorbing in sustained manner the new national production; all in addition to the function already mentioned -delegated in the training institutions- of providing skills to the human resources necessary for industry.

Supply and demand, national entrepreneurship and industrial workers, property and consumer market; in short, components and players which, although they go on to achieve major levels of autonomy and development on their own, recognize state intervention in their origin and strengthening.

## 14 **4. The consummation of one model and the emergence of a new scenario**

To tell the truth, the model of internal growth through import substitution produced many positive results. It contributed, among other things, to the growth of a physical infrastructure, to the creation of a considerable technological park, to the emergence of a previously inexistent industrial sector, to the appearance of important urban centres, and on the social level, to an expansion of the cover of diverse social benefits.

Nevertheless, towards the seventies there began to appear the alert signs which were evidence of the limitations of the model:

- industries had been created which needed permanent subsidies and which were incapable of exporting in any competitive manner;
- The dependence on State intervention for the development of the diverse sectors of the economy, generated speculative attitudes which neglected the pertinence of technology, quality of products, consumer needs and prefer-

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ences, international competitiveness and, in general, levels of productivity and efficiency;

- other less developed countries were achieving extraordinary industrial growth, through the employment of an outward-looking development strategy, based on market incentives, and which showed a strong participation of the private sector.

There then began to be drawn the characteristics of a new strategy based on:

- the replacement of sectors which had traditionally been the motor of growth -for example, iron and steel, petrochemicals and automotive industry- by new others, among them, microelectronics, computer science, telecommunications, biotechnology and the production of multiple-use, greater resistant synthetic materials;

- the relative loss of importance in production, of traditional factors such as natural resources and labour force, together with the increase in relative importance of factors linked to knowledge, technology, management and entrepreneurial development;

- the globalization or universalization of the economy, but also of society and communications, which was originally applied to products, but which was later extended to finances, technological processes, entrepreneurial organization, politics, the consumer and the world of culture in general.

This new panorama has strained our economies and societies in such a way that there is no player today -State, production units, employers' and workers' associations, civil organizations- which is exempt from rethinking its manner of organization, of social and economic insertion, and its contribution to national development.

The States are faced with the challenge of redefining their function and their administration, inclining on the one hand, towards forms which are more efficient, flexible and suited to the production, social, sectorial and local demands which are emerging within the new development strategy; and, on the other, towards regulatory and strategic planning functions in terms of social

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and economic policy, improving their capacity to articulate and interface with the diverse players and groups in the society.

The production units, for their part, and independently of their size, must adapt to the new exigencies of productivity, efficiency and competitiveness within the framework of open economies, playing a much more active role than in the past in investment in technology, qualification of human resources and procuring efficient articulation at multiple levels (with the new mechanisms of incentives to investment coming from the States, with other enterprises, with training institutions, universities, etc.).

The societies as a whole must take on major national tasks, among which stand out, principally, that of undertaking a process of transformation of production suited to the new national and international conditions which, at the same time, succeed in correcting the major social inequities expressed in unemployment, underemployment, marginality and social exclusion.

## The centrality of training and human resources development to the current development strategy

In this context, the training and human resources development scenario acquires once more in the history of Latin American and Caribbean countries a strategic importance. It is within this environment that the new development strategy, in its aim of achieving a transformation of production which permits the elevation of both its levels of competitiveness and productivity and of social equity, plays several of its major roles.

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It could be affirmed, without error, that it is no accident that the countries which have undertaken attempts at productive transformation and modernization with greater success have conceded the most importance to the development of their human resources, which has led them to the “restructuring” of their educational and vocational training programmes, whether these take place within the enterprises or out of them.

This fact is so profound and significant that even the more advanced countries are today revising their educational and training systems, with the aim of raising their quality, linking them more efficiently to productive, scientific and technological development, and directing them as the motive force of an increasingly greater productive and competitive capacity.

As such, it is possible to affirm that:

- One thing which contributes significantly to the consolidation of the

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new economic order -in addition to the behavior of the labour and employment markets in the medium term- is the defining, on the part of the State, of training and education functions for the development of skills and competencies which equip not only for entry into the formal sector, or for the performance of more lucrative activities, but also for occupying jobs or performing activities of better quality.

- The strategic importance of this function for growth, in the face of the imperatives of productive and international competitiveness and under conditions which are increasingly more intense in know-how, is something which has stood out glaringly.

- Even if the estimations with regard to the evolution of the economy towards changes in its structure -which imply a significant increase in jobs requiring more intense know-how- can be kept conservative, the increase in the levels of training and education are necessary, both for objectively obtaining greater levels of social mobility, and for forging well-founded expectations of social mobility in those who live in marginal conditions today.

Certainly, training and education policies must be designed so that they transfer highly flexible competencies which offer the greatest possibility of adaptation to the current conditions of the labour market and to the foreseeable evolution of these conditions. At their very best, they must be competencies which permit rapid retraining and re-qualification.

There is not the least doubt, then, about the positive relationship existing between the level of economic and technological development in the countries and the importance of investment in education and vocational training. The other side of the coin is equally valid: many people associate the lack of productivity and competitiveness, including their decline -as is currently happening-, with deficient or inadequate education and vocational training.

But, it is one thing to recognize the close connection between development and training; it is quite another to design and put into place training systems and institutions which respond to the training needs and demands of societies based increasingly on information, scientific know-how and technological innovations, while at the same time operating as democratizing agents in the diffusion and production of knowledge. And this is what the Latin American and Caribbean countries are faced with today.



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Hence, it is basically a matter -and about this there can be no major doubt- of *promoting an integral policy of human resource preparation*, in order to respond, quickly and suitably, to the unavoidable challenges in which the new development strategy finds itself sustained.

It would be almost unnecessary to point out that, in a world of constant change and in societies in transition, there are no prefabricated responses, there are no predetermined models which can be followed as a guide for action, for which reason people and organizations are forced to sharpen their perception and focus their attention in such a way as to be able to visualize the new paths along which they must tread. And truly, it is to this that the different education and training systems in existence in the region are obligated.

To undertake such tasks also implies an understanding that training is not only a basic factor for an increase in productivity and an improvement in the conditions of competitiveness, but also an essential instrument of public policies, especially those directed at the most vulnerable sectors: youths, women, the unemployed, workers in the process of retraining, among others.

This multiple challenge is of such magnitude that it cannot be approached with any reasonable expectation of success by any stake-holder alone. The most suitable path seems to be the construction of national consensuses involving the State, workers and employers, incorporating the experience and resources of the vocational training institutions. This would make possible a space for coordination of interests in view of economic and social development, and at the same time, the long-term political sustainability of the said national projects.



## Innovations in the world of training

The flexibility and adaptability of regional training institutions are facing a new opportunity to be tested today. As said before, there is no “model”, neither in terms of forms of action, nor institutional arrangements, nor of subjects of attention.

A review of different regional experiences permits a recognition of elements, in the daily practice of some initiatives, which provide evidence of the effort at adaptation to which we were referring.

