



VOCATIONAL EDUCATION IN ARGENTINA: RUPTURE, CONTINUITY, INNOVATION¹

Pedro Daniel Weinberg*

To Mauricio de Magalhaes Carvalho,
for his vision, his work and his teachings

* Full Professor, Manuel Belgrano Cathedra on Education and Work, Universidad Nacional de San Martín (Argentina). President, Fundación Electra, for the progress of labor law (Uruguay). Formerly Director of Inter-American Centre for Knowledge Development in Vocational Training (Cinterfor), a technical service linked to the International Labor Organization (ILO) from 1995 to 2006. The author of over 50 papers on education, vocational training and work. Buenos Aires, city and capital of Argentina.
E-mail: pdweinberg@gmail.com

Received for publication on:
12.26.2016

Approved for publication on:
3.3.2017

Abstract

This paper discusses the development of vocational education in Argentina from 2001 to 2014, and the actions promoted by the Ministry of Labor, Employment and Social Security. Analysis of the “re-foundation” of vocational education within this time frame, and presents the construction of a national system of vocational education. It also analysis the role assumed by the organizations of the employers and workers in this area, including the contextualization of training policies within the labor relations system framework and the design of labor and training policies around productive development. In the conclusion, a warning was issued regarding the need to create institutions, to adopt public policies and implement regulatory mechanisms to guarantee the continuity of attained goals.

Keywords: Institutionalism. Vocational training policies. Labor policies. Productive development. Technical support. Quality Management. Competences evaluation and certification. Sectoral training. Participation of employers’ organizations.

1. Introduction

The main feature that characterized the development of Vocational Education (VE) in Argentina since the early years of this century is the role played by the State in admitting its leadership responsibility in addressing this issue; and particularly the leading role adopted by the Ministry of Labor, Employment and Social Security (MLESS) regarding this issue. In other words, the labor portfolio recognized the need to “re-establish” a specific area to act in this space and

to promote a set of strategic programs capable to meet the demands of the productive and social sector within the economic reconstruction and social inclusion framework process after the 2001/2002 crisis.

Although other actors from the Argentine State have been acting in the VE sector, there is no doubt that the main role is currently played by the MLESS. Explicitly and operationally, the aforementioned department has taken the leading role required in this matter, in order to address an issue of such importance and scope. In this way, complementary and convergent actions have been fostered with other public actors (ministries of industry, agriculture, social development, education) – especially at the level of the provinces to which such responsibilities were transferred – science and technology, etc.) with a federal, territorial and sectoral approach (economic activity sectors), and encouraging the participation of the organization of the workers, employers and social organizations.

Hence, the revitalization of labor relations systems and labor institutes, as well with the development of active employment policies, make up the framework of Vocational Education activities in Argentina. Throughout the period started in 2003 two distinct stages can be recognized. In the period from 2003 to 2007, the objective of such VE actions was to improve the social inclusion conditions through active employment policies designed to reduce unemployment rates and improve employability conditions in the formal jobs originated in the reindustrialization process. From that period onwards, although the actions continued to deepen such actions, the efforts also aimed at generating institutional conditions and capacities for the creation of a national Vocational Education system, taking into account such experiences accumulated at the initial stage. Namely, strengthening and consolidation of the institutional infrastructure, developing a pedagogical technical infrastructure in accordance with the demands of the programs, training and development of management teams, technical and teaching staff, the allocation of equipment and the promotion of mechanisms for social dialogue, as well as, the participation of actors from productive sectors and social organizations.

Some of the VE breakthroughs in Argentina in recent years have shown a number of innovations which deserve to be examined in two dimensions; one refers to an international comparative analysis, and the other, from a national perspective.

1.a From an international comparative perspective, the three most significant innovations that have been coined by the MLESS are related to (I) the concept attributed to VE; (II) the follow-up role played in development and capacity building; (III) the conception in the establishment of such modalities of action and cooperation within the framework of other national strategic policies.

1.a.I The VE concept goes beyond a self-referential view on this matter. Thus, under the conception and the practices adopted by the MLESS in terms of VE, an attempt is being made to go beyond a mere intervention in terms of training and development of human resources. Explicitly and continuously, Programs have been designed and implemented with two broader and more encompassing scenarios in mind: productive development policies and social inclusion policies. In other words, VE is not worth by what it means in itself, but rather as an intervening variable which contributes to the economic recovery, productivity increase, and an improvement in the competitiveness of productive units and the economy as a whole. At the same time, VE is part of such policies and programs geared to the achievement of formulas capable to advance towards the achievement of higher levels of social inclusion.

• • • • •
**The MLESS
 establishes
 such
 strategic
 alliances
 necessary
 to achieve
 the goals set
 up by the
 country**
 • • • • •

1.a.II The creation of permanent technical support mechanisms to the training units is in itself an innovation in terms of the usual duties of labor portfolios. Thus, MLESS provides technical support services aimed to develop, strengthen and/or modernize such training units operating in the country. The services focused on the administration and the management of such centers as the technical-pedagogical engineering on which training processes rely (development of training methodologies and technologies, curriculum set-up, preparation of teaching materials, training/specialization/ updating of management staff and faculty, among others). Examples of such modernization carried out by the Ministry include the insertion of Information and Communication Technology (ICT) in the training processes, the adoption of competence-based training and the management of institutional quality in the administration of such centers.

