



MEXICO CASE STUDY

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TECHNICAL AND VOCATIONAL EDUCATION AND
TRAINING (TVET)



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This project is an initiative of the Association of Caribbean States (ACS) in collaboration with the French Development Agency (AFD), and is designed as a proactive approach to produce documentation and provide recommendations for strategies and procedures to strengthen human resource capacities in cross-cutting areas necessary for a sustainable and competitive Regional Tourism Industry.



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EDITORIAL NOTE

Documents that are part of this study on "Technical and Vocational Education and Training (TVET) in tourism in the Greater Caribbean" were made between October 2014 and April 2015, on the basis of various documents made under the auspices of national, regional and international organizations since the themes, which form the central part of this consultancy, have been addressed extensively for more than fifteen years. Used as reference documents and dating from 1995 to 2015, those are the work of professionals of various nationalities.

When these authors are cited in our texts, it means having used the style of writing, vocabulary and terminology used originally; so, there is not a precise or rigorous homogeneity in the texts that make up this study with respect to the use of the languages (Spanish, English and French). Additionally, the final documents that compose this study were originally written in, either French, or Spanish or English. The translations of these documents are free-lance translations.

PRESENTATION

The following Technical and Vocational Education and Training (TVET) Mexico Case Study was developed to provide information regarding the status of the technical, vocational and training programs related to the tourism industry of the country. It starts with an overview of the economy and the tourism industry to put into context the importance of tourism in the country.

It is not the purpose of this document to rewrite all the information that is available from several authors and/or publications, but instead to complement, amplify and supplement this report. Every effort has been made to make this Case Study as accurate as possible. However, there might be some slight differences due to the fact that there are not accurate or actual statistics on all topics. Although, several international and national organizations have carried out researches that include not only statistic but some projections on the topics and some of that information is included in this document.

Therefore, this Case Study should be used only as a general information and general reference and not as the ultimate source on TVET in general and TVET for the tourism sector in Mexico.

This TVET Case Study on Mexico was developed by CERTIFICACIONES DE CENTROAMÉRICA, S.A. (CERTIFICA) under the consultancy “Training for Careers in Sustainable Tourism” of the Association of Caribbean States (ACS) with the support of the French Development Agency (AFD). The team member that developed this Case Study was Denia Del Valle, Sustainable Tourism and Human Resources Development Specialist, with editorial support from Carmen Rosa Pérez, General Coordinator.

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I. OVERVIEW OF THE TOURISM AND HOSPITALITY INDUSTRY

A. OVERALL COUNTRY PROFILE

The official name of Mexico is United Mexican States (Estados Unidos Mexicanos). Mexico is a federation of 31 independent states, all in various stages of economic and social development. It is the place of origin and splendor of several advanced Amerindian civilizations - including the Olmec, Toltec, Teotihuacan, Zapotec, Maya, and Aztec - Mexico was conquered and colonized by Spain in the early 16th century. Administered as the Viceroyalty of New Spain for three centuries, it achieved its independence early in the 19th century on September 16, 1810.

Mexico is located at the southern portion of North America, bordering the southwestern United States from California to Texas. The southernmost Mexican states of Quintana Roo, Campeche, and Chiapas define the northern border of the isthmus of Central America. It has an area of 1,964,374 square kilometers –making it the third largest nation in Latin America (after Brazil and Argentina), and the largest among the ACS country members. It has a 10,143 kilometers coastline which 2,805 are on the Gulf of Mexico and the Caribbean Sea.

The elections held in 2000 marked the first time since the 1910 Mexican Revolution, that an opposition candidate - Vicente Fox of the National Action Party (PAN) - defeated the party in government, the Institutional Revolutionary Party (PRI). He was succeeded in 2006 by another PAN candidate Felipe Calderón, but Enrique Peña Nieto regained the presidency for the PRI in 2012.

Mexico has the second-largest economy in Latin America, even though is a middle income country ranking “moderately free” in the Index of Economic Freedom (a joint publication of the Wall Street Journal and the Heritage Foundation). It is a major oil producer and exporter¹, about one-third of government revenue comes from this industry. Even when the Mexican economy is heavily reliant on the money sent home by millions of migrant workers in the United States of America, it has recently been emerging from its deepest economic slump since 1930s, with foreign companies pouring billions of dollars of fresh investment into the country. Gross Domestic Product stood at US\$1.845 trillion in terms of purchasing power parity in 2013 with a growth of 1.1% compared to 2012, representing a per capita GDP of approximately US\$15,600.00; the largest in Latin America. The inflation rate for 2013 was 3.8%.

The country has abundant natural resources, due to its rich biodiversity and varied wildlife, it is considered as one of the mega-diversity countries around the globe. In addition, it has an extensive subsoil resources (including large reserves of oil and silver). As of 2003, about 5% of the country’s land area is under a protected status. The National Commission of Natural Protected Areas currently administers 176 natural areas of federal level representing more than 25,394,779 hectares.² Protected sites included six wetlands of international importance (RAMSAR sites) adding 1.1 million hectares and 12 biosphere reserves totaling 6.8 million hectares.

¹ Source: <http://www.banxico.org.mx/>. Retrieved in March, 2015.

² Source: <http://www.conanp.gob.mx/regionales/>. Retrieved in March, 2015.

About nearly half of Mexico's total land area is officially classified as agricultural, only 12% of the total area is cultivated. Extensive irrigation projects carried out in the 1940s and 1950s greatly expanded Mexico's cropland, especially in the north. One-third of Mexican territory is officially designated as grazing land. These lands are located mainly in the north. Some 9 percent of Mexico's territory consists of forest or woodland, 59 percent of which is in the tropics, 15 percent in the subtropical zone, and 26 percent in the temperate and cool zones. Temperate forests cover some 49 million hectares, almost one-third of which are open to logging, mainly in the states of Chihuahua, Durango, and Michoacán.

Mexico's main industries are food and beverages, tobacco, chemicals, iron and steel, petroleum, mining, textiles, clothing, motor vehicles, and tourism. A strong rebound of exports, improved confidence and fiscal stimulus have driven a recovery, with manufacturing leading other sectors. The recovery was projected to gain momentum with growth of just over 2.5 % in 2014 and about 4% in 2015, strengthening further in 2016. At the time of preparing this document it could not be confirmed the achievement of the figure for 2014.

Fiscal policy was expansionary in 2014, but the fiscal stance is expected to return to a neutral position in 2015 and will tighten in 2016 as foreseen in the government's new fiscal framework. The significant decline in oil prices, while partially offset by a depreciation of the currency could nevertheless reduce fiscal revenue substantially, delaying consolidation. On the other hand, the government's structural reforms should boost investment, notably in the energy and telecommunication sectors.³

Spanish is the official language for both the mestizo and Indian populations. Approximately 6 million Mexicans spoke an indigenous language as a first language in 2000. The number of indigenous language speakers rose slightly in absolute terms from 1990 to 2000 but declined slightly as a percentage of the total Mexican population (7.2 percent in 2000 versus 7.8 percent in 1990). Indigenous speakers are highly concentrated in the southern states of Guerrero, Oaxaca, Quintana Roo, Chiapas, and Yucatán. Among indigenous language speakers, 83 percent also speak Spanish, while about 1 million are monolingual. Linguistically isolated communities are most prevalent in the states of Chiapas and Guerrero.

Mexico has approximately 112 million people positioning the country with the 11th largest population in the world. Over 50% of its population is under 25 years, with the largest age group between 15 and 19 years old (10% of the population). Around 40% of the population is 19 years old or under, and the average of the population is currently 26 years old.

³ OECD Economic Outlook, Volume 2014 Issue 2 No. 96, November 2014.

B. TOURISM PROFILE

Since the 1920s, tourism has been a key source of income for Mexico's economy and the sector has historically had the most potential in the country. Mexico has been traditionally among the most visited countries in the world according to the United Nations World Tourism Organization (UNWTO) and it is the most visited country in Latin America and The Caribbean. The most notable attractions are the Mayan ruins, cultural festivals, colonial cities, nature reserves and the beach resorts. The nation's temperate climate and unique culture – a fusion of the European and the Mesoamerican – make Mexico an attractive destination. The peak tourism seasons in the country are during December and mid-Summer, with brief surges during the week before Easter and Spring break, when many of the beach resort sites become popular destinations for college students from the United States.

According to *Banco de Mexico –BANXICO* (Mexican National Bank) during 2014⁴, the number of international tourists who travelled to Mexico exceeded 29 million, which represents a growth of 20.5% in comparison to 2013; and represents a new historic record. The incoming of foreign currency from international visitors to Mexico during 2014 also was a historic record totaling US\$16,258 million, 16.6% higher than the amount reached in 2013, representing an increase of more than 2.23 million dollars over the previous year. The tourism balance grew by 36.8% in 2014, hitting a new record of US\$6,601 million.

