

**DIRECTORATE FOR EDUCATION
EDUCATION POLICY COMMITTEE**

Group of National Experts on the Recognition of Non-formal and Informal Learning

**RECOGNITION OF NON FORMAL AND INFORMAL LEARNING
COUNTRY NOTE FOR MEXICO**

This document is the Country Note produced for Mexico within the context of the EDPC activity on Recognition of Non-formal and Informal Learning. It is one in a series of 16 Country Notes prepared after a review visit – either Thematic Review or Comparative Policy Analysis or both – in each of the participating countries to this activity. This Country Note was prepared by the following team of experts: Ms. Francisca Maria Arbizu Echávarri, Mr. Mike Coles, Ms. Miho Taguma and Mr. Patrick Werquin; and is based on a study visit which took place on 12-16 June 2006, as well as background documents prepared to support the visit.

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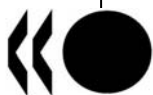


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1. Introduction

1. *Recognition of Non-formal and Informal Learning* is becoming high on the policy agenda in many OECD countries. In 1996, the OECD education ministers agreed to develop strategies for “lifelong learning for all”. The approach has been endorsed by ministers of labour, ministers of social affairs and the OECD Council at ministerial level. It is an approach whose importance may now be clearer than ever. Learning is a continuous process that takes place throughout life and in many settings. The concept of “from cradle to grave” includes formal, non-formal, and informal learning. If learning is only recognised as the outcome of formal teaching, most of what is learnt is not recognised. From a policy point of view, when developing learning for economic and social benefits, this wider recognition of learning is clearly more effective. From the point of view of an individual, learning for its own sake may be sufficient for some but, for others, the recognition of learning outcomes may need to be incorporated into formal qualifications. The outcome of the whole process of recognition of non-formal and informal learning may bring benefits to the individual and the society.

2. How much evidence exists on the benefits of such recognition? Do governments know enough about the impact of national policies on such recognition? Under what conditions can such recognition be beneficial for all? To begin to answer these questions, a project entitled *Recognition of Non-formal and Informal Learning* was launched in 2006. The purposes, working methods, and issues for analysis are detailed in the project proposal¹.

3. The specific purpose of the *Collaborative Policy Analysis (CPA)* strand of the project is to tailor the focus of the study to meet the needs of a country under review, to deliver country notes quickly by keeping their scopes focused and to facilitate scaling-up of local policies and practices to a national level or using them for “local-to-local” knowledge transfer. It also aims to encourage international collaboration among practitioners and policy-makers at the local level.

4. While the CPA looks at a specific focus, the results should be useful to other OECD member countries or non-OECD member countries, where applicable. To this end, the Secretariat has proposed a set of focuses, from which a country is to choose related to their policy relevance in consultation with the Secretariat. The proposed focuses are:

- Visibility of non-formal and informal learning outcomes;
- Transferability of learning outcomes;
- Impact study on the users; or
- Transparency of the system.

5. This Country Note forms part of the process of the CPA. Since the CPA takes a more specific focus than the tried and tested OECD Country Review process and is designed to support a series of exchanges between the OECD review team and the local experts and policy-makers, this note for Mexico is in its third draft and has already been the subject of several exchanges between the OECD review team and the Mexican authorities.

6. This Note should be read in conjunction with the Country Background Report (CBR) provided by the Mexican authorities in preparation for the visit (CONEVyT, 2006). This CBR contains a fair amount of

1 <http://www.oecd.org/edu/recognition>

descriptive commentary and statistical information about the Mexican education and training systems as well as observations on the process of recognising non-formal and informal learning.

7. The OECD team visited Mexico on 12-16 June 2006 and engaged in a full programme of visits and meetings arranged by the Mexican Steering Group. Annex 1 shows details of the programme and the participants in all of the meetings that took place. This Note has been prepared by the rapporteur of the team (Mike Coles) with the help of the other team members.

8. The OECD team would like to thank the Mexican hosts for their warm welcome during the review visit and for preparing an informative and interesting itinerary. The OECD team is grateful to the Mexican Steering Group and other individuals who assisted in ensuring that the CPA visit be collaborative, substantive and productive. The policy-makers, researchers, practitioners, and target beneficiaries we spoke with during the visit were equally helpful in describing current practices and key issues that were not always covered or explained in depth in the Country Background Report, and were open in discussing the problems that they face (Annex 2). The team also wishes to extend its special gratitude to Mr. Leonel Zúñiga Molina for chairing the steering meeting at the end of the visit, Ms. Luz María Castro Mussot, Ms. Dulce María Nieto Pascual, Ms. María Luisa de Anda y Ramos, and Ms. Patricia Martínez Ascencio who accompanied the team during the visit and prepared the Country Background Report; and Mr. Fernando C. Crespo Ortiz and Ms. Socorro Martínez de la Vega for their assistance in carrying out the post-visit CPA process as new contacts.

2. The focus of the *Collaborative Policy Analysis* in Mexico

9. The Mexican CPA focuses on the impact study on users of informal learning recognition²; more precisely, it focuses on measuring and enhancing such impact. It is the case that visibility of Agreement 286 and its coordination contribute to this approach on impact. In Mexico, national scale recognition is made possible through the statutory instrument known as *Agreement 286* (2000) and its various supplementary agreements³ (328, 357 and 379) enacted since 2003. In fact, it is one specific part of Agreement 286, the third clause (*Título Tercero*), which refers to accreditation (recognition) proceedings for non-formal and informal learning, acquired through self-teaching or through work experience, related to educational levels or school degrees. This third clause of Agreement 286 sets forth two procedures for: (a) the recognition of knowledge acquired in a self-taught manner or through work experience and related to certain educational levels or school grades; and (b) the recognition of knowledge based on the certification of experience obtained by means of vocational education for work. The former sets out to compare knowledge as equivalent to levels or grades in the official *academic field*, while the latter, tries to recognise knowledge acquired in the *labour field*. (The first one is designated as a “general procedure” and the second one as a “special procedure”. Both designations correspond to the legal terminology of this Mexican Secretariat Agreement).

10. Agreement 286 is derived from the Educational General Law (LGE). Article 45 of the LGE states that the Secretariat of Public Education (SEP⁴), together with other competent federal authorities, must establish a certification regime that allows the gradual accreditation of knowledge and skills. SEP is entitled to issue a Secretariat Agreement establishing the basis for accreditation and certification of

2 In this Country Note informal learning is taken to mean all learning that is gained through experience or through self-teaching that lies outside the scope of what is recognised in the formal education and training systems. It therefore includes non-formal learning.

3 Agreements 328, 379 and 357 cover the specific application of accreditation processes for basic skills, the baccalaureate (high school certificate) and higher education qualifications, including qualifications in early childhood education, respectively.

4 www.sep.gob.mx

knowledge acquired through self-teaching or through labour experience. Agreement 286 is the principal instrument that establishes the guidelines which determine the procedural rules and general quality criteria necessary to recognise these self-taught achievements as educational levels and qualifications. In the note that follows, Agreement 286 is used as a proxy for all these official procedures used to accredit⁵ achievement that has been gained in ways other than through formal learning programmes⁶.

11. It is important to appreciate that in the context of Mexico, Agreement 286 has two fundamental features; the first is legal status that provides currency and validity to certificates awarded through the administrative infrastructure that emanates from Agreement 286; and the second is its public policy status that allows different kinds of initiatives to be developed and coordinated to achieve the policy goal of a higher level of accreditation of existing skills within the Mexican population. Thus Agreement 286 is the main legal instrument that Mexico holds for embracing any activity on the accreditation (recognition) of non-formal and informal learning (RNFIL) and in relation to which, since 2001, several national programmes have been implemented.

12. The OECD Review Team and the Mexican authorities decided to look closely at the impact of a broad set of national policies on the field of accreditation of non-formal and informal learning for the visit of the OECD team to Mexico. It is expected that the CPA procedure be focused on more specific initiatives than those highlighted in the Mexican case; however there are good reasons for maintaining a broad perspective on accreditation of informal learning in Mexico. Agreement 286 is a major innovation and its rationale and implementation is likely to be of interest to many countries. At the same time, the practices surrounding Agreement 286 are complex in Mexico – politically, financially, procedurally and technically – and the commentary from an international perspective is intended to be helpful to those who manage the continued development of procedures based on Agreement 286.

13. During the visit to Mexico, the range of presentations and visits gave the Review Team an opportunity for intense evaluation of the operation of the various accreditation processes based on Agreement 286. Documents were provided on all aspects of operations and managers responded fully to questions raised. The Review Team was able to interact with a wide range of stakeholders (including those putting themselves forward for accreditation). This wealth of information provides the basis for this Country Note.

14. As part of the CPA process, a series of further questions have been developed for countries to consider and respond⁷. The questions lead to an agreed focus of the CPA process and they establish the nature of the policy relevance of the chosen focus. Mexico has asked that this Country Note concentrate on two distinct parts of the accreditation process related to Agreement 286. As stated above, the first part is about options for measuring the impact on individuals – i.e. how is their lives and work changed by their experience with accreditation processes. In this connection, the Mexican authorities are interested to know how the profile of Agreement 286 might be improved. In addition to the impact evaluation, the OECD team offered options for the coordination and management of the accreditation system, arising from implementation of Agreement 286, for consideration by the Mexican authorities.

5 It is important to note that the Mexican authorities prefer to use the word accreditation for the process of meeting the requirements for official recognition of learning in order to approve the award of a national qualification. This Note is exclusively concerned with official recognition and therefore the word accreditation (for qualification) is used throughout instead of the more general term recognition which may not lead to certification.

6 Full details of the operation of Agreement 286 are described in detail in CONEVyT (2006).

7 See the Appendix (Background Questionnaire) to CONEVyT (2006) prepared by DGAIR.

3. The Mexican context: relevance of accrediting informal learning

15. There are some aspects of the United States of Mexico – *Estados Unidos Mexicanos* – that make a study of accreditation of non-formal and informal learning particularly relevant and important.