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### 1. The concept of training

An initial change or transformation which can be observed is in relation to the concept itself. Through diverse experiences a redefinition which answers to at least four aspects of training is indicated: in its links with the system of labour relations; meanwhile it forms part of the processes of technological transfer; as an educational factor, articulated with the labour environment and the forms of technology; and finally, but by no means least, oriented towards the structuring of competencies, surpassing qualifications, inasmuch as these are understood as the mere accumulation of knowledge and skills, as can be seen in detail.

i. **Links with the system of labour relations.** While the model of development based on import substitution was valid, it was, as was seen, the domain of the public vocational training institutions to train the human re-

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sources for industry, within the framework of the many responsibilities of the State. The system of labour relations consolidated within this matrix was impregnated, among other aspects, by the tendency to encourage mechanisms of negotiation, for the major part tripartite, some times by branch of activity and others by enterprise, where discussion was centered on topics such as: employment stability, regularity and percentage increase of pay; the coverage offered by social security services (health and unemployment insurance, family allowances, etc.).

The changes already indicated with respect to the types of entry into the economies of a world-wide trade, the increasing weight of the factors of knowledge and technology in production processes, and the change of roles in the different labour players, have profoundly transformed the various aspects of labour relations. The concept of stability of work is beginning to give place to a vision of flexible, more and better qualified workers, capable of taking on rapid retraining, and thus assuring for themselves stability, not in a job but in the employment market. Without relinquishing the hope that social security services would be maintained, it is obvious that the systems which support them are in crisis in many cases and that they are confronted with restructuring processes. Whatever the form and modalities in each country, it seems clear that suitable training constitutes the best insurance against unemployment.

Likewise, discussion about amounts and mechanisms of remuneration, even within the framework of collective bargaining, tends to lean on the conduct of productivity, and elements of logic such as seniority and working career in the enterprise, are ceding priority to the logic of questions dealing with qualification of persons, for example: experience, and levels and types of training.

Consonant with the changes referred to, training and human resources development have ceased to be a function **delegated in** and **arrogated** to the State. Through their representative organizations, employers as well as workers are approaching the theme of training, proposing initiatives to the State and the training institutions, and organizing their own training structures, becoming involved in the design and execution of policies. In summary, because of its increasing centrality, training is beginning to occupy a major place in negotiations and labour relations.

**ii. Training, part of the process of technological transfer.** In the clas-

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sical conceptions in use up until recently, training was conceived as the ordered and systematic transmission of knowledge, skills and dexterities capable of promoting the elevation of the personal qualifications of the worker. Today one is witnessing a transcending of this isolated concept of training, removed from the context of the environment and the time in which it is developed, and which leads to action centered in itself, not necessarily articulated with the labour processes for which it is conceived.

An observation of the most innovative experiments in the training institutions, technical schools or technology education units, reveals the increasing influence of labour processes and technological innovation. According to the new conceptions, training must be understood within a process through which the production units and the workers agree to an aggregate of scientific and technical information associated with the production processes. The educational institutions and units which define it in this way, articulate training with the integral process of assistance and advice which they provide to the enterprises. In this way, the training of human resources forms part of a set of actions of technological transfer, as much of work as of production, adaptation and innovation.

**iii. Training as a factor of education, articulated with the processes of production.** The proposal of the innovative centres or schools is to articulate educational action with the processes of linkages with the enterprises. For example: in Brazil, the technological centres of the SENAI and the technology education centres; in Colombia, the technological service centres of the SENA; in Mexico, the training promotion units have embarked on some ambitious programmes of focus on the enterprises (technical assistance and advice, technological information, applied research). Students and teachers participate actively in these new undertakings. And this rarely constitutes an additional service, but strongly points to the search for mechanisms which would provide feedback to the pedagogical factor in its diverse facets: programme content, training methodologies, modalities of attention. Or, what remains the same aims at improving the teaching-learning processes, both with respect to educational capacity and to relevance and quality of education. This is emphasized even more when the centres referred to become focal points for the diffusion of advanced technologies, depending on the extent to which interaction is established with the production and technological needs of the industrial park which they serve. All of the above, in the understanding that in spite of their investments and their new and committed projections towards the tech-

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nological, the units under analysis do not cease to be defined, essentially, as agencies of training and education; so that the selling of services is not, centrally, a new source of financing, but rather, constitutes formulas being tested to bring the reality of the world of production closer to the schools and centres. Furthermore, in collaborating with the enterprises in the resolution of problems, the production units are not the only ones to benefit; the scientific and technological knowledge base also increases, which is the critical issue.

**iv. Training for competencies.** The changes, both technological and organizational, which are taking place within the productive apparatus as well as within the context of globalization, are redefining the parameters of competitiveness of the markets in which the production units are developing. The effects of this process are making themselves felt not only in the structure of production but also in employment and in working conditions in the work centres.

Obviously this technological and organizational transformation is requiring of training systems and institutions new responses leading to the achievement of different and greater levels of training and capacitation. And at the centre of this problem is the orientation that ought to be given to training so that it is articulated both with the objectives of productivity and competitiveness of the production units, and with the expectations of economic and social improvement of the population.

Thus it is that different social players identify training oriented by results and based on modular, flexible and quality systems, as the axis orienting the efforts to be deployed, which by analogy with the systems of quality in production, allude to reliability, normativity, evaluation and certification, which are the elements which shape the competence of the individual into a specific job function.

Owing to this, job competence is becoming a crucial issue, leading to the transformation of education, training and human resources development schemes; it is also becoming a decisive tool in the formulation of education and labour policies which, along with economic policies, procure sustained economic growth and equitable social development.

In the traditional programmes, training is oriented towards the qualification of the worker, likened to a group of tasks; in general, training programmes

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have a management slant, to the extent to which they are instrumental, and in the best of cases, are limited to an intellectual proposal. The processes of change in operation in the training institutions and in many technical schools, take other dimensions into consideration. They are not reduced to the transmission of technological information and manual skills, but pay attention to cultural, social and attitudinal aspects which broaden the capacity of individuals. The culture of modernization of production based, among other criteria, on quality, productivity, efficiency and competitiveness, cannot be approached from training programmes centered exclusively on preparation for specific jobs.

Contribution to the construction of a new culture of labour and production is central in the instances which we are considering; this is achieved not only through the explicit training methods, -courses, programmes, curriculum content, methodologies, but the environment and production climate to which the centres and schools have access are, basically, what makes it possible. In other words, the new skills necessary for an economy open to the currents of international trade, under highly competitive conditions, cannot be attained through training which responds to the former schemes of the innkeeper and tailor organization; the substantial change in operation in the innovative schools and institutions, is the transcending of the reductionist focus, based merely on pedagogical training for the acquisition of qualifications. This implies that modern competencies cannot be acquired in just one course. Rather, they must be the reflection of a production environment, impregnated with the atmosphere of the enterprises, with the codes of conduct and performance which operate in reality, with standards of work and production.

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In summary: only those proposals which articulate education and training with labour and technology, in an appropriate environment, can put together the mechanism through which are acquired the values, habits and behaviours inherent in the competencies which current historical circumstances require of workers, technicians and professionals.