1.a.III The formulation and the design of VE policies and strategies are oriented both by the requirements from the various labor relations components and by the national and sectoral goals which are set up in other areas of public life: industrial development, agri-food and agro industrial sectors, scientific and technological development, and social development, among others. In other words, the MLESS establishes such strategic alliances necessary to achieve the goals set up by the country in other areas such as those referred to above.

1.b By reviewing the advances achieved by VE development in recent years, two situations appear which deserve to be pointed out even briefly in terms of the institutional advances that have occurred over the years: (I) On the one hand, the role played by the State in such matters; and (II) the leading role attributed to social dialogue in the design and adoption of policies, and its subsequent operation.

1.b.I Again it is true that the Argentine State took the responsibility for implementing VE in the country. This means that the MLESS took over

again the responsibility for such matter, which up to then was dispersed in a multiplicity of institutions and actors at the beginning of the 21st century. In addition, it should be recognized that the MLESS is the body that included vocational training in the agenda of national strategic priorities at this stage. Whilst it is true that in all circumstances the social actors were invited to participate in this enterprise, reality is that the State took the initiative once again. In retrospect, this was the case in 1944 when the National Commission for Learning and Professional Guidance was created under the aegis of the then newly created Secretariat of Labor and Social Welfare, or in 1959 when the National Technical Education Council was set up within the Ministry of Education and Culture of the time. Alternatively, much later, when the first “Industrial School of the Nation” had its foundation in 1899 at the request of the National Executive Power, specially designed to train the technicians expected to claim the incipient national manufacturing industry.

1.b.II When other “institutes” in the labor relations systems are considered, VE again proves to be the most innovative space for the creation of social dialogue and stakeholder participation scenarios. Few other institutionalized areas can show so many and so varied longstanding modalities capable to reach consensus and agreements between the organizations of the workers and employers. This is comparable to what happens with such topics between VE established formulas and those formulas in force in areas such as employment, health and safety, wages, working conditions and environment, productivity, labor inspection, etc. Therefore, the new manners of participation that are being tested and established in the field of assessment and certification by competency are added to the “classic” VE dialogue environments and continuing education – national, provincial, territorial, sectoral, particularly at sectoral level – by sectors of economic activity. Within the framework of the support to social dialogue as the basis for employment and continuing training policies, such policies promoted by the Ministry of Labor have already covered some 40-activity sectors. Such actions are implemented under the auspices of the “Tripartite Sectoral Councils for Continuing Training and Competencies Certification;” which provide a good example of the design of new institutions based on dialogue and consensus building among actors. The Councils provide an interinstitutional and sectoral space where the State, organizations of the workers and employers can set up such agreements and strategies that will enable the effective implementation of active policies focused on employment, continuing training, labor competencies certification and support to labor insertion. The following tripartite sectoral councils have been set up since 2008: construction; metallurgy and metalworking; software; fruit, horticulture and olives; tourism and gastronomy; food industry; bakers, pastry cooks; pizza cooks, automotive and automotive mechanics; sugar industry; clothing and textiles; plastics; drinking water and sanitation; apiarian; leather, footwear and leather goods; distribution of electrical energy; forestry and timber;

refrigeration industry; naval industry and port and maritime services; administration and trade; citrus fruit; cultural industries; mines and quarries; and services in private homes.

Nonetheless, the training issue has a prominent place in the agenda of the “National Council of Employment, Productivity, and Minimum, Vital and Mobile Wages.” Their functions mainly include formulation of recommendations for the development of employment and vocational training policies and programs.

2. Vocational training: a labor policies component

Although it is true that since the 1990s the educational portfolio has been losing relevance in its intervention in the subject (transference of VE centers to the provincial and/or local orbit) and the Ministry of Labor has been playing an increasingly prominent place (creation of the Vocational Training Under Secretariat), the lack of accomplishment in those years should be recognized. The main reasons explaining this circumstance include the following factors: (a) the deindustrialization process that took place in the country failed to generate a significant demand for skilled labor; on the contrary, a significant portion of the best human resources in enterprises (both public and private) became unemployed. (b) one of the main objectives sought to create a market for the availability of training opportunities relying on a high participation of the private sector could not be established. (c) such training market was then occupied by *sui generis* training companies rather than by the presence of relevant actors such as the companies from the productive sector or the chambers that nucleate them. (d) most of the financial resources, which came from the development bank – the World Bank and the Inter-American Development Bank (IDB) – were channeled to those programs focused on youth training and employment and labor retraining: in both cases achieved impacts were far from meeting expectations. This set of circumstances had a negative effect on the construction of a vocational education organization based on such new bases on which the labor authorities of those years originally sought inspiration: a greater linkage of vocational training with the requirements of the labor market.

However, some of such contributions deserve registration. Since the mid-1990s last century, and after many decades, vocational training began to be conceived as a component institute in the labor relations systems; and, therefore, it becomes a labor policy issue that deserves to be dealt with in the different negotiating bodies under the purview of the respective portfolio. VE becomes then one of the topics included in the agenda of

discussions between the organizations of the workers and employers and at the minimum wage negotiating table; this does not prevent the continued recognition that VE contains an “educational” imprint, since the programs themselves are aimed at generating productive citizens.

