
ANNEX 2

BOXES

Box 1

CAPLAB: Peru³³

CAPLAB is an organization specialised in executing development projects in Peru. One of its priority objectives is to modernise vocations and promote decent work and self-employment in rural and urban areas, and the scheme is based on learning from and building on experience.

CAPLAB was set up in 1996 to tackle the problems of unemployment, precarious employment conditions and low income among large sectors of the population. The Swiss Agency for Development and Cooperation (SDC), in association with the Ministry of Labour and Employment Promotion and the Ministry of Education, supported the setting up of this services centre to foster the integration of socially disadvantaged young people and women into the labour market. Throughout its period of activity, the CAPLAB has cooperated with different institutions on a variety of projects. In addition to the SDC and the ministries mentioned above, there was also the INBAS (Institute for Vocational Training, Labour Market and Social Policy) in Belgium, CARITAS in Peru, the FONDO EMPLEO (National Fund for Labour Training and Employment Promotion), the Movimiento Fe y Alegría (Faith and Happiness Movement), ITACAB (Institute of Technologies Appropriated for Marginal Sectors) and ILO/CINTERFOR (the Inter-American Centre for Knowledge Development in Vocational Training).

CAPLAB activities are centred on a network of CEOs (Occupational Education Centres), which are managed by the state. These centres cater to the most disadvantaged sectors of the population and their aim is to help these people to have better access to employment through suitable

33 CAPLAB. (Centre for Labour Training and Development Services) "Report on Outcomes and Effects of the 1997-2006 Labour Training Programme".

technical training. CAPLAB formulated a series of proposals for strengthening and improving the CEOs because, at that time, the 900 centres in Peru were operating with minimal equipment and training teams that needed updating, and their trainees had a low level of labour market entry (only 27%). These proposals constituted the CAPLAB Model

This was organized into three different strategies. First, *Technical Training and Labour Demand*, which was an effort to change training processes to make them responsive to the labour demand from medium and small enterprises. As a result of this initiative, some 65% of the trainees from the CEOs that adopted the model achieved labour market entry in the specialist area they were trained for, and 30,000 young people per year benefited from the programme.

The second strategy was *to train facilitators for quality training*, which is an ongoing project with the trainers and instructors at the CEOs. They are taught to handle the latest technologies and methodologies in modern enterprises to ensure that the training they give will improve the trainees' access to the labour market. More than 4,000 centre directors and instructors have been trained under this scheme, 60% of whom are women.

The third strategy is *to widen access to employment*. This involved strengthening the Public Employment Service (PROEMPLEO) and fostering decentralisation in the service through the CEOs, municipalities and NGOs. This has led to improved labour market entry for some 36,000 people.

The application of the CAPLAB model was extended to around 285 CEOs, and this kind of intervention has spread to other countries such as Ecuador, Nicaragua and Bolivia.

In 2003 a new general education law was promulgated in Peru which included methodological proposals, tools and strategies from the model, especially in the process of converting CEOs into CETPROs (Centres of Technical-Productive Education). The centres ceased to be merely training organizations and became suppliers of other services as well for the labour force and for enterprises in the local area.

The CAPLAB implemented various experiences in which it pursued

its goal of achieving greater labour market entry not only through employment but also through different undertakings in rural and urban areas, many of which involved atypical activities. For example, the skills demanded by different producers were strengthened, and in one case a trainee from the Institute of Higher Technology, which is also in the programme, has a guinea pig³⁴ farm in the mountains where he lives. He sells 250 guinea pigs a week in two cities and has won a prize in a competition for small entrepreneurs for handling technology and the requirements of associating with producers. Another example is a vendor of curtain rails who was trained at a CEO in iron-work and went on to change his work prospects by setting up a curtain rail factory, and has now diversified into other metal products. His training at the CEO not only gave him mastery of the production techniques he needed but also helped him acquire the necessary management skills to develop the enterprise.

In this model, educational structures that are already in existence are used, and the emphasis is on organization, the training of teachers and managers, and tailoring the training to the real demands of local enterprises.

34 This is an autochthonous species of guinea pig which is a prized speciality in Peruvian gastronomy.

Box 2

CHILE CALIFICA: Chile³⁵

The Chile Califica programme was set up in 2002 as a joint initiative by the Ministry of Education and the Ministry of Economy and Labour. It is a government body financed by the Chilean government and the World Bank, and its task is to set up a permanent training system in the country based on coordinating the world of training with the world of employment. The idea is that an individual will pursue skills-based training trajectories in a process that continues throughout his or her life regardless of age, level of schooling or labour situation, so as to complete, update and improve their training.