3.1. Demographic change – gradual ageing

16. Mexico has undergone a process of radical demographic change in a relatively short period. The population is predominantly young; 50% of the population was less than 25 years old in 2000. Intensive education policies that are intended to lead to a decrease in birth rate have begun to take effect and in the last two decades the population growth rate has decreased. Together with an increase in the population's life expectancy and the migration of young people to the USA, a gradual aging of the population distribution is taking place.

17. This demographic evolution impacts the educational system. By 2020, the school age demand for primary school will diminish by 20.5% (to around 11.5 million), while the school age demand for secondary education (to complete basic education) will drop by 17.1% (to less than 5 million) and for upper secondary education will decrease by 13.8% (to about 5.5 million). In contrast, the potential demand for higher education will continue growing until 2013, to almost 15 million (6.9% growth). It is a fact that the educational backlog of persons who never entered or were expelled from the school system is more numerous than the students registered in initial education. However, the lower birth rate offers an opportunity to concentrate resources on those people of school age and offer a second chance for older people to gain certification.

3.2. Migration – internal/international

18. Migration patterns in Mexico are complex but they follow three distinct forms. The first is internal migration where agricultural workers migrate with their families from the cities each year for the duration of the production cycle, which lasts approximately between four and six months. They then return to the city seeking employment establishing alienated areas within large cities. The second is international migration where people with urban origins migrate towards the United States of America. It is estimated that during the 1990s, the flow of labour in both directions of people born in Mexico was between 800 thousand and one million movements per year. A third form of migration is also important and takes account of those people who migrate into Mexico as they travel north to the USA. Some of these people stay for substantial periods of time in Mexico, working to earn money before they continue moving northwards.

3.3. Socio-economic inequality

19. One of the largest problems Mexico faces is structural social and economic inequality. A reliable poverty indicator is the distribution of income, which presents a strong concentration in the richest 10% of the population.

3.4. Low educational attainment levels

20. The number of people over 15 years of age who have incomplete basic education⁸ is over 34 million. This educational disadvantage in the adult population – the so-called educational ‘backlog’⁹ – is

8 Basic education refers to the completion of lower secondary education – reaching the age of 15 or 16 with 9 years of education.

high and a series of policies have been introduced to offset it. Whilst the proportions in the population with an educational shortfall have generally fallen, the absolute numbers of people with incomplete education has risen consistently and rapidly since 1970 (CONEVYT, 2006; Table 1.8), and has generated a significant potential demand, especially for secondary and upper secondary education. The size and diversity of this educational backlog presents a tough test to accreditation processes for basic education. There is also a strong demand for accreditation processes of informal learning for the baccalaureate qualification and for a higher education degree.

3.5. The importance of credentials

21. Mexican society places high importance on qualification levels. For example, people are usually addressed by the title or qualification status that they obtained at school such as “Dr.”, “professor”, etc. (doctor, profesor) rather than by their names. This form of high status acts as a powerful motivator for individuals to participate in further learning and have existing learning accredited. Communities and families encourage this form of achieving high status through learning and qualifications and make Mexico a strongly credentialist country. Whilst this is a motivator to learning, it may also be a barrier to innovation since the culture particularly values traditional standards and methods of evaluation.

4. Agreement 286 – challenges as an accreditation tool

22. The continued development of a strong social and economic democracy in Mexico depends on raising the levels of education, skills supply and social engagement. The educational backlog at all levels, but particularly at the level of basic education, is seen as a serious barrier to this development. The conception and development of Agreement 286 (and the associated Agreements) is the key policy response to this barrier and it raises serious challenges related to management, financing as well as technical functioning of accreditation procedures. In many homes and communities there is strong pressure for young people to enter the workforce as soon as they have earning power and this challenges the level of completion of schooling. For most people the engagement in work and communities leads directly to learning through experience and self-teaching. For some people in lower level employment, there is a desire for developing skills and gaining accreditation that will enable them to work or study at higher levels. Thus in Mexico there is a high level of unrecognised learning as well as a high level of demand for recognition programmes.

4.1. Links to formal education

23. There is a clear, well-established, formal learning and accreditation system in Mexico that extends in stages from completion of primary schooling through to higher education. Those stages are included in three official levels: (i) basic, (ii) middle/ high (higher secondary) and (iii) higher education (tertiary). Basic level comprises primary and secondary education¹⁰, middle/higher secondary education is recognised through a formal qualification (baccalaureate or equivalent)¹¹, and higher education through bachelor’s, master’s and doctorate degrees as well as other technical degrees. Competence-based qualifications derived from occupational standards are also available from specialised colleges. As these

9 The term ‘backlog’ was used by the Mexican team to refer to individuals who have not completed basic education and is not intended to be pejorative. The term is appropriate since it refers to a task for the education system – to eliminate the backlog and reach a situation where all individuals have basic education.

10 Usually 9 years of schooling.

11 Usually 12 years of schooling.

formal qualifications are so important, the accreditation system for informal learning in Mexico relates directly to the following levels of formal qualification:

1. Basic education is recognised through the Model of Education for Life and Work (MEVyT) of the National Institute for Adult Education (INEA)¹².
2. Middle/higher secondary education and higher education are recognised through the general procedure of Agreement 286. The general procedure covers the recognition of knowledge acquired in a self-taught manner or through work experience and is related to certain educational levels or school grades. It sets out to compare knowledge as equivalent to levels or grades in the formal academic field. Within the academic field there are two types of accreditation of informal learning:
 - Higher secondary: completion of middle/high schooling –baccalaureate certification is possible through Agreement 286 as well as some other professional technician degrees¹³ such as Nursery Technician.
 - Achievement at the bachelor’s degree level is possible through Agreement 286. Twenty-six bachelor’s degrees are achievable¹⁴ as well as a bachelor degree in Early Childhood Education (pre-school teaching) and actions are being taken to include *Técnico Superior Universitario*¹⁵ (TSU) in the field of Real State Brokerage and in Medical Emergencies.
3. Labour competence can be recognised through Agreement 286 but it is not done at present. The process of recognition through Agreement 286 is not direct. The procedure is as follows: first, CONOCER¹⁶ issues a Labour Competence Certificate, then the knowledge, skills and competences recorded in the Labour Competence Certificate can be recognised through the special procedure established by Agreement 286 for use as part of an accreditation programme. So it is in fact CONOCER that guarantees the labour qualification certificates but it does not currently issue the final certificate due to technical problems.

4.2. The same qualification level, different routes

24. As in most countries, the formal levels of qualification are clearly understood as parts of the social structure and standards required for successful achievement and are respected and valued. Each level is a significant threshold to better jobs. Agreement 286 is designed to give access to these levels by providing a different route to the same standard. In other words, the traditional formal levels are maintained as social standards; Agreement 286 does not add new levels to the accreditation system, instead

12 However, currently (January 2007), DGAIR (General Directorate of Accreditation, Incorporation and Revalidation) is trying to implement the procedure to certificate the Secondary level through Agreement 286 with CENEVAL as the assessment institution. In this project, INEA would issue the Secondary certificates in Mexico City and local Institutes for Adult Education would do the same in the 31 states of the Mexican Republic.

13 Currently (2007), DGAIR (General Directorate of Accreditation, Incorporation and Revalidation) is seeking to add more professional technician profiles to A286.

14 Currently (2007), DGAIR (General Directorate of Accreditation, Incorporation and Revalidation) is seeking to add more Bachelor and TSU profiles to A286.

15 University degree of senior technician in a field.

16 CONOCER is the Council for Standardisation and Certification of Labour Competence.

it aligns a standard of learning that takes place informally, outside the traditional institutional structure, with each of these levels.

25. The attainment of the standard required at each level does not lead to a qualification that is identical to its traditional equivalent. It remains possible to distinguish the route the learner has taken to the qualification level. The existence of two routes to the same qualification level is an issue worthy of further examination since it implies that the route is an important part of the status or currency of the qualification. This in turn questions the quality assurance processes that aim to establish each route as equivalent to the other.

4.3. Balancing access criteria and accreditation

26. Returning to the challenges of operating arrangements for Agreement 286 it is clear that the number of potential users of the facility of Agreement 286 and its associated Agreements is vast and includes people of all ages. The equitable distribution of opportunity across all settings, but especially between urban and rural settings, is problematic, as is the provision of easily accessible guidance and support. The use of diagnostic stages in accreditation (such as those operated by INEA) is important since the form of these tests, if they are to lead to accreditation, must balance encouragement with challenge, and must show a clear next step in learning for the applicant. For the higher levels of accreditation, there needs to be some kind of basic requirement for showing readiness for accreditation, for example a baccalaureate certificate for access to a bachelor's degree programme. These requirements also need to be set with sensitivity since they may act as a strong deterrent for individuals with high levels of informal learning through experience, for example by requiring a mature worker to study material included in the school curriculum, or by extending the time required for the accreditation process.

27. Financing the system is a major challenge and requires careful balancing of priorities in the education service as well as striking the right balance between state support and the level of self-financing required. The self-financing element needs to be graduated as the process of accreditation proceeds so that the initial stage is relatively low cost and further costs are incurred in as success leads to the next part of the accreditation process. If costs are front-loaded the applicant may perceive accreditation to be too expensive.

4.4. Different systems for accrediting informal learning

28. The infrastructure of the accreditation process (registration, assessment and certification) has to be fit-for-purpose and carry credibility with users. To achieve these goals a wide range of stakeholders need to play their part in the accreditation process; these include different government departments, the social partnership of employers and employee representative bodies, learning institutions of many different kinds, assessment centres and regional and community agencies. Thus the accreditation process in Mexico can be seen to be potentially and extremely complex with many interdependencies between the different aspects of accreditation and the management functions.

