



Developing Skills for Employability with German Partners

8 Success Stories from Latin America



iMOVE[®]

TRAINING – MADE IN GERMANY

AN INITIATIVE OF THE



Federal Ministry
of Education
and Research

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Imprint

Publisher:

iMOVE
at the Federal Institute for
Vocational Education and Training (BIBB)

Project Management:

Silvia Niediek

Text:

iMOVE with contributions from featured organisations

Photos:

Cover photo: fotalia, MIC GmbH

Other photos: Contributing organisations, iMOVE, CONALEP (p. 22 top centre and left)

Layout:

Katharina Moraht and
MIC GmbH, Cologne, www.mic-net.de

Print:

Druckerei Brandt GmbH, Bonn

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iMOVE is sponsored by the Federal Ministry of Education and Research.
iMOVE is responsible for the contents of this publication.



Preface

Since the turn of the millennium, Latin America has experienced sustained economic growth. However, this is for the most part based on the exploitation of raw materials and the export of agrarian products. In consequence, this means not only great dependence on the price fluctuations on the world markets, but also an ever increasing destruction of the environment and biological diversity. To counteract this, it is important to promote future-oriented and globally competitive sectors of the economy. Skilled labour in particular can contribute to increasing the innovation capability of enterprises and entire countries.

Many countries in Latin America have achieved significant progress in improving their educational systems over the course of the past few years, with governmental education campaigns significantly contributing to this trend: According to UNESCO, the literacy rate of the adult population is at 91 per cent and 95 per cent of all children attend primary school.

Yet the lack of vocational training and continuing education provisions continues to be one of the reasons behind the high youth unemployment rate. The approximately 45 per cent of young people under the age of 18, who live in poverty and have next to no occupational perspective, are particularly affected. Because of their lack of employability, these young people cannot take equal part in the economic and social life and are unable to contribute to sustainable economic growth in their respective countries.

“Training – Made in Germany” offers the necessary know-how to meet the challenge in the field of vocational education and training. Germany has a long-standing tradition in this field and enjoys a high reputation for the demand-driven and practical orientation of its qualification programmes. The integration of professional, social and methodical competencies characterises the kind of knowledge German partners can provide.

The initiative iMOVE was established by the Federal Ministry of Education and Research in 2001, in order to promote international business relations of German training providers with international public and private organisations. iMOVE services include a multilingual database which contains information about German training providers, seminars, trainings, and trade visits abroad.

This brochure presents eight success stories of skill development realised in a joint effort by partners from Germany and Latin America. With its wide range of training offers and its strong emphasis on employability, “Training – Made in Germany“ has the potential to successfully support and promote the training systems in the countries of Latin America.

Markus Milwa
Director, iMOVE



Renewables Academy (RENAC)

Know-how for the sustainable use of photovoltaics

There is plenty of solar energy available in Mexico, yet so far it is not much economically exploited. A lack of know-how constitutes an impediment in using solar energy for power generation (photovoltaics), heat generation (solar thermal energy) and cooling (solar cooling). Planners, technicians and political decision-makers lack important qualifications.

Renac México was established in order to promote the sustainable development of renewable energies and to develop the Mexican solar industry by targeted continuing education. The capabilities and competences conveyed there make an important contribution to climate protection by improving the framework conditions for solar technology and the increased use of solar energy, while at the same time further developing the legal framework by training the decision-makers.

Since 2001, the training centre for solar energy generation Renac México offers continuing education courses in the field of photovoltaics for engineers, fitters and decision-makers. These include numerous company founders and newcomers, who intend to open up a new field of business with photovoltaics in Mexico.

Renac México is a joint project of Renac and the Mexican producer of modules ERDM Solar, which in its initial phase was supported also by the Deutsche Investitions- und Entwicklungsgesellschaft (DEG – German Investment and Development Association). ERDM and Renac have jointly developed a comprehensive training programme. It includes plant layout, project control, calculation, construction and repairs as well as basic knowledge as regards financial and legal aspects. After attending a three- to five-day training course, the participants are given a certificate of completion.

