



RETOOLING A WORKFORCE TO MATCH INDUSTRY NEEDS: MEXICO REVAMPS SKILLS-BASED VOCATIONAL TRAINING, 2008–2012

SYNOPSIS

In 1995, the Mexican government instituted a skills-based vocational education and training system to gain a competitive edge in global markets by making it easier for job seekers to signal their qualifications to employers and by modernizing job training nationwide. However, initial efforts to implement the system failed to gain traction among businesses, unions, and educational institutions. In 2007, a new leadership team took over the public trust that was managing the system and reformed its model to better fit the needs of workers and employers. The new model differed from international recommendations in several key ways but attracted a broad base of users from more than a hundred different industries. By 2013, Mexico's unique approach to skill standardization had begun to generate results and attract interest from other emerging economies.

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INTRODUCTION

By the turn of the twenty-first century, Mexico had emerged as an economic heavyweight. Its diverse economy, based on services and manufacturing, was by some measures the world's 11th largest.¹ It had the world's biggest Spanish-speaking population, and it enjoyed free-trade agreements with its neighbor the United States as well as Canada, the European Union, Japan, and other nations. Even with those market advantages, Mexico lagged behind its economic peers in one crucial aspect: its low-skilled labor market.

Despite steady gains in educational participation,² Mexico ranked low on international measures of labor productivity and economic competitiveness in the early 2000s.³ Studies suggested that the underdevelopment of

its human capital handicapped Mexico compared with competing economies in Asia and Latin America.⁴ Experts criticized the country's vocational training as haphazard, uncoordinated, and disconnected from the needs of the labor market.⁵ To attract the advanced industries it needed to push its economy to the next level, Mexico had to cultivate a world-class workforce and enable employers to match skills to positions more easily.

In the early 1990s, Mexican leaders decided to create a national system to standardize both the training of workers and the certification of workers' skills, building upon VET expansion programs that the World Bank had helped implement in the previous decade. From 1992 to 1994, the labor secretariat sent teams to study VET systems in the United States, Canada,

England, Germany, South Korea, and Japan. As the model for its new system, Mexico chose the National Vocational Qualifications framework of England and Wales, which had pioneered a skills-based VET system in the 1980s. The system centered on certification of *skills*—meaning, the know-how to perform specific job functions—taught and assessed under a shared methodology.

The UK VET centered on *competencies*, or demonstrable skills. Competencies had to be observable, measurable, and valuable across different work contexts. These features made them universal and transferrable between workplaces and schools, which encouraged lifelong learning. Informal and formal learning were equally valuable because skills were tested by output—carrying out tasks—rather than the mastery of information. For example, a machinist could gain certification in using a certain type of machine only by demonstrating this competence under observation in a test facility. Finally, the model created a national framework or system of competencies classified by field and by level. The classification scheme helped employers gauge the skills of job candidates and helped workers acquire skills relevant to their desired career goals.⁶

Under England's system, a national Sector Skills Development Agency convened councils for each economic sector. Each council, composed of government, industry, and labor representatives, developed standards for training, assessment, and independent certification in its respective sector. The national agency funded, supported, and oversaw the councils' work and promulgated the final national standards.⁷ Ultimately, the system organized thousands of skills into a unitary grid of 11 functional fields and five levels of advancement. By certifying worker proficiency in common job skills, the system enabled employers to identify job candidates who met their labor needs. Experts considered the English system versatile and coherent, and it later served as a model for

national VET systems throughout the European Union.⁸

Mexican leaders wanted to create a similar VET system for three main reasons: First, it would enable certified workers to credibly signal their skill sets to potential employers, thereby reducing information asymmetries in the labor market. Second, it would align job training in workplaces and schools with international standards, making training more useful to workers and making workers more useful to employers. Third, it would enable workers to gain credit toward formal academic degrees for skills gained on the job, which would boost the job prospects of the 32 million Mexicans who lacked formal secondary education.

To develop and implement the new system, Mexico's labor and education secretariats jointly created the Council for the Standardization and Certification of Labor Competence (Consejo Nacional de Normalización y Certificación de Competencias Laborales, called *Conocer*—the Spanish for *to know*). In 1994, the secretariats set up Conocer as a public trust, a step, which under Mexican law, required no legislative action.⁹ Conocer enjoyed early high-level political support as well as backing by the World Bank and the Inter-American Development Bank. Ernesto Zedillo, Mexico's president from 1994 to 2000, played a leading role in Conocer's creation in his previous role as secretary of education.