The arrival of passengers by air increased 8.3% with respect to that registered in 2013, reaching 50 million passengers carried by airlines. The arrival of passengers on domestic flights exceeded 32.8 million people in 2014; this represents an increase of 7.9% in comparison to 2013. In addition, the number of domestic flights increased 6.4%. The majority of international tourists coming to Mexico are from the United States (representing 55.5% of the total air arrivals) and Canada (13% of air arrivals). Other visitors come from Europe (United Kingdom, Spain, France, Germany, Italy, Russia and Sweden), followed by Latin America tourists (Brazil, Argentina, Colombia, Venezuela, Chile, Peru, Costa Rica, Guatemala, Cuba and Ecuador). A smaller group of international tourists arrived from Japan, Australia and several countries of Africa.⁵

The ports that received the highest number of cruise passengers were Cozumel (3,398,929), Ensenada (698,462) and Majahual (415,267). Puerto Vallarta and Ensenada had an increase of 55.2% and 42.8% respectively, in comparison to the number of cruise passengers registered on 2013. There is also a burgeoning domestic tourism trade, as a growing affluent middle-class begins to go on holidays within their own country. While Mexico's middle/lower class usually promotes national tourism, the middle/higher class usually prefer to travel overseas.

The influx of foreign currency from the arrival of international visitors had an annual increase of 16.6% in 2014, exceeding the level of 16 billion dollars. The following chart show the statistics from 2008 to 2014⁶

⁴ Results of Tourism Activity 2014. DATATUR, Sub-Secretaría de Planificación y Política Turística, Secretaría de Turismo de México. January 2015.

⁵ National Migration Institute, SECOB electronic records, compiled by DATATUR.

⁶ Source: Balance of Payments, Banco de México, compiled by DATATUR.

As result of the arrival of international visitors and the income of foreign currency registered in 2014, the average income of foreign currency from international visitors grew 12.5% in comparison to 2013, reaching US\$201.00. The tourism balance achieved a positive result of 6,601 million dollars representing 36.8% of increase in comparison to 2013. The average expense of international visitors grew by 12.5% in comparison to 2013 reaching US\$492.00.

The medium long-stay tourist arrivals increased 9.6% in 2014, compared to the previous year. About 84.2% entered by air while the remaining 15.8% entered to Mexico by land. The average expense of medium long-stay tourist increased 9.4% in 2014, reaching US\$850 per stay.

Cancun consolidates as the main arrival destination for international tourist in 2014.



1. TRENDS IN NICHE MARKETS

Beach and water-sports tourism is one of the most important segments of the Mexican tourism industry in terms of numbers and revenue to the country. Acapulco, Cancun, Chetumal, Huatulco, Ixtapa, Loreto, Los Cabos, and Puerto Vallarta are the most visited beach areas in the country, hosting between 50 percent and 80 percent of international tourists and providing about that proportion of tourism revenue.

Colonial areas provide interesting historical tourism destinations. Colonial tourism destinations in Mexico include Guanajuato, Guerrero, Oaxaca, Puebla, Taxco, and Zacatecas. The National Association of Restaurants and Tourism Services indicate that colonial destinations have not enjoyed as much investment and the resulting modernization and improvements as their beach tourism counterparts, in part because they simply do not show the same magnitude of profits.

Atlas Tourism Mexico (ATM)⁷ is the systematic public register of all natural and cultural resources and assets that might become tourism attractions and/or destinations. It is managed by SECTUR. Along with the beach and colonial (cultural destinations), SECTUR through the ATM promotes the niche markets of Meetings and Conventions, Health and Wellness, Sports, Nature-based and ecotourism and, under other categories, also offer Weddings Destinations and LGBT⁸.

Tourism in Mexico has many offerings specific to children, which enhances the attractiveness of Mexican destinations for families. Especially in resort towns such as Acapulco, Cancun, and Puerto Vallarta there are complexes designed for children that feature water sports, entertainment, and educational activities; the Radisson and Club Med are examples of these facilities.

2. IMPACT ON ECONOMY

Mexico is set to be the world's 7th largest economy by 2050⁹, to date is the second-largest economy in Latin America and the 13th in the world. Tourism has been identified as one of the main drivers for the growth of the country's economy.

In 2011 8.4% of the GDP was due to tourism. The total contribution of Travel & Tourism to GDP was 13.3% in 2013, and at the date of the elaboration of this document the forecast for 2014 was to rise by 4.2% and to have a 14.8% of GDP from tourism in 2024. The Mexican touristic GDP is higher than the overall GDP of some countries like: Cuba, Ecuador, Dominican Republic, Guatemala, Uruguay, Costa Rica and Panama and is also equivalent to adding the state GDP of Aguascalientes, Morelos, Durango, Yucatán, Quintana Roo and Zacatecas.

The National Statistics and Geography Institute (INEGI, for its Spanish acronym) is in charge of leading the National Account Systems of Mexico (SCNM, for its Spanish acronym).

Among the indicators measured by the CSTM are: the Tourism Gross Domestic Product (TGDP), Tourism Consumption (TC), Tourism Collective Consumption (TCC) Gross Fixed Capital Formation Tourism (GFCFT), Tourist Offer and Use, Paid Occupied Jobs (POJ).

The Tourism Gross Domestic Product (TGDP) is comprised by renting and business services (21.8%), transportation (17.4%), handcrafts and goods, (16%), restaurant, bars and nightclubs (10%), general commerce (8.6%), lodging (8.4%), second homes 3.6%), entertainment 1.8%, travel agencies, tour operators and time shared (0.9%). The remaining 10.6% is comprised by various related services such as professional services, repair and maintenance, health services, among others.¹⁰

The expenditures made by the travelers determine the Tourism Consumption (TC); it is comprised by the Internal Tourism Consumption that represents 83.6%, the Inbound Tourism

⁷ <http://www.atlasturistico.beta.sectur.gob.mx/AtlasTuristico/quees.do?lang=es>. Retrieved on March, 2015.

⁸ LGBT is the acronym for Lesbian, Gay, Bisexual and Transgender Tourism.

⁹ Vocational and Technical Education: Mexico's Case. UK trade and Investment. January 2013

¹⁰ Sistema de Cuentas Nacionales de México. Cuenta Satélite del Turismo de México 2013. INEGI 2015.

Consumption that represents 9.5%, and the Outbound Tourism Consumption that represents 6.9%. The expenses are classified by the travel motivation: businesses, vacations, etc. The Collective Tourism Consumption is the set of tourist services provided by the government for the benefit of visitors. This represented 3% of the total country government consumption in 2013.

The Gross Fixed Capital Formation Tourism (GFCFT) is a variable related to the tourism activity and includes the construction of infrastructure, buildings, roads and other tourism buildings (79.6%), and machinery & equipment (20.4%) i.e.: aircrafts and passenger buses. With the intention to gauge, the value generated by tourism in the country, in terms of GDP and compare it with economic activities and tourism in other countries CSTM developed the following map:



The data shown was developed using the most recent information of the Tourism Satellite Accounts of the selected countries (2013). Mexico and New Zealand shared the same Tourist GDP followed by Malaysia, France and Austria are about the same while Nicaragua and Australia have the lowest.

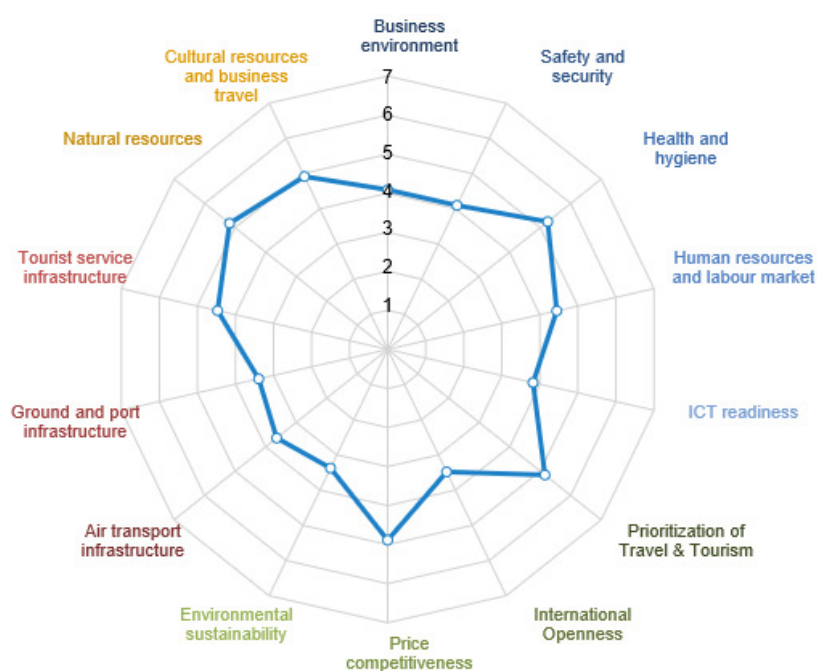
3. EMPLOYMENT IN TOURISM

According to the report of the Mexican Satellite Tourism Account, 5.9% of the total paid jobs are generated by the travel and tourism industry, this represents 2,315,183 paid jobs during 2012 and 3,180,000 jobs (6.4% of total employment) in 2013. This is expected to rise by 3.5% in 2014 and rise by 4,106,000 jobs (7.1% of total employment) in 2024¹¹.