This is a general programme but it includes some components that cater to specific groups, namely young people and adults who have been excluded from the educational and training systems, the active population with low literacy levels and weak work skills, and workers who want to be trained and have their labour skills certified.

The first component is **Secondary Education Levelling**, which is a flexible system in that the beneficiaries can begin or complete their secondary education and thus establish a starting point that gives them the same possibilities as other workers for labour market entry. In this system, young people who are unable to go to classes every day are encouraged to study in whatever time they have available. These studies are based at institutions that are accredited at a Ministry of Education regional registration department, which is open to training providers, and the courses are specialised, free of charge and flexible, so the students can progress at their own pace, under conditions that suit them, and in the time they have available. The training is organized in line with combined models that include attendance activities, and they lead to final exams in educational establishments. This component is aimed at young people and adults over 18 who wish to complete their studies but are unable to attend classes on a daily basis. The students have classes over a period of approximately eight months and they receive instruction in language and communication, English, maths, social sciences,

35 From the Internet pages of REDETIS, ILO/Cinterfor and CHILE CALIFICA. November 2007.

natural sciences, philosophy and psychology. The study groups can meet at the premises of the training institution, at schools, at workplaces, or at social or community centres.

From 2002 to 2004, 74,000 people had their *secondary education certified*. Their average age was 33 and the distribution by gender was homogenous.

Another component of the course is aimed at establishing an integrated *technical training* offer at all educational levels that is coordinated with labour training. It involves projects focused on labour competencies, and since 2002 some 25 projects of this kind have been financed.

A third component is *training* geared to the needs of the market and coordinated with the use of new computer technologies. This is organized in a distance learning modality and utilises CDs or the Internet, and there is a connected scheme to grant the enterprises that take part certain tax exemptions. The training is executed through technical training organizations (OTECs). Between 2002 and 2006, some 15 OTECs were certified, 840 were in the process of seeking certification and 341 were in the process of self-evaluation, and up to 2005, some 10,260 workers has been trained.

The fourth component is *labour competencies*. Part of the programme is to set up a national system that enables people to certify their labour skills regardless of how or where these skills were acquired, and productive sectors, unions, academia and the state are all involved in this process.

Lastly there is a fifth component of the programme that has to do with *labour information*. This is a programme to systematise information about the education and training offer and any other information about employment opportunities that may be useful for students, workers and employers.

Box 3

PRIMER PASO: Argentina³⁶

The Primer Paso (First Step) programme is a project to provide work experience in the open market on a massive scale, and this is combined with supplementary training. This is in the framework of an employment promotion management project of the Ministry of Production and Labour in the province of Cordoba, and it is focalised on a target group that has high rates of unemployment.

The foundations for this programme were laid in 1999 when the local government of the province promulgated a decree to this effect. To launch the project, its management unit and the province's Employment and Vocational Training Coordination office designed and implemented a system whereby entry forms were distributed on a massive scale throughout the province thanks to assistance from local governments (municipalities), police precincts, branches of the Banco de la Provincia de Córdoba (Bank of the Province of Cordoba) and the post office network.

The target groups are unemployed young people aged 16 to 25 with low levels of education who have not had any connection with the formal labour market in the six months prior to the start of the programme. Candidates cannot be the beneficiaries of any other public employment and training programme and they cannot be receiving assistance from the social security system. On the programme, special consideration is given to the disabled and to young people from regions with very low levels of productive and socio-economic development. There is quota system and 1,000 places are reserved for these groups.

The basic aim of the programme is to insert these unemployed young people into the open labour market. First there is a **labour practice phase**, which starts with a registration procedure for enterprises that are disposed to participate, and only enterprises with 20 employees or less are eligible. In this phase, the beneficiaries do four hours a day of work practice up to a maximum of 20 hours per week. In addition to the wages they are paid by the enterprise they receive an allowance which is paid directly at the bank to avoid intermediaries. In the four years that the programme has been in operation, links have been established

36 For further information on Primer Paso, see www.redetis.org.ar and www.oitcinterfor.org, Youth, training and employment.

with more than 6,000 enterprises, some 95% of which are small and medium size, where the young people do their work practice. The average of beneficiaries per enterprise is 1.4.