29. As stated earlier there are four sets of accreditation processes under the umbrella of the general procedure of Agreement 286:

- a) Baccalaureate qualification
- b) Bachelor's degrees
- c) Bachelor's degree in Early Childhood Education

d) Labour market competences (possible under the special procedure through use of certificates guaranteed by CONOCER)

30. Each of these is now outlined. As stated earlier, basic education (primary and lower secondary) is currently not an active part of the general procedure of Agreement 286, however a procedure is being developed to recognise the secondary part of basic education. Details of the current (non-agreement 286) procedure for recognising primary and secondary education form an important part of the public recognition process in Mexico. Accreditation of basic education for young people and adults is the responsibility of INEA and begins with a series of diagnostic tests. These tests begin the process of either awarding a primary or secondary certificate or, more commonly, allocating an applicant to the right level of participation in basic education. A diagnostic exam allows individuals to discover if they have knowledge, skills and wider competences that correspond to basic education. If the person presents and passes all the sections of the diagnostic exam, s/he can accredit one or more modules or finish primary or secondary education and receive the corresponding certificate. The diagnostic exam is given in five free sessions, according to the qualification system of the Model of Education for Life and Work (MEVyT)¹⁷. The operational system is ruled by procedures for registration, accreditation and certification of adult learning:

a) Accreditation for the baccalaureate qualification level begins with an announcement in the public press inviting applicants to come forward to take part in the accreditation process. Candidates who are over 21 years of age must present their secondary school certificate and some other official documents such as a birth certificate or identification document containing a photograph. If these are complete and acceptable, candidates must register online and pay about EUR 130. He or she will receive a pass to enter the examination via a private assessment agency (CENEVAL¹⁸). Candidates may download a guide of contents to prepare their examinations or buy a CD with the guide. Candidates will participate in a two-phase assessment: a general knowledge (180 short item tests) and a written test about texts or topics assigned to the individual, the latter is independently assessed by two examiners. The results of exams can be consulted online through public electronic portals.

b) Accreditation for bachelor's degrees begins with a response to an announcement that appears permanently on public electronic portals. Interested persons over 30 years of age attend a Ministry building where they receive information about the requirements for the degree they are interested in. If they fulfil all the requirements, they are granted admission and directed to CENEVAL. There they register for the first general exam and pay the specified fee which is based on the area and number of phases they have to accomplish. A jury of experts also interviews the individual. Candidates can use an online guide of contents of the qualification to prepare for examination or buy a printed copy or CD with a digital interactive programme. If candidates pass their first general exam, they pay the fee corresponding to the second phase and are interviewed by a jury in order to determine the theme of the thesis they have to deliver. After delivering their thesis, candidates must take a final oral exam in front of a jury. Candidates for degrees in the health field or agricultural engineering must pay a third phase fee and undergo an additional practical assessment. The Ministry of Education is responsible for issuing the bachelor's degree and the professional license that backs the competence covered by the degree. Professional bodies participate in a technical council that is organised for every degree; these bodies are involved in the whole accreditation process from the exam design to the oral examination of candidates.

17 See CONEVyT (2006; Figure 21, p. 24).

18 National Centre of Evaluation for Higher Education, www.portal.ceneval.edu.mx

c) Accreditation of the bachelor's degree on Early Childhood Education (pre-school teaching) is a variation on the process described above for bachelor's degrees. In this case, people who are 21 years old or older may participate. The assessment comprises two stages: one involving a general exam, EGC-PRE (*Examen General de Conocimientos y Habilidades para la Acreditación de la Licenciatura en Educación Preescolar*) and another requiring a lesson plan presentation. If candidates pass the first test with an outstanding mark, they need not take the second exam. As part of the assessment of the second stage, applicants present a lesson plan and videotape which shows them teaching a sequence of activities related to a content included in their lesson plan. Applicants pay only one fee for the entire process of accreditation at the outset.

d) Accreditation of labour competences uses technical standards of labour competence developed by lead bodies: these are panels of employers and trade unions that represent specific branches of the economy. The assessment and certification processes started in 1998. Assessment Centres were set up that used the standards to determine whether workers were competent in specific job roles. Measuring labour competences always requires the evaluation of a portfolio of the workers' achievements. This competence assessment may also involve observation or simulation and an assessment of the knowledge acquired by means of written tests. These tests may include objective questions or problem solving on topics that are difficult to observe during performance, like unforeseen situations that the candidate must be able to solve. Costs are variable and can be a barrier if specialist equipment is required. Occupational standards are expressed as units of a qualification and therefore the costs are associated with units rather than with the entire qualification. This means that the costs of qualifications can be spread out over a period of time as units are achieved one by one.

Table 1 Summary of entry requirements

	Basic Education (Carried out under the Model of Education for Life and Work (MEVyT) of INEA)	Baccalaureate (General procedure Agreement 286)	Bachelor's degree (General procedure Agreement 286)	Bachelor's degree in Early Childhood Education (General procedure Agreement 286)	Accreditation of workplace competences (CONOCER can guarantee certificates which can be used under the special procedure of Agreement 286)
Minimum age	Over 16	21	30	21	None
Required educational achievement	None	Lower secondary school	Upper secondary school	Teachers' Training College or upper secondary – baccalaureate	None
Labour experience	None	None	5 years	3 years teaching	Significant but not defined in terms of duration
Testimonial	No	No	Yes, from a Chief Executive or equivalent	No	No

31. Within each of these five aspects of accreditation of informal learning there are many potential barriers to participation for individuals, for example: costs, production of documents and certificates, access to a computer, access to the Internet and availability of CDs containing guidance on the accreditation procedure. There is a need to balance the positive effects of these aspects on the accreditation system as a whole with their effects as barriers to participation on some individuals.

5. Developing the policy for accreditation of informal learning: benefits, barriers and options

32. In this section the OECD team and the Mexican authorities have selected to study the impact of the accreditation of informal learning as the focus of this Note. In the discussion of each aspect of impact there are observations on current policy and practice together with some suggestions for improvement. The discussion is organised under the main headings: (i) measuring the impact of policy implementation and (ii) raising the profile of the accreditation system under the Agreement 286.

5.1. Measuring impact

33. Since 2000 there has been steady growth in the accreditation of informal learning at all levels. As will become clear in the sections that follow, the separate elements of Agreement 286 provisions create a complex matrix of institutions and procedures that can complicate development of the accreditation system and the setting of priorities for funding. It is also difficult to weigh the advantages of greater investment in accreditation of informal learning against priorities for investment in formal accreditation in the education and training provision. Collecting and analysing impact information about the accreditation of informal learning can inform decision-making and cut through some of the complexities. With six years experience of expansion of accreditation of informal learning in Mexico, the measurement of impact of the programme on people, firms, educational institutions and communities is now timely.

34. In Mexico there have been major advances in facilitating accreditation of learning amongst people who did not complete basic education. There have also been significant improvements in the accreditation of informal learning for higher levels of qualification such as the baccalaureate and bachelor's degree. Within the workforce, standards have been set for many occupations and these allow people with no formal qualification to have their skills accredited in a qualification. All of the accreditation processes also stimulate significant supplementary learning. Progress is still small in relation to the total basic education backlog but there is now increasing demand for accreditation and a higher visibility for accreditation, learning opportunities and certification. These are major achievements in the context of the complexities in Mexico outlined in section 4 above. These achievements can be categorised into 3 groups: 1) institutional arrangements (with a wider scope in society); 2) technical arrangements (to set up legal, technical and methodological arrangements); and 3) stakeholders' behaviour (to increase incentive for individual users as the main stakeholder).

5.1.1. Institutional arrangements

Recognition of formal learning and the contribution of other learning

35. The interplay between the formal education system and accreditation processes for informal learning requires continuous attention. Direct investment in learning through the education and training system, particularly for young people, remains a priority, not least because 25% of the school population leave before completing basic education (9 or 10 years of schooling). Thus for Mexico the level of human capital developing through non-formal means is of growing importance. The question is whether the expansion of provisions under Agreement 286 is a direct challenge to the formal initial education provision by comforting those who leave school with incomplete education with the opportunity of a second chance later in life. Another significant question is based on standards. Does the route to a qualification make a difference to the learning standards that are certificated? Is the existence of two different routes to a qualification level leading to confusion and inefficient use of resources? Is learning in the formal system a more solid basis for progress later in life than the same standard of education acquired later through work or community life? There are no clear answers to these questions and for this reason they demand continuous attention through the collection of relevant information from users of the accreditation systems.

36. In the long-term, investment in the initial education system should stabilise the demand for accreditation of basic education later in life. Together with the current demographic shift towards a smaller school population this should reduce the educational backlog further. However such a reduction also means that greater emphasis can be placed on accreditation for higher qualification levels that will be compatible with innovation policies for attracting modern businesses to become established in Mexico. The well-known ‘Matthew’ effect¹⁹, which shows itself in most, if not all, countries, indicates that people achieving accreditation are likely to seek higher levels of accreditation later in life. This progression in learning and accreditation needs to be monitored so that demand can be estimated.

37. Some of the investment in accreditation of informal learning is seen as a means of generating greater social cohesion (European Commission, 2006). A good example is the potential of accreditation processes to reduce the attractiveness of black market practices in the informal economy. Indications are that the informal economy in Mexico is large²⁰. Another example is the development of entrepreneurial and technical skills within communities that can facilitate the development of small businesses; this might have the effect of reducing the migration of key family members to work in the cities and in the USA. Such trends will require monitoring.

Decentralisation

38. Mexico is a large country with a strong regional government. The decentralisation policy was discussed during the OECD visit in the context of the responsibility of local agencies to make Internet links, counselling and assessment opportunities available to applicants for the various levels of accreditation. However, the effects of further decentralisation on the control of Agreement 286 management were not discussed in detail. Therefore, with the exception of one suggestion, the OECD Review Team reserves comment on this subject in this Country Note²¹. The suggestion from the OECD Review Team concerns the extent to which regions can be used to test (on a large scale but not a national scale), innovations in the management and technical aspects of accreditation systems.