¹¹ Travel & Tourism Economic Impact 2014 Mexico, World Travel & Tourism Council, 2014

SECTOR	NUMBER OF PAID JOBS 2012	% OF PAID JOBS 2012
Renting and business services	87,977	3.8%
Restaurants, bars and nightclubs	840,411	36.3%
Second homes	2,315	0.1%
Transportation	363,484	15.7%
Handcrafts and goods	314,865	13.6%
Commerce	254,670	11%
Lodging	138,911	6%
Entertainment	53,249	2.3%
Travel agencies and tour operators	18,521	0.8%
Time shared	11,576	0.5%
Other services	229,203	9.9%

4. COMPETITIVENESS



According to the Travel and Tourism Competitiveness Report 2013 of the World Economic Forum, Mexico is stable at 44th overall position and 5th in the Americas. The country received impressive marks for its natural resources (ranked 8th) an area that shows an improvement since the last assessment, with many World Heritage Natural sites and megadiverse fauna. The country's cultural resources are also among the best in the world (21st) with 34 World Heritage Cultural sites, several international fairs and exhibitions and strong creative industries.

These inherent strengths are reinforced by the overall prioritization of the sector in the country (3rd.) and effective marketing and branding campaigns. Some areas have improved, yet continue to require attention –for example, ground transportation infrastructure is being developed but still ranks relatively low (69th), and more efforts are required to ensure that, this sector, is being

developed in a sustainable way. Finally, despite a marginal improvement since 2011, safety and security remains the main source of concern for the tourism and travel sector, where Mexico still ranks low on the 121st. position.¹²

II. EDUCATION IN COUNTRY

The Public Education Secretariat (*Secretaría de Educación Pública – SEP*) is the official body responsible for education. The SEP shares this responsibility with various national and regional bodies. Each state has its own Education Secretariat.

The Mexican education system is based on Section 3 of the Mexican Constitution and on the General Law of Education. In Mexico, compulsory education lasts 10 years from age 6 to age 15 (primary and lower secondary education). All programs at upper secondary level require the payment of a tuition fee.

Official school ages by level of education are pre-school: 5 to 6 years old, primary school: 7 to 12 years old, secondary school: 13 to 17 years old and tertiary education: 18 to 22 years old.

SCHOOL AGE POPULATION BY EDUCATION LEVEL¹³

Pre-school	854,142
Primary	2,409,928
Secondary	1,783,506
Tertiary	1,567,642

The illiteracy rate data, for the population between 15 to 24 years old in 2012, was 193,958 (69,231 male and 124,727 female). Population from 15 years and older (2012) was a total of 1,937,141, being 641,111 males and 1,296,030 females.

The country's educational performance¹⁴ has improved in recent years. It has raised participation in childhood education to almost 100%, with some of the highest enrolments across OECD. Children age 5 to 14 are attaining primary and lower secondary education, but there is a gap in upper secondary enrolment, graduation and performance. For those in education at age 15, mathematics performance improved between 2003 and 2009, but performance in reading and science remains among the lowest across OECD countries. Mexico has been demonstrating, in the last years, that there have been improvements in equity distribution of learning opportunities.

¹² Table extracted from the World Economic Forum Travel and Tourism Competitiveness Index 2013 (page 250).

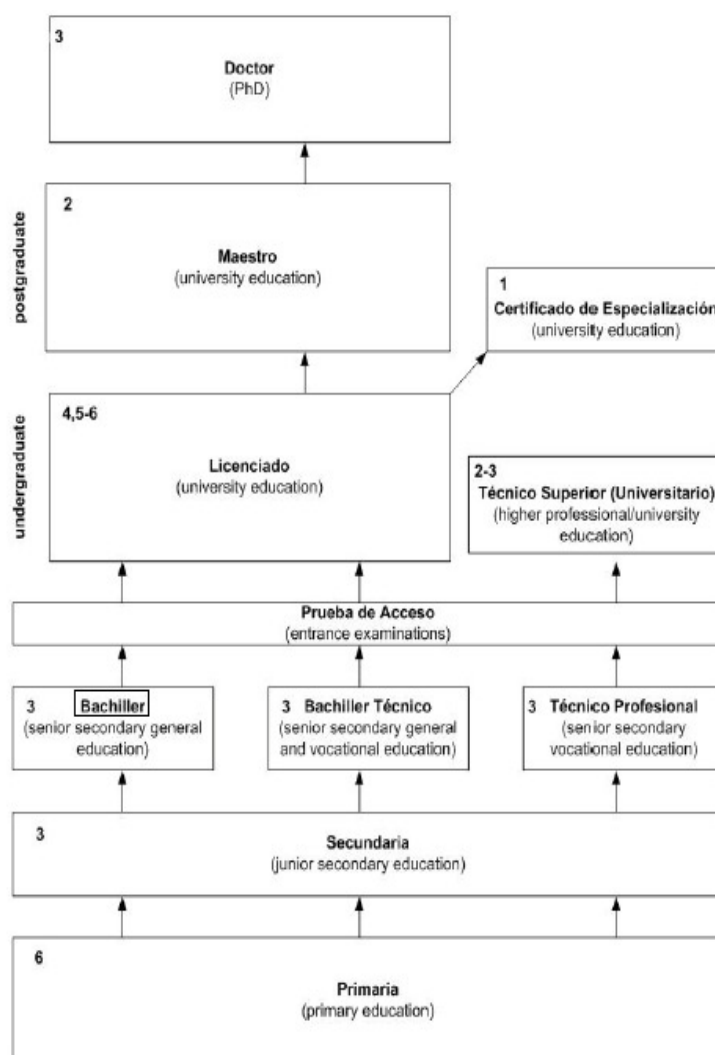
¹³ <http://www.uis.unesco.org/DataCentre/Pages/country-profile.aspx?regioncode=40520&code=GTM>

¹⁴ Mexico Education Policy Outlook. OECD 2013

Upper secondary graduation rates have been increasing at an annual average of 3.6% between 2000 and 2011. Tertiary education graduation rates have also been increasing representing 23% of 25-34 year-olds attaining tertiary education. Labor market perspectives for students are positive at all levels of education. However, 24.7% between 15-29 years-old were not enrolled in school and not employed in 2011.

Mexico is one of the few countries with higher unemployment rates among individuals with tertiary education among OECD countries (4.8%), than those with upper secondary education (4.4%). The proportion of 15-29 year-olds not in the education system and not employed (24.8%). This pattern has remained stable in the past decade in Mexico, suggesting a potential structural mismatch between labor market supply and demand and higher demand for low-wage jobs.

EDUCATION SYSTEM¹⁵



¹⁵ Mexico Country Module, 2nd Edition version 2. NUFFIC, Evaluation of foreign degrees and qualifications in the Netherlands. February 2013

A. EDUCATION RELATED LAWS

- Political Constitution of the Mexican United States, Article 3: Establishes the right to education and the State's legal duty to offer compulsory basic education (three preschool cycles, six primary cycles and three secondary cycles; totaling 12 school years starting from age three).
- Law of Public Federal Administration, Article 38 where the functions of the Public Education Secretariat (SEP) are included.
- Internal Regulation of SEP, describing the specific functions of the Public Education Secretary, the Undersecretaries, General Directions and the decentralized education institutions.
- General Law of Education: This Law regulates the education imparted by the State – the Federation, States, and municipalities, its decentralized organisms and the private parties with authorization or with recognition of official validity of studies. It is of general observance in all the Republic and the provisions contained in this law are of public order and social interest.
- Regulation of Education in Federal Matters: Is the legislation related to the process of learning and education as the main function of the SEP. It includes the regulation of the integration of private educational institutions and the guidelines are applicable to plans and programs of study.
- Law of Science and Technology: Its objective is to regulate the economic support that the Federal Government provides to promote, strengthen, develop and reinforce the technology development and innovation within the country.
- Law of Linguistic Rights of Indigenous Population: Its main objective is to recognize and protect the linguistic rights –individuals and collective, of indigenous communities or groups; and the encouragement of its use and the development of indigenous languages.

B. EDUCATION LEVELS

SEP has established four different levels of formal education:

EDUCATION LEVEL	OBJETIVE
Kindergarten – Initial Education (<i>Educación Pre-primaria</i>)	Educational services for children under six years old, essential to ensure optimum training and development.
Primary school – Basic Education (<i>Educación básica</i>)	Educational services for children within 6 to 13 years old, essential to acquire fundamental knowledge.