In addition to this work experience component there is a **training** phase, and for this an agreement was signed with the City of Cordoba Economic Development Agency. This agency provides resources channelled from the IDB (Inter-American Development Bank) / FOMIN (Multilateral Investment Fund) using a system of training coupons. In this way, supplementary training is provided for 1,700 young people from the city of Cordoba and other cities of more than 10,000 inhabitants in the province. The training itself is organised by two training institutions, the Blas Pascal University, which is privately managed, and the Information Sciences Vocational Council of the Province of Cordoba. The young people are trained in specialised areas like applied computer sciences, sales and quality customer attention techniques, hygiene and safety at work, reading and interpretation of plans, and handling foodstuffs. This training is supplemented with a system whereby youth take part in an Occupational Project module which has a duration of 8 hours and is organised by trainers from the Employment and Vocational Training Coordination office, the executive unit of the programme. While this phase is in operation there is a supplementary component: a human capital diagnosis system is made available to a group of 300 small and medium enterprises that take young people on the programme to enable these enterprises to identify and systematise their training needs, and this was the basis for programming the specialised training areas mentioned above.

Lastly there is the **supervision** phase. More than 50 training staff from the province's central vocational training institute make visits to the enterprises involved in order to formally monitor the progress and administration of the programme and to make an on-the-spot check on the trainees' performance, their relation with the employer, and to forestall or resolve any conflicts that might arise. This inspection is an examination of the enterprise's pedagogic orientation profile rather than an assessment.

Approximately 44,000 young people have participated in some or other component of the Primer Paso programme, and as a direct result of the training and work practice system more than 10,000 of them have been inserted in a stable situation in the labour market.

Box 4

THE UOCRA FOUNDATION: Argentina³⁷

This is an NGO that for nearly 15 years has been engaged in a variety of activities to provide updated, good quality education for workers in the building trade to improve their conditions of life. It is an interesting experience in that it involves an association between a union institution, the Workers Construction Union of the Republic of Argentina (UOCRA) and an employers' association, the Argentine Chamber of Construction (CAC).

In 1993 these two organizations signed a mutual cooperation agreement to set up the Foundation for Education and Training for Construction Workers (F.E.C.T.C.). The aim of this initiative was to promote training and education and facilitate labour market entry for these workers. Since that time, the Foundation has established linkages with various government bodies, enterprises and NGOs, which have helped it progress towards its objectives.

The Foundation offers a wide range of technical vocational training. The design of these activities is based on a diagnosis of demand from the sectors in question, so there are linkages between vocational training and the socio-productive context where the trainees will be inserted. The offer is structured as a combination of continuing training, so there is great emphasis on constantly updating and improving the training offer, and on competency-based training to give the worker a grounding that will allow him or her to use the skills learned in a variety of situations and contexts, to be able to reflect about their own practice and work with other people, and thus become more employable. This system of Training and Certification by Competencies (SIFOC) offers education organised into training itineraries that cover the main branches in the field including traditional building techniques, industrialised construction, various kinds of installation skills, welding and finishing.

For these training activities, a network of vocational training centres has been organised. Twenty centres in different regions in the

37 Source: the UOCRA Foundation web page, consulted on 16 November 2007, and publications distributed by the institution.

country are already members of this network, and another 14 are in the process of joining. The aim of this network is to strengthen training institutions in this sector. As these centres belong to the public education system, the whole local community in each case approves of the investment that has been made to develop them. The Foundation provides technical assistance for designing curricular content and also training and updating activities for the trainers.

In 2004, the National Training Plan for Construction Workers (PCNT) was initiated. This is a scheme to provide training for secure, skilled employment, and it involves instruction in health and safety on site and is geared to strengthening the network of training centres. In 2007, under this plan, some 1461 modules were executed and 24,917 workers received training. Some 77% of the beneficiaries attending courses are men, 43% are under 25 years of age, 52% completed primary education, and 80% are not currently involved in any other form of education.

In addition, the Foundation provides higher education at its Institute for Higher Studies for the Construction Industry (IESIC) with a professional nursing course and a higher technical diploma in industrial hygiene and safety, and also at national educational institutions (through cooperation agreements) such as the National General San Martín University and the Cervantes Higher Institute in the city of San Juan.