However, Conocer lost political support under Zedillo's successor, Vicente Fox, whose administration questioned its legal standing and its use of expensive private consultants. The Fox administration replaced Conocer's founding director with a succession of less-experienced directors and often left the post vacant. Industry and union leaders accused Conocer of corruption and mismanagement. Although the council approved 601 skill standards, few were ever used. Out of Mexico's 45 million workers and job seekers, only a quarter million candidates were certified by Conocer standards.¹⁰ The labor

secretariat and the World Bank judged the program a failure and withdrew support. By 2004, Conocer had effectively stopped operations.

In December 2006, the newly elected government of Pres. Felipe Calderón looked to boost economic growth by increasing workforce productivity. To achieve that goal, the new government sought to resurrect national skill standards through Conocer. Secretary of Public Education Josefina Vázquez Mota tapped her friend Sergio García-Bullé, a former managing partner at global consultancies Booz Allen Hamilton and A.T. Kearney, to jump-start Conocer.

A graduate of the University of Pennsylvania's Wharton School of Business, García-Bullé had spent more than two decades solving management problems worldwide. "Conocer was not in good shape," García-Bullé recalled. "[But] Josefina told me that it was time for me to use my experience and my talent, whatever I had, to do something for my country from the government side."

Alfredo Garza, whom García-Bullé hired as communications director, explained that García-Bullé reformed Conocer to "put the user at the center of its operations." Garza said: "Using lessons from his career as a consultant, García-Bullé established a new structure for Conocer in which businesspeople, workers, educators, and public servants participated. He redirected Conocer to better contribute to Mexico's competitiveness by strengthening the skills of its human capital."

THE CHALLENGE

García-Bullé's first step was to assess Conocer's problems, in accordance with a 2005 loan agreement between the Mexican government and the Inter-American Development Bank.¹¹ García-Bullé spent six months evaluating Conocer's model and operations and interviewing those he saw as the system's intended users: "business associations, private companies of

Mexico—big, medium, and small—the trade unions, the workers, academic institutions, and students." He concluded that Conocer had succeeded in creating an English-style VET system but failed to attract users to the system. Many employers and workers distrusted Conocer as an institution and saw little value in its work. García-Bullé saw the need to reform the Conocer model to better serve labor market needs and to restore Conocer's credibility after a decade of unsteady leadership and poor oversight.

"My idea from the very beginning was that whatever you do in any organization either private or public has to generate value for your clients," García-Bullé said. "[Otherwise,] your organization really has no reason to exist—no purpose."

Under Conocer's original model, the public trust convened 65 standardization committees (*comites de normalización*) composed of government and academic experts as well as industry and labor representatives from specific economic sectors, such as tourism or mining. The committees developed skill standards for their sectors, which Conocer's council reviewed. Once approved and published in the government gazette, the standards took effect nationwide.

To gain proficiency under those standards, a candidate did not need formal training but did have to be tested at an evaluation center and then certified by a certifying body. Conocer accredited institutions such as businesses and schools as training or evaluation centers. However, only independent certifying bodies (*organismos certificadoros*) with Conocer accreditation could certify qualified candidates. Mexico, like England, separated evaluation and certification to provide a check on the system. "To have credibility, we needed certification by a third party," said Augustín Ibarra, Conocer's first director. "That's why for us it was necessary to have a rigorous assessment process and an independent certification process."

The independent third-party certifiers typically were private firms that specialized in certification. Most were based in Mexico City and unable to provide effective coverage nationwide. Many users complained of low-quality certifiers that lacked transparency in their operations. Magali Soria, whom García-Bullé appointed operations director in 2008, said: “The certification entities were not responding to market expectations. Certification standards were relaxed.”

Business associations, major corporations, trade unions, and universities resented the exclusive use of independent certifiers and preferred to conduct certification themselves, as they had done previously. “Employers told me they couldn’t understand what the government was doing,” García-Bullé said. “They have their own training centers. If they couldn’t certify the competencies of their own workers, of the new hires whose skills they were developing, then they didn’t see any value in working with Conocer.”