3. The 2001/2 crisis and the new VE scenario: rupture and continuity

The VE organizational model, which implementation began since the end of the last century, could be in distinction from others previously tested. It was because the labor portfolio was taking responsibility for everything related to VE; and was doing so from a guiding, organizational, ordering dimension; and left the implementation of such programs to specialized training units. When the Ministry took over responsibility for VE, and just as had happened in other countries in those years, it was associated with the implementation of active employment policies. Such outlined guidelines had continuity in the new structure of the intervention that took place after 2001/2 crisis. In any case, the urgencies brought about by the crisis in terms of the labor requirements demanded by the economic reconstruction process, and in order to deal with the alarming levels of social exclusion and poverty, forced a redesign of VE model and conception.

One of the factors that make a distinction between this VE organization and implementation model of the FP and the previous one is the very concept that was put into practice. At present, training is understood as a component of active policies to improve employability and income, linked to productive work and to the generation of decent working conditions, as advocated by the Ministry, and is given a proactive nature in terms of the provision of labor competencies to the workers engaged in the new national economy. On the other hand, the previous model would emphasize a training conception more closely linked to remedial or assistance commitments for (a) the population displaced from their jobs because of privatization of public enterprises and from deindustrialization, and (b) for young people going through difficulties in entering the labor market.

Besides, there is a rupture in the modes of action chosen by the labor authority to develop its new action strategies in the field of training and development of country’s human resources. Three of its most relevant elements will in analysis later; namely: (a) the creation of a network including all continuing training institutions; (b) the implementation of a technical support mechanism for the institutional strengthening of such units responsible for implementing VE programs; and more recently, (c) the first attempt in the country to sanction a Strategic Plan in this area.

• • • • •
 At present,
 training is
 understood as
 a component
 of active
 policies to
 improve
 employability
 and income

• • • • •

4. Innovations introduced by the current model

As already mentioned, the model shows innovative features regarding the organization and management of VE in Argentina, especially when compared with the development of VE in the last third of the last century. Some of such traits will be in discussion below since constitute a progress in an evolution and strengthening process that, in the medium term, has a potential lead to the creation of a national system. Alternatively, one can say that during this decade foundations have been laid to provide the country with institutional and political capacities based on participation and social dialogue among the actors. Some of such practices, validated by years of action, have their explanation below.

4.1 Continuing Training Institutions Network

The Network is a combination of those entities that aim to articulate the demand from productive sectors with the training needs of the workers, both employed and unemployed, taking into account the strategic perspectives of local and/or sectoral development. Hence, what distinguishes MLESS current approach is the potential to promote training programs focused on productive citizens; that is, programs designed based on the demands of productive and decent work and aimed at improving the employability conditions of the participants and increasing their income levels. Through such network, the Ministry will ensure access and retention in quality jobs through a permanent training policy for workers (employed or unemployed) who need it. As said previously, it does not operate by implementing VE programs directly, but has rather chosen to employ a promotion and follow-up strategy that enables the generation of institutional capacities for development and strengthening of the units that make up the network.

The network operates in articulation with the Network of Employment Agencies; this way the network manages to develop a joint work that favors the social integration processes for less favored groups and the development of competitiveness in productive sectors at a territory level.

The Network has more than 300 public and private management institutions. The construction of this Network is an important step forwards in terms of organization: although most of such institutions depend on other authorities, the MLESS seeks to intervene in an organic, systematic and orderly manner, in order to generate an accumulation of expertise and practices, disseminate organizational and pedagogical learning, and, above all, avoid overlapping efforts and duplicate investments. Ultimately, the commitment has to do with the quality and the relevance of the programs being delivered.

4.2 Technical support

A great deal of the efforts made by the MLESS in this VE field up to now has shown an auspicious scenario where, for the first time in the country, unique modalities and conceptions of organization and management have been implemented, even within the national educational effort framework.

One of such innovative formulas relates to the fact of having formalized and institutionalized the provision of technical support services to the units in the Network, as well as to those centers that request it. The strengthening of institutions focuses on (a) the management of such network participating organizations, (b) curriculum set-up and preparation of teaching materials, and (c) faculty training. Through such actions, efforts have been made to strengthen the institutional capacities of VE centers; that is, different care modalities are provided according to the institutional diagnoses; this is carried out in such fields where technical and substantive support is required: namely, organization, administration and management, technical and pedagogical aspects, equipment, etc. This effort seeks to optimize the transfer of technological resources and expertise to those institutions that are part of the Network with a view to improving the quality and the relevance of the training offered.

This operates to ratify the unique role played by the labor portfolio: the MLESS does not directly operate vocational training programs; its action focus on the promotion of the development of the institutional capacities of existing centers or those whose creation occurs along with other social actors (trade unions, business chambers, civil society organizations). The operation has several edges: technical support, monitoring, evaluation. Such actions intend improve the quality and the relevance of VE and the employment programs supported by the labor portfolio itself.

4.3 Institutional quality management

The MLESS is committed to promoting quality and relevance VE programs; in order to achieve such objective, the requirements due to be met by those institutions and centers that carry out their actions in the framework of the training and employment programs included in the portfolio have been defined. To this end, MLESS has committed to achieving a quality standard applicable to all institutions and training centers that make up the Continuing Training Network. For this purpose, a "Quality Reference" has been defined and developed by the MLESS jointly with the Argentine Institute for Standardization and Certification (Iram).