## **2. Recent changes in training management**

Several training institutions, technical schools and training programmes organized around Ministry of Labour projects, to cite a few cases, have accepted the challenge of their institutional transformation. Ultimately, this is a consequence of the crisis of the old models of work organization, as well as of

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the impact of the profound technological revolution coming out of computer science, new materials and biotechnology. Redefining the institutional arrangement seems to be one of the keys to achieving an advantageous operational position. This redefinition must embrace objectives, functions and scopes, entry into the world of production and alert attention to the demands of the labour markets. Among the themes which make up the new strategies, we shall comment briefly on three which assiduously appear as preferred options: sectorialization, verticality and integrality.

**Sectorialization.** One of the movements gaining greater acceptance in the region, has to do with sectorialization; that is, the redefining (or restructuring) of units (schools, centres or programmes) with the aim of servicing specific economic sectors. For decades, and in many countries, an educational unit was identified as industrial, rural or commercial, and undertook a variety of specialties within the field. An industrial school could take on courses in mechanics, electricity, construction, chemistry and so on. Current trends point to focus on the needs of a specific sector (graphic arts, tanning, foods, textiles and others). This focalization has advantages which are derived from its specificity.

26      One: the real possibility of participation, through their organizations, of the players involved in the labour processes (workers and managers). The more delineated and precise the discussion, the more intimate and friendly the participation.

Two: the question of equipment. In focalizing, the diversity derived from disparate training is reduced, which, furthermore, facilitates the targeting of the equipment towards a production end (of goods and above all of services), beyond its educational and training application. The intensive use of equipment, which with this strategy can be updated, makes the repayment of costs more bearable.

Thirdly, sectorialization gives rise to verticality; and finally, is directed towards integration of action.

**Verticality.** Traditionally, the training of human resources was distributed by level. The vocational training institutions, in general, prepared workers for skilled and semi-skilled jobs. The technical schools were concerned with the intermediate levels of the occupational pyramid, while the universi-



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ties prepared the professionals. While infrastructure and homogeneous equipment permit concentration of effort; while there is constant rapprochement to the scientific-technological transformations of the production and labour processes, there are beginning to emerge conditions for accepting the challenge of providing training for all levels of the occupational pyramid of one branch of activity. This is what many schools and centres have observed and are implementing as a consequence. In many cases, training services from the lowest levels, up to internationally recognized post-graduate courses, are being offered. As a corollary, the possibility of providing continuity in the supply of educational and training services, is one of the contributions to the general education system.

It is not by chance that these educational units are being observed with particular interest. Having broken dualities and dichotomies, they have permitted programmes and outreaches to be defined by criteria derived from the production and labour reality, and not be tied to rigid administrative schemes. And what is better; the opening of training to the different levels of the occupational pyramid opens the possibility of fulfilling one of the dreams of permanent education: that schools be at the service of all those who need a training response of some type.

**Integrity.** The offer of diverse services to the sector, is a perspective which is being opened with the new institutional arrangements, apart from training and human resources development. A policy of open doors provides the schools and centres with the potential to be converted into many other things: technological animators, showcase for new developments in the sector, spaces where students, teachers and people from the world of work share equipment and laboratories. And, what is fundamental, sphere in which the fragmentary practices of the old manual labour vs. intellectual work scheme are overcome, on the basis of the integrative formula training/education/labour/technology.

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### **3. Change of focus: from programmes based on supply to programmes based on demand**

A third level on which it is possible to find innovations relates to the change in the clientele of the different units. These are now not so much just groups of individuals who call on their services, but the production unit (the

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enterprise) as an important demander of services of different types, and not just of training, has begun to appear.

It is not just the subject of attention which is changing. Other types of projection for the units are also appearing. These, while they continue seeking their students in the labour market, are also beginning to act through intermediate means; that is, they are approaching individuals and enterprises via sectorial chambers, or local employers' or workers' organizations. And, above all, they are based on the new forms of organization of production as are the technology-based business incubators, the business nurseries, the industrial parks, the scientific-technological parks, etc.

More precisely: in some innovative experiments it has been understood that the training of workers was not always the first need of the enterprises; that the needs for updating/ specialization/training should be conceived in terms of the overall management of the production units; and, not less important, that it was not only the workers who needed to be included in the training programmes: the managers and the owners as well. It is a matter, in the final analysis, of placing the training of workers in a context of integral attention to the requirements of the production units.

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This change of focus provokes a passage from emphasis on the strengthening of the **supply of training**, to an emphasis on the strengthening of the **demand for training**. From a scheme of procedures where the programmes are preconceived by the institutions, and to which the production units and individuals had to adapt in view of their needs for training, there is a trend towards a modality of work in which the enterprises and the workers intervene in the phases of design, implementation, evaluation and adjustment of the new programmes. Ideally, the majority of programmes should not be repeated, but should consist in specific responses to the expressed need of the productive apparatus.

This last point bears an additional advantage: it renders viable the generation of training and consultative mechanisms for the micro, small and medium-sized enterprise. For too much time, the relatively smaller enterprise found no way, not only to fulfill the legal precepts necessary to carry out training activities, but neither found the suitable and specific mechanisms which could respond to their needs for assistance and support. The new modality of work, centered in the integral attention to production, training and technologi-

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cal needs, expressed in the specific demand of the production units, allows for the satisfaction of already-known requirements, the detection of others which were not known, and, what is more stimulating, the unleashing of new demands.



## Training strategies for the informal sector

The presence of the informal or non-structured sector has become a permanent and unavoidable feature of regional labour markets. The development by governments of strategies to deal with it has surely had to wait for a long time. This delay has been due, on the one hand, to the difficulty which this phenomenon presents at the moment of realizing a conceptualization which is at one and the same time suitable and translatable into effective action, which has not failed to be countered by diverse postures with regard to their origins, perspectives and possible functions within the economy. On the other hand, the idea that its growth could be linked to the application of adjustment policies from the eighties, led to the assumption of a critical nature which merited strategies of a similar nature, without the establishment of more permanent institutional frameworks grounded in focus on the said sector.

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These two factors, which influenced the area of social policy generally considered as delaying its capacity to respond, affected vocational training in a special way, since of its own it plays a protagonistic role in any strategy oriented towards the informal sector, in the matter of employment.

It must be added, moreover, that the training systems and institutions remain inevitably subject to the tension of providing a response both to the modern, structured sector of the economy, with its demands for achieving significant and rapid increases in competitiveness and productivity, and to the informal sector, with its intrinsic heterogeneity and complexity, with its over-

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lapping with the problem of poverty, and with the lack of clearer, general policies by which it can be guided.

Because of this, the task of systematizing all that is being done in the region in the matter of training for the informal sector, is a highly complex one. Many of the programmes and actions which are developed for socially disadvantaged groups; for example, youths from poor homes, women heads of households, micro-entrepreneurs, signify action in this field. However, informality is not directly related to poverty. While poverty is a phenomenon associated with income distribution, the informal economy is determined by relationships of production.

Although at first sight it could seem unsuitable to use the same concept for approaching such dissimilar situations as those of a pedlar and of a computer software consultant, the concept of informal economy becomes useful precisely because it refers us to a specific type of production relationship which generates incomes and separates us from the notions of economic duality and social marginality. Although the majority of individuals involved in informal activities in Latin America are poor, the processes of the informal economy are occurring throughout the entire social structure.