EDUCATION LEVEL	OBJETIVE
High school – Secondary and Upper Secondary Education (<i>Educación Media Superior</i>)	<p>It has a nominal duration of 3 years and offers three types of education:</p> <ul style="list-style-type: none"> General senior secondary education, which prepares for higher education and culminates in Baccalaureate (<i>bachiller</i>) certificate. General Senior Secondary Education with a vocational component, Technical Baccalaureate (<i>bachillerato tecnológico</i>), also known as bivalent baccalaureate (<i>bachillerato bivalente</i>), provides admission to higher education and culminates in the Technical Baccalaureate (<i>Bachiller Técnico</i>) certificate. Purely vocational education (<i>educación técnica profesional o terminal</i>), which grants no admission into higher education. It lasts 3 years (although shorter programs are in existence). Upon completion of the program, students are awarded the Technical Certificate (<i>Certificado Técnico</i>), also known as <i>técnico profesional</i> or <i>profesional técnico</i>.
Higher Education (<i>Educación Superior</i>)	<p>It is made up of the universities, technical universities, institutes of technology and teacher-training institutes for basic education (<i>escuelas normales</i>). Mexico has around 600 higher education government institutions and about 1,100 private institutions of higher education.</p>

Since 1994 Mexico became member of the Organization for Economic Cooperation and Development (OECD) and this has been very influential in education with involvement in the OECD program for international student's assessment (PISA) –a triennial survey of the knowledge and skills of 15-year-old school students.

III. NATIONAL TVET LEGISLATION, POLICY, STRATEGY, STRUCTURE AND STATUS

TVET in Mexico plays an important social role by providing learning opportunities to students at risk of dropping out. Several federal institutions play an important role promoting the technical and vocational education and training and skills development within the country.

A. TVET LEGISLATION

Lifelong learning plays an important role in the thinking of Mexican policymakers, and a number of measures have been introduced accordingly.

- Political Constitution of the Mexican United States
 - Article 3: “All people have the right of education. The General State – Federation, States, Districts and Municipalities-, will provide preschool, elementary, middle and high education”.
 - Article 123, section (a), item xiii states that companies, whatever their activities may be, are compelled to provide their employees with training and skills development for work.
 - Article 5: “No person may be prevented from performing the profession, industry, business or work of his choice, provided that it is lawful. This right may only be banned by judicial resolution, when third parties’ rights are infringed, or by government order, issued according to the law when society’s rights are infringed. No one can be deprived of legal wages, except by a judicial ruling.
- Law of Professions: Regulated the Article 5 of the Political Constitution, and it is related to the practice of a profession in the Federal District.
- Law of Coordination of Higher Education: Establishes the foundation for the distribution of the higher education functions among the Federal Government, the State Government and the Municipalities; as well as to determine the economic support for it.
- General Rules and Criteria for the Integration of the National Competency-Based System (November 2009).

B. POLICIES

- Pact for Mexico: An agreement between the most important political parties and the Federal Government (Signed in December 2012). It sets out clear commitments on education to increase education coverage in upper secondary (80%) and tertiary education (40%), among others.
- Agreement 286 (October 30, 2000), Public Education Secretariat: It is designed to give learners access to all levels of the education system by offering an alternative pathway to that provided by the formal system. This Act also allows equivalences of competence certificates with credits of formal education programs at the vocational and professional levels. In accordance with it, CONOCER promotes the development of certifiable standards for recognizing the competences of workers, so employers can endorse the assessment and certifications unit standards, and CONOCER then issues the official “labor competence certificate”.

C. TVET FORMAL, NON-FORMAL AND INFORMAL SYSTEMS

The recent evolution of the Mexican labor market is mainly a result of structural changes in the economy during the last decades, demographic and educational changes, greater participation of women in paid activities, and other factors associated to the economic cycle that alters the composition of employed and unemployed people and formal and informal sectors of the economy. In addition, there have been changes in technology and in the demand for goods and services that have created both a shift in the employment demand for workers with higher educational levels and qualifications, in addition to a growing competition for employment.¹⁶

The Public Education Secretariat (*Secretaría de Educación – SEP*) and the Labor and Welfare Secretariat (*Secretaría de Trabajo y Previsión Social*) offer formal and informal technical education and training courses. The Education Secretariat is responsible for the National System of Technical Institutes (SNIT), which offers formal technical education and training from upper-secondary to graduate levels.

Technical and vocational education and training (TVET) provided under the upper secondary education, has three main types of programs:

1. Training for Work courses level 2 are short training programs, taking typically 3 to 6 months to complete. The curriculum includes 50% theory and 50% practice. After completing the program, students may enter the labor market. This program does not provide direct access to tertiary education.
2. The title “technical professional – baccalaureate”) is offered by various subsystems, although one subsystem –CONALEP- includes two thirds of the total of the students. The program involves 35% general subjects and 65% vocational subjects. Students are required to complete 360 hours of practical training.
3. The program awarding the “technological baccalaureate” and the title “professional technician” is offered by various subsystems. It includes more general and less vocational education: 60% general subjects and 40% vocational subjects.

The upper secondary system in Mexico is composed of over a dozen subsystems which differ from each other to varying degrees. The differences are in content, administration and target group, among others.

D. STATUS

Even though the national qualification framework is under validation, Mexico has many years’ experience in the development of a Labor Competence Framework, which shares aims and characteristics with many National Qualification Frameworks (NQFs) worldwide. The framework envisions the basis for qualifications in technical vocational education and training, as well as

¹⁶ Recognition of Non-Formal and Informal Learning in Mexico, Background Report. OECD

workplace-based training. The Mexican framework has five levels, and originally had 12 horizontal divisions, but this was changed to 11 divisions, and then again changed to 20 divisions.

The framework has been developed through two different projects, both of which were broadly concerned with vocational, technical, and workplace training as well as broader human resource development. The first approach to a qualifications framework took place from 1994 to 2003 with the Technical Education and Training Modernization Project (PMETyC) financed by the World Bank and managed through the Secretariats of Labor and Social Welfare (STBS) and Public Education (SEP). It was strongly influenced by the British NVQ model. The National Council for Normalization and Certification (CONOCER) was created with broad stakeholder and inter-departmental representation to establish an integrated framework of 12 competence areas and 5 levels, to develop the labor competence technical standards with which to populate this framework, and to develop an assessment and certification system and the regulatory framework from awarding bodies.

In 2005 a new project began, funded by the Inter-American Development Bank. CONOCER was reorganized and the emphasis of the new project was to ensure that the Labor Competency Framework relates to educational institutions as well as human resource development strategies in companies, and that stakeholder participation was improved. The grid has been changed to include 20 sectors. There is a stronger sectorial focus in implementation with ten strategic sectors identified. In 2008 the Mexican government decided to re-launch CONOCER with a new approach, which is described as working closely with enterprises and producing demand-driven standards.

IV. ADMINISTRATIVE STRUCTURE FOR LABOR COMPETENCIES MANAGEMENT (ACCREDITATION ON COMPETENCIES FOR WORK) AT NATIONAL LEVEL

In Mexico, the recognition of labor competences for workforce development and employability is closely associated with the National Competency System (SNC for its Spanish acronym) developed by CONOCER and under which recognition of non-formal and informal learning is organized, regulated and implemented.

THE SNC is a federal governmental instrument created with the aim to contribute to economic competitiveness, educational development and social progress of the country, based on strengthening the powers of the people to successfully meet the challenges of increasingly globalized markets. The SNC provides mechanisms for both public and private institutions to have more competent people.¹⁷

At **Structural Level** the SNC is comprised of three councils representing the labor sector, the employment/private sector and the government sector. The private sector (employment sector) has three representatives: the Entrepreneurial Coordination Council (*Consejo Coordinador Empresarial* –

¹⁷ http://www.conocer.gob.mx/index.php?option=com_content&view=category&layout=blog&id=1&Itemid=3. Retrieved on February 24, 2015.

CCE), the Mexican Employers Confederation (*Confederación Patronal de la República Mexicana – COPARMEX*), and the Confederation of Industrial Chambers of the Mexican United States (*Confederación de Cámaras Industriales de los Estados Unidos Mexicanos – CONCAMIN*).

The labor sector has also three representatives: the Revolutionary Confederation of Workers and Peasants (*Confederación Revolucionaria de Obreros y Campesinos – CROC*), Confederation of Mexican Workers (*Confederación de Trabajadores de México – CTM*) and the Labor Congress (*Congreso del Trabajo*).

The governmental sector has six representatives from the Federal Government: Public Education Secretariat (SEP), Labor and Social Welfare Secretariat (STPS), Economy Secretariat (SE), Agriculture, Livestock Rural Development, Fisheries and Food Secretariat (SAGARPA), Tourism Secretariat (SECTUR), Energy Secretariat (SENER), and the Secretariat of Finance and Public Credit (SHCP).