For more than seven years, actions have been implemented so as to achieve two objectives: on the one hand, to establish in the institutional culture of

the entities and centers participating in the Network an attitude aimed at assuming a commitment to the importance of quality management; and on the other hand, to adopt such devices, benchmarks and performance standards that will allow to accredit the quality of the management of such entities and centers. As a contribution to achieving this goal, the MLESS will not only provide technical support (courses and specific services to managers), but has already contributed financial support to those entities and centers that seek to improve the quality of their management.

The MLESS relies on the quality referenced above, which defines the requirements to be met by those units willing to join this process. Two levels of compliance have been set up; both taking into account the eight-quality management principles that form up the basis of ISO 9000 standards. Sixty centers and institutions have already been certified.

4.4 Competences evaluation and certification

Since training, evaluation and certification of occupational skills became part of the scope of the MLESS, two distinctive features were registered that can be regarded as a novelty. In one hand, although competence-based training could be constructed in the light of pedagogical and didactic practices renewal strategies, the aforementioned were not tested from the regular educational fields, but were rather initiated in the country in the scope of the VE conducted based on the labor portfolio. On the other side, and not less important, since the beginning of this renewal process it became evident that the design has to do in addition to the formative contents of VE programs, with the strategies aimed to the continuous improvement of the management of the quality of such institutions and centers from where such programs are delivered. In other words, training, assessment and certification of competencies are understood in a broader perspective than the mere “modernization” of methodologies and training technologies. They rise other transcendent movements, such as the recognition of abilities, skills, knowledge, expertise, and dexterities acquired by people throughout their working life; and a contribution to the strategies aimed to reach the “educational termination” of primary and secondary studies by young people and adults who did not finish them at the proper time with such educational levels.

In any case, the above facts are not surprising. Based on the commitment assumed by the MLESS with such requirements of quality, relevance, equity and efficiency in the design of VE programs, the deep transformations that occurred over the last 40 years in the field of work organization – the scientific technological revolution and production globalization – strongly affected the skills of the labor force. Among other aspects, VE programs began to consider that the learning topics should face such work situations where variability

and uncertainty predominate. The same way, the design of training strategies rely on the need to build a technical pedagogical architecture designed around solving problems rather than the formation of routine and repetitive situations.

To meet such challenges, the MLESS had to undertake an ambitious pedagogical and didactic “reengineering” project on which to prop such VE programs promoted and encouraged by that ministry. For this purpose, designs of curricular structures and materials were established from a training conceptual perspective based on labor competency standards agreed by the labor world actors in such instances of participation and dialogue between the protagonists of the productive processes. This way, workers and employers, along with the references provided by the MLESS, gave rise to the creation of “Tripartite Sectoral Councils for Continuing Training and Certification of Competencies” which will be discussed later. Because of such initiative, actions were carried out in a wide range of economic sectors, didactic materials were created and courses were delivered for the training and development of teachers, technicians and managers (competence-based curricular design, didactic resources and competence-based professional training, training of trainers in labor competencies, among others).

The importance of sectoral councils lies at least in three aspects: (A) They constitute an advancement in the institutionalization of the participation of social actors – workers and employers – in the definition and implementation of short and medium term strategies, supported by the MLESS. (B) They served to organize and articulate in an organic and systematic manner the three main lines of intervention of the labor portfolio on this matter. They are: (I) Training, based on the definition provided by the specific economic sector to which the workforce qualification demands were linked. (II) Certification, based on the recognition of experience and abilities of the workers who accredit them through the respective evaluations. (III) Institutional strengthening through the promotion of such quality management model in training institutions. (C) They set the bases for establishing sectoral networks including the availability of training around economic activity sectors.

Because of this movement, twenty-one sectoral councils were set up and more than 110,000 people from different economic sectors and throughout the country were evaluated and certified up to April 2014. The Continuing Training Strategic Plan set a target of 500,000 workers with labor competency certificates by 2020 (ARGENTINA, 2011).

• • • • •
 The design
 of training
 strategies
 rely on the
 need to build
 a technical
 pedagogical
 architecture
 designed
 around solving
 problems

• • • • •

4.5 Sectoral training

One of the most significant institutional management innovations introduced refers to the ordering that has been taking place since the middle of the last decade around the creation of VE sectoral networks.

This mode of action is directed to the identification, selection and strengthening of VE institutions and centers in a given economic sector. In addition, the human resources development strategies are defined through sectoral social dialogue, while facilitating the employability of trained workers in the productive units of an economic sector.

The sectoral approach seeks to optimize the transfer of technological resources and knowledge to different groups of institutions in a given economic activity sector; as a matter of fact, the ultimate objective is to improve the quality and the relevance of the training offered. By 2010, nine networks existed and they would incorporate as much as 95 public and private institutions from 15 Argentine provinces (including the Autonomous City of Buenos Aires). Those first Networks would operate around the General Business Confederation of the Argentine Republic (CBCAR), Union of Construction Workers of Argentina (Uocra), Electric Power Network, Service Stations Network, Fruit and Vegetable/Olive Growing Network, Automotive Mechanical Network, Metallurgical Network, Artisan Pastry Network, and Tourism, Gastronomy and Hospitality Network.