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In general terms, the basic characteristic of the informal economy is the realization of income-generating activities (directly or indirectly) without institutional regulation within the framework of a society in which such activities are indeed regulated. This absence of regulation can affect distinct elements of the labour process, and each situation defines a specific type of activity.

Firstly, one can refer to the **status of the job**; for example, when the job is not declared, the social benefits to which the worker is entitled are not provided, salaries are below minimum wage level, or employment is offered in circumstances which labour standards would not permit.

Secondly, one can refer to **working conditions**; for example, when the activities are hazardous to health or public hygiene, or present a danger to security, when they ignore inherent prohibitions in the area, or when dangerous products are manufactured in the middle of densely populated areas.

Thirdly, one can refer to the **type of administration of some enterprises**,

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for example, fiscal fraud or the generalized use of non-registered cash payments, as a means of economic transaction.

From the works of PREALC, during the mid-seventies, one can observe an irruption of the concept of informal sector, which had a positive influence on training institutions, since it furnished theoretical and methodological categories which enabled improved focusing of actions towards this sector. This was so probably because the empirical nature of the informal sector applies analytical instruments such as typology of production units, or occupational categories, in general very similar to the methodological instruments of the institutions.

With a view to designing and executing programmes intended for this sector, and within the line of analysis which characterizes the informal sector as a group of production units, it is possible to identify the intended population of the training programmes as all those who work individually for themselves, or in small production units characterized by almost no availability of capital, by the application of very simple or rudimentary technology, and by the employment of a small number of workers whose level of instruction is usually very low. Their organizational structure -if they have any- is elementary and division of labour is minimal. Wages in this type of unit are generally lower than in those that can be obtained in formal businesses, social security is practically non-existent and employment is highly unstable.

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In the delineation of the informal sector from the perspective of the labour markets, the intended training population is characterized by whether it belongs to certain occupational categories: self-employed worker or small-business owner in informal units, wage-earner in informal production units, unpaid family worker, domestic worker, etc.

The use of such categories in training actions has meant a long and arduous path of apprenticeship, since the informal sector is an heterogeneous reality within which basically subsistence-level occupations and production activities coexist with others which have a certain potential for development, given their specific articulation with the markets, and their particular combination of production factors.

A typical problem of this nature is that presented with the concept of micro-enterprise. On the one hand, it is clear that one of the manifestations of

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the informal sector are the small production units which, because of their size, can validly be called micro-enterprises. But there are approaches which define the micro-enterprise by removing it from its context in the informal sector, and which essentially define it by its intrinsic characteristics: size, level of technology, level of productive and organizational development, etc.

In both perspectives, at least two major types of micro-enterprise are usually differentiated: those whose level of development is minimal and can only provide a subsistence function for their workers, and those which possess a development potential, a capacity for accumulation. And in defining the training actions, it is extremely important to be sufficiently clear and explicit with respect to what type of micro-enterprise is concerned, and in which development policy the training action is located.

Below is a coarse attempt at typification, with a view to locating the distinct strategies developed in view of more general categories which can be explained. Three major types of category seem to be taking shape:

- Those aimed at stabilizing employment and improving, even modestly, the conditions of work and production, and the incomes, of populations linked to the informal sector in subsistence activities. The populations lack, as a whole, the internal resources and/or the external articulation necessary for achieving a potential for more dynamic growth and development. Typically, these strategies cover groups such as hawkers, domestic workers and persons self-employed in activities of extremely low productivity.
- Those designed fundamentally to facilitate the transfer of manpower from the informal sector to the formal sector. Especially targeted here are workers with a relatively higher level of basic education, work qualification and experience, for whom have been identified or is expected to be generated entry opportunities in the formal productive structure. Articulation with the formal sector can be made via two means: through their linking as wage-earners in the formal sector; or through their organization and formalization in order to place the goods and services which they produce, in a more structured and stable manner, in the formal sector.
- Strategies oriented towards the consolidation, modernization and expansion of activities in the informal sector with a development potential. These activities are generally referred to as informal micro-enterprises, in order to



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distinguish them from the formal micro-enterprises which are very small production units with respect to the number of workers employed and which operate at purely modern levels of technology, capital and productivity. The informal micro-enterprises with development potential are distinguished from subsistence-level micro-enterprises by the presence in them of a positive capital expressed in fixed assets; by a level of competitiveness which allows them to compete in certain markets even with formal sector enterprises; by their capacity to generate surpluses and to retain part of them in their operation on the same market; and by their capacity to accumulate capital for reinvestment, which can be directed to the incorporation of technology and/or the creation of new jobs.

Notwithstanding the difficulty of achieving a regional balance of the progress attained in this matter, it is possible -within the scope of this work-, to establish which are the most salient features of the innovative experiences that have produced most encouraging results.

i. Training for these sectors is understood in its aim as **training for productive work and for social development**. That is, that it ought to contribute towards facilitating a labour-productive insertion of its target population, in such a way that -in addition to offering immediate employment and income opportunities- it contributes to the general development productive apparatus, while it contributes to the processes of change which lead to overcome its constrictions, imbalances and inequalities and, as such, to an elimination of the structural determinants which place these sectors and groups in disadvantageous positions.

ii. These experiences show that the only way to contribute to such an objective is through a **pedagogical proposal which considers the members of its target population as active subjects participating in and responsible for their own development**, and capable of understanding the socio-economic processes in which they are involved. Training for work and development favours people-centered teaching-learning processes, preferably in collective contexts, which develop their creativity and permit them to consciously manage their learning process, adapting it to their own rhythm and to their particular interests. This type of training is recognized, in its turn, as part of the processes of open and life-long education, and therefore seeks to envision the best manner of articulation with other modalities of education so that it can be completed and strengthened.

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iii. **The transcending of the traditional notion of teacher-instructor in benefit of the broad concept of agents of training** is verified. Now involved in the training process are business management advisors, technical assistants, development agents from other institutions participating in integrated processes, community developers, among others. The collective configuration of the training agent, as an inter-disciplinary team which animates, supports, orients and regulates the training process, contributes to facilitating in target populations a progressive autonomy and development of interest in the themes of cooperation and management. This configuration, in spite of being open to articulation with new agents in different phases of the training process, is not left to chance, but is based on careful processes of selection and training, and on techniques of working by projects.

iv. **Programme planning of training for work and development is functional.** It is constructed on the basis of the identification of problems and critical deficiencies in the forms of labour and management used, and the design of improved features incorporating suitable technology. That is, the functional character tends to assure the capacity for a training response to the real problems felt by the target population.

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v. Training seeks to be integral, projective and flexible:

**Integral**, since its contents include not only technologies for production of goods and services, but give particular emphasis to the development and instrumentation of the capacity for production and business management. All this is complemented with content relating to the social and economic contexts which provide the setting for and determine the labour-production insertion of these groups. This configuration requires, on the other hand, that programme planning be also integral with respect to anticipating and ordering, around the processes of development of skills and dexterities, processes of development of knowledge, and of attitudes and values.

It is **projective**, to the extent that starting from the immediate set of technical problems being faced by the target population, or the immediate needs of a subsistence-level production, they are able to offer possibilities for the development to those who wish or need to complement or deepen their training in order to have access to more technology- or management-type levels. Among other effects, this definition has taken articulation with external sys-

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tems such as those of non-school-based basic education, those of popular education, etc., in search of providing the target populations with possibilities of access to basic training in elements of mathematics, reading and writing, as well as to the development of skills of expression and handling of formal processes and institutional environments.