At **Strategic Level** the SNC is integrated for the Competences Management Committees (*Comités de Gestión por Competencias -CGC*) who are in charge of the definition of the competency standards and provides recommendations for the assessment and certification. These committees have participation of business sector leaders and workers of the different productive sectors. As of February 2014, CONOCER has integrated 147 Competences Management Committees as follows:

INSTALLED COMPETENCES MANAGEMENT COMMITTEES ¹⁸	
Productive Sector	100
Government	19
Social Sector	11
Educational Sector	15
Arts and Culture Sector	2
TOTAL	147

The **Operational Level** is where the assessment and certification processes, based on evidences, take place. At this level, participants of the CONOCER network integrated by the Evaluation and Certification Agencies, the Certification Bodies, the Evaluation Centers and the independent evaluators operate in maintaining a client-oriented philosophy of excellence in service.

A. GENERAL DIRECTORATE OF TRAINING CENTER FOR WORK - DGCFT

The DGCFT is a centralized body of the Federal Public Administration attached to the Under-secretariat of Higher Secondary Education (SEMS) from the Secretariat of Public Education (SEP) and is responsible for training and work that is taught in the Training Centers for Industry Labor (CECATI) and regulation of private schools built and decentralized that offer this type of

¹⁸ http://www.conocer.gob.mx/index.php?option=com_content&view=category&layout=blog&id=5&Itemid=7 . Retrieved on March 19, 2015.

instruction. The DGCFT main objective is the development of human resources to meet the needs of the productive and service sectors, while under its responsibility, and training for work that is taught in the CECATIs or ICATI (The Institute of Training and Education for Industrial Work).

The Institute of Training and Education for Industrial Work (ICATI), has as main objective promote training to enable young people and adults in the State of Mexico, gain knowledge, develop skills and competencies through technical, administrative and service courses. Likewise, in the ICATIs, ICATs and CECATIs the needs of the business sector are addressed, through providing the specialized resources that promote the productivity of their workers.

B. UNDERSECRETARIAT OF HIGHER EDUCATION - SES

SES is part of the Public Education Secretariat (SEP) and is responsible for promoting quality education that allows the formation of competitive professionals and committed to regional and national development, and contribute to building a more fair society.

Through its various public policies, plans and programs, the SES works to provide a fair, relevant, flexible, innovative, diversified and comprehensive coverage of education. It seeks to move towards strengthening an increasingly integrated and articulated Up-to-date System of Higher Education, promoting equity in education, retention of students and promotion of graduates.

This Under-secretariat of the SEP has four general directorates: Higher University Education, Higher Technological Education; Higher Education for Educational Professionals, and Liberal Professions.

Objectives:

- Provide the public with training programs that enable their incorporation into a compensable and socially useful work.
- Link CECATIs with business and government sectors to ongoing review of the curriculum and trainees access to the production plant, in order to supplement their training and facilitate their adaptation to production processes.
- Validate the knowledge and skills acquired outside the classroom.
- Train for work as part of the integral growth of individuals providing full development of their capabilities.

C. LABOR AND SOCIAL SECURITY SECRETARIAT - STPS

The Labor and Social Security Secretariat has as one of its main strategies of labor policy the promotion of the advantages that training represents and the improvement of the productivity of the work centers. The activities have been oriented to the following main goals:

- To guide enterprises in the development of actions of training, improvement of the productivity and of working conditions, as well as the implementation of modern systems of remuneration.
- To offer technical assistance and economic support to enterprises or groups of enterprises to provide training programs and productivity improvement. The actions have been oriented to small and medium enterprises which generate more than 70% of the country occupation. The STPS through the general direction of training and productivity has, as one of its functions, to give support to the training activities that the different working places offer. It also, promotes and watches over the enforcement of the legal requirements of enterprises and training agents.

In order to carry out the training and productivity processes technical guides for self-management have been elaborated. These guidelines allow institutions to use its resources in a more efficient way through methodologies and other instruments that are easy to apply.

The STPS, in order to support micro, small and medium enterprises to increase productivity and the improvement of the quality of their business, has developed technical guidelines for clothing, restaurants, wood products and auto-mechanic shops. These guidelines are for self-application, drafted in a simple language and represent an innovative alternative, with less investment to train personnel and facilitate creativity and modular consultancy.

D. COUNCIL FOR NORMALIZATION AND CERTIFICATION - CONOCER

The National Council for Normalization and Certification (CONOCER for its Spanish acronym) is a parastatal institution of the Mexican Federal Government, sectioned in the Public Education Secretariat (SEP), with tripartite participation of the Secretariats of Labor, Economy and Education.

The Secretariat of Education created a framework of national qualifications and levels (following UNESCO's ISCED levels), meanwhile, CONOCER has sector-specific competency committees, who define occupational standards. In some fields and sub-systems of upper secondary TVET, Mexico has excellent data on the labor market outcomes of TVET graduates through the Labor Market Observatory.

Encouraging measures have been taken to integrate TVET into a broad framework of lifelong learning including the elimination of dead-ends and recent reforms aiming to facilitate mobility within the educational system.

E. NATIONAL COLLEGE FOR TECHNICAL AND PROFESSIONAL EDUCATION – CONALEP¹⁹

CONALEP was created by presidential decree in 1978 as a decentralized public agency of the Federal Government, with legal personality and its own assets. Its main objective was oriented to the formation of technical professionals and high school graduates. In 1993, the decree was reformed to open the expectations for job training, inter-sectorial cooperation, community support and technological advice and assistance to businesses. In 1994, according to the country's needs, CONALEP adopted the scheme of Standards of Competence-Based Education and Training (CBET), launching the reform of its educational model consistent with this approach.

In 1998, as a result of their experience in developing training programs under the scheme of CBET, CONALEP undertook a project for accreditation of schools as centers Work Skills Assessment with the purpose of boosting the evaluation of skills acquired throughout life, with the benchmarked Technical Standards of Labor Competency. In 2003, a new academic reform was carried out, with which innovated and consolidated the methodology of Education and Training Based on Contextualized Competencies. In 2008, took place the reorientation of the educational model, in response to the demand for training of highly qualified human resources and recognized in the productive sector, with a strong occupational and academic training for competitiveness, supported by civic values and environmental sustainability, which contribute to national development.

By amending the Decree of Creation held in 2011, the training of technical professional associate degree is incorporated. CONALEP is currently a federalized Institution, consisting of a central unit that regulates and coordinates the system; 30 State Colleges; Decentralized Unit Operation in Mexico City and the Representation in the State of Oaxaca. This structure allows the operation of services on 308 campuses, which are located in major cities and industrial zones, eight service centers and Technological Services (CAST for its Spanish acronym).

Mission: CONALEP has the mission to offer competency-based training for Professional Technicians and Professional Technicians Bachelors. It trains and assesses the labor competencies needed by the production sector of our country.

Vision: CONALEP is a leading institution in the training of Professionals Technicians and Professionals Technicians-Bachelors in Mexico, offering recognized quality programs based on the Mexican dual model, their graduates have relevant job skills and social values that allow them to be competitive in the labor market and pursue post-secondary studies.

Objective: To form professional technicians and professional technician-bachelors.

¹⁹ <http://www.unevoc.unesco.org/go.php?q=UNEVOC+Network++Centre&id=3051&pg=1>. Retrieved on March, 2015.

Regular Tasks: CONALEP is an institution that forms professional technicians in 47 different disciplines divided in two principal sectors: industrial and services. Part of its regular tasks follow the demands and educational reforms in Mexico, some of which are listed below:

1. Develop new courses according to the demands of the production sector;
2. Develop curriculum and update equipment;
3. Reduce failure and dropout rates;
4. Implement strategies to develop scholarship programs for students;
5. Strengthen international cooperation with institutions that benefit the CONALEP system;
6. Implement strategies for expanding education provision;
7. Promote links with the industry to reduce unemployment.

V. METHODOLOGY USED FOR THE CONSTRUCTION/IMPLEMENTATION OF KEY STANDARDS AND LABOR COMPETENCIES AND TRAINING PROGRAMS CONTENTS INCLUDING STAKEHOLDER'S CONSULTATION PROCESS

CONOCER creates the National Competence System (*Sistema Nacional de Competencias -SNC*) for the purpose of organizing, implementing and regulating mechanisms for the recognition and accreditation of all learning –formal, non-formal, and informal. CONOCER is a government organization with a three party governance model, CONOCER provides a platform for linking education and the world of work in order to make the Mexican labor force more competitive. All stakeholders agree with the SNC recognition practices: employers, workers, educators and the government. These are designed to ensure that Mexican society has competent workers in every area, thus promoting economic growth, educational development and social progress. Three institutional pillars sustain Mexico's Competency System:

- Sector committees
- Mechanisms for alignment between educational curricula and “on-the-job” training
- National structure for evaluation and certification.

CONOCER created and trained technical expert groups (GTES) to develop Competency Standards. The GTES is responsible to develop a Functional Map including all individual functions in order to identify those that must be standardize.