As stated above, “Sectoral Councils for Competencies Certification and Vocational Training” were created in order to allow the specific economic sectors to operate VE programs. Such councils were built to provide spaces through which the representative actors from a sector (workers, employers, MLESS) would seek to meet consensus around the certification by competencies. In recent years, a significant number of sectoral meetings have been held in such sectors as food, winemaking, construction, automotive, software, metalworking, tourism and gastronomy, forestry, clothing and textiles, among others.

4.6 Strategic Plan. Continuing Training: innovation and employment in Argentina 2020

The Strategic Plan is one of the first attempts in the country to establish an explicit and orderly agenda of objectives and goals in the field of vocational training. It was adopted in late 2010 and is understood as an instrument designed to set the frames for VE performance in Argentina. Its foundations contribute to understand such VE conceptual scope associated with the sustained economic growth national policies as well as with the inclusive social development processes implemented during the first decade of the

21st century. Its functions are in addition to the national commitment to incorporate the economically active population into the knowledge society and close the digital divide; technological development and decent work are the two strategic goals set up by the MLESS in the Plan.

The Strategic Plan sets forth that sustainable growth will rest on the greater value added by production factors: hence, it sets as one of its specific lines of intervention those linked to increased productivity and competitiveness, productive development and decent employment. In addition, it considers Continuing Training to be a right of all workers and that such right develops throughout their working life, as well as a modality that contributes to the knowledge society in a space where the interests of both the State and the productive sector are articulated and converged (entrepreneurs and workers) through social dialogue. The State participates through its economic, social, educational and labor policies; workers' organizations, by promoting VE as a condition for access and permanence in quality jobs; and the business sector, by encouraging knowledge management through investment in technology and workers training.

One fact worth mentioning is that this Plan is linked and articulated with other equivalent plans approved by the same time. In other words, it is not an isolated Plan. Rather, it is committed to the national goals set for the productive sectors: Industrial Strategic Plan 2020; Strategic Agro-food and Agro Industrial Plan 2010/2020; and Science, Technology and Innovation National Plan "Argentina Innovative 2020".

5. Achieved Results: 2003/2014²

The actions designed to training workers have accumulated 2,486,256 between May 2003 and April 2014. At the beginning of the period (2003) the number of participants was only 22,953 workers. Of this historical total, 1,369,463 attended educational termination courses, and 1,116,793 attended vocational training programs.

In what vocational training is concerned, a little less than two thirds of the total number of people attending the courses did so under sectoral agreements and provincial conventions; whilst and more than 12% attended through the Fiscal Credit Program, that is, attendees currently employed in productive units. In 2013, 20% attended through a Program for Youth with More and Better Jobs. In addition, 35% of the continuing training actions have operated through sectoral agreements entered mainly with such centers managed by trade unions and business organizations. Another 36% do so through agreements entered with provinces and municipalities,

• • • • •
**Sustainable
 growth
 will rest on
 the greater
 value
 added by
 production
 factors**
 • • • • •

which implies a strong commitment to geographic decentralization and the strengthening of institutional capacity in the territories.

The vocational training offer by sectors ratifies the discussion in previous pages regarding the decisive role that the MLESS took in the framework of the reindustrialization of the country after the 2001/2002 crisis. Precisely 41% of the programs were delivered in the manufacturing industry (clothing, textiles, tanning and leather goods, food and beverage processing, manufacturing of common metals, etc.); and more than 18% were channeled to construction programs.

As for gender and age, two facts deserve to be emphasized: in the period under analysis, women accounted for 46% of enrollments, and the rest for men; 40% of the attendees were under 25 years of age; those between 26 and 35 reached an additional 30%.

In terms of educational terminology, the MLESS played a leading role in providing the possibility of completing elementary and secondary education for more than one million people; it was possible through agreements entered with provinces and municipalities. As of 2005, there has been an increase in the youth population in educational termination activities, with the consequent reduction in the adult population. The growth of the Program for Youth with More and Better Jobs accentuated this trend. Thus, people under 26 years of age started to account for 13.8% (2005) and 73.9% in 2010. In 2013, 84.3% of the attendees are under 26 years old.

The education and training policies, promoted as part of the strengthening of social dialogue, managed to reach as much as 40 economic activity sectors and drove the participation of 258 business organizations, 135 trade union organizations, 112 social organizations and 43 state agencies. The latter linked to the sectoral strategic plans adopted in science and technology, tourism, agriculture, industry, mining, etc.

The programs currently being in implementation are aiming to establish competence standards, and likewise promoting the evaluation and certification of competencies in 32 economic activity sectors. Up to April 2014, 393 papers described as sectoral valid labor standards were registered, and 112,073 workers evaluated and certified their labor competencies. Such 32 standards correspond chiefly to the metallurgical sector (53), automotive mechanics (50), construction (37) and meatpacking plant (32). More than 50% of the certified people came from the construction sector, and 9.0% from meatpacking plant.

In terms of institutional quality improvement, during 2005/2011 period, 897 institutions were prequalified based on a quality benchmark; 139 of these

have already completed their improvement plan, whilst 58 of them have already been certified by Iram. In addition, between 2006 and 2014 some 4,000 teachers and managers attended the training program.