Finally, **flexibility** refers to the search for the versatility necessary for adapting to a broad range of economic, social, technological and cultural situations among the target populations and their types of production. This flexibility, which presupposes a diversity of content and levels of training, is implemented through the modular organization of the curriculum, the only way to permit combinations and variations in the training processes, but maintaining control of them and assuring strategies of integrality and projectivity.

vi. Lastly, but by no means least important, these experiences combine three operational functions in their action strategies: training, promotion and advice.

**Training** is directed to the elevation of the competency levels of persons for the performance of tasks related to the process of production of specific goods and services, for the management of that same process, and for the tasks which involve their own well-being and development. The training techniques include not only those of the traditional witness type (not less valid because of that) such as courses, workshops, seminars, etc., but also those which have been developed more recently, such as techniques derived on the basis of distance education.

**Promotion** is directed towards the social integration of an initially scattered population and its mobilization around a development alternative, as well as towards maintaining cohesion in the face of the accumulation of internal and external pressures which inevitably affect it throughout the training process. The techniques most frequently used within this function are: participatory research-action, pedagogic propaganda, revival of the oral tradition, organizational laboratories, meetings and training tours, etc.

The **advice** function seeks to provide access to the socioeconomic and technological information which broadens the training panorama, usually restricted because of its necessarily specific nature. It includes entrepreneurial or management advice, and technical assistance aimed at helping to confront

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technical problems which -because of their urgency or level of complexity and specialization- remain outside the reach and immediate possibilities of the target population, or cannot wait on the results of training, and must therefore be solved “from outside” by experts. The advisory programmes are normally organized on the following types of events or lines of action: technological and socioeconomic information, extension campaigns, training consultancies, technical assistance, socio-entrepreneurial advice, among others.

## Job competencies: a key training tool in the face of the challenges of competitiveness

The emphasis on job competence starts, in several industrialized countries, as a basis for the regulation of the internal and external market of the enterprise, and also of the manpower training policies, which are closely related with the production changes of the eighties. This relationship occurs on the different levels of the change in production: i) the strategy of creating competitive windows in the globalized market; ii) the strategy of productivity and the dynamics of technological innovation, organization of production and organization of labour; iii) human resources management; and, iv) the perspectives of the social actors in production and of the State.

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The influence of the emphasis on job competence, today reaches the most modern sectors of production in Latin America and the Caribbean, but is beginning to have repercussions in broader spheres, while it converges with the efforts developed in the same sense from within the vocational training world, where there exist antecedents dating back to the decade of the seventies.

### **1. Job competence and labour market**

The competency of the human factor has always been recognized as an important component of the internal architecture of the enterprise, that is, the contribution which individuals are able to develop in order to achieve specific objectives.

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Nevertheless, in the traditional emphases, and in large measure still valid in the region, attempt is made to exploit that competency in only some of its dimensions, generally the quantity of effort made. The *quantity* of effort is a relatively easy factor to be controlled by management and copied by competitors. Not so the *quality* and *direction* of the effort made, which are peculiar to the organization but which are not something that management controls at all, and in which it must invest in order for them to be effective.

From the supply side of training, one is also witnessing the advent of new emphases which attempt to take account of the requirements of the modern productive sector, attend to existing situations of surplus materials and improve conditions of employability in the diverse sectors of the population.

In every case, and for both ends of the relationship, the need arises for a new concept: that of job competence, which goes beyond that of simple qualifications for a specific job. The challenge for this emphasis is to offer a response to the need to identify and construct new spheres of knowledge, under a perspective which permits adaptation to the new circumstances which are appearing. A requirement which can seem ambivalent: creating around knowledge norms which are modified with time.

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One of the characteristics of the new type of labour market policies is the participation of the social actors in the design, execution and evaluation of programmes. As a consequence, these programmes are defined in a decentralized manner and their impact depends on the mobilizational capacity of the players in respect of improvement of productivity and training.

This last point bears with it a clear problem for the regional reality: the lack of experience of the diverse players in the new roles which they must assume for the development of active labour market policies.

At present, the challenge of the training policy consists in knowing at what moment the State ought to be directorial and promote training activities, and at what moment it ought to leave the initiative to the private sector in the broad sense of the word. Transition from the model ought to be understood as a process of institutional learning, both for the State and for the other players. In this process there will be successes and errors, and the level of advance will depend on the capacity for analysis, feedback and continuous adaptation on the basis of the experiences developed.

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## 2. Conceptual and methodological bases for the focus on job competency

In order to understand what is being spoken about when allusion is made to **job competency**, it is important to distinguish its meaning from the other older and more widely used term: qualification.

If by qualification is understood, with some frequency, all the knowledge and skills which individuals acquire during the processes of socialization and education/training, it would be within a focus that is instrumental in nature; as such it would be a type of “asset” on which individuals could depend in order to perform specific jobs. In this sense, it would be defined as the “*potential* capacity to perform or undertake tasks corresponding to an activity or job”.

Competency, for its part, refers only to some aspects of this “pile” of knowledge and skills: those which are necessary for achieving certain results required in a given circumstance. It is the “*real* capacity to achieve an objective or result in a given context”.

In order to identify the *qualification* required in a job, or rather the labour market, the method adopted in many cases was that of an occupational analysis oriented towards the establishment of a simple inventory of all the tasks included in an occupation. The inventory of tasks was the point of reference.

In order to identify the *competency*, one starts from the results and/or objectives desired from the organization in their totality, which derive in tasks, and these in required knowledge, skills and abilities. In this case the tasks are conceived as a *variable* medium between the result and the knowledge and skills with which the individual is endowed. So as to avoid interferences and reductionisms in the initial defining of the tasks, an attempt is made to establish a direct connection between the results and the endowment of knowledge and skills.

In an environment of continuous technical and organizational changes within the enterprise, tasks also change. For their part the objectives are in general less variable, although they tend to be more exacting. It would be more sensible to have them as a point of reference for the endowment of knowledge and skills than the tasks.

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Furthermore, in the presence of superimposed and complex objectives, the unidirectional relationship between task and result disappears, making room for a greater diversity of options aimed at the achievement of a specific result, owing to the processes of apprenticeship being forged by the processes of change. To the extent that greater importance is being given, on the one hand, to training in general and, on the other, to the evolutionary character of the requirements of tasks and to job mobility, the concept of competency tends to be imposed on the terminology to the detriment of that of qualification, and the “competency portfolio” competes with the school certificate.

### **3. Some regional experiences**

In 1975, Cinterfor/ILO, in fulfillment of a mandate from the XI Meeting of the Technical Committee, embarked on the development of a project on measurement and certification of the occupational qualifications acquired by workers through systematic training courses, work experience or a combination of both.

The idea of beginning a project of this nature arose, among others, for the following reasons:

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- The vocational training institutions, in response to the demographic increase and the growing technological development, were facing the need to broaden and diversify their programmes, in order to satisfy labour market demand and improve the quality of the training required for the different levels of occupational qualification.