The trainings take place in Mexico City and in Querétaro, the economic and scientific centres of renewable energies in Mexico. 17 photovoltaics seminars were held training a total of about 120 participants over the course of the first year between June 2011 and June 2012. Renac México intends to also offer courses for solar warm water generation soon.



Internet: www.renac.de

Qualifications for planners, technicians and political decision-makers



The training courses aim at professionalising the building and operation of solar facilities and counteracting reservations against the utilisation of solar technology in politics and industry. Photovoltaics has the advantage of being used in a decentralised manner, for instance, for powering irrigation pumps or telecommunication stations in rural areas of Mexico, where some four million people continue to live without electricity even today.

The training staff of Renac México, by now numbering ten teachers, have previously attended a train-the-trainer seminar on photovoltaics provided by the parent company Renewables Academy (Renac) and held in their home country and in Germany. During this seminar, they were taught didactic and methodological knowledge to be used in their teaching as well as in-depth subject related expert knowledge and practical experience. The trainers had previously worked for Mexican enterprises and had previous knowledge of both photovoltaics and teaching.

With its headquarters in Berlin, Renac is Germany's leading provider of vocational training and continuing education in the field of renewable energies and energy efficiency. Since its establishment in 2008, more than a thousand participants from 96 countries have profited from Renac's training courses and also from the incidental exchange amongst each other.

In order to increase worldwide attention for its educational programmes, the Renac directly addresses energy agencies, educational institutions, ministries and enterprises in the respective target countries. It likewise closely cooperates with German institutions and associations that are part of a strong international network, including iMOVE. For instance, the Renac used the opportunity of presenting its service provision during an iMOVE delegation to the MENA region and to present its Mexico-based activities during iMOVE's 10-year anniversary celebration event.





Hedwig and Robert Samuel Foundation

Professional qualification as help to help yourself

The Düsseldorf-based Hedwig and Robert Samuel Foundation, which celebrates its 80-year anniversary in 2012, has been active in promoting vocational training for children and young adults in Central America and Asia for over 20 years. The foundation's initial support for third-party projects was abandoned in favour of initiating and realising its own long-term support projects on site. The Samuel Foundation provides practice-oriented vocational training for young people from financially disadvantaged parts of society in its own training centres. So far, more than 5,300 young people have successfully completed the foundation's vocational training programmes. Up to 90 per cent of these graduates obtain adequate employment in their special field after completion of the course.

In Costa Rica and in Nicaragua respectively, the Samuel Foundation provides 125 young people per year with free vocational training, which includes also catering during the day and transportation costs. The high quality of the vocational training programme is guaranteed by the foundation's close cooperation with

national authorities and enterprises as regards conception and implementation of vocational training programmes. The vocational training certificates are officially approved and recognised throughout the respective country.

All vocational training courses target professions in the crafts, technical or service occupations, which can be taught quickly and in a closely practice-related manner and which are highly in demand in the long term in these countries. At present, the young people receive qualifying vocational training in the fields of motor mechanics, refrigeration and air conditioning technology, administration and accounting assistance. In addition to professional know-how, great value is placed on additional qualifications of relevance on the employment market, such as English and computing competences as well as personality development and strengthening.

The vocational training course runs over a period of 19 months. A practice-oriented approach is given highest priority in all vocational training courses. In emulation of the German dual system, the course programme schedules a three-month work placement towards the end of the vocational training course. During this phase, the young people work in the businesses of the partnering enterprises in order to apply the knowledge acquired in theoretical and practical lessons in a real working environment and to consolidate their new competences.