The Foundation engages in connected activities as well: it executes courses that are supplementary to the normal vocational training offer, organises conventions with enterprises, gives training that enterprises request, trains trainers through the network of centres, and provides assistance for training institutions, enterprises and workers. It set up and administers a Fund for Research, Training and Safety for the Construction Industry (FICS), which is the fruit of an agreement between the trade union and the Chamber of Construction to give priority to training in the area of risk prevention and health and safety at work.

Box 5

Education for New Industry: Brazil³⁸

This programme was initiated in 2007 as a response from industry to the need to expand the offer of opportunities for training to cater to the new demands of the labour market in Brazil. It is linked to the Strategic Map of Industry 2007-2015, and is tailored to the productive sector's vision of how the country will develop in the future. These entrepreneurs have identified quality education as a crucial condition for enterprises to expand and for the economy, which is in a growth phase, to become more competitive. The programme is managed by the National Confederation of Industry (CNI), which plans to invest 10.45 thousand million Brazilian reals in basic and vocational education for 16.2 million people in the country. In the 2007 to 2010 period, these resources will be used to modernise the schools network and laboratories, to train teachers, and to overhaul the content of SESI (Social Service for the Industrial Sector) and SENAI (National Industrial Training Service) courses.

The SESI and the SENAI have vast experience in formal and vocational education and this was a key element in the organization of the programme as it draws on and improves what these two organizations have learned in over fifty years of experience during which they have been financed from a payroll levy in industry. The SENAI is currently training two million workers per year at 406 schools and 301 mobile teaching units. The SESI has schools in more than two thousand municipalities, and every year more than one and a half million people enrol on its courses in preschool education, primary and secondary education, continuing and adult worker education.

This initiative to restructure and reinforce what has been achieved is based on four lines of action: new vocational profiles, new industrial regions, new technologies, and an accelerated rate of growth in the economy. The *new vocational profiles* are designed to respond to the needs of the new model of industry in which there is an increasing trend to recruit human resources with higher levels of schooling. At the present time, some 4.8 million out of the country's 7.8 million industrial workers, which is 61% of the total, did not complete their primary education, and this is seen as one of the main factors limiting growth in the

38 Source: Educação para a Nova Industria. Executive Summary, CNI, SESI, SENAI. Brasília, 2007.

country's economy. To remedy this, it is vitally important to raise the levels of primary education, continuing education and vocational training. *New industrial regions* should be developed on the basis of the greater mobility of productive capital and not centred just in the more developed regions but geared to the emergence of new poles of production. As to *new technologies*, the programme aims at reformulating and updating teaching methodologies and educational content to be able to respond to the demand for better trained human resources. The final point is that *the economy's rate of growth is accelerating* so more trained workers are required, and the programme is geared to meeting this need.

The SESI and the SENAI have both set ambitious goals for the next three years. In the areas of primary and continuing education, the SESI has projected 7.1 million children, young people and adults enrolled, and it will extend its coverage to holistic schools (that have a longer teaching day). It is expected that coverage will extend to 40% of the populations of the holistic schools at the secondary level by 2010, and that the education of 75% of these students will be coordinated with vocational training. Besides this, an effort will be made to progressively increase the proportion of students who complete their studies in this time frame.

In vocational education, the SENAI envisages an enrolment level of 8.6 million young people aged 14 to 24 in initial and continual worker training, and they will have apprenticeship contracts with enterprises and will do theoretical and practical work. There will be around 482,000 trainees in secondary technical vocational education, and they will be taught the skills that are essential to be able to work in the new expanding industries. It has been estimated that by 2010 more than one million new jobs in industry will have been generated, of which approximately 400,000 will be technical occupations. The SENAI is also planning for 32,690 students in higher education, an area in which the organization is expanding, and an average annual growth of 32% in enrolments is expected over the period. To support this projected growth in enrolments, some 1.3 thousand million Brazilian reais will be invested in physical and technological infrastructure over the period.

The overall objective of this programme is to foster the insertion into the formal economy of an increasing proportion of young people over 16 years old. Today most of this age group are working in the informal economy.