6. New players in the VE field

The country relies on a wide, diverse, and rich supply of VE programs that are promoted by a variety of Argentine State agencies. Moreover, for the first time in history, important, though not complete, advances in the articulation and linkage are beginning to be detected. In this regard, the MLESS has encouraged meetings, agreements and strategic partnerships aimed to address the issue of dispersive supply, very worrying until recently.

Thus, not a few ministries undertook the task of providing VE services. For information purposes, it is worth mentioning, among other things, that the projects implemented by the Ministry of Agriculture, Livestock and Fisheries, especially based on the "PROSAP" Project designed for the family economy based rural food production sector. The Ministry of Social Development took advantage of its "Argentina Trabaja" Project, designed for social equity development actions whose axes are family and work. The Ministry of Education, with its "FINES" Project geared towards educational termination and taking advantage of the National Institute of Technological Education (INET) with its "Improvement Programs" that favor such VE centers that are dependent on the provinces; the Ministry of Industry through the Productive Development Agencies Network.

Other not less important, innovative and impacting initiatives are those supported by: (a) the unions, because these have formed the most extensive network of VE centers in the industrial, manufacturing and services sectors available in the country. (b) Companies in the automotive and steel sector through the creation of VE centers and technical schools. (c) The role played by the National Institute of Industrial Technology (INTI) after the 2001/2002 crisis by strengthening certain economic sectors (textiles and clothing, leather, footwear and leather goods, food, etc.) and where VE became a strategic component of technology transfer processes for micro and small enterprises. (d) The public and private agro technical schools network, followed by the scientific technological revolution, occurred in the field in Argentine. (E) The local development agencies that incorporated VE as one of their conventional industrial extension services.

Some of such initiatives will be in discussion below.

6.1 Unions and VE

The trade unions support the most relevant, substantive, continuous, institutionalized and nationwide coverage in terms of Vocational Education in the country. Although having an already significant participation in the context of the National Council of Technical Education (CONET) framework, the development of an infrastructure – physical, human and technical – began to expand significantly since the mid-1990s last century. The termination of CONET, the transfer of technical schools and vocational training centers to provinces and trade union organizations, and the creation of the Vocational Training Sub secretariat within the scope of the labor portfolio were the starting point of a virtuous spreading of this type of services that accelerated notably in the last decade.

Trade union participation in the field of vocational education has evolved into a greater diversity of forms and levels than in the past. To the extent that there was a reduction in the commitment of the State in this matter, these organizations took over to face the challenge of providing training to workers. Another fact that contributes to explain this situation is the recognition that VE: (a) has become an explicit link between labor policies in general and labor relations systems in particular, especially in such issues relating to employment, income and working conditions; and (b) has been strictly enshrined in collective bargaining. Due to this trade unions expansion and consolidation process in vocational training, the role of the labor portfolio became decisive in terms of policy orientation, technical support and funding. This virtuous MLESS/Unions relationship materialized through various programs and modes of service. To mention only the most important, in the development of continuing training programs for employed and unemployed workers, competences evaluation and certification, management of institutions quality, etc.

• • • • •
 There has
 been a
 concern
 among
 Argentine
 entrepreneurs
 as far human
 resources
 training and
 development
 • • • • •

The sectoral approach, the networking, the value chain approach, and the strategic alliances with employers' organizations are the usual agenda for the operation of those trade unions that nucleate workers in construction, metallurgy, automotive, trade and services, electricity distribution, bakery/pastry, to name just a few.

6.2 Entrepreneurs and Vocational Education

Since the 1930s and the 1940s there has been a concern among Argentine entrepreneurs as far human resources training and development are concerned. The creation of education and training units in companies are evidences of this. Unlike union organizations, individual companies are usually taking responsibility in this matter; very few chambers rely on an institutional infrastructure capable to respond to the training of their staff

and to address this issue in a sectoral manner. To mention some of such employers, reference is in the Argentine Chamber of Commerce, which relies on a continuing training department (Vocational Education and Training) and the Argentine Federation of Graphic and Related Industries, responsible for the Gutenberg Foundation, where training and career ladder courses are delivered at a tertiary level in the field of graphic arts.

The new generation of schools and vocational training centers within companies originated from such possibilities opened by Technical Education Law 16,450 and the need to have qualified human resources to meet the demands of the steel and automotive industry, which started their activities at that time.

Large companies in the automotive industry (Ford, Mercedes-Benz, Renault, Volkswagen) have made direct, systematic and continuous investments in the training of workers, mid-level technicians and supervisors; many of such ventures originated from the opening of plants in early 1960. Thus: (a) for almost half a century, the Henry Ford Technical School has been operating in Centro Industrial Pacheco in that company. (b) Mercedes-Benz, since the beginning of the 1960s, has contributed to the training of qualified personnel in technical areas. Firstly, a training center was set up where the first Vocational Training courses aimed to those young people who were not part of company's workforce, oriented towards mechanics and electricity specialties. Moreover, since March 2005, the Juan Manuel Fangio Automobile Museum Foundation has been running the "Fangio Foundation Technical Education School," and Mercedes-Benz Argentina has been providing the funds to cover school-related expenses. (c) The company of same name managed Renault Technical Institute, established in 1961 and located in Santa Isabel, province of Córdoba. Renault Foundation took over the management as from 1991 onwards. At present, it provides training at such levels as vocational education, high-school level and college level technical education. (d) Building on the former Siemens Argentina's School-Factory structure, Werner von Siemens Technology School, under the National Technological University, has been operating since 2004. (e) In turn, Siderca/Tenaris recently (2012) opened the doors of Roberto Rocca Technical School in Campana, Province of Buenos Aires. (f) Philips School, linked to Philips Argentina, has been delivering technical courses at high-school education level (WEINBERG, 2011).