The Samuel Foundation relies on local employees and partners on site in implementing its projects in the various countries. This helps minimising intercultural friction and increases social acceptance of the projects. The foundation's office in Germany manages and controls the projects in close cooperation with its respective local managing directors. As a subscriber to the iMOVE newsletter, the foundation moreover



High quality by cooperation with national authorities and enterprises



keeps itself well-informed as regards the latest developments in the field of education export and currently available offers within the iMOVE cooperation exchange.

Costa Rica was the first country of expansion for the Samuel Foundation's international support activity. The initial core area of the foundation's vocational training activity was constituted by refrigeration and air conditioning technology in San José, the capital of Costa Rica. Nowadays, the Samuel Foundation additionally provides vocational training courses in the fields of administration and accounting assistance and of motor mechanics, since these professions in particular have great demand for qualified personnel who are familiar with current technologies. These occupations therefore provide good opportunities for skilled entrants to embark on a professional career.

Because by now the current training centre near the centre of San José has reached its uttermost limits of capacity, the Samuel Foundation is currently building a new training facility in Alajuelita, the city with the highest number of financially disadvantaged inhabitants in the region around the metropolis of San José.

At the end of the civil war in Nicaragua, many young people were on the streets who had learned nothing but warfare. The Samuel Foundation involved itself in the social task of integrating

these young people in commonly acknowledged occupations. Based on a commissioned study, motor mechanics was selected as the first vocational training course to be established due to the good professional opportunities it provided.

A former finca in the outskirts of the capital Managua now is the foundation's core establishment in Nicaragua. By now, air conditioning technology and administration assistance are likewise part of the curriculum there.

In addition, the Samuel Foundation has supported state-run educational institutions in Havana, the capital of Cuba, for more than a decade. Since 1993, the Samuel Foundation operates two vocational training centres in New Delhi, where young people are taught fashion design. In Thailand, the foundation, since 2002, provides financial support and advice for children and young people to enable them to obtain, depending on their individual capabilities, the best possible educational degree.





IFPA (Instituto de Formação Profissional Administrativa) Qualifications for various markets

The IFPA (Instituto de Formação Profissional Administrativa), located in São Paulo, Brazil, is the worldwide largest German vocational training school outside of Germany. It was established in 1982 at the Humboldt School in cooperation with the German-Brazilian Chamber of Industry and Commerce and the Consulate General São Paulo. In 1992, it adopted its current name IFPA. Over the course of the past 30 years, more than 1,500 young people have completed a vocational training course modelled on the German dual system.

One part of the two-year vocational training period is made up of study modules at the vocational training school of about six weeks each. The apprentices spend the remaining time with practice-oriented work at the companies providing their vocational training. The final examinations are held by the German-Brazilian Chamber of Industry and Commerce. At present, a total of nine German and eight Brazilian teachers work at the IFPA. About 75 per cent of lessons are held in German by experts from Germany; the remaining lessons are held in English, Spanish and Portuguese.

Students attending the IFPA are given the opportunity of completing a dual system vocational training course that is recognised in Germany while at the same time acquiring an important qualification for the Brazilian market. On offer are the commercial vocational training courses of industrial clerk, forwarding / logistics services provider agent and office communications clerk. The qualifications are recognised by the German market and correspond to examination certificates acquired in Germany.

The Brazilian certificates vary depending on the respective occupation requiring vocational training. Together with the companies, the apprentices determine the core areas of their vocational training by choosing various modules. These are computer sciences, logistics, foreign trade, global finance and foreign languages (English, Spanish for business). Those training to become an office communications clerk can acquire three national Brazilian Técnico-level qualifications, depending on their respective choice of core areas. The “Técnico” is a secondary level qualification.

The “Tecnólogo” is a tertiary level qualification open to industrial and forwarding clerks. Those passing this qualification can have part of their achievements at the IFPA recognised by a university in Brazil, thus much facilitating their entry into the



Internet: www.ifpa.com.br

Free choice of various apprenticeship core areas and degrees



national university system. Moreover, alumni of the IFPA acquire several internationally recognised qualifications in the fields of computer sciences and languages.