Users also complained that third-party certifiers overcharged for their services. Eduardo Miranda, training secretary for a Mexican trade union—the Revolutionary Confederation of Workers and Farmers—representing 4.5 million workers, said his union had a “poor experience” with the old model, which lowered his “trust and interest” in Conocer. Miranda sat on the Conocer standardization committee for the tourism sector, one of the first to develop skill standards. Ultimately, however, he found the certification costs, ranging from 2,500 to 7,500 pesos (US\$250 to \$750 at the time) per worker, prohibitive. “We hoped to see our colleagues get certified, but at lower cost,” he said.

Another problem users had with Conocer was that its skill standards did not reflect market needs. “There were about 600 competency standards, but they were done according to what those in the government would like rather than what we needed as employers,” said Carlos Noriega, vice president of Mexico’s National

Confederation of Industrial Chambers, a leading business association. “The certificate didn’t really have value.”

García-Bullé agreed that the skill standards created by Conocer’s committees were not valuable to users. “Conocer was excessively involved in defining the standards and their content, instead of truly empowering employers and workers to do so,” he said. “Therefore, in many cases, the skill standards were not updated [regularly] and became obsolete. They were not on target in terms of what employers required. There was no detailed analysis of which standards were generating value. Sometimes they were not developed in the best sequence. And above all, they were not part of the human capital agendas of the sectors. Consequently, in many cases, they were not utilized for certification.”

García-Bullé said the skill standards had limited relevance because standardization committees dominated by civil servants and academic experts had created them. Although the committees had industry representatives, those members tended to be midlevel human resources managers rather than business leaders. According to Consuelo Ricart, an Inter-American Development Bank VET specialist based in Mexico, the end result was that Conocer operations were too centralized and top-down rather than industry led. Thus, she said, Conocer “had lost credibility with the private sector.”

Conocer’s credibility gap had grown into a chasm during the period of stop-and-start operations before 2008, when, Soria said, “Conocer lost its credibility.” Users were upset at Conocer’s low standards of service, lack of transparency, and inability to issue certificates. “Some users even told me stories of corruption in which they were asked for money,” García-Bullé said. “They said supervision was relaxed and the processes were not followed.”

To build a national system of skills-based training capable of upgrading of Mexico’s workforce and aligning training in schools and

workplaces, Conocer needed to rebuild credibility with employers and workers. To gain the trust of those users, Conocer had to accommodate their needs by cutting out independent certifiers, by including more industry input in the development of skill standards, and by reducing corruption.

FRAMING A RESPONSE

In 2007, García-Bullé presented his assessment of Conocer to Secretary Vázquez and outlined his vision for the New Conocer. Noriega summed up Vázquez's reaction as: "I love it. If you're so passionate about this, take it." She appointed García-Bullé director of Conocer.

As a first step, García-Bullé reframed Conocer's mission. He rejected suggestions that Conocer's mission was to certify job skills. "Saying that Conocer exists to certify workers is like saying the central bank exists to print money," he said. "The mission of Conocer is to support Mexico's economic competitiveness by contributing to human capital development, with a lifelong-learning perspective." García-Bullé said such a shift in perspective helped convince potential users of Conocer's value. "Once we changed this statement of strategy, we started to get the attention of many people," he said.

Next, García-Bullé changed Conocer's model in three important ways. First, he replaced standardization committees with competence management committees (*comités de gestión por competencia*) that had broader powers and the leeway to develop their own skill standards. Unlike the old standardization committees, which Conocer had convened, García-Bullé invited industry and labor leaders to create competence management committees for their respective sectors.

The new rules required each committee to include high-level sector leaders with decision-making authority, such as chief executives and trade union general secretaries. Conocer provided a common methodology and guidance, but the committees otherwise set the content of their

own standards for skills-based training, evaluation, and certification. Although Conocer reviewed the committees' work and although its technical council had final say over the standards, García-Bullé's team generally deferred to the committees as the best arbiters of labor market needs.

This change made Conocer less top-down and more responsive to the demands of employers and workers. It marked a departure from the English system, under which government experts actively participated in the creation of skill standards. Ricart said that she and other international advisers applauded the change. "Our recommendations for Conocer have always been that they be much more connected with the productive sector," she said. "Let the sectors decide how to certify and evaluate and how to do it best."

Second, Conocer no longer mandated the use of third-party certifiers. "The exclusive involvement of independent third parties was not generating a national network fast enough, said García-Bullé, "and it restricted competition that could foster high quality and better prices for users' benefit. It was hurting the trust and credibility of the process. We created a new model allowing universities, vocational schools, employers, chambers [of commerce], and trade unions to certify competencies. We needed to create a truly nationwide certification network of high prestige that would be credible to the market."