The Competence Management Committees of employers and workers develop competence standards for the economic sector they represent with support from the GTES. They may adjust educational curricula and recommend the creation of ad-hoc programs. Members are high-level executives and experts from key areas, as well as representatives of employers' organizations, social organizations and government institutions. The CMCs are the strategic forums where:

- Define human capital agenda for competitiveness of the productive, social, educational and government sectors.
- Define and propose solutions relevant to the assessment and certification for different Competency Standards for the different sectors.

The objectives of the CGC are:

- Promote the development and implementation of the National Skills in its sector.
- Define human capital agenda for competitiveness in the sector.
- Develop and update the Competency Standards (EC), the Proficiency Assessment instruments and, the mechanisms that encourage certification of workers in the sector.
- Follow up and drive operational excellence solutions for Evaluation and Certification in its sector.

The Competence Management Committees can be integrated based on the request of associations, chambers, entrepreneur confederations, businesses, labor unions, civil society organizations and the Government interested parties to become part of a CGC. One or more committees per economic, social or governmental activity can be integrated.

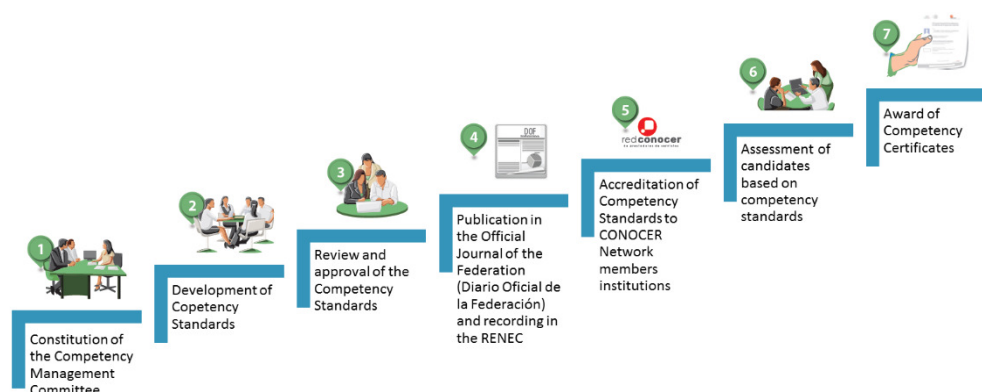
A proposal that includes the business or organizations profile has to be submitted to CONOCER's Approval Committee, which analyzes and validates the proposal to conform the Committee. Once approved, one or several Technical Groups are comprised with highly experienced staff in relation to the activity or economic sector. These groups are in charge of developing the Functional Map, the Competency Standards and the Assessments Tools, which have to be validated by the CGC. The updated version of those documents along with the Proposal for Assessment and Certification Solutions are submitted for the validation and final approval of CONOCER.

VI. PROCESS OF THE DEVELOPMENT OF CURRICULAR OR PROGRAM CONTENT ADAPTATION BASED ON KEY STANDARDS AND BASIC COMPETENCIES FOR WORK

The National Competence System (SNC) is a framework for the recognition and accreditation of labor competences. It is based on six strategic principles:

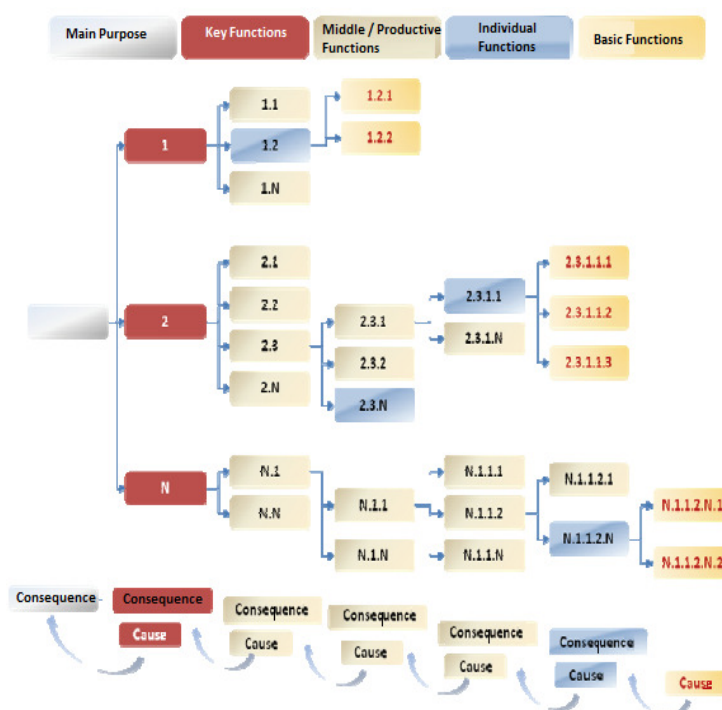
- Helping employers, workers, educators, and the government to work together to improve economic competitiveness and growth.
- Involving all sector leaders in setting agendas and making decisions.
- Encouraging employers and workers to play an active role in designing the SNC, thus fostering demand for competent workers.
- Offering recognition and certification to all who require it, including private sector and self-employed workers, government workers, teachers and students.
- Developing education curricula aligned to the SNC.
- Promoting new paradigms for assessment based on demonstration of competences in addition to traditional knowledge tests. The Competency Standards are the definitions of knowledge, skills and attitudes required for a person to perform any productive, social or government activity, with a high performance level defined by the sector themselves.

CONOCER defined seven stages in the National Competency System²⁰:



A functional map is the graphic representation of all the structured required functions, which allows reaching the expected results identified by the CGC. The background is comprised of several key indicators such as population (number of people that contribute to the achievement of the function), businesses (Name of the main institutions where this function is performed), and source of information (where the information is obtained), SCIAN²¹: It includes code and title of the sector, sub-sector code and title.

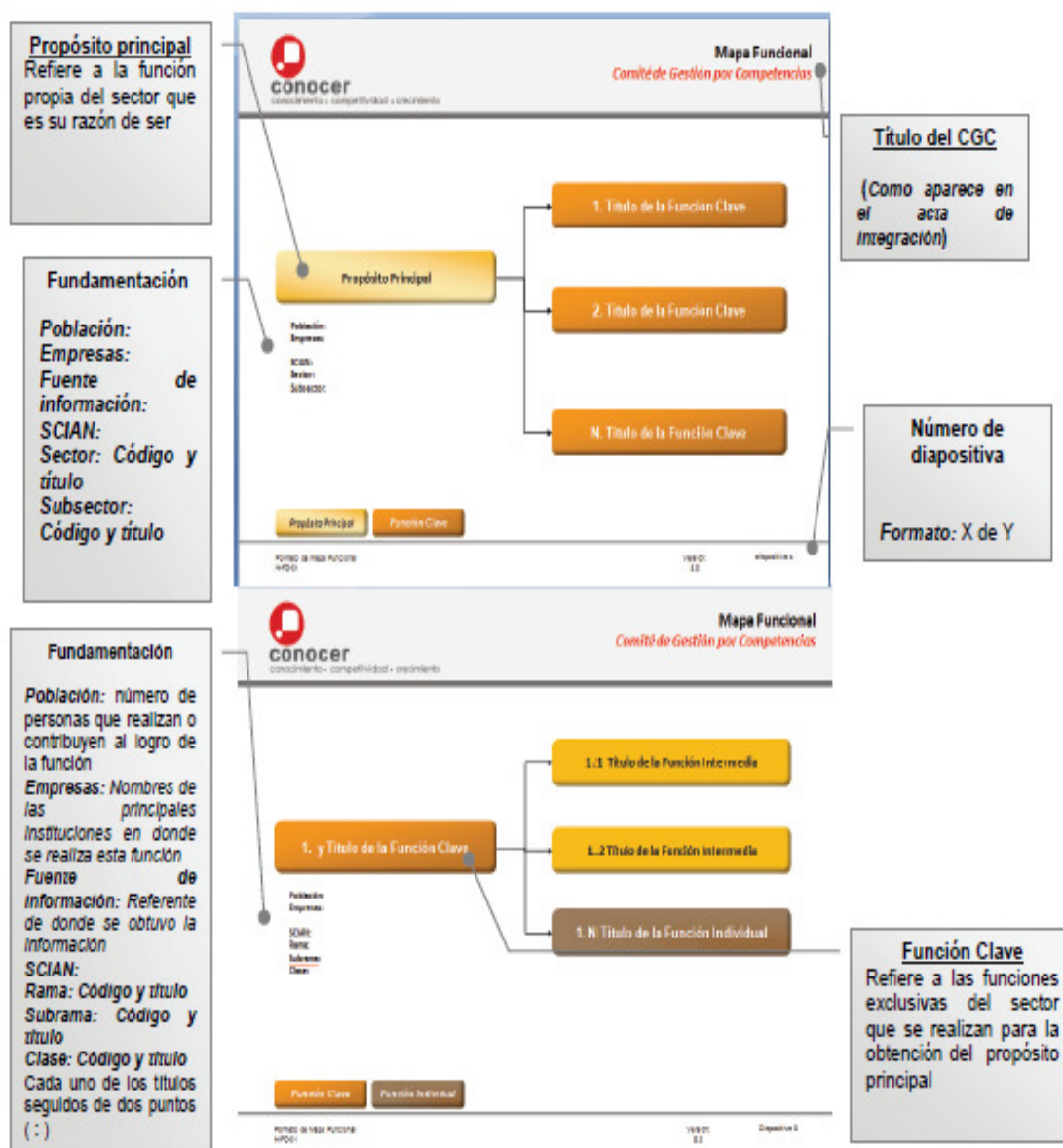
STRUCTURE OF A FUNCTIONAL MAP²²



²⁰ Adapted from the information brochure of the National Competency System

²¹ North America Classification Industrial System

²² Guía técnica para el Desarrollo del Mapa Funcional (Código N-DPSN-GT-2010). Secretaría de Educación Pública. Consejo de Normalización y Certificación de Competencias Laborales. Pág. 5

FORMAT OF THE FUNCTIONAL MAP²³

There are 27 Competencies for the tourism and related-tourism industries registered in the National Registration of Competencies RENE²⁴.