Since São Paulo is the largest and most important industrial location in Brazil with more than 900 German enterprises on site, the apprentices can choose from a large number of predominantly German companies providing vocational training. Partners of the IFPA include, amongst others, Volkswagen, Mercedes, BASF, Bayer, Siemens, Kuehne + Nagel and also an increasing number of small and medium-sized enterprises. The iMOVE Market Study Brazil features a more comprehensive list and presents the IFPA as a successful example of the dual vocational training system.

Only students accepted by the IFPA can apply for a vocational training position with the IFPA's partnering enterprises. Yet when it comes to selecting candidates within the companies, the IFPA is not immediately involved. However, the IFPA provides job application trainings to prepare the young people for the selection interviews in the companies.

Prerequisites for attending the IFPA are a minimum age of 17 and proof of either a German university entrance qualification, a German advanced technical college entrance qualification or the national school certificate Ensino Médio. German language

skills must be proven by the German Language Diploma (Level II). Those not as yet in possession of the diploma must pass a qualifying entrance examination. Once this entrance examination is passed, the students have time to take the diploma at the IFPA before completing their vocational training period. The diploma is a precondition for admission to the final examination at the end of the vocational training course. Candidates with insufficient knowledge of German are given the opportunity to attend a German course at their own expense at the IFPA. The successful completion of this course likewise enables temporary admission until the candidates have completed the diploma.





Alianza para la Transferencia Tecnológica (Altratec)

Dual vocational training to provide a model for the future

Mexican experts from the world of politics and business as well as from educational institutions stress the fact that Mexican vocational training is due to experience a paradigm shift. As this process takes place, the German dual vocational training system is to boost the poor image of vocational training in Mexico by providing a model for the future.

The enterprise Alianza para la Transferencia Tecnológica (Altratec) makes an important contribution to help effect this change. It was established in 1998 by employees from the education project “Dual vocational training in Mexico”, which in turn has its roots in an initiative by an expert from the Centre for international Migration and

Development (CIM). In due course, the enterprise received support from the automobile manufacturer Mercedes-Benz and from the Colegio Nacional de Educación Profesional Técnica (CONALEP), a public training facility for technicians.

CONALEP continues to be Altratec’s main customer to this day. Important German partners include the Federal Institute for Vocational Education and Training (BIBB), the Federation of German Industries (BDI) and the Steinbeis Foundation. Today, Altratec is a non-profit limited liability company. Its work is presented also in the iMOVE Market Study Mexico. At present, the establishment of a foundation is being prepared.

Altratec has its headquarters in the federal state Estado de México. From there, 62 permanent staff and 155 project staff from Mexico and Germany carry out dual training measures in



For the governmental recognition of practice-oriented training measures



the five Mexican federal states Tlaxcala, Nuevo Leon, Estado de México, Chiapas and Morelos. Measures for three more federal states are being prepared. The trainers include master craftsmen, engineers, technicians, tourism experts and trained chefs.

Altratec services numerous German and Mexican (vocational) schools, technical universities as well as currently 61 enterprises in their introduction of approaches to dual education. To this effect, it provides advisory services to several educational ministries. Altratec supports apprentices and their trainers, supervises the weekly report magazines via a specially developed internet programme and coordinates the cooperation of schools and the industry.

Also, it organises the governmental recognition of practice-oriented training measures in various Latin American school systems, maintains three training centres with annexed living quarters for carrying out educational measures at intercompany level and in doing so guarantees the implementation of the relevant national and international guidelines.

The enterprises pay school fees for their apprentices to an amount of about 105 Euro as well as vocational training pay of approximately 100 Euro per month. So far, 810 skilled workers

have completed their vocational training in the professional fields of mechatronics, electro mechanics, information technology, computer sciences, tourism and gastronomy. Other occupations, such as plastics mould maker, are to be added to the range on offer by the end of this year.