Box 6

The SENAI External Evaluation Programme in Brazil³⁹

This is an ongoing follow-up programme to evaluate the outcomes of the training institution based on the performance of its trainees. It consists of the SENAI Trainee Permanent Follow-up System – Sao Paulo (SAPES), which originally went into operation in 1985 and monitored various kinds of courses and specialised subject areas. In addition to this feedback it also provided an institutional analysis of the enterprises where the trainees were inserted. Since 2002, its head office has been at the SENAI main office in Brasilia (SENAI-DN), and the programme has spread to a large number of other states in the country. It meets the need for information to be able to make systematic evaluations of an institution's performance so it can tailor its vocational training programmes to student expectations and market needs. The main aim is to set up a system to monitor the performance of trainees in the labour market.

The programme functions as follows: there is an initial phase in which the profile of a trainee who completes a course at the SENAI is evaluated, and this includes an analysis of his or her expectations in terms of income and how long they expect to be in the labour market. Then there is a second phase in which the trainee's progress over the year after finishing their studies is checked against how far their expectations have been satisfied. Lastly, the enterprise where the trainee was inserted is asked to give an assessment of how this worker performed and what expectations the enterprise has of people trained at the SENAI.

This kind of evaluation has been adapted and used by national institutions such as the MTE/SEFOR (Ministry of Labour / Secretary for Vocational Training), the SENAC (National Commercial Training Service) and the CEETEPS (Paula Souza State Technological Education Centre – Sao Paulo). In the evaluation a set of indicators are used, and in this case 28 indicators were selected: 13 that reflect performance and 15 that monitor the goals that were set. These indicators cover four dimensions of trainee evaluation:

³⁹ Source: SENAI DN, *Análisis externo del SENAI*, Brasilia, 2002.

1. Employability
2. Socio-vocational promotion
3. The trainee's satisfaction with the SENAI
4. The visibility of SENAI's image

In the institutions mentioned above, 9,056 students who recently completed training courses were evaluated in 1999, 3,580 in the year 2000 and 12,636 in 2001, and administrative staff in 779 enterprises were interviewed.

One positive finding is that some 63% of trainees were inserted into the labour market. Each year, this scheme makes it possible to evaluate how well the institution is working, analyse what steps are necessary to rectify any defects that are detected, and measure the effects of educational programmes on both kinds of beneficiaries, the trainees and the enterprises.

This programme has been extended from its original home at the SENAI office in Sao Paulo to 10 regional offices under the direction of the national head office. An important point to note is that these are external evaluations, because the reference indicators used to gauge the effectiveness of programmes are independent of the institution itself.

To sum up, first the trainees' labour performance is measured, then the SENAI courses⁴⁰ are evaluated, and lastly the SENAI's image.⁴¹ All in all this is a positive experience because it makes it possible to periodically monitor how well a vocational training institution is functioning and provides concrete input for decisions such as whether training should be extended to new locations or whether certain courses should be terminated.

40 The courses are evaluated on a Likert scale with five levels.

41 Analysis of the SENAI's image is based on an Abraham Maslow ranking of individuals' needs and motivation.

Box 7

**The evaluation of ex-trainees from the SENATI
Dual Programme: Peru⁴²**

The evaluation of vocational training outcomes is a crucial problem in the development of these kind of institutions. To meet this need an evaluation of trainees who completed the SENATI Dual Learning Programme was carried out by Aiga Von Hippel in a coordinated effort involving the GTZ Project, the Ludwig-Maximilian University in Munich, the German Development Foundation and the SENATI itself. The aim was to evaluate the above-mentioned programme by following up on the progress made by trainees so as to be able to formulate projects to improve the institution's offer in the field of training and counselling.

In 1995 and 1996, the SENATI initiated far-reaching reforms in its teaching-learning methodology, the profiles of its training staff, and its equipment and infrastructure. It was decided at that time to undertake a study of trainees who enrolled at the SENATI just when the above-mentioned reforms were being put into practice and who completed their courses in 1998-99, so as to obtain a picture of the outcomes of the action taken. Field work was done to gather basic information that could be used to measure the quality and effectiveness of the Dual Learning Programme. The quality and effectiveness of vocational training institutions can be measured by analysing the subsequent employability of their trainees, that is to say gauging their ability to accede to and retain satisfactory employment.

In the case of the Dual Learning Programme, 69% of the apprentices who completed their courses were directly applying at work the training they had acquired, and a further 9% were employed in a related area. In the study, these positive outcomes were attributed to a number of factors including the following:

- The programme based on the dual system provides practical training in real activities on the job, in enterprises, and this is supplemented with theoretical technological training.