- The educational reforms undertaken in recent years by the majority of countries in the region, tend to validate the experience acquired by workers throughout their working life, which requires the design of adequate evaluation procedures for determining the knowledge and skills of the workers.

- National employment services do not always dispose of information relating to the occupational qualifications of the economically active population, neither of clear estimates about the qualitative and quantitative requirements of the employment market which would permit them to formulate indications relating to supply and demand of skilled manpower.

- Finally, the expediency has been recognized of establishing basic sub-regional occupational profiles which serve as a reference for the design of



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training programmes with common essential content, and systems of certification which favour the free movement of workers in the countries belonging to a sub-region.

Almost immediately -in October 1976- while at the same time pioneering, the process of institutionalization of occupational certification began in Costa Rica with the creation of a specialized Department at the National Training Institute [INA], the main objective of which is to administer the Occupational Certification System throughout the country. During the first six years of operation of the system, the INA, with the participation of employers and workers, updated its labour studies and developed occupational tests for 18 occupations belonging to nine vocational branches. Participating in the certification process during this period were approximately 900 workers who, on the basis of the individual diagnosis obtained as a result of the application of the practical and technological tests, received the training necessary to achieve the levels required by the enterprises.

In 1983, the Organic Act No. 6868 of INA was enacted, establishing (in Article 3, Clause d.) that in order to achieve its aims, the Institute has, among its attributes:

“To develop a system for officially certifying the level of knowledge and skills of workers who submit to the evaluations in the areas imparted by the Institute, independently of the manner in which such knowledge and skills may have been acquired.”

The regulations of the Act consider, among other aspects, that submission to the evaluations will be voluntary and as such that non-possession of a certificate will not be an impediment to the exercise of any activity for which a qualifying certificate is not legally required.

It is indicated, furthermore, that the delivery of certificates will be free for workers, and that wherever possible, employers and workers of well-known ability, taken from lists presented by the professional organizations representative of the activity or by the respective affiliated council, will be made to participate in the certification process.

In Brazil, with the opening of the international market, demands are increasing for high levels of quality of their products and competency of work-

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ers. The country is beginning to live with the reduction of tariff walls and with the consequent opening of its frontiers, which stimulates the exchange of skilled manpower among member countries of that market.

In the face of this scenario, the SENAI considers it important and appropriate to implement a **System of occupational certification**, taking into account that there exists in the country a growing number of enterprises, certified or in the process of certification in the systems of guaranteed quality, which naturally are going to demand certification of the competencies of their workers. The system of certification proposed for the SENAI is conceived with a view to meeting the demands in this field, attempting to make the interests of industry compatible with the aspirations of workers, which must be oriented towards the development of the country.

Considering that the quality of products and services depends basically on the quality of persons, certification must look at two planes:

- One, as part of a training system, within an environment of continuing education, permitting open and flexible access to workers, employed or not, interested in acquiring improved competency for the job;

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- The other, aimed at immediate attention to demands for certification of workers with professional experience, in order to satisfy the requirements of enterprises derived from the norms established by the international systems of guarantee of quality.

Finally, and in the case of Mexico, it is interesting to highlight the recent and ambitious experiment undertaken by the **Council for the Standardization and Certification of Competencies of Workers [CNCCL]**.

The Council for the Standardization and Certification of Competencies of Workers [CNCCL], was set up as a tripartite body at national level in 1995, and began to function with stability from 1996. The initiative of the government responds to the concern for achieving the participation of the players, among other mechanisms applying incentives to demand, the aim of which is to support the structure and development of a training based on standards of competency and its certification, in that way determining the support which is going to be offered.

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There are fundamentally two central axes on which the activities of this Council, as well as the other instances of government involvement, are inscribed: 1) Definition and integration of standards of competitiveness; 2) Establishment of the system of certification of workers' capacities, which enjoys social credibility and wide acceptance in the labour market.

The system of job competency proposed for development consists of five major components:

1. Definition of technical norms of job competency by branch of activity or occupational group, by the social players and with government support.
2. Establishment of mechanisms for evaluation, verification and certification of the knowledge, skills and abilities of individuals, independently of the manner in which they were acquired, always and whenever they comply with the technical standards of competency.
3. Transformation of the supply of training into a flexible modular system, based on standards of competency, in order to permit individuals to transit between modules, according to their needs.
4. Creation of incentives to demand, in order to promote the new system among the population and the enterprises, and seeking equity in the distribution of opportunities for training and certification, paying attention also to the needs of the marginalized population.
5. Conducting research in support of the system as a whole.

Starting from the creation of a system of national coverage, greater emphasis is placed on the definition of standards for the more common functions in the different economic branches, technological languages and occupational areas. And so in this strategy job competencies are classified into three types: **Basic**, which refer to the basic behaviours that workers ought to demonstrate and which are associated with knowledge of a training nature, as are reading, expression and verbal and written communication. **Generic**, which describe behaviours associated with performances common to diverse occupations and branches of productive activity, as are the ability to work in groups, to plan, to programme, to negotiate and train, which are common to a large number of occupations. **Specific**, which identify behaviours associated with

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knowledge of a technical nature, linked to a particular technical language and a specific productive function.

Without intending to end the presentation of the model of the Council, it is appropriate to point out that while the norm is the axis of the strategy for the standardization, evaluation and certification of job competency, it is established that these must be defined by “Standardization Committees” on which are represented the different interests of the workers and employers of a specific branch of economic activity, industry or area of competence, and their activities supported by one or two representatives of educational institutions.

Finally, this initiative is conceived within the perspective of finding a valid alternative for linking the different modalities of education and training with employment demands in the country. The challenge is to face the issue of modernization of the systems of education and training for work, not only so that they respond to the needs of adaptation to the new economic and technological conditions, but above all to pay attention to the need to place education and training within the reach of all sectors of the population, with suitable and relevant content and of the quality required by the labour market.

## A range of options for articulation between the State and the private sector in the matter of training and human resources development

The modalities of articulation between State and private sector in the region are not, not even closely, homogeneous, neither are the levels of consolidation in each case.

For example, in the matter of the financing of training, there are countries in which specifically earmarked funds were completely removed, and in their place were organized tax incentives aimed at motivating enterprises to train their own human resources; there are others in which they were reduced. And still others where, although they have kept them, there are provisions which allow tax exemption in favour of the enterprises, when they carry out the corresponding training programmes.

In the same way, there are appearing a number of combinations which range, according to the country, from concentration of planning and regulatory functions in Ministries of Labour, leaving responsibility for execution of programmes to private and public training agencies, to inclusion of the planning and execution functions within a single public vocational training institution. The majority of national cases are located between both extremes, with diverse training systems depending, among other aspects, on the institutional history of training, the strength and capacity to adapt to the changes demonstrated by the institutions, the general state and orientation of production and the economy, or the strategic political options assumed by the governments.

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To illustrate both the modalities of articulation which figure in the regional panorama today, and the results being produced, four national cases are presented below. Included as examples, they have the value of enabling a visualization of the diversity existing in this field, while they represent, with the relevant alterations and adaptations, variants carried out in countries in the region.

### **1. Training, productivity and technological development: the Technological Centres of the SENAI of Brazil**

It is fitting to mention, in the first place, the ingenious formulae developed in this country with the aim of linking training with the current needs and restorative demands of the enterprises, which has led to the SENAI and the enterprises assuming hitherto unknown responsibilities.