5.1.2. Technical arrangements

Coordinating the complexities

39. The need to develop a national system of accreditation of learning for people who are outside the formal system has been clear to policy-makers and led to the provisions of Agreement 286. The implementation of the systems of accreditation has been a huge undertaking of great complexity. The goal has been to make the system responsive to individuals, communities, employers and the Mexican economy and to keep the system relatively simple at the level of the individual. But these goals are not easy to achieve when public confidence in the formal system cannot be put at risk and the full range of legitimate stakeholders have to be engaged, not least to make resources stretch as far as possible. These tensions have created complexities as each of the accreditation processes has expanded and become operational. There is now a multiplicity of responsible bodies and procedures that form the basis of the accreditation process. Responsible bodies include policy and administrative bodies (*e.g.* DGAIR²², DGB²³, INEA, CONOCER),

19 See, for instance, OECD (2007).

20 During the country visit, it was suggested that about 50% of the adult working population are engaged in the informal or ‘black’ economy in Mexico.

21 One of the strengths of the CPA process is that a dialogue on such issues can continue for some time after the country visit if the host country wishes it.

22 General Directorate of Accreditation, Incorporation and Revalidation.

23 General Directorate of Baccalaureate.

and assessment centres (*e.g.* CENEVAL, INEA, and those linked with CONOCER such as ACERTAR²⁴ or CECOLAB²⁵).

40. There is a complex interaction between higher education and professional colleges and work-based standard bodies like CONOCER. The interaction between public bodies such as CONALEP²⁶, DGETI²⁷, DGETA²⁸, and small and large private bodies is also intricate. All of this seems to create a jungle of competent bodies and of procedures for registration, assessment and certification.

Transparency and synergy

41. The fundamental legal basis for Agreement 286 is clear and enabling. It provides a scaffold for the whole accreditation enterprise. It is suggested that the route to a more rational structure depends on the analysis of the following three axes:

- Institutions – where more creative solutions may be available for the ways in which roles and responsibilities are exercised to support accreditation;
- Methodologies – where broad common agreements on quality assurance processes can bring coherence to diversifying practice;
- Standards – where independent benchmarks can be established as a framework of equivalencies between the different accreditation systems.

42. These three axes could form the basis of data collection to support a systematic review of where synergy can be found and any unproductive, overlapping and confusing interactions can be eliminated. There are examples of negative interactions in the current system. Certification of labour competences by CONOCER are needed for the awards of higher education degrees, currently the latter is held up due to legal problems with CONOCER and its entitlement to issue certificates. Clearly the public and political confidence in the system of accreditation is challenged by such delays. It is urgent that SEP finish the legal process to allow CONOCER to play the role it is designed to play.

43. There is confidence in many European Union countries that one of the benefits of a learning outcomes-based qualifications system is that the added transparency can lead to linkages between education sectors (such as academic education and training for work-based competences) and create greater coherence. In Mexico it can be argued that the totally separate structures for the CONOCER area of competence and the relevant professional areas in higher education are inefficient and unhelpful for businesses. There is an option in Part 3 of the legal framework (Agreement 286) to develop linkages between competence levels and qualification levels²⁹, making it possible for competence assessments (based on learning outcomes and approved by CONOCER) to be easily and naturally assimilated into the accreditation process for formal qualifications at all levels. Use of learning outcomes might allow a closer relationship to develop between vocational schools and businesses and enable the baccalaureate (technological) to become stronger. A stronger linkage between the professional colleges, CONALEP and

24 National Non-Profit Organisation for Quality Assurance in Vocational Competences.

25 Certification Body for the Accredited Vocational Competences.

26 National College of Professional Technical Education.

27 General Directorate of Industrial Technical Education.

28 General Directorate of Agriculture and Livestock Technical Education.

29 There is no firm link between the levels of education system with the 5 levels of NTCL (standards of competences of CONOCER).

CONOCER could also develop and could be beneficial in terms of coherence and transparency to users, especially to businesses. Some research could be undertaken to find out the potential value of a learning outcomes approach with the main stakeholders.

44. Currently businesses in Mexico, like those in many other countries, suffer because the content of higher education programmes is mainly agreed at institutional level and therefore linkages of large companies, such as the national electricity company (CFE), to higher education provision has to be negotiated with each university. In the opinion of companies such as CFE, this slows progress in developing training links between companies and universities. The increasing use of learning outcomes to describe higher education programmes (under the Bologna process) could facilitate better linkages between the academic sector and businesses.

45. Increased coordination between the productive sector and the governmental departments for education and labour can also lead to increased responsiveness. The Agreement 286 procedures have the potential to sharpen the policy dialogue between the various social partners involved in the accreditation of both formal and informal learning. Weak coordination also hinders the visibility and transparency of outcomes of the accreditation processes with individuals, businesses and other interested stakeholders. Later in this note it is suggested that the introduction of common national levels of qualification could have the effect of linking the productive sector with the education sector.

Academic and vocational qualifications

46. In Mexico the status of qualifications that indicate competences required in work are overshadowed in terms of social currency by more academic qualifications. Whilst this observation is an international phenomenon, it is important that the accreditation system for informal learning, which has the potential to strengthen the status of vocationally relevant qualifications, is not in effect a tool to reinforce the high status of academic qualifications. A stronger link between education and work is desirable in most countries (OECD, 2007) and some of the characteristics of competence-based qualifications, such as the development and use of national standards based on learning outcomes, and performance assessment and verification by experts, have the potential to bridge education and work. The relatively low profile of the occupational standards in educational provision in Mexico could be investigated, as it is possibly one contributory factor to perceptions of lower currency for vocational qualifications.

47. An example of where the accreditation system for informal learning seems to underline the dominant status of academic qualifications is the dependence on the latter as an entry requirement, such as the need for a baccalaureate qualification before being admitted to the process leading to the award of a bachelor's degree in an applied area. It should be possible for some work-based qualifications to be used in the same way, thus raising the status of these qualifications.

The structure of qualifications

48. The baccalaureate is a broad qualification and is designed for general matriculation (upper secondary leaving certification). As such it is clearly fit for purpose and is designed to suit the environment in which it is taught and evaluated. However, within Agreement 286 the baccalaureate can be made more flexible. The programmes for the baccalaureate could be modularised and allow certification in specific areas of content. The accreditation process would then allow for the award of certificates (or transcripts of achievements) for units of qualification. This will enable adult learners to achieve the baccalaureate standard in stages, for some individuals the opportunity to spread out the cost and the time needed is likely to be a major incentive to prepare for evaluation.

49. In the introductory comments in this Country Note, the OECD team suggests that there might be four ‘natural’ levels of qualification in Mexico:

1. Completion of basic schooling.
2. Completion of middle/high schooling – baccalaureate certification.
3. Technical career qualification (skilled worker status).
4. Higher education achievement at bachelor’s degree level.

50. In fact there is a substructure of levels of qualification. For example basic schooling includes pre-school, primary and secondary education. Higher education includes bachelor’s, master’s and philosophical (doctorate) degrees. As for the professional profiles, they include the professional technician (*Profesional Técnico*) and the university level technician degree known as TSU (*Técnico Superior Universitario*) as well as all the bachelor’s degrees. There are also different levels of work-related qualifications that may be obtained through the special procedure³⁰ for professions and occupation levels.

51. It is possible that the baccalaureate level is too high a step of learning for many people with basic schooling. Only one third of applicants to the CENEVAL evaluation process for the baccalaureate are successful. Greater flexibility might follow if an intermediate level of qualification were to build on basic schooling, reflecting the standards reached in middle schooling. Evidence from other countries suggests that for many jobs this intermediate level of knowledge and skills is needed (CEDEFOP, 1999). The development of an intermediate level qualification could significantly increase qualification levels and produce skilled people who would be in demand, especially if it were oriented towards the knowledge and skills of the workplace. People achieving this intermediate qualification can decide to step up to full baccalaureate level at a later stage.

52. Within the current accreditation system, both formal and informal, there may be advantages in certification of partial qualification. Modularisation of curricula and unitised evaluation may lead to more significant gains in removing the educational backlog. Such partial qualification may ease the financial and non-financial costs for learners in gaining accreditation and it may motivate some learners to continue to full qualification. Part of this process would be the creation of transcripts and credits that lead to exemptions of further learning.

53. At the lower levels of qualification, the goal is to reach the levels of a full basic schooling. The context for the learning at this low level is therefore the key transferable skills that enable better participation in social and work activities. A significant part of the content of this basic schooling is relevant to workplace settings through its generic nature. The provision in this area may benefit from enhancement to include some level 1 competences that are specifically linked to the workplace, as this is an important signal of relevance to mature learners. The workplace relevance also removes some of the stigma attached to a poor record in formal schooling.

Evaluation tools

54. The methods used in evaluation vary across the levels of qualification and within them. The methods used are expected to have a direct influence on applicants since it is generally accepted that there are clear personal preferences for particular methods. It is therefore important that the full range of tools

30 The special procedure is part of Agreement 286 and involves schools, universities and other training institutions negotiating with a series of key national bodies for their curricula to be linked to other national qualifications and accreditation systems including Agreement 286 provisions.

for evaluation is considered, including portfolio assessment. Administrative and financial pressures can bias methodologies towards the use of instrumental closed tests in preference to other more open (and often more expensive) methods. In the same way, these pressures can raise the profile of formal knowledge, which is relatively easy to evaluate, in preference to competence that requires demonstration of knowledge and skills in a meaningful context, which is more complex and may be more costly. The bias towards evaluating formal knowledge seems to be stronger at the higher levels of qualification. Impact evaluation on users could include probes into perceptions of value and relevance of different evaluation methods.

55. INEA and CENEVAL are developing evaluation tools for assessing wider competences, including self-learning skills and key generic competences. These development projects are welcomed and will be of interest to other countries.

5.1.3. Individual stakeholders' behaviour

The centrality of the individual learner

56. The provisions of Agreement 286 put the individual at the centre of decision-making, not learning institutions and funding bodies (that include employers). Taking personal responsibility for learning allows individuals to make the most of lifelong learning opportunities and can demonstrate positive attitudes to learning, work and personal ambition. Using accreditation processes has both direct costs and indirect costs for individuals and it may be that in circumstances where the benefit of additional learning and accreditation is shared with employers that the direct and indirect costs are also shared. Currently the capacity of a person to have workplace competences recognised depends to a large extent on the person's employment status and the disposition of their employer to support accreditation. Measuring the impact of these factors on the take-up of accreditation of informal learning can help with planning further development of the system.