42 Source: Von Hippel, Aiga, "Grado de ocupación de los egresados del aprendizaje dual del SENATI" (National Service of Occupational Training in Industry). Produced by the German Agency for Technical Cooperation (GTZ) GMBH Project. Lima, Peru, 2001.

- Entrepreneurs participate in every stage of the training process, from course design right through to evaluation.
- The trainers made an important contribution.
- The institution itself has great prestige.

The statistics on trainees who complete courses are an important information input for the training institution about how these people perform in the labour area and, in the light of their current occupation, what they think of the training they received. This enables the institution to modify certain aspects of its offer and make adjustments so it is more tailored to the trainees' and the labour market's real needs. One component of the SENATI study was personal interviews with a random sample of people who obtained their final certificate in February 2001, that is, who had been part of the intake in the 1996-I semester at the Lima area office. Three occupational areas were selected on the basis of their importance in the economy, namely electrical engineering, automobile mechanics and metalwork. Interviews were held with ex-trainees who had been in the labour market for two or three years, with the idea that there would be a second interview some time afterwards to see what progress these people had made. A total of 90 individuals who had completed studies in the three fields mentioned above were interviewed.⁴³ First the data about job level and its connection, if any, with the training is analysed, and then there is a study of the employer enterprise as regards its size, the time the ex-trainee has been in this employment, remuneration, the level of the occupational position, satisfaction with occupational position, the reasons why this position was sought, working conditions, the skills the employee developed while studying, plans for improvement, and what further training courses the individual might take. The fact that nearly 70% of individuals are working in the area they were trained for is taken as a good outcome.

This model for studying ex-trainees can be replicated in other training institutions and in other SENATI centres. It constitutes a source of reliable information that can be used as a basis for making decisions about reforms and to supplement the retrospective evaluation of programmes.

43 A total of 231 people in the three specialist areas who enrolled in 1996 obtained their certificates in 2001, and of these a random sample of 90 were selected, 83 men and 7 women.

Box 8

The Labour Competency Certification Programme: Argentina⁴⁴

In various countries in Latin America there are projects under way to develop continuing training and labour competency certification. This involves drawing up catalogues of skills for different sectors of the economy, and these translate into changes in the curricula of training institutions. In Argentina, the Ministry of Labour, Employment and Social Security began with projects of this kind in mid 2004. Work is under way on a national level in the process of developing the certification of skills in line with performance parameters, work methodologies and procedures for standardization and evaluation, quality assurance in institutions and the certification of workers. Up to now, 23 sectors of activity have been covered and 190 competency standards have been established, each with its own evaluation instruments. It is calculated that by the end of 2007 some 12,000 workers had been evaluated in line with skills standards.

As well as the public institutions that have formulated these policies, in this case the Ministry of Labour, different actors in the productive process are necessarily involved in the pursuit of this objective. These actors intervene at different levels:

Technical level: Experts from the sector, to draw up occupational maps and competency standards.

Policy level: Administrative staff, to agree on the use of the parameters established, and to construct the sector certification body.

Institutional level: Councils and committees have to be set up to coordinate training institutions with employment offices to make sure that interaction processes are effective.

A number of associations and federations from different sectors of the economy are also involved in the process, such as representatives from the footwear industry, the Chamber of Construction and workers from the building industry, and federations and associations from other sectors like pastries and cakes, wool production and tourism. For these projects to operate smoothly, the entrepreneurial sector has to partici-

44 Source: www.trabajo.gov.ar/competencialaboral, consulted in October 2007, and interviews with participants.

pate very actively in order to establish linkages between skills certification and the demands of its quality policy and its capacity to manage its resources in relation to these parameters. Participation by the trade union sector is also crucial because of the collective agreements involved and the consequences of the process in terms of employment, remuneration and categories.

The innovative feature of this programme is that curricular design is structured so as to facilitate training by labour skills. To produce these designs, first the specific capacities to be taught on each course were determined, then the standards that had been set were analysed, especially as regards the capabilities that would be brought into play, and thus lists of skills were drawn up. These would be the training objectives on the courses to be prepared. At the same time, work was done on training instructors so they would be able to handle the new schemes which involve courses based on problems, critical points and diagnosing situations. Studies on this subject have shown that entrepreneurs are reluctant to support this training, and among the reasons they give is that it involves a loss of work time and/or that once employees have been trained they may move on to a different enterprise. There is also the question of how much the actors involved know about what a skill is and how it should be transmitted. The problem is how to attract the actors' interest and how to get them to participate in these projects because if these initiatives to improve the training of workers in the necessary skills are to yield positive results they will have to have real support from the various actors involved.