²³ Guía Técnica para el Desarrollo del Mapa Funcional (Código N-DPSN-GT-02-2010) Secretaría de Educación Pública, CONOCER, 2010.

²⁴ <http://www.conocer.gob.mx/index.php/estandaresdecompetencia.html>. Retrieved on February, 2015.

CODE	NAME OF STANDARD	LEVEL OF COMPETENCY	COMMITTEE
EC0010	Provision of personal aesthetic service	2	Massages and Spa Services
EC0016	Specialty service attention to diners	2	National Restaurant Industry
EC0038	Attention to diners	2	Tourism
EC0042	Food and beverages service coordination	3	Tourism
EC0043	Housekeeping for temporary accommodation	2	Tourism
EC0044	Housekeeping and cleaning services coordination for sitting areas and rooms for temporary accommodation	3	Tourism
EC0045	Reception and guest services for temporary accommodation	2	Tourism
EC0046	Provision of facial cosmetic services	2	Massages and Spa Services
EC0047	Monitoring the conditions or guest registrations and stay	3	Tourism
EC0072	Care site attention for visitors during tours	2	Aguascalientes Tourism Services
EC0086	Preparing coffee based beverages	2	Mexican Association of Coffee and Specialty Coffee shops (<i>Asociación Mexicana de Cafés y Cafeterías de Especialidad, A. C.</i>)
EC0117	Ayurveda Abyanga massage application	2	Massages and Spa Services
EC0122	Deep tissue massage application	2	Massages and Spa Services
EC0123	Holistic massage application	2	Massages and Spa Services
EC0124	Swedish massage application	2	Massages and Spa Services
EC0125	Mezcal Sale in food and beverage establishments	2	Mezcal Services
EC0126	Industrial kitchen cleaning	2	Tourism
EC0127	Food preparation	2	Tourism
EC0128	Beverage service preparation	2	Tourism
EC0143	Shiatsu massage application	2	Massages and Spa Services
EC0183	Client service in Spa	2	Massages and Spa Services
EC0184	Industrial laundry operation	2	Bahía de Banderas Tourism Services
EC0186	Spa business management	4	Massages and Spa Services
EC0206	Coordination of linear work	3	Bahía de Banderas Tourism Services
EC0313	Manufacture of artisanal mezcal	2	Mezcal Services
EC0314	Practical management of wine in consumption and sales places	3	National Restaurant Industry
EC0427	Lymphatic draining massage application	2	Massages and Spa Services

VII. PROCEDURE FOR THE EVALUATION AND CERTIFICATION OF KEY AND BASIC LABOR COMPETENCIES

Mechanisms for alignment between educational curricula and “on-the-job” training depend on the competence standards developed by the sector committees. These are formally recorded in the National Register of Competence Standards, which functions as a national reference for all persons certifiable by CONOCER.

The national structure for evaluation and certification is a network of training, evaluation and certification providers, which assures credibility to users; both within the country and internationally. All formal basic education and the most upper-medium (baccalaureate and technological) education is coordinated by the SEP. However, some institutions for upper-medium education are run or recognized by autonomous universities or by the National Polytechnic Institute (*Instituto Politécnico Nacional – IPN*). The SEP issues nationally valid formal certificates at the end of secondary, upper-medium and higher education, and confers technical titles upon completion of a specialization in upper-medium technological education. On behalf of the SEP the General Directorate of Liberal Professions registers and confers titles upon completion of Bachelor’s degrees, Master’s degrees and Doctorates.

In addition, CONOCER have been working together with the Secretariats of Education, Labor and Economy on improving training, evaluation and certification in the workplace. This involves identifying the sectors of the economy, which are most in need of greater human capital, and using competence standards to make educational curricula more relevant to the needs of these sectors.

MECHANISMS FOR EVALUATION AND CERTIFICATION²⁵

The mechanisms for assessment and certification of competences are based on portfolios evidence, observations of real-life performances, interviews or proof of knowledge. When required, evaluation of attitudes, behavior, and personal values are carried out through professional assessment tools. There is also a process to provide feedback from evaluations to positively impact an employer’s organizational success or an employee’s career development.

A candidate, firm, trade union or institution who approaches an evaluation center to go through evaluation and certification processes, first receive a letter detailing rights, obligations and costs of the process. All candidates who decide to participate in the process are accepted for the evaluation and certification process. Legally, there is no restriction for anyone who decides to start the process. Applicants may go through a voluntary diagnostic assessment to determine their level of competences. The applicant then decides if he/she wants to go directly to the evaluation process, or improve its competences through a particular training program or additional work experience. If he/she feels ready, then goes directly to the evaluation process and further certification. The cost depends on the market of service providers together with a fee to be paid to CONOCER (this depends on the level of the certificate; for example, for certificates at level 1 the fee is about US\$5.00, for level 2 US\$15, and for level 3 US\$30. Most of the processes are promoted and driven in an institutional way. The majority of the applicants

²⁵ García-Bullé, Sergio G. Linking recognition practices and National Qualifications Frameworks: International benchmarking of experiences and strategies on the recognition, validation and accreditation (RVA) of non-formal and informal learning. Chapter 22, Mexico: The National System of Competence Standards (NSCS) and recognition. UNESCO Institute for Lifelong Learning 2013.

are presented by trade unions, employers' associations, individual firms or educational institutions. Until now, few individuals approach the system for a single certification.

CONOCER certification of competences is official and valid throughout Mexico, as it is issued by an entity that belongs to the Public Education Secretariat. In addition, equivalency with credits of formal education programs at the vocational or professional levels is guaranteed through an agreement issued by the Secretary of Education. Employers and trade unions, through their sectorial committees also endorse the certifications, thereby providing validity and credibility to the labor market.

CONOCER adopts a holistic approach to the development of competences. Its concept of competences includes:

1. **Knowledge and abilities** required to execute a particular function in any service or manufacturing sector.
2. **Social competences**, including the capability to build a relationship of trust with others, working in teams and building social networks.
3. **Attitudes**, including the ability to achieve goals self-confidence, resilience, motivation and the strength to fight for one's beliefs.
4. **Intellectual competences**, namely the capabilities to generate new ideas and innovation.
5. **Ethical competences**, including core values that help to distinguish between right and wrong.

STRUCTURE FOR ASSESSMENT AND CERTIFICATION

CONOCER promotes the participation of relevant prestigious institutions in its assessment, validation and certification procedures, including employers', workers', academic and government institutions. This helps to develop a network of institutions and providers of assessment and certification services.

A. QUALIFICATIONS AND QUALIFICATION FRAMEWORK

Outside the national educational system, diplomas called "*constancias*" are awarded for certain courses and/or non-formal education. These can be recognized by the Secretariat of Public Education (SEP) as equivalent to qualifications within the national education system. In such circumstances, the SEP establishes criteria on a case-by-case basis and sets out procedures to follow for recognition.²⁶

1. SECONDARY VOCATIONAL EDUCATION

National education programs have emphasized technological upper-medium education. The SEP has approved The Under-Secretariat of Upper-Medium Education which retained responsibility for gathering and disseminating data and information from the different institutions (public and private) providing this kind of education; including the National Council for Technical and Professional Education (CONALEP).

²⁶ Law of General Education. Article 64.

2. NATIONAL QUALIFICATIONS FRAMEWORK

The Mexican Qualification Framework (MQF) was developed by the General Directorate of Accreditation, Incorporation and Revalidation (*Dirección General de Acreditación, Incorporación y Revalidación – DGAIR*)²⁷. CONOCER is participating in the development of the MQF specifically on issues related to the NCS and equivalences with formal educational degrees.

SEP-STPS-CONOCER defined in 2000 five levels of competencies. These are not described in the updated CONOCER Web site, but we found it along the different Competency Standards approved.