Another significant role played by companies is the support and sponsorship to technical schools and public VE centers in production poles and in the communities where they operate; some rely on specific programs aimed to strengthening these types of facilities; in this regard, they provide funding, technological support, equipment, refreshing courses for teachers and managers (WEINBERG, 2011). In addition, virtually all large companies, and

many medium-sized companies, have developed linking programs between their productive units and technical schools and vocational training centers by providing internships or adopting the dual training system (WEINBERG, 2011).

In addition, at sectoral level, the Argentine Chamber of Software Industry (CESSI) has been leading an innovative initiative through the implementation, with a support from the MLESS, of a National System of Continuing Training for the Software Industry. In this regard, it is possible to say that since 2005 more than 46,500 people have been trained throughout the country through 2,580 high-school level technical courses. Two hundred eight computer labs were installed throughout the national territory, enabling a training capacity for 50,000 attendees. In compliance with such agreements, the labor portfolio equipped, as of 2010, 40 advanced laboratories in 17 Argentine provinces; this new installed capacity has committed to deliver 200 courses for 4,000 attendees. In 2012, a Three-year Agreement was entered with CESSI, under the name of Empreartec, aiming, among other goals, to generate more and better jobs in the sector, as well as to improve companies' competitiveness (WEINBERG, 2011).

6.3 National Institute of Industrial Technology (INTI)

One of the most significant innovations gestated within the VE institutional framework in Argentina refers to INTI intervention in workers training actions; in particular, this originated from the 2001/2002 crisis. Currently, this agency is a unique reference in the matter, especially in some economic activity in the manufacturing sector. And not less important: this helped to design VE practices in a so far less explored field: the conviction that VE is a relevant aspect of the set of technical and management services that contribute to increasing companies productivity. The INTI has been developing an organizational approach, improving the technical and human condition of workers and entrepreneurs, within and outside companies. In this perspective, Vocational Education has become a decisive factor in everything related to consolidating the innovation and technological change processes, especially in the development of human resources and the production and dissemination of technologies in the productive units of the industrial sector. The incorporation of VE into the INTI agenda is recent and is one of the original aspects of the modernization process and institutional transformation assumed by this agency in recent years. In this regard, in the integral treatment proposed by the INTI to deliver technical support to companies, VE is included on the areas of management, production, marketing and administration.

Such practices set up by the agency should be in addition to this novel approach. On the one hand, the intervention includes sectoral support to

• • • • •
**Vocational
 Education
 has become a
 decisive factor
 in everything
 related to
 consolidating the
 innovation and
 technological
 change processes**
 • • • • •

its services and VE programs; such sectors as leather, textiles, wood and furniture, fruit and vegetables are in the list for illustrative purposes only. On the other hand, the centrality attributed to the territory in all the efforts generated around productive processes technologies and management technologies.

6.4 Agro Technical Education in rural areas

Public and private management agro technical schools acting in rural areas have played a key role in the training of the workers, technicians and supervisors, which actually required the scientific-technological revolution carried out in the field in Argentine. Irrespective of any judgment that may be retained about the production model adopted in the country, it is necessary to recognize that agro technical schools have provided in a timely and efficient manner the human resources required by the innovation and technological change process; and this was done in a remarkably short time frame. In other words, the lack of skilled human resources did not become a “bottleneck” in the “economic revolution” that occurred in the last twenty years in agriculture, livestock, industry and services in rural areas. It is difficult to understand the impact of biotechnology – seed development to cite only one of the most eloquent examples – or the incorporation of information technologies – from traceability to agricultural machinery, through the computerization of the entire productive processes – without the decisive contribution to these enterprises made by the educational units that operate throughout the country. Moreover, it is necessary to emphasize that such Educational Units have acted, more often than not, in building strategic alliances with INTA Experimental Stations at the local level. In addition, they have done so by anticipating in time and type the demands for employment and labor competencies by the economically active population, both in the agro-industrial sector and in the agri-food sector, and even in family economies. The innovative role found in their approaches have two dimensions: the full management of schools (most of them meet VE levels, non-university high-school level and higher education, while providing technological services to productive units) as well as the pedagogical technical intervention formulas adopted. Three reasons explain the success of this decisive contribution: (a) the vocation to meet the demands of the productive sector; (b) the institutionalized and sustained participation of social actors at local level and/or at educational unit level; and (c) the incorporation of pedagogical and didactic experimentation and innovation as usual practices in the development of training processes.

6.5 Local development agencies

Another example worth mentioning is the redefinition of the training concept in “local” environments of deep productive transformation, especially in terms of innovation and technological change, and the provision of technological services and technical support. This is how the Ministry of Industry, the creator of the Network of Productive Development Agencies understands the issue. This Network makes up an institutional platform for management, information and support that includes the local vision, and promotes and facilitates the linking of small and medium enterprises (SMEs) to such local and regional institutions linked to the sector. The services provided by the Network and by the 70 agencies comprising the Network include everything related to training and technical support.