57. Certainly the different forms of Agreement 286 accreditation provisions is having an impact on levels of lifelong learning especially since, in practice, this provision often requires the individual to undertake additional learning to supplement the informal learning already achieved. Information about the extent to which individuals are supported in their participation in an accreditation process may be useful for informing the further development of lifelong learning policy.

Responsiveness is the key

58. Better coordination not only leads to greater efficiencies but can also produce improved responsiveness to individuals and employers. There is evidence that the various accreditation processes linked to Agreement 286 are not meeting the level of public demand for accreditation at the higher qualification. Indications of such a shortfall in meeting the demand are the effects of use of tools such as limited periods for accepting applications for accreditation. These 'windows for application' produce a high volume of applications and generate waiting lists. These factors and others suggest that, at least in the minds of the applicants, there is a demand for qualified people that is largely unmet. The accreditation process is not funded by the central government through a specific budget and so the limits placed on the accreditation process is likely to be connected with administrative capacity. It is possible that Agreement 286 needs to operate more flexibly in terms of evaluation procedures so as to increase the number of periods when individuals can participate. There are signs that this is gaining support from stakeholders. There are other aspects of flexibility being considered, for example, the baccalaureate is currently awarded through the accreditation process if the individual is successful in all the subject fields. There is a possibility that from 2007 on, the individual who fails to pass one subject field should have the opportunity to take the test in this field one more time.

Evidence

59. In addition to the statistical evidence of the growing use and demand for accreditation of informal learning there is some evidence that the accreditation of informal learning is having an effect.

- There is a belief in INEA that the recognition process for initial education makes a difference in people's lives, the organisation has begun some small-scale investigations into the effects of the accreditation process. INEA also believes that through changing the focus of its programmes, people are learning how to learn and this is likely to have a lifelong pay off.
- CONOCER has no single coherent evidence base of impact on people or businesses of the use of work-place competence studies. However, CONOCER does have a jigsaw of informal information about impact. There are difficult methodological issues to be addressed before useful and reliable evidence of impact can be produced.
- The Ministry of Labour has carried out small-scale studies of impact on companies but no information on the effects of training on individuals has been produced.
- CFE is confident of impact of training on the company's bottom line and has produced data to support a positive effect. Translating this into the effects of accreditation of informal or learning on the job is difficult.

5.1.4. Measuring impact: next steps

60. One of the most striking points for the OECD team was the contrast between the extremely effective monitoring and reporting of the Agreement 286 processes, which kept them under continuous review and led to improvements, and the absence of data on impact of the system on individuals, businesses, communities and the Mexican economy. The team was familiarised with many case studies of individuals and how they felt about accreditation through Agreement 286 procedures – all positive feedback – but there was no systematic research on the benefits to a sample of individuals over a period of time. Case studies of businesses were made available and some hard evidence of benefits to particular companies was offered, but no systematic research data was available.

61. During the time when Agreement 286 procedures were expanding, adjustments to its functioning were based on the opinions of stakeholders. These were influential and took into account the rather extensive and rigid structures of the educational sector. However, at this significant stage in the development of Agreement 286 procedures, adjustments to policy and practices probably need to advance to a more solid evidence base. Some policy options offered in the form of a summary of action points that would lead to improvements in measuring and enhancing the impact of the accreditation of informal learning in Mexico are provided below. They are intended to be less prescriptive than policy recommendations and more precise than a listing of possible opportunities for policy development.

Policy option: measure the impact of the system on users (especially individuals and businesses); this is likely to be of great value. First of all, it would allow gathering information in order to assess whether Agreement 286 has met its goals, and second, it should allow managers to gauge the impact on users. The outcomes of an impact study would also facilitate redefining the system's objectives and scope and should lead to confidence among the people that new public policy-making is based on reliable data and information.

Policy option: as part of the study described above, conduct a longitudinal study of the impact of Agreement 286 procedures, this is also discussed in the Mexican response to the OECD's

Appendix to the Guidelines for Country Participation in the CPA. The most relevant variables linked to the system can be selected for data collection over time and, after analysis of trends, can inform policy-making on lifelong learning, employment, income and personal empowerment. Analysis can also look at gender, impact of accreditation and non-accreditation, educational areas where greater demand is concentrated and costs for individuals. Data can also be scrutinised against Mexican geographical factors. CENEVAL is an institution that possesses abundant information about candidates who have sat assessment examinations by means of Agreement 286. This could serve as the basis for data collection aimed at measuring the impact of the system on individuals.

Policy option: implementation structures for Agreement 286 procedures are complex. A time limited (internal) review of the structure of all of Agreement 286's provisions could be carried out. This review could consider the evidence gathered to date, including data provided to the OECD team, and the content of this Country Note. The review could require a report on the existing evidence from a respected and competent person and be required to take into account contextual information and developments in the Mexican education and training systems, both existing and planned.

62. Such impact measurements and structural reviews can help to raise the visibility of Agreement 286 procedures. Increased visibility with the Mexican public and major institutions will be helpful, however the visibility within political decision-making is also crucial. Reports based on systematic analysis of data can also be helpful for informing decisions on budget allocation.

5.2. Raising visibility

63. Making judgements about the extent of public profile of the accreditation procedures for informal learning is difficult. One reason for this is that so many factors are influential, for example, on the local scale the effectiveness of local communications infrastructure is important, and on the national scale, the dedication of budgets to provision enhances political prominence. Visibility can also be limited by poor coordination between parts of the accreditation system so that links between them are not obvious and one aspect of provision cannot be supported by another. The factors that affect visibility are discussed below, under three categories.

5.2.1. Strategic management of costs and financing

Managing costs

64. At the level of the individual seeking accreditation of his/her informal learning, a guiding principle should be that the costs they incur should reflect the actual level of engagement with the system. For example, individuals could pay more as they progress through registration, diagnosis, evaluation and certification. There is some evidence at the moment that costs for assessment at the higher levels of qualification are at least partly front-loaded and this is possibly a deterrent for some individuals. The expensive part of the system of accreditation is the evaluation stage and the quality assurance processes that are linked with it. It is therefore right that this area become the most costly to potential users.

65. The cost of accreditation could also be linked to the level of qualification since financial returns to qualifications are higher for higher-level qualifications. This is the case at the moment in Mexico but there may be some value in reviewing how the lower levels of qualification can be reduced in cost. One way is to ensure that the extent of quality assurance processes is in line with level (status) of the qualification. Low-level basic skills accreditation can require a much less sophisticated quality assurance

system than the evaluations for the baccalaureate for example. The ultimate goal could be that diagnosis, evaluation and certification leading to completion of lower secondary education is free to users.

66. Currently there is a mixture of public and private operations in the accreditation system with CENEVAL and CONOCER being privately funded operations. The OECD team is not aware of evidence that public systems are better than privately operated systems or vice versa; there are good examples of both systems in other countries. Internationally, there is a trend towards private certification, and whilst some certification is subject to little explicit quality assurance processes they carry currency with users and recruiters, for example, the high value of various commercial IT qualifications. The question for Mexico is which system is likely to offer the greatest sustainability and the highest levels of currency for key users? It is often the case that employers express their interest in skills levels of employees rather than qualification levels. Bringing employers into the funding arrangements for qualifications may depend on the ways qualifications are structured so that skills levels of qualified people are transparent, for instance, by using learning outcomes as the basis for curricula and evaluation.

67. Increasing the extent of private operations within systems for the accreditation of informal learning raises the issue of risk to public confidence. Countries facing this challenge have developed regulatory approaches that usually involve developing criteria for operations and quality; checking performance against them; issuing licences to practice and the use of penalties for those not meeting standards. The responsibility for operating these criteria can be carried out by publicly funded bodies, private businesses or agencies set up by the government that are partly funded by government and partly funded by users such as employers and individuals.

68. The lack of project funding for accreditation procedures hinders the development of an independent system of indicators for the performance and impact of accreditation processes and for the active promotion of A286 programmes so they could be more widely known and used by individuals.

Finding the finance

69. Generally, in Mexico the various forms of accreditation of informal learning are not directly funded through government support budgets – they are intended to be self-financing. The administrative support for the accreditation processes through government departments clearly has costs but this does not show as an explicit cost in budgets for accreditation processes. Hence, the financial profile of accreditation processes for policy-makers and the public is low.

70. The OECD team considers that CONOCER needs special interim financial support until a time when a critical mass of sectoral occupational standards has been developed. This critical mass is a position where the availability and use of occupational standards is sufficiently widespread for them to become part of the everyday language of sectoral training, qualifications and workforce deployment. At the moment, this does not appear to be the case and the potential of occupational standards to perform some key functions in economic and business planning is yet to be fully realised. As a wider range of users come to depend on occupational standards and a true market begins to operate amongst businesses that are able to assess against the standards, the costs of assessment and verification will begin to fall to more reasonable levels and enable greater use of the evaluation process by smaller businesses. This is important because the use of occupational standards as the basis of accreditation processes brings in many ‘skilled’ workers who have limited certification or formal qualification. The accreditation of workplace knowledge and skills is a potentially vast enterprise that will enable businesses to transform their production methods. It will also enable mobility of people based on the skills they have and eliminate inefficient hiring methods.

71. Interim support for CONOCER is also important for other reasons. The organisation has the potential to forge links across education and work and bring the advantages of learning outcome-based methods of evaluation of knowledge and skills to a wider audience.

72. It is possible that it will be necessary for CONOCER to evaluate the quality of workplace assessors in all parts of the accreditation system and fund the development of their profession since they will be key agents in maintaining the quality of the evaluation process.