LEVEL OF COMPETENCY	DESCRIPTION
5	Competence that involves the application of a range of fundamental principles and complex techniques, across a wide and often unpredictable variety of contexts. High degree of personal autonomy. Frequent responsibility for the allocation of resources. Responsibility for analysis, diagnosis, design, planning, execution and evaluation. Responsibility for all team works results under his/her leadership.
4	Competence in a broad range of complex, technical or professional work activities performed in a variety of contexts. High degree of personal responsibility and autonomy. Responsibility for the work of others. Occasional responsibility for the allocation of resources.
3	Competence in a broad range of varied work activities performed in a wide variety of contexts, most of which are complex and non-routine. There is a considerable responsibility and autonomy. Control or guidance of others is often required.
2	Competence in a significant range of varied work activities, performed in a variety of contexts. Some of the activities are complex or non-routine. Responsibility and autonomy are low. Collaboration with others is often required or through a work group or team.
1	Competence in the performance of a small range of varied work activities. Routine and predictable activities are predominant.

VIII. RESULTS TO DATE OR RESULTS EXPECTED

Since 1990, lifelong learning has played an increasingly important role in Mexico. The Mexican approach distinguishes between separate pathways to the same educational or qualification outcome. The informal and non-formal pathways, though outside the traditional institutional structures.

²⁷ UNESCO Institute for Lifelong Learning. National Qualification Frameworks: Mexico. 2013

An impact evaluation has not yet been conducted. CONOCER is in the process of developing tools and mechanisms to evaluate it. However, so far, has developed a database of firms, voluntary and educational institutions that certify workers (CONOCER Network).

As of December 2014, CONOCER Network contains about 70 accredited entities for evaluation and certification of competences, and more than 2,000 points of contact to provide services around the country.

Over the last five years CONOCER has issued more than 400 thousand certificates of competence, 65% more that during its first 12 years of operation.

Mexico displays a sub-sectorial approach to the recognition of non-formal and informal learning, with different approaches in primary and secondary education, higher education and the employment sector.

The National Competency System aspire to create links with international qualifications frameworks in order to facilitate labor mobility within the country, the regional and eventually the wider world.²⁸

As of April 12, 2015 23 sectors of the national economy that represent about 65% of GDP has competency standards²⁹. There are 460 Competency Standards recorded at the National Registry of Competencies (*Registro Nacional de Estándares de Competencia*) – *RENEC*³⁰, twenty-seven (27) of them have been developed for the tourism and travel sector (see page 27 of this document).

IX. OPPORTUNITIES AND CHALLENGES

Due to demographic changes and migration of many young people to the United States, a gradual aging of the population has taken place. At the same time, the proportion of people who never entered school or who left school early is higher than those who are registered in initial education. Despite these features, Mexican society places high importance on qualifications levels and is a strongly credential-oriented society. Raising levels of educations, skills development and social engagement are seen as crucial for the continued development of a strong social and economic democracy in Mexico³¹.

Over the last decade, capacity building in higher education has been the main concern of the Mexican higher education policy. Most of the growth in Mexican higher education system has been concentrated at the “*licenciatura*” level (first degree- Bachelor’s degree- requiring 4.5 to 5 years of study), while shorter vocational higher education grew at a much slower pace (it represents one percent of graduates in Mexico). In recent years, Mexico’s attention has therefore focused more on the postgraduate studies.

A foremost priority of SEP is to increase the contribution of higher education for the development of the country and its transition to the Knowledge Society. For graduates, the current situation is rather satisfactory, with higher than average private return on higher education studies and a smoother access

²⁸ García-Bullé, Sergio G. Linking recognition practices and National Qualifications Frameworks: International benchmarking of experiences and strategies on the recognition, validation and accreditation (RVA) of non-formal and informal learning. Chapter 22, Mexico: The National System of Competence Standards (NSCS) and recognition. UNESCO Institute for Lifelong Learning 2013.

²⁹ RENECE Statistical Booklet 2014.

³⁰ <http://www.conocer.gob.mx/index.php/estandaresdecompetencia.html>. Retrieved on March, 2015

³¹ UNESCO Institute for Lifelong Learning. The Mexican Qualification Framework, 2013

to the labor market than elsewhere in Latin America or in Europe. Despite this mixed picture, the SEPs main priority is to articulate education programs at all levels of the National qualifications framework with skills demanded in the labor market.

Mexico displays a sub-sectorial approach to the recognition of non-formal and informal learning, with different approaches in primary and secondary education, higher education and the employment sector.

The recognition of labor competencies for workforce development and employability is closely associated with the National System of Competency.

Certification of competences under the NSC is largely driven by the need to make certain industries more economically competitive. Certification offer occurs as a result of a personal decision by employers, trade unions, academic institutions or individuals within the industry concerned.

In October 2012, SEP announced the Mexican Bank of Academic Credits.³² This allows certificates of accredited certification centers, including those from CONOCER to count towards formal educational programs at upper-middle and higher levels.

MEXICAN QUALIFICATION FRAMEWORK	LEVEL	DOCUMENT OF CERTIFICATION	CREDITS
8	Doctorate		300 credits (3 years)
7	Master	Diploma of higher specialization	60 – 120 credits (1 – 2 years)
6	Professional License	Specialized diploma	240 – 300 (4 – 5 years)
5	Professional License	Advanced diploma	120 – 180 (2 – 3.5 years)
4	Professional Technician	Certificate IV	136-180 (2 – 3 years)
3	Bachelor	Certificate III	91 – 135 (1 – 2 years)
2	Secondary	Certificate II	46 – 90 (3 years)
1	Primary	Certificate I	1 – 45 (6 years)
0	Pre-school	Certificate of Pre-school	(3 years)

Both the Mexican Qualification Framework and the National Competency System aspire to create links with international qualifications frameworks in order to facilitate labor mobility within the country, the region, and worldwide.

In line with the internationalization of higher education, Mexico is developing transparency tools to facilitate mobility and academic cooperation across regions, particularly with the European Union.

³² Article 8 of the Announcement published by DGAIR on the Official Mexican Government Journal on October 4, 2012.

X. IMPORTANT LESSONS AND FUTURE PLANS³³

Further implementation of the Mexican Qualification Framework would benefit cross-regional mobility and cooperation, and above all, it would produce lasting benefits for Mexico and the Mexicans, in particular if linked to a solid credible system at national level and a comprehensive system of quality assurance.

While several of the reforms in qualifications and credit systems have been initiated by DGAIR, they can only be successfully implemented with the full support of the Federal Government as a whole.

The Mexican Qualification Framework has facilitated the work of CONOCER by setting out equivalencies between labor certificates and formal educational degrees.

At a deeper level, the success of the Mexican initiative is explained by the fact that, it is motivated by a desire to increase competitiveness in order to promote progress and prosperity.

Operational issues of training, evaluations and certification, although critical, are seen as instruments for the pursuit of this goal and not as an end in itself.

³³ UNESCO Institute for Lifelong Learning. The Mexican Qualifications Framework.

XI. ABBREVIATIONS AND ACRONYMS

BANXICO	Mexican National Bank
CECATI	Industry Training Centers
CEE	Entrepreneurial Coordination Council
CONALEP	National College for Technical and Professional Education
CONCAMIN	Confederation of Industrial Chambers of the Mexican United States
CONOCER	Council for Normalization and Certification
CORPAMEX	Mexican Employers Confederation
CROC	Revolutionary Confederation of Workers and Peasants
CSTM	Mexico Tourism Satellite Account
CTM	Confederation of Mexican Workers
DGAIR	General Directorate of Accreditation, Incorporation and Revalidation
DGCFT	General Directorate of Training Centers for Work
GDP	Gross Domestic Product
GFCFT	Gross Fixed Capital Formation Tourism
GTES	Technical Experts Groups
INEGI	National Institute of Statistics and Geography
IPN	Polytechnic National Institute
ISCED	International Standard Classification of Education
MQF	Mexico Qualification Framework
NQF	National Qualification Framework
NUFFIC	Netherlands Organization for International Cooperation in Higher Education
NVQ	National Vocational Qualification
OECD	Organization for Economic Cooperation and Development
PAN	National Action Party
POJ	Paid Occupied Jobs
PRI	Institutional Revolutionary Party
RENEC	National Registry of Competencies
SAGARPA	Agriculture, Livestock and Fisheries Secretariat
SCIAN	North America Classification Industrial System
SCNM	National Account Systems of Mexico
SE	Economy Secretariat
SECTUR	Tourism Secretariat

SENER	Energy Secretariat
SEP	Public Education Secretariat
SES	Under-secretariat of Higher Education
SHCP	Secretariat of Finance and Public Credit
SNC	National Competency System
STPS	Labor and Social Security Secretariat
TC	Tourist Consumption
TCC	Tourism Collective Consumption
TGDP	Tourism Gross Domestic Product
TTCI	Travel and Tourism Competitiveness Index
TVET	Technical and Vocational Education and Training
UNWTO	United Nations World Tourism Organization
WEF	World Economic Forum

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