To be competent or skilled means to have a system for approaching work, the will to find solutions, a questing attitude, tolerance of failure, precision, and the desire to do a good job. Skill means having knowledge and capabilities that are mobilised in action.⁴⁵ When we talk about a skill, therefore, we implicitly mean three basic capabilities that must be combined and based on specific knowledge, namely to diagnose, to predict and to plan. These are the foundations that the success of these projects to certify skills will be based on.

45 Gallart, María Antonia and Jacinto, Claudia. (1997). "Competencias laborales: tema clave en la articulación educación-trabajo", in Gallart, M.A. and Bertonecello, R. (editor), (1997). *Cuestiones actuales de la formación*. Montevideo, ILO/Cinterfor.

Box 9

The National Secondary Education Examination: Brazil⁴⁶

In the mid 1990s there was a reform in secondary education in Brazil. In 1996 the Law of Guidelines and Fundamental Principles of National Education was promulgated, and the National Secondary Education Examination (ENEM) was instituted to evaluate the quality of the education being given. In Brazil up to the 1980s, secondary education was geared mainly to relatively limited middle and high level population sectors and was seen as a route to tertiary education, but in the 1990s secondary education came more to be seen as the concluding stage of primary education, it came to symbolise democratisation and training for citizenship. With this change of perspective, more and more adolescents were incorporated into this level of education. The system expanded enormously and this was accompanied by the curricular reform mentioned above, and it was also necessary to incorporate a tool to measure the actual quality of the education. This tool is the ENEM, whose main purpose is to evaluate the exit profile of students who complete this level. This means making an evaluation of students' performance when their basic schooling is concluded, based on the range of skills to do with disciplined behaviour they will need to be able to cope with the increasing challenges of modern life. It is expected that these skills and learning content will have been assimilated by the students in the course of their schooling. "The school should ensure that the students develop the general structures of language, sciences, arts and philosophy with a teaching dynamic that allows the young people to mobilise this traditional knowledge in the search for creative solutions to day-to-day problems that are presented in appropriate contexts".⁴⁷

In this way the examination leads to the construction of a labour competency chart and skills that constitutes a reference framework for evaluating basic schooling, and in this it is similar to examinations in other countries such as the SAT (Scholastic Aptitude Test) in the

46 Source: Guimarães de Castro, María Helena , "A reforma do Ensino Medio no Brasil", paper presented at the seminar "Calidad y Equidad en la Educación Media", Buenos Aires, 2004. CENEP. (Sponsored by the Ford Foundation).

47 Guimarães de Castro, María Helena, document previously cited.

United States or the Baccalauréat in France. It is a single, multi-disciplinary test with 63 objective questions based on a chart of five competencies and 21 skills. These five competencies are as follows:

- Mastery of the Portuguese language and of specific language in the areas of mathematics, arts and sciences.
- The application of concepts to understand natural phenomena, historical and geographical processes, technological production and art.
- The utilisation of data and information as a basis for making decisions in problem situations.
- The ability to construct consistent arguments.
- The capacity to formulate proposals for intervention in the real world, with respect for human values and taking the socio-cultural diversity of the country into account.

One important feature to bear in mind is that the examination is voluntary, and since 2001 it has been free of charge to students who complete their studies at public (state-run) schools. Between 1998 and 2002 some 3.3 million students were evaluated in this way. The examination is an important evaluation tool because it reveals the defects in the training that is given. Higher education institutions are free to choose whether they will utilise the results of this examination as a requirement for their students. In 2002, 4,893 students in Brazil also took part in the PISA (Programme for International Student Assessment), which is coordinated by the OECD in 32 countries, and the results they obtained in the two tests were very similar.

The ENEM makes it possible to examine whether the great expansion in enrolments in education in Brazil has been accompanied by an improvement in the quality of the education itself. The first approach was mainly designed to research the ability of school-leavers to read and understand texts. The ENEM Pedagogic Report expressly states that “The results of the 2002 ENEM show that of all the challenges in Brazilian schooling, access to learning to read is the most highly-valued and needed by society” (MEC/INEP, 2002, in the document cited). This experience of a voluntary, free examination is seen as an instrument for quality control in basic education in Brazil.