5.2.2. Link to qualification frameworks, qualification systems and qualifications

Learning leads to accreditation which leads to certification

73. The Mexican system is interesting since it is conducive to learning for accreditation as well as giving direct access to qualification through accreditation of informal learning. In other words, the accreditation system is encouraging lifelong learning which is considered a desirable culture in most, if not all, countries. However there is a view that the accreditation system should be primarily about accreditation and it appears to be the case that it is too often about accreditation after requiring some additional learning. The refocusing of the accreditation system on certification of existing learning may be a useful way of making the system more transparent and useable, albeit for fewer applicants.

74. Certification at the higher levels of baccalaureate and bachelor's degrees requires the production of certificates achieved at lower levels of learning. This requirement is a useful quality assurance procedure that seems to raise confidence in the candidate's capacity to learn at higher levels. There is a case for dispensing with this requirement. The accreditation process for higher-level certification contains clear specifications of the learning required and of the evaluation process to be used to accredit it. This should be sufficient. If additional proof of lower level learning is required, it suggests that the specification for higher-level learning is not quite complete. In the case of Mexico, where the educational backlog is so large, this process adds to a culture of deficiency in learning that can be a deterrent to a significant group of skilled but unqualified citizens.

What are the standards?

75. The introduction of an accreditation process that provides alternative routes to established and trusted qualifications is inevitably scrutinised for the standards expected of applicants. Thus credibility has to be earned by proven reliability of procedures and acceptance of certificates by academic and labour authorities. As time has passed, Agreement 286 has gained acceptance from those who had doubts about its validity and conferred legitimacy on the qualifications gained. However, this battle for acceptance is constant and working with different stakeholder bodies such as the professional colleges is important in maintaining confidence in the expected standards. The relative success of the INEA programmes and the favourable comparative statistics on progress of people entering higher education with a baccalaureate based on Agreement 286 (as opposed to those using the traditional route to a baccalaureate) is a strong signal that can be used to strengthen confidence in the process of accreditation of self-taught knowledge and skills.

Establishing national levels

76. Consistent approaches to standards across all of the procedures under Agreement 286 are crucial to maintaining legitimacy. One area of variability is connected with the four 'natural' levels of formal education (basic, secondary upper, technical career qualifications, bachelor's) perceived by the OECD team; these do not link directly with the five labour competence levels (1-5). Whilst these education and work qualification levels are often very different to each other in content, the former give access to the latter and therefore some kind of link would help greatly with coherence of standards across the whole

education and training system. For such a link to be developed a kind of reference system needs to be available. In some countries, qualification levels for education and work are described in identical ways, in others a qualifications framework is developed where the education and work qualifications can sit side-by-side. Whilst such a framework can be designed using existing information about qualifications (length of programme, institution offering the qualification, evaluation methods), it is increasingly common for qualifications to be expressed in terms that facilitate comparison with regard to learning outcomes.

77. If Mexico is to continue to aim for its vocational qualifications to use the occupational standards produced by the work of CONOCER, it is necessary to ensure a return on investment by allowing and encouraging all parts of the education and training system to use them. The use in qualification design is obvious but equally important is the use of standards by employers in modernising work practices, delivering training and setting up more effective management structures. The training provision that is managed and monitored through the Secretariat of Labour and Social Welfare (*Secretaría de Trabajo y Previsión Social*) is well placed to amplify knowledge of the value of these standards. Small businesses in particular require support in seeing the value in defining work processes and training needs through occupational standards.

78. Other than in the VET colleges it is hard to see the position of workplace competencies in the formal education system. There may be elements of the curriculum for upper secondary education where the workplace realism, portrayed by occupational standards, may be useful to some teachers. Baccalaureate (Technological) modules can adapt material from these standards in some subjects. The definition of labour competences can also be a positive curriculum influence on higher education, especially where companies are seeking high level training in technical areas, the experience of the national electricity company CFE is relevant here.

79. Each of the Professional Colleges³¹ develops relevant professional profiles for its sector. These profiles develop through the experience of experts in the sector and it should be possible for the profiles to use the CONOCER standards where they are available, certainly there is advantage in formalising some linkage.

80. In the VET colleges, occupational standards and curricula and assessment could be more coordinated. The CONOCER occupational standards require a professional interpretation by teachers into a form that is useful for coordinating teaching programmes across colleges. These transformations, which produce educational standards, can describe content, pedagogy and the most appropriate evaluation tools. In managing the development of these occupational standards, value from occupational standards is optimised in terms of developing a supply of workers skilled in modern and relevant processes that will be in demand by employers. A major effect of developing these educational standards is to express programmes in terms of learning outcomes (to correspond with workplace competences) and this has a major positive spin-off in terms of transparency to users.

Learning outcomes and frameworks

81. It is interesting that in many countries, especially those in the European Union, there is work underway to describe curricula, training programmes and qualifications in terms of learning outcomes³².

31 The Professional Colleges play an important role in training and updating the main professional groups in Mexico. There are 48 colleges each of which develops a profile for the knowledge, skills and wider competences required in their area. The colleges also arrange for experts to be trained to assess people for accreditation in their area.

32 Most programmes are defined in terms of a teaching syllabus and a programme of fixed duration in a particular type of learning institution.

The main drivers for these initiatives are transparency and coordination³³ which have the potential to enhance visibility. However many of these countries also see the use of learning outcomes as a means of supporting better accreditation of informal learning. The expertise of CONOCER in the methodologies of writing learning outcomes is an asset in Mexico that can inform the Agreement 286 processes. One step beyond the current position is to seek a general move towards greater transparency and coordination across the secondary and tertiary system through the use of learning outcomes. One goal of the Bologna process³⁴ within higher education is the greater use of learning outcomes as it supports mobility of students and enables credit transfer and accreditation of non-formal and informal learning.

82. Other countries are considering qualifications frameworks – these are often based on learning outcomes defined as knowledge, skills and wider competences³⁵. The advantage of these national qualifications frameworks is that they embrace all qualifications that adhere to national standards for learning content and evaluation processes. They can make explicit the qualifications levels that are implicit in Mexico and establish (with stakeholder help) direct equivalences between the different fields of education and between education and work. Qualifications frameworks are explicit public statements about the levels in the qualification system, and where the levels in such frameworks are described using expected learning outcomes, frameworks can be powerful tools for increasing the visibility of qualifications levels and the routes to accreditation at these levels. Because the levels in such frameworks are defined independently of any particular qualification type, it is possible for them to become the basis for a system of accreditation of informal learning.

83. Developing a qualification framework for Mexico is a large undertaking with many considerations to be made, for example the management of the process of reform, how institutional structures for accreditation intersect with the functions of a framework or the role of the framework in education and training governance. It would be useful to gain a view from Mexican experts on the practicalities of creating such a framework and to spell out the advantages of undertaking the task.

84. Even with no explicit Mexican framework for qualification levels, it may be useful to set up a formal review of the standards expected across the different operations of Agreement 286. This should be independent of current actors in the system if it is to play a role in maintaining public confidence in the accreditation of informal learning.

5.2.3. Target intended beneficiaries

Understanding drop out

85. The linkage between registration, diagnosis, accreditation and certification is strong in the Mexican procedures built on Agreement 286. However as stated above, across the procedures about two thirds of people who register do not complete certification. This is too many. Some research is needed here to identify the key reasons for failure to reach certification. Some of them will be understandable, for example, failure to comply with accreditation requirements or a change of personal circumstances; however some linked to deficiencies in the system may need attention such as weak counselling services at crucial times or the cost to the applicant.

33 The development of the European Qualifications Framework also calls for transparency through the use of learning outcomes.

34 A now worldwide inter-governmental process that aims to harmonise higher education provision into universally recognised cycles of learning.

35 See Bjørnåvold and Coles (2006) for an up-to-date record of progress in implementing policies for recognition of learning outcomes across European countries.

86. The increased use of Information and Communication Technologies (ICT) across the accreditation process is excellent and many more people are enabled to register, carry out diagnostic tests, learn about the detailed requirements of evaluation procedures, submit responses to test items and receive certification. The use of ICT is intended to increase access and participation and it seems that this is indeed happening. However there is a possibility that fear of new technologies or lack of facilities may be a significant barrier to some people and produce unintended discrimination.

Mexicans abroad

87. There is a large cohort of Mexicans working in the USA (permanently or temporarily) and contributing to the US economy as well as indirectly to the Mexican economy through their families. It is probably the case that many of these migrants are working below their true skill level and are, in all but certification, overqualified for the work they do. For individuals to gain better economic status, it is necessary for Mexican competences and experience to be recognised and have currency in the job market in the USA. INEA programmes (which are extensive across the States close to Mexico) and the other Agreement 286 procedures are a major step towards this increased accreditation in the USA. Definition of programmes in terms of learning outcomes and the establishment of a Mexican qualifications framework – with equivalencies to US state-wide standards – will be another move towards full and fair accreditation of competencies for Mexicans working across the border. Furthermore, the promotion and communication of Mexican quality assurance processes, for both formal and informal accreditation, through engagement with key US agencies, especially employer bodies, will help with full and fair accreditation.

5.2.4. Raising the profile: next steps

88. There is a balance to be struck between building an accreditation system that is responsive to need and one that is actively promoted to generate awareness and, in consequence, greater levels of need. The Mexican system, at all levels of qualifications, seems to be poised for greater levels of public promotion following system development. The accreditation systems are robust enough for wider dissemination. Once again some policy options are now offered.

Policy option: review the processes for providing information, advice and guidance to individuals as promotion of accreditation processes begins with orientation of individuals. The knowledge of the possibilities in terms of accreditation by individuals is rapidly followed by the need for information about the range of steps that need to be taken to make sure the direction of travel and the speed of the accreditation process is in line with the available financial and time resources. Orientation of individuals precedes the well-established and effective diagnosis testing to establish the correct positioning of individuals within the learning and accreditation process. The INEA system of orientation for basic education seems to be very effective and could be a model for other parts of the accreditation system. The establishment of common principles for guidance, which may allow potential users to get information about the different instruments used as part of Agreement 286, could help to improve the visibility of the accreditation process. Assessors have an important role in the accreditation procedures based on Agreement 286. Not least in these roles is that of counsellor to applicants and potential applicants. Some formalising of this role may lead to improvements in orientation procedures and optimise the successful accreditation of learning in Agreement 286 procedures.