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- The enterprises in the process of modernization and committed to the transformation of their productive and organizational processes with the aim of increasing productivity, improving the quality of their products and services and achieving greater competitiveness, are beginning to require of training agencies, public and private, specific technical and technological advisory services, which go beyond the traditional training courses. By virtue of this, some institutions have established forms, media and methods of offering such services and, in this way, of being able to provide the corresponding advice, without being detached from their fundamental objective of human resources training. The reason why this is successful is rather original, although obvious: for training to have any meaning in the present times, it has to be linked to the processes of labour and to technological innovation, and as such, training agencies, rather than limiting themselves to developing in workers a series of skills out of context, must be concerned with the cultivation of competencies in consonance with the business environment, within which there exist specific codes of conduct and operation, and standards of work and production.

- It is in this way that the SENAI -in interpreting training as part of the technological transformation process- has converted some training centres of excellence into *Technological Centres* seeking to carry out programmes focusing on the enterprises, according to branches of economic activity (tanning, footwear, precision mechanics, chemistry and textiles, welding, furniture, smelting, electricity and electronics, foods, transport, metal mechanics,

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graphic arts, paper and cellulose, among others). Their major mission is to acquire -nationally or internationally- work technologies, and to transfer them to the industrial enterprises, particularly the small and medium ones. Around such activity, they undertake, on the one hand, *engineering and design* activities (research and development) aimed at fashioning new products or improving existing ones, with a view to increase in production, productivity and improvement in quality. On the other hand, they offer *technological services* which constitute technical supports for innovation: technical advice and assistance; consultancy services linked to business or production management; laboratory tests and experiments; specification, selection, testing and installation of new equipment; inter-mediation and sub-contraction.

- It must be observed that these Centres -in spite of their technological vocation- do not cease to be training agencies, since behind the lending of the services mentioned, and as a fundamental background, is the training of human resources in a specific branch of economic activity and at different occupational levels. It is, rather, that some of these Centres, through accords and joint work with the technical schools and universities, offer training services which range from the lowest educational levels to universally recognized post-graduate courses.

- To conclude, it could well be said that these new training units -the Technological Centres- are a place of encounter among education, applied research and productive work, where different worlds converge: that of the university, of science and technology, of technical-vocational training and of labour, all of them places -in a coordinated manner- at the service of the productive transformation of the enterprises and of different economic sectors.

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## **2. The emergence of a system: the SENCE of Chile**

In Chile a total restructuring of the conceptions, forms and modalities of dealing with training and human resources development was undertaken. As a result of this restructuring the National Training and Employment Service [SENCE] was established, governed by the following principles:

- The different actors, through social dialogue, participate in the formulation of the national policy of training for productive and equitable employment.

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- The training activities are driven by the demands of the productive sector.

- The supply of training is developed in an environment which favours competence among the training agencies, as a way stimulating efficiency, quality and relevance of training services.

- The State assumes a regulatory and complementary role leading to: the promotion of training activities and vigilance over their quality; attending to social demands in this regard; correcting the negative effects on the demand for training caused by distortions in the labour market; and providing information to the stake-holders in the system, so that they can make proper decisions on the matter.

The stake-holders in the National System are: the enterprises, the training agencies, a National Training Supervisory Office and the State. The training activities are organized around two major axes: Training Programmes in the Enterprises and Public training Programmes, the latter driven, organized and financed by the above-mentioned Supervisory Office.

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The Training Programmes in the Enterprises include training activities and complementary technical improvements which the enterprises undertake through their own initiative, and the cost of which is assumed as a tax exemption, subject to certain norms and formalities. The Public Training Programmes include those activities by means of which social training needs are taken care of. Social training needs are understood as the training requirements of the poorest segments of the population, who normally find themselves excluded from the training programmes of the enterprises.

Among the Public Training Programmes, the following are worthy of mention:

- A Youth Training Programme, the target population being young people with scarce resources, with problems of employment marginality, owing to low schooling linked to irrelevant experience and lack of preparation for the world of work.

- A Programme of Training and Technical Assistance to Small and Micro-enterprises, the target population being small producers excluded from



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benefiting from the tax exemption offered for training in the enterprises, due to the informal nature of their undertaking, or those for whom the said tax exemption is inadequate by reason of the limited size of the enterprise.

- A Programme of Training for unemployed or under-employed Adults, the target persons of scarce economic resources -unemployed or under-employed- with working experience but with low educational levels and no preparation for the world of work.

- A Programme of Labour Restructuring, aimed at facilitating the mobility of workers displaced through the restructuring of production, modernization of technology and reduction of the public sector, towards new productive activities. This deals, in general, with specialized workers, whose competencies have reduced their value in the labour market.

- A Programme of Apprenticeship in Enterprises, the aim of which is to promote the employment and training of young people as skilled operators, through long-term training programmes (2-3 years), in which periods of theoretical training in Training Centres, are alternated with periods of practical training in the enterprises.

### **3. Institutional restructuring: the transformation of the SENA of Colombia**

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The example of Colombia serves to capture the simultaneous role of continuity and innovation which, within the framework of a State policy on training and human resources development, the public vocational training institutions can play.

The National Apprenticeship Service [SENA] fulfills a role of continuity through the ratification -by means of law- of its character of a public establishment of the national order, with its own independent patrimony and administrative autonomy, attached to the Ministry of Labour and directed in tripartite form by representatives of government, workers' organizations and employers' associations.

It defines as its basic function integral vocational training for the incorporation and development of persons in productive activities who contribute to the social, economic and technological development of the country, priority

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attention being given to young persons who constitute the new labour force, efforts being concentrated on qualification for functioning within the environment of the processes of production of goods and services.

In its turn, and based on the Restructuring Act, this institution is conducting an innovative process of redefining its structure, its articulation with the spheres of production, education and society in general, its procedures and the characteristics of its offering which, without losing its central objective of training, is opening up towards new services.

To detail, these innovations are:

- A structure with few levels, with a Central Office, regional offices and training centres, the latter being the axis of the new organization as it progressively takes on additional competencies in the pedagogical, administrative, financial and planning order, with organizational models suited to the characteristics of each region and of the country.

- Networking among the training centres, and with the clients, homologous bodies and information, research and technological development centres.

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- Encouraging national agreements to broaden the scope and relevance of the training supply, especially with universities, in order to strengthen the training link, and with employers to improve productivity and competitiveness.

- Flexibility and continuous updating of the content of training, as the central foundation of its relevance.

- Modernization of designs, so that they support the generation of an innovative, creative and polyvalent knowledge.

- A system of information on labour supply and demand which centres its action on broadening its scope, labour market analysis, innovation in occupational classification, extension of the occupational guidance service and access of users to job training.

- Utilization of “virtual” workshops specially designed to support train-

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ing processes, in place of real workshops, which are usually more expensive and of less coverage.

- Training and technical assistance in the levels of management of micro, small and medium enterprises.

- Enrolment alternatives for the complete itinerary (full exits) or for specific aspects or trimestrial modules of the occupation, which can be followed in chain-link fashion until training is completed.