More projects with official support are planned for the coming year. In addition to further expansion of the cooperation with governmental authorities in eight federal states and the integration of more cooperation partners, a centre for vocational training, design and production in the field of tool and mould making is to be established under the project title "Pro Mexico". Moreover, a vocational training project for 950 skilled workers in the fields of mechatronics, metal working, plastics engineering and renewable energies (solar technology) is planned in cooperation with the governments of the federal states of Estado de México and Tlaxcala.





Fundación Cristo vive

Vocational training for an active part in society

Established in 1990, Cristo vive is a non-profit, ecumenical foundation that is recognised by the Chilean state. It maintains also international relations and close contacts especially with Germany, including the Federal Ministry of Education and Research, which also established iMOVE.

In Chile, Cristo vive is committed to the promotion of ecclesiastic base communities, sponsorships, child day-care centres, scholarships, help for homeless people, drug rehabilitation and health centres. It is also active in the field of vocational training. The foundation funds three vocational training centres. These provide free courses of education and are financed by the institution SENCE (Servicio Nacional de Capacitación y Empleo - National Service for Continuing Education and Employment), which grants funds from the Chilean Labour Ministry. For the most part,

these funds also cover the costs of training material, equipment and work clothes as well as for transport and catering.

As is the case in most Latin American countries, Chile does not have a vocational training system comparable to the German one, nor does it have a vocational training system based on the dual principle. Since usually companies do not accept apprentices, Cristo vive is committed to establishing the vocational training school system as a successful vocational training model.

Cristo vive's most important target group are the early school leavers. In Chile, some 80,000 young people between 14 and 17 years of age leave school without a formal degree. That is about 3.7 per cent of the total population. This number is increased by numerous young people who have a school degree but are unable to gain access to either university or the employment market. As a rule, they and their families have no funds at their hands. Most of them live in the slums of Santiago. The foundation intends to support these young people in developing a perspective for their future by gaining occupational qualifications and in finding for themselves an active part to play in society.

In 2012 alone, the three vocational training centres of Cristo vive in Chile have been providing training for 1,600 young people. At the 16 workshops of the craftsman training centre EFPO, young people earn qualifications in the fields of wood working, building, metal working, motor vehicle mechanics



Internet: www.fundacioncristovive.cl

Occupational qualification provides future perspectives also for poor early school leavers



and gastronomy. At the Prisma de Los Andes institution, young people train for occupations in the hotel and gastronomy industry as well as for jobs in the field of administration and law. Yet another institution trains young people to become state certified nurses.

The vocational training period runs over six months. The semester features 500 hours of theory and practice at the institution's workshops as well as two months of in-company work placements, which are selected and supervised by the foundation. The exception is the nursing training with 1,600 hours of vocational training over a period of 18 months. The work placements are an important element in helping the graduates subsequently entering the employment market.

The vocational training courses closely follow the needs of enterprises. The demand for well-trained, skilled labour is increasing in many sectors, such as mining, energy and building. The foundation is involved in the FORJAR network, an association of nine organisations providing vocational training, for the purpose of exchanging experiences and for expanding its competences also as regards its cooperation with the industry.

Yet the vocational training courses also take into account the needs of the young people, who often have no experience with school-type learning situations and find themselves unable to cope. The foundation therefore adapts the courses and learning material to meet the young people's learning styles. A maximum of 20 apprentices is taught per course and they all are given their own personal space for learning. About two thirds of the vocational training course is dedicated to occupational practice. Moreover, each course is supervised by a psychologist to further develop the young people's social competences. The trainers regularly attend continuing education courses to further develop their pedagogic and methodological competences.

Over the course of the past 20 years, Cristo vive has trained 12,000 young people. Most of them have found suitable employment after their vocational training and receive a better wage than young people without corresponding qualification.

For the future, the foundation intends to introduce two-year vocational training courses that can lead to the qualification of "Profesional en oficio" (office professional). This title is modelled on the German journeyman qualification and is recognised by the Chilean Education Ministry. Moreover, an independent educational institution is to be established to provide training for the trainers.