Policy option: review the interplay between parts of the system of accreditation of informal learning with a view to developing synergy between them and consequently raising the visibility of the entire system. As stated earlier, the planning and implementation of Agreement 286 has involved enormous challenges. Relatively fast progress has been made possible by encouraging distinct developments on several kinds of accreditation at the same time. This means that the

accreditation system is made up of different procedures at the different levels of qualification and, whilst they share some commonalities, they are distinct and this may create confusion in individuals about the various institutions and communications related to accreditation and certification under Agreement 286. The time may be right for a more assertive managerial view of the system to be developed so that the responsibility of the administrative units involved could be more clearly defined. A simplification in the infrastructure of accreditation processes, by using the three axes mentioned earlier, may help to avoid some confusion. The free exchange of information between the different parts of the system may also lead to advantages, not just by allowing anticipation of the problems in terms of what service differences might bring to individuals, but also to allow for increased sharing of practices that could lead to efficiencies and better coordination. There may be some benefits for higher education in linking with the generally more interactive practices operated at the lower levels of qualification.

Policy option: research could be commissioned to inform the business case for introducing the use of learning outcomes in the definition of learning programmes and evaluation procedures across education and training provision. This work should be based on the experience of CONOCER and other work-based stakeholders in using these methods.

Policy option: a national committee for exploring the advantages of a Mexican Qualifications Framework could be set up. The remit of this group should include the gathering of research information, examination of policy in other countries and formulating a proposal for consultation with all stakeholders.

6. In summary

89. Strategies to recognise non-formal and informal learning are necessary to encourage young people and adults to have accredited the knowledge they have acquired by means of experience or through self-education, so they can continue learning throughout their lives. The challenge is serious and requires a strong and sustainable strategic approach.

90. What Mexico has achieved so far is just the beginning. The figures for successful accreditation of non-formal and informal learning are small in comparison to the educational 'backlog' but there have been significant improvements in levels of education and training corresponding to the formal education system. People and society have come to appreciate the value of recognising non-formal and informal learning and consequently there has been an increasing demand for this type of accreditation, particularly for basic education certificates.

91. There are some major tasks that the new administration of Agreement 286 needs to face in order to measure the impact and raise the profile of Agreement 286. The OECD team would like to suggest that these tasks are crucial for the further development of the accreditation process in Mexico. These tasks are:

To measure impact:

- Take stock of data on the users in a systematic way;
- Set-up a longitudinal impact study; or
- Carry out a structural review exercise of all Agreement 286 procedures.

To raise the profile of Agreement 286:

- Carry out a review exercise on information, guidance and counselling provision;
- Promote a holistic vision such as by streamlining the accreditation processes;
- Research on benefits by collecting good practice business cases of learning outcomes-based assessment; or
- Set up a national committee to examine the benefits of a Mexican Qualifications Framework.

92. It is now necessary to have a reliable indicator system for both impact on users and the effectiveness of the processes. Both are needed for effective decision-making about adjustments that are likely to consume precious financial resources. The systematic measurement of impact is crucial. A formal feedback system could be designed that defines indicators covering all the desired impact areas for Agreement 286 procedures, data could be collected (longitudinal data on individuals is an important dimension) that will allow continuous evaluation. A common methodology should be used for measuring impact that all agencies can use to collect data. In this way a comprehensive picture of impact can develop relatively quickly.

93. Steps should be taken to raise the profile of the accreditation processes for informal learning by increasing the coordination between the different types of accreditation of informal learning and increasing the transparency of the system as a whole through the use of learning outcomes and national levels of qualification. Developing the systems for offering information, advice and guidance to applicants will also be advantageous in raising the visibility of the accreditation system

94. The reduction in the backlog, together with the demographic changes is leading to a sharper focus on lifelong learning. Clearly, individuals are motivated to learn more when self-belief rises as a result of accreditation; there is value in finding ways that make people realise they have knowledge, abilities, skills and competences that are amenable to accreditation. The Labour Competence Certification System allows the documentation of the intangible assets of the population that develop Mexico's human capital. However, the general value of lifelong learning is not yet widely appreciated and there is more work to do here in promoting the concept and communicating its advantages for learners and businesses.

95. This Country Note is intended to provide a focus for Mexico to continue to work on the policy agenda linked to accreditation of informal learning. There is evidence that the interaction of the OECD team and the Mexican partners has already yielded benefits. The OECD team is ready to respond to proposals from the Mexican partners and to assist with further policy analysis and development.

REFERENCES

Bjørnåvold and Coles (2006), *Governing Education and Training: the Case of Qualifications Frameworks*, *European Journal*, CEDEFOP.

CEDEFOP (Sellin, B.) (1999), *European Trends in the Development of Occupations and Qualifications*, Volume III, Thessaloniki.

CONEVyT - National Council for Education for Life and Work (2006), *Country Background Report for Mexico: Recognition of Non-formal and Informal Learning*, OECD, Paris, 72 pages, www.oecd.org/edu/recognition

European Commission (2006), *Progress towards the Lisbon Objectives in Education and Training*, *Commission Staff Working Paper – 2006 Report*, Brussels.

OECD (2007), *Qualifications Systems: Bridges to Lifelong Learning*, OECD, Paris.

ANNEX 1: PROGRAMME OF THE OECD RNFIL ACTIVITY COUNTRY VISIT TO MEXICO

Monday, 12 June		
9:00 - 13:00	Meeting with the authors	INEA: Francisco Márquez 160, 5° piso, Col. Condesa, México, D.F.
	Welcome to the OECD team by Prof. Ciro Adolfo Suárez, CONEVyT President and General Director of INEA.	
	Meeting at INEA with responsible staff of diagnostic exam for basic education certificates in Mexico and the USA.	
13:00 - 14:30	Lunch	
15:00 - 17:00	Meeting with authorities and staff of the General Directorate of Accreditation, Incorporation and Revalidation (DGAIR), in charge of 286, 328, 357 and 397 Agreements.	SEP-DGAIR: Dinamarca No. 84 Piso 8 Col. Juárez, México, D. F. close to Zona Rosa
17:00 - 18:00	Meeting with National College of Administrators and with professional private members of a technical council for the design of assessment exams.	
Tuesday, 13 June		
10:00 - 10:20	Welcome and introduction to mission and social function of CENEVAL.	CENEVAL main building: Av. Camino del Desierto de los Leones No. 19, Col. San Ángel, México, D. F.
10:20 - 11:00	Introduction to CENEVAL's services as an opportunity to collect data on aspects related to knowing different populations.	
11:00 - 11:30	CENEVAL's responsibility in the assessment process to accredit bachelor's degrees on the basis of Agreement 286.	
11:30 - 12:00	CENEVAL's responsibility in the assessment process to accredit bachelor's degrees on early childhood education on the basis of Agreement 357.	
12:15 - 12:45	CENEVAL's responsibility in the assessment process to accredit the baccalaureate on the basis of Agreement 286.	
12:45 - 13:00	Progress on the design of the assessment process to accredit the secondary level on the basis of Agreement 286.	
13:00 - 13:30	Quality control mechanisms of marking processes.	
13:30 - 14:15	Experiences of examiners and certified people on the impact of exams.	
14:30	Lunch.	
16:00 - 17:00	Meeting with authorities of the General Directorate of Baccalaureate (DGB).	SEP-DGB: Av. José María Rico No. 221.
17:15 to 18:00	Meeting with DGB staff and responsible coordinators of the baccalaureate assessment operation on the basis of Agreement 286. Guests: Universidad Veracruzana de Jalapa, Ver.; Colegio de Bachilleres de Baja California; Preparatoria Federal por Cooperación Luzac de Torreón, Coah.; Preparatoria Federal Lázaro Cárdenas de Tijuana, B. C.	SEP-DGB: Av. José María Rico No. 221. Col. del Valle. México, D.F.
Wednesday, 14 June		
9:00 - 11:15	Meeting at the General Directorate of Training (STPS).	STPS-DGC: Periférico Sur 3313 - 4° piso. Col. San Jerónimo Aculco. México, D.F.
12:00 - 14:30	Meeting with the National Council for Standardisation and Certification of Labour Competence (CONOCER) and with representatives of leading bodies and awarding bodies.	CONOCER: José Ma. Ibarrarán 33. Col. San José Insurgentes. México, D.F.
14:30	Lunch.	
16:00 - 18:00	Meeting with academics: Felipe Martínez Rizo, Ignacio Villagordoa Mesa, Estelio Baltasar Cadena, Gustavo Flores Fernández, Antonio Morfin, Roberto Flores Lima, Daffny Rosado, Arnulfo Arteaga.	CONOCER: José Ma. Ibarrarán 33. Col. San José Insurgentes. México, D.F.

Thursday, 15 June		
11:00 - 17:00	Meeting with responsible staff of labour competence standardisation and accreditation at the Electrical Federal Commission (CFE) in Celaya, Gto.	CFE: Celaya, Guanajuato.
	Visit to the assessment centre.	
	Lunch offered by CFE.	
	Meeting with union representatives at the Electricity Federal Commission.	
Friday, 16 June		
10:00 - 12:00	Formal delivery of the baccalaureate certificate.	SEP-DGB: Aula de Calidad. Av. José María Rico No. 221. Col. del Valle. México, D.F.
12:00	Meeting with individuals who have received their certificates in different periods.	
14:00	Lunch.	
16:00 – 18:00	Meeting with the steering group: Dr. Leonel Zúñiga Molina; Lic. Luz María Castro Mussot, on behalf of Prof. C. P. Ciro Adolfo Suárez; Lic. Fernando C. Crespo Ortiz; Ing. Ricardo Oziel Flores Salinas; Dr. José O. Medel Bello, on behalf of Mtro. Rafael Santiago Vidal Uríbe, and Mtro. Jorge Luis Ibarra Mendívil.	SEP-DGB: Av. José María Rico No. 221. Col. del Valle. México, D.F.