- With a view to achieving ambitious objectives in terms of utilizing all the potential of contracts which the legislation of apprenticeship contracts permits, at the levels of skilled worker, vocational specialist and technologist, a combination of strategies: promotion of the apprenticeship contract among employers, sponsorship of workers already linked to employment, recognition of courses in other vocational training institutions and in enterprises, stimulation of the training chain, utilization of strategies of out-of-school or part-time training, maximum utilization of the installed and operational capacity of the centres, significant reduction of all costs and improvement of the total efficiency of the entity.

- A definition of open institution which seeks and executes strategic alliances with businesses, employers' and workers' organizations, NGOs, municipalities, technological development centres, public and private educational and research bodies and other national and international organizations, as a way of harnessing, adapting and transferring technology, methods and media in order to raise the quality, scope and relevance of the training programmes, the actions of a technical nature derived from such programmes and the employment information services.

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The entire action of the institution is focused on the achievement of results and guided by the philosophy of service to the client.

#### **4. Training and modernization of production: the CIMO Programme of Mexico**

The Programme of Integral Quality and Modernization [CIMO], in Mexico, is one of the basic components of the Modernization of Labour Markets Project (1993-97) and constitutes an undertaking of major interest for

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other countries in the region. It began as a pilot project aimed at shaping and promoting training, human resource development, the quality, productivity and competitiveness of micro and small enterprises and intended to orchestrate demonstrative action which could be repeated and multiplied by the self-same enterprises, thus generating a permanent, modernizing and self-sustained process which will permit elevation of the competitiveness of the Mexican productive apparatus and the level of training of workers and employers.

The Mexican reality with respect to training activities was, for a long time, applicable to other countries and training institutions in the region:

- The enterprises had maintained a strategy of competitiveness based on rigid specialization.
- As such, the training programmes are structured as standardized packages, where knowledge was structured for the exclusive intention of the job.
- The change in market conditions provoked numerous problems for the enterprises organized on the basis of a rigid conception, for which reason some of them began to apply more dynamic administrative structures where better communication and cooperation of workers for the solution of the problems was converted into a fundamental aspect of a new productive strategy.
- The assignment of new responsibilities and functions to staff, raised the need to incorporate into the training content broader technical knowledge and aspects related to: quality control, new forms of organization of labour and production, as well as the links with cooperation.
- Finally, training is beginning to be seen as an investment which must be constantly renewed. This can be achieved if the knowledge of workers is updated continually, in such a way that they acquire the attitudes to face the continuous technological changes and improve the development of the enterprise on the basis of participation.

Faced with this conceptual and operational change of direction with respect to the nature and scope of training activities -and always taking into account the new productive and entrepreneurial conditions- within the broad National Training and Productivity Programme, the following objectives for

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training were proposed with the aim of guaranteeing them to the workers:

- Integral training which looks at the aspects linked to job performance and which permits them to obtain better conditions for professional and personal development.
- Flexible and adaptable training, modifying methods and permitting rapid substitution of knowledge in order to deal with technological changes.
- Identification of training needs arising from the introduction of technological changes, new equipment and methods of work.
- A participative process of training needs detection which permits the identification, classification and prioritizing of those felt by workers in order to establish course curriculums.

Based on these guiding principles, novel training programmes have been established within the National Training and Productivity Programme, among them the CIMO, the basic scheme which consists of the constitution of Training Promotion Units (TPUs) within the intermediary entrepreneurial organizations and the establishment of groups of enterprises by branch, based on common themes or problems.

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These TPUs, jointly with the enterprises, conduct a basic diagnosis and develop a programme of support to the enterprises, by means of process consultancy instruments. On that basis the training actions are conducted, involving all the occupational levels and areas in the enterprises.

Three important moments in the development of CIMO stand out:

- i. Emphasis on training promotion; and on the link between the needs of enterprises and the supply of training. The advances achieved were: consolidation of the TPUs; initiation of the adaptation of training supply; training courses in a significant number of enterprises; and the initiation of diagnoses as an instrument in defining strategies.
- ii. Emphasis on the execution of integrated training programmes and integration of groups of enterprises under the modalities of theme, branch, provider and client. The advances achieved were: greater adaptation of the con-

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tent of training actions; greater continuity of training; groups of enterprises which proposed objectives beyond that of training; and greater consciousness among entrepreneurial agencies of offering integrated services to their members.

iii. Emphasis on getting groups of enterprises to advance in the training and integral development of the enterprise; and on the development of entrepreneurial agencies which demonstrate an interest in providing integrated services to their members. The advances achieved were that the entrepreneurial agencies, jointly with the CIMO Programme, are initiating the development of Integrated Service Units and Quality-Productivity Centres.

For the 1993-97 period, the CIMO Programme established the following strategies: broadening the geographical and sectorial scope, as well as the scope of the trained active population and the services offered; continued grouping of the enterprises in order to establish common services and achieve better production and market links; encouraging assimilation on the part of the entrepreneurial agencies of the scheme of operation; and consolidation of the link with other institutions of support to micro, small and medium enterprise.

## Conclusion

However drastic and radical the multiple changes in the society and the economy in general, and in the sphere of training and human resource development in particular, may seem to us, a dynamic and perspective view seems to be the most suitable for approaching the discussion of the challenges to be faced.

All the relevant players must participate in the tasks established for the new development strategy: States, training institutions, enterprises, employers' and workers' organizations, all possess a history and have their role in the future. All are faced with the challenge of reformulating their organizational structures, their functions and their modalities of insertion in the productive and social life of our countries. As such, rather than past or future players, they must be conceived as players in transition.

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Each one of these players has an important role to play with respect to the theme of training and human resources development, and this is, in its turn, a central theme for each of them. This centrality is derived from the fact that the human capital is the essential force in this time of change. As a consequence, the present world of work accentuates the importance of the type of training for the development of human resources which can create and carry forward the constructive change.

It is essential to note, however, that the current coincidence in the strategic importance of training among the diverse social and productive players does not render the task of designing and implementing policies in this plane

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more simple. Much to the contrary, it is an increasingly complex task, given the plurality of the challenges being faced today by our societies and economies.

Those of us who work in the field of training are now obligated to respond, on the one hand, to the requirements of the productive sector, in terms of raising the levels of productivity and competitiveness, and on the other, to develop the capacity to attend to relegated groups and sectors, contributing to an equitable distribution of training opportunities and, therefore, to integration and social cohesion.

While these are not necessarily contradictory objectives, making them compatible is an arduous task, and is precisely the recurring factor in the daily practice of the experiences which we seek to analyze in this document. The experiences, even though they can be considered to be incipient, or not as intensively and extensively developed as would be desirable, are probably the firmest basis for the construction of national consensuses on the matter of training and human resources development, in consideration of an improved competitiveness and productivity of our economies, and an elevation of the levels of integration and social justice.

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A work which seeks to achieve a more detailed description of the different innovative experiences in train in the region, would surely take account of the enormous diversity which exists. Nevertheless, at the point of finding a common denominator for all of them, we certainly have to elect as a principal characteristic the systematic search for strategic associations among States, training institutions, enterprises and civil organizations, as well as the transcending of institutional and disciplinary barriers in the broad field in which the educational and training actions are developed.



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