Instituto Superior Aleman de Comercio (INSALCO) Business school cooperates with vocational training companies

Since 1979, the German Vocational Business School (Instituto Superior Aleman de Comercio, Insalco) in Santiago de Chile combines the teaching of theoretical and practical knowledge based on the well-proven German model of dual vocational education and training. The Insalco training course runs over a period of two years, during which the apprentices spend two days per week at the school and three days at the company providing their training.

Offered are vocational training courses for the professions of office communication clerk, wholesale and foreign trade clerk, forwarding clerk and shipping agent in cooperation with 40 Chilean and German enterprises including BASF, Bayer and Kühne + Nagel. 70 per cent of subjects are taught in German, the remainder in English and in Spanish.

Teaching at the Insalco is practice-oriented and designed to meet the precise enterprise requirements. The Insalco owes this emulation of the German dual system to a joint initiative of the German School in Santiago (where the Insalco is situated) and the German-Chilean Chamber of Industry and Commerce (Camchal).

26 apprentices in their first year of apprenticeship and 20 in their second year presently study at the Insalco. The school provides the apprentices with learning material and modern computer equipment. Classes comprise a maximum of 15 apprentices per subject, thus promoting active participation in the lessons.

Within the companies, the apprentices are immediately confronted with the working environment and professional practice. They are integrated in the company's operational processes and are given concrete tasks right from the start. In each enterprise, an employee is in charge of them in the function of tutor and supervisor, supporting them in the event of any questions or problems. The in-company vocational training is furthermore subject to a "rotation plan" determining all departments the apprentice is to successively work in during the duration of his or her apprenticeship.

The company providing vocational training pays half of the study fees; the apprentice pays the other half. Moreover, the companies pay their apprentices a monthly wage over the course of the entire apprenticeship. This is at least equivalent to the Chilean statutory minimum wage.



The apprentice assumes productive tasks right from the beginning.



At the end of the apprenticeship, each apprentice has to pass an examination consisting of two parts. In a written exam, the young people have to prove their knowledge of all theoretically taught subjects. In addition, they have to pass an oral, practical exam in their respective field held by a board of representatives of the Chamber and of the companies, which includes also teachers and the headmaster of the Insalco. After passing both parts of the examination, each graduate receives a certificate for his or her vocational training profession issued by the German Chamber of Industry and Commerce (DIHK) and valid also in Germany, as well as a certificate issued by the Chilean Ministry of Education. 702 apprentices have successfully passed this examination to date.

The degrees are recognised both in Germany and Europe and in Chile. They conform with the standards of the German dual system and are certified both by the managing director of the DIHK and by the board of managers of the Chamber in Chile. The degrees are moreover known in six other countries in Latin America, where apprenticeships similar to the ones at the Insalco are offered. In addition to the Chamber examination, the young professionals have to pass a worldwide recognised examination in business English, for which they are prepared during their regular lessons.

After the successful passing of the final examination, the graduates can continue their education with a university course. An agreement between the Insalco and the privately run Universidad Mayor makes provisions for shortening and facilitating a study course and reducing the pertinent costs. The university gives Insalco graduates credit for two semesters to be deducted from the eight-semester study course “Ing. de Ejecución en Administración de Empresas con distintas menciones”. This degree is roughly commensurate with the German university of applied sciences degree of a business administration diploma or a business administration bachelor.

The Chamber in Chile is a member in the Insalco advisory committee and functions as a link facilitating between the vocational school and the companies providing apprenticeship training. It provides support in obtaining apprenticeship training positions in companies, in advising the training managers and in taking the final examinations. On commission by iMOVE, the Chamber has compiled a market study for the export of vocational training and continuing education to Chile.