One of the many examples that may be mentioned in this regard is the one related to the progress made in the framework of the “Territorial Competitiveness Program of the Central Region of Santa Fe.” In this case, as in the case of others, there is a new training conception and practice in a context defined as part of the territorial development process marked by innovation and technological change, and by the quantitative and qualitative leap of the agricultural and industrial production. No one can ignore the fact that the full economic growth of the central region of Santa Fe is one of the most striking phenomena for citizens, analysts, rulers and politicians. This is where training has gained a privileged seat alongside other components of the effort to increase productivity and competitiveness at the level of companies, value chains, and economic sectors, as well as at local development level. In this regard, it is conceived and articulated within the medium- and long-term efforts and strategies defined by the Development Agencies in that area. VE is integrated with the production and innovation networks, knowledge, the public-private relationship, the regional perspective, the institutional strengthening; all this set of measures that have become key to achieving the competitive, dynamic and sustainable development of regional economy.

7. Final considerations

The advances achieved over the last decade are highly promising in Argentina’s vocational education. Such figures referred to above are evidences of this. And no less relevant is the “intangible capital” that the country can exhibit: since the organizational culture that, faced with the innovation and the permanent experimentation until the unprecedented developments in the manners of organizing and managing programs, the pedagogical and didactic designs, and the ongoing training and development of instructors, managers and technicians. The accumulated institutional capacities that allow the labor portfolio, and the State in general, must also be counted as part of this

intangible capital, rely on an infrastructure that is capable of undertaking large programs in short periods of time; in other words, there is a “muscular tonicity” that allows to react quickly to unforeseen demands.

Likewise, it should also be mentioned that there is a wide and varied institutional capacity for VE throughout the country. The systematization of processes; the consecration of modes of participation of social actors; the strengthening of networks at local, provincial, national, sectoral level; the installed institutional capacity; the images formed; the willingness to experiment and innovate; the opening of views to act in articulation with other actors from the State and from social, union and business organizations. In short, the accumulation of practices and expertise forms a solid basis for undertaking a second stage in VE transformation that will lead to a national strategic objective: the creation of a national vocational education system. For this reason, the suggestion is to promote a broad and participatory debate around an agenda that should include, among other topics, the following:

- a. The generation of a permanent institutionality capable to guarantee continuity in the effort towards a National Vocational Training System.
- b. The sanction of an Organic Law related to Vocational Education.
- c. The formulation of a consensual public policy, based on a social dialogue in the VE area, designed to set up objectives, strategies, goals, allocation of resources.
- d. The adoption of mechanisms capable to strengthen the participation levels of social actors at national, sectoral, provincial and territorial level.
- e. The strengthening, consolidation and institutionalization of regulatory spaces in terms of quality management, competencies, national qualification frameworks, among others.
- f. The strengthening and development of institutional support areas (technical support) in: administration and management of system training entities; establishment of information, analysis and research systems; and human resources training;
- g. The creation of a Technological Prospecting Unit.

Notes

¹ Working paper prepared by Pedro Daniel Weinberg at the request of ILO Office in Buenos Aires, May 2014.

² The data presented come from the Monthly Report. Continuing Training Actions (Apr. 2014) Prepared within the framework of the Integral Plan for the Promotion of Employment by the Ministry of Labor, Employment and Social Security, Ministry of Employment, Directorate of Strategic Information for Employment.

References

ARGENTINA. Ministerio de Trabajo, Empleo y Seguridad Social. Desarrollo e innovación: empleo y competencias. **Revista de Trabajo**: nueva época, Buenos Aires, año 4, n. 5, 2008.

ARGENTINA. Ministerio de Trabajo, Empleo y Seguridad Social. **Diálogo social institucionalizado en la formación profesional Argentina 2003-2013**. Buenos Aires: OIT: Ministerio de Trabajo, Empleo y Seguridad Social, 2013a. 96 p.

ARGENTINA. Ministerio de Trabajo, Empleo y Seguridad Social. **Plan estratégico formación continua**: innovación y empleo Argentina 2020. Buenos Aires, 2011. 35 p.

ARGENTINA. Ministerio de Trabajo, Empleo y Seguridad Social. Subsecretaría de Programación Técnica y Estudios Laborales. **Serie estadísticas e indicadores laborales**. Buenos Aires, 2013.

CAPPELLETTI, Beatriz et al. **Actores sociales y formación en Argentina**. Montevideo: Cinterfor, 2000. 119 p.

CATALANO, Ana et. al. **Diseño curricular basado en normas de competencia laboral**: conceptos y orientaciones metodológicas. Montevideo: Cinterfor: Banco Interamericano de Desarrollo, 2004. 226 p.

SLADOGNA, Mónica. Las condiciones para el conocimiento productivo. **Revista de Trabajo**: nueva época, Buenos Aires, año 4, n. 5, p. 105-116, 2008.

WEINBERG, Pedro Daniel. Formación profesional, innovación y cambio tecnológico. In: ARGENTINA. Ministerio de Trabajo, Empleo y Seguridad Social. **Orgullo nacional**: un legado de trabajo. Buenos Aires, 2011. p. 112-113.