ANNEX 2: PARTICIPANTS IN THE MEXICO COUNTRY VISIT

The OECD team

Francisca Arbizu, Director, Instituto Nacional de las Cualificaciones (INCUAL), Spain (Expert)

Mike Coles, Qualifications and Curriculum Authority (QCA), London (Rapporteur)

Miho Taguma, OECD, Directorate for Education, Education and Training Policy Division, Paris

Patrick Werquin, OECD, Directorate for Education, Education and Training Policy Division, Paris
(Project manager)

Mexican steering group for the OECD activity

Leonel Zúñiga Molina, Head of the Unit of Educational Policy Planning and Evaluation.

Luz María Castro Mussot, on behalf of Ciro Adolfo Suárez, President of CONEVyT and General Director of INEA.

Fernando C. Crespo Ortiz, General Director of DGAIR.

Ricardo Oziel Flores Salinas, General Director of DGB.

José O. Medel Bello on behalf of Rafael Santiago Vidal Uribe, General Director of CENEVAL.

Jorge Luis Ibarra Mendivil, General Director of CONOCER.

Dulce María Nieto Pascual, Responsible for SEP relations with OCDE.

12 June 2006

Meeting with authors of the Mexico Background Report

Luz María Castro Mussot, General Coordinator.

María Luisa de Anda y Ramos, Author.

Patricia Martínez Ascencio, Author.

Welcome

Ciro Adolfo Suárez Martínez, President of the National Council of Education for Life and Work (CONEVyT) and General Director of the National Institute for Adult Education (INEA).

Dulce María Nieto Pascual, Responsible for the Secretariat of Public Education (SEP) relations with OCDE.

Alfredo Aguilar Orozco, on behalf of the General Directorate of International Affairs, SEP.

National Institute for Adult Education (INEA)

Luz Ma. Castro Mussot, Academic Director.
Patricia Ramos Méndez, Director of Foreign Relations.
Laura Marín Bastarrachea, Vice-Director of Ruling and Assessment.
María Luisa de Anda y Ramos, INEA Consultant.
Miguel Gallareta Negrón, Regional Coordinator.
Patricia Martínez Ascencio, Chief of Impact Evaluation.
Beatriz Rivera Eguía, Chief of Learning Assessment.
Joaquín Reyes Barrón, Chief of Learning Assessment.

General Directorate of Accreditation, Incorporation and Revalidation (DGAIR)

Fernando Crespo Ortíz, General Director of DGAIR.
Guillermo Pablo López Andrade, Director of Scholarships.
Julieta Martínez Yrizar, Vice-Director of Control and Assessment.
María del Socorro Martínez de la Vega, Coordinator of Planning and Quality Management.
Alejandra Reyes Guzmán, Coordinator for Agreement 286.
Lucina Franco Zamora, President of the National College of Administrators (Colegio Nacional de Administradores, A.C. CONLA).
Félix Patiño Gómez, Vice-President of CONLA.
Alfonso Castro Lomelí, General Coordinator of Agreement 286 at CONLA.
Judith Trejo Caballero, Technical Counsellor of CONLA at CENEVAL.
Víctor Mercado Pérez, Technical Counsellor of CONLA at CENEVAL.
Lucrecia Flores García, received the baccalaureate and bachelor's degree through Agreement 286.

13 June 2006

National Centre of Evaluation for Higher Education (CENEVAL)

Rafael Santiago Vidal Uribe, General Director of CENEVAL.
José O. Medel Bello, General Coordinator of National Admissions Exams.
Socorro Calderón Gutiérrez, Responsible of Agreement 286 for the bachelor's degree.

Antonia Aguilar Monterrosas, Responsible of Agreement 286 for the bachelor's degree.

Jorge Hernández Uralde, General Coordinator of Bachelor's Degree General Exams (EGEL).

Rocío Llarena del Rosario, Attached General Director of Special Programmes.

Beatriz Jiménez Aguilar, Attached General Director of Operation.

Lucía Monroy Cazorla, in charge of the Attached General Directorate of Research and Ruling.

Sócrates Muñiz Zafra, Attached General Director of ICT.

Juan de Dios Samperio Sánchez, Responsible for marking at the Attached General Directorate of ICT.

Rodolfo Moreno González, certificated by means of Agreement 286.

Eduardo Robledo Robles, certificated by means of Agreement 286.

Perla López Villagrán, certificated by means of Agreement 286.

Florencia Díaz Rosas, certificated by means of Agreement 286.

General Directorate of Baccalaureate (DGB)

Ricardo Oziel Flores Salinas, General Director of Baccalaureate.

Francisco Javier Blanco González, Director of Operation, DGB.

Mónica Acosta, National Coordinator for the Operation of Agreement, DGB.

José Cruz Holguín Ruíz. Responsible for the operation Of Agreement 286, Preparatoria Federal Lázaro Cárdenas. Tijuana, Baja California.

Roberto González Gutiérrez, Responsible for the Operation of Agreement 286. Preparatoria Federal por Cooperación Luzac. Torreón, Coahuila.

Margarita Ayala Gómez, Responsible for the Operation of Agreement 286. Universidad Veracruzana. Jalapa, Veracruz.

Ezequiel Carrillo Gallardo, Colegio de Bachilleres del Estado de Baja California. Mexicali, Baja California.

14 June 2006

General Directorate of Training, Secretariat of Labour and Social Welfare

Raúl Herrera Vega, General Director of Training.

Beatriz Pulido Campos, Director of Technical Training.

Francisco Javier Díaz Orrostieta, Coordinator of Planning, Registration and Information.

National Council for Standardisation and Certification of Labour Competence (CONOCER)

Jorge Luis Ibarra Mendivil, General Director of CONOCER.

José Gabriel López Garza, Responsible of Standardisation, CONOCER.

Alfredo González González, Responsible of Certification, CONOCER.

Martha Cortés Delgado, Responsible of Planning, CONOCER.

Patricia González Lozano, Responsible of Links and Legal Affairs.

Cristián Félix Valdez, Responsible of Management and Finance.

Carlos Noriega Arias, President of the Educational Commission of the National Confederation of Industrial Chambers (CONCAMIN).

Representatives of the awarding bodies ACERTAR and CECOLAB.

Representatives of the assessment centres El Palacio de Hierro and Click.

Marcial Maciel, Training Manager, Electricity Federal Commission (CFE).

Daffny Rosado Moreno, Coordinator of Advisors, Higher Secondary Education Vice-Secretariat, SEP.

Meeting with academics

Felipe Martínez Rizo, General Director of the National Institute of Educational Evaluation.

Ignacio Villagordo Mesa, Chancellor of Liverpool University.

Estelio Baltasar Cadena, Expert on labour competences, Higher Education School of Chemical and Extractive Industries Engineering, National Polytechnic Institute.

Gustavo Flores Fernández, Director of VET Curriculum Design, National College of Professional Technical Education.

Antonio Morfin Maciel, Director of the Centre for High Management on Economy and Business, Anáhuac University, and private consultant on competences.

Roberto Flores Lima, Inter-American Development Bank consultant and expert in competences.

Daffny Rosado Moreno, Coordinator of Advisors, Higher Secondary Education Vice-Secretariat, SEP.

Arnulfo Artega, Researcher of the Metropolitan Autonomous University.

Rafael Santiago Vidal Uribe, General Director of CENEVAL.

Dulce María Nieto Pascual, Responsible for the Secretariat of Public Education (SEP) Relations with OCDE.

Luz María Castro Mussot, Academic Director, INEA.

15 June 2006

Electricity Federal Commission (CFE)

Marcial Maciel, Training Manager.

Alejandro Sánchez Anguiano, Secretary of Social Welfare – Union of Electrical Industry Workers in the Mexican Republic (SUTERM).

José Luis Cuevas Madrigal, Coordinator of National Training Centres (CENACs).

Carlos Acosta Maíz, Vice-Manager of Training Administration.

Sandra Córdoba, Chief of the Training System Department.

Merari Bojórquez and Florentino Sáez Espínola, Training Manager consultants.

Roberto Martínez Muñoz, CENAC's Chief of Industrial Relations.

Margarita Franco D., CENAC's Coordination Supervisor.

Raúl Villareal Peña, General Coordinator of Celaya, CENAC.

Ramón Hernández H., Chief of the Technical Department of Ixtapantongo, CENAC.

Manuel Blanco Sosa, INEA Delegate in Guanajuato.

Estela Rodarte Rosas, Chief of Training, INEA Delegation in Guanajuato.

16 June 2006

General Directorate of Baccalaureate. Certificate Delivery

Presidium

Fernando Crespo Ortiz, General Director of DG AIR.

Rafael Vidal Uribe, General Director of CENEVAL.

Néstor Rolando Aguilar Domínguez, General Director of Human Resources, Council of the Federal Judiciary.

Ricardo Oziel Flores Salinas, General Director of DGB.

Javier Blanco González, Director of Operation and Finance, DGB.

Successful learners

Ana Silvia Fuentes Catarell

Silvia González Martínez
Susana Laguna Olvera
Ma. Guadalupe Herlinda Lobato de los Reyes
Víctor López García
Verónica Mejía Hernández
Maricela Pérez Cruz
Patricia Elena Ramírez
Blanca Estela Rosas García
Fernando Zúñiga Bautista
Rosa Hilda Cruz Ramírez
Ernestina Nicolás González
Edson Eumier García Reyes
Rubén Baza Román
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Ma. Teresa Malta Berumen
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Martha Hamill Meléndez
Daniel Betancourt Bautista
Ma. Guadalupe Barajas Mosqueda
Luis Olvera Alvarado
Fanny Epifanía Arena Martínez
Christian Valencia Orozco
Estela Jasso Jiménez
Silvia Rojas Mendoza
Joel Lorenzana
David Cortés Alejandra Salinas Bucio

Luis Gómez Berlie

José Luis Ávila Barrera

Francisco Ricardo Ávila Santacruz

Blanca Yuridia García Arellano

Ana Isabel Ojeda Villanueva

Carlos Ramos Aguilar