Instituto Tecnológico Centroamericano (ITCA)

Dual vocational education and training advantageous for all involved

The state-owned ITCA school for technicians and engineers in El Salvador was established in 1969 and is administered by the non-profit entrepreneur foundation Fundación Empresarial para el Desarrollo Educativo (FEPADE). It offers 22 study courses at five sites and provides also a broad range of continuing education classes. Some 6,000 students are currently enrolled at the ITCA.

In 2008, the ITCA introduced the technical study course of mechatronics (automation technology) including elements from the German dual system of vocational training in cooperation with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ – German Association for International Cooperation) and the Centre for International Migration and Development (CIM). Every third month, the students spend four weeks of work placement at a company providing vocational training. The quality of the work placement is continuously controlled. When the study course was introduced, a public-private partnership (PPP) with the German enterprise FESTO Didactic, an affiliate of one of the worldwide leading automation enterprises, proved to be very successful. This partnership enabled the ITCA to build a vocational training centre meeting state-of-the-art industrial standards.

The mechatronics vocational training course first started with a group of 40 students from 22 companies providing vocational training and 20 students in a school-only class. The study course runs over a period of two and a half years, after which students are given the opportunity to continue their studies and earn the title of “engineer”. At present, some 300 prospective students apply for the 40 dual study and vocational training placements.

In the meantime, the ITCA has converted also other study courses adopting the dual system. These include logistics/ foreign trade, industrial electronics, CNC technology, industrial mechanics and chemistry. For 2013, the school prognosticates 320 students for studying a dual training course. So far, more than 100 enterprises have been won over to support the project. Due to the very good results the project has yielded so far, other educational institutions from El Salvador and from Honduras have already expressed their interest in the model. iMOVE supports the placement of German experts at these institutes.

The dual education and training course is organised by coordinators, with one coordinator assuming responsibility for 40 students respectively. The coordinators are assigned with two main tasks: They are to win over companies providing vocational training for the respective next vocational training year and they



Internet: www.itca.edu.sv

Less youth unemployment and higher starting salaries



are to safeguard the quality of the vocational training by paying monthly visits to the various enterprises, by advising both the students and their trainers and by acting as mediators if necessary.

The dual vocational education and training scheme has huge advantages for the students, the enterprises and the ITCA alike. The students benefit from the fact that the enterprises fully cover their study fees. At present, the enterprises pay the ITCA 125 US dollar per month and mechatronics apprentice. 100 US dollar cover the study fees; the remaining funds are paid to the students.

According to a survey compiled in 2010, the graduates of the dual system had a higher basic salary at the start of their career with an average of 430 US dollar, than their fellow students from the purely class-taught training group with only 320 US dollar. Moreover, they were faster in finding employment. 71 per cent of the former dual system students were either employed or self-employed shortly before their graduation, compared to 55 per cent of students from the school-only group. These data ultimately resulted in the abortion of the purely class-taught mechatronics study course at the ITCA.

The enterprises in El Salvador profit from the excellent recruitment opportunities provided by the dual vocational training system. Especially the small and medium-sized businesses profit from this, as they are not as well known and cannot afford a comprehensive selection process for recruiting graduates. Moreover, the businesses gain advantages from the productive contribution on part of the young workforce even during their apprenticeship. All students are obliged to suggest, plan and implement at least two improvement projects within the companies providing their apprenticeship training. The fact that more than 80 per cent of the initial 22 enterprises adopting this

cooperation scheme in 2008 currently continue to provide apprenticeship training for students proves that the enterprises clearly recognise these advantages.

The ITCA as a provider of education likewise has gained advantages by the introduction of the dual vocational education and training system and the ensuing closer contact with the industry. The coordinators raise the operative costs to a limited degree compared to the school-only training course. These costs, however, are more than refinanced by the fees paid by the enterprises, as these are significantly higher than the 40 US dollar charged to students by the ITCA for a school-only training course. From the point of view of the education provider, the dual vocational education and training system is therefore also financially sustainable. Moreover, it has become significantly easier for the institute to market its comprehensive range of continuing education courses for professionals within enterprises.





Festo Didactic

Vocational training modules for students and the industry

Professional qualification in the field of mechatronics is the basis for working with automated and networked systems in order to achieve optimal availability, quality and prices of products. The installation of modern equipment is not sufficient when wanting to increase productivity. Qualified skilled workers are indispensable.

The Festo enterprise, established in 1925 in Esslingen, is an industry leader in the field of pneumatic and electric drive engineering and mechatronics for industry and process automation. The automobile, food, textile and packaging industries in particular benefit from these systems. At present, Festo has 15,500 employees at more than 250 production sites worldwide.

In 1965, Festo established its affiliate company Festo Didactic in order to satisfy the great demand on part of companies for technical education in occupational practice as regards the various technologies and processes. The range of trainings on offer go far beyond the implementation of Festo's product range.

Festo Didactic employs 500 staff worldwide, 150 in Germany alone. The company's total turnover is 97 million Euro per year; half of this is generated in Germany. Even so, Festo Didactic is a worldwide company with activities in 176 countries, covering more than 30 languages and operating through 59 proprietary Festo country divisions and 40 retailers.

In addition to its own training centres, Festo Didactic also sets up training centres and laboratories upon commission by enterprises and universities, chambers and ministries. In doing so, the German company takes into targeted consideration the interests and needs of the local industry. Owing to many years of experience in the compilation of international market studies, Festo Didactic knows about the demands companies place on their employees. Festo Didactic can draw from this knowledge when planning and implementing Festo-certified vocational training institutions that are to bring forth qualified skilled personnel.

In 2011, Festo Didactic created one such vocational training centre at the Don Bosco University (UDB) in El Salvador, the second of its kind in the entire country. The Salesians of Don Bosco have begun their work in El Salvador as early as in 1903. Today, the organisation maintains ten different institutions



ive know-how transfer between practical application and theoretical teaching



on four different sites in the country. The UDB is part of the “Ciudadela Don Bosco” integrated educational system, which was established in 1986 with the aim of enabling the economically disadvantaged population in the metropolitan area of Soyapango to gain access to qualified vocational training in particular in technical and engineering sciences study courses. The educational system of the Salesians of Don Bosco includes also schools, pre-schools, workshops, sports facilities and artistic institutions as well as the Fusalmo Foundation and the workshop settlement Poligono Don Bosco with annexed vocational training school for young people in risk situations.

This training facility in Soyapango comprises three workshops that are equipped with the latest hardware for practice-oriented, technical vocational training courses in the field of automation technology with a focus on industry robotics, CNC (Computer Numerical Control) and CIM (Computer Integrated Manufacturing). In addition to regular study courses, the Don Bosco University offers also training modules of up to three days of duration for employees from public and private organisations. In 2011 alone, 132 external candidates from Guatemala, Honduras, Nicaragua and El Salvador attended the continuing training courses at the training facility. This intensifies the transfer of know-how between practical application and theoretical teaching and strengthens both the industry and the university.

Expert and highly motivated trainers make sure that the training facility remains accessible to many. In El Salvador, Festo Didactic trained UDB university employees specifically for the particular infrastructure of the training centre. Festo Didactic is a close partner and regular contact for updates and extensions to the training facility and remains in that role well after completion and official acquisition by the university. For 2012/13, plans for such an extension focus on the CIM facility.

The excellent reputation of German technology worldwide constitutes an additional plus for Festo Didactic. This reputation and the good experiences international partners have made in cooperating with Germans cast a positive light also on German training propositions. Yet the many years of membership in the iMOVE network have likewise contributed to visible success as regards public awareness of Festo Didactic. Festo Didactic intends to use this platform also in the future.

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iMOVE

iMOVE is an initiative of the Federal Ministry of Education and Research. Our mission is to promote international cooperation and business relations among German training providers and international public and private organisations.

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