This change deviated from the English model and from international practice. García-Bullé argued that Mexico had many respected institutions that could be trusted to handle training, evaluation, and certification of candidate skills as long as they delegated those roles to different colleagues within the institution to reduce the risk of a conflict of interest. "The theory is that the prestige and credibility of an institution in the labor market are stronger than any independent third-party role," he said. "If the

certification is done by a university, business association, or other prestigious institution, we are conveying certainty to the markets.”

Third, García-Bullé believed that Conocer should not subsidize the committees’ work to develop skill standards. The services Conocer provided benefitted private firms and workers. García-Bullé believed that the industry leaders who convened the competence management committees would be able to find time and funds for developing standards they saw as important to their economic competitiveness. Trade associations and other organizations could pick up the tab. Conocer staffers would advise the committees about the process, but would not provide funding or instruction on the content. García-Bullé said the industry leaders who convened the competence management committees would be able to find time and funds for developing standards they saw as important to their economic competitiveness.

García-Bullé argued that when Conocer was directly assisting the committees, it had inadvertently discouraged industry leaders from investing their own attention and resources in the committees’ success. “The only way we’ll have true involvement of the [economic] sectors is to not give them money,” he said. Furthermore, making committees responsible for their own funding would keep them focused on producing standards that users valued.

In contrast, international practices held that state cofinancing was necessary to induce industry leaders to collaborate on creation of skill standards, especially since standardization had spillover benefits for society at large—such as reduced unemployment. Ricart said: “From our look at best practices worldwide, the lesson is that if you don’t cofinance, it’s not going to work well. Most of the countries that have managed to do this rather well do have cofinancing mechanisms so that . . . [industry participants do] not have to invest in the nitty-gritty research that’s required to do these things well.” Ricart agreed with García-

Bullé that Conocer should no longer give expert help to the committees, but she recommended that Conocer provide matching grants to augment industry investment.

García-Bullé stood by his approach. “In this case, based on my business experience, I don’t believe subsidies are a good idea,” he said. Rather than putting money into developing labor competencies, García-Bullé wanted to focus Conocer’s resources on building and promoting its new framework to reach as many sectors as possible.

GETTING DOWN TO WORK

García-Bullé directed Conocer from 2008 until the end of Calderón’s presidency, in 2012. His first tasks were to build a reform team and secure buy-in from industry and labor leaders. After Mexico’s education secretariat approved the rules of Conocer’s new model in 2009, competence management committees took root in a wide range of sectors, and Conocer had to consider whether to limit their proliferation.

Building a new team

García-Bullé had unusual freedom to reshape Conocer because of the entity’s flexible structure as a public trust under the education secretariat¹² and because most staff had been hired as consultants. The education secretary appointed Conocer’s director, determined its budget, and chaired its technical council, which also included six government representatives and three representatives each from employers and trade unions. Secretary Vázquez and her undersecretary, Miguel Székely Pardo, supported García-Bullé’s reforms and enforced them through administrative orders.

One of García-Bullé’s first priorities was to reshape Conocer’s staff to include more private-sector perspectives. Out of roughly 120 staffers, García-Bullé replaced about 20, including most of the directors. He appointed four new directors, some of whom he had previously worked with on

consulting projects. “As all of us come from the private sector, we thought more like the private sector,” said Blanca Jolly, whom García-Bullé appointed as managing director. “We know more about the needs of the entrepreneurs and the unions.”

In line with Conocer’s new model, García-Bullé abolished the administrative division between training and certification, which had previously been managed separately. “They were like two different islands with no communication,” Jolly said. “It was very hard to make them one. But we made them into one system: the national system of competencies.” The new system integrated the key activities of (1) promoting and supporting the work of competence management committees to develop skill standards and (2) overseeing skill evaluation and certification.

The new team made Conocer’s operations more systematic and transparent so as to limit opportunities for graft in areas such as staff compensation. The team also improved the office environment, which had deteriorated during years of neglect and dormancy. “The premises were not in good condition,” Jolly said.

To boost morale and generate creative ideas, García-Bullé worked to change Conocer’s organizational culture, which had previously been “closed and inward looking,” in the words of communications director Alfredo Garza. Using lessons from his career as a consultant, García-Bullé established internal committees to brainstorm new ideas. He also checked in with staffers frequently, both individually and as a group. Nevertheless, some of the preexisting staff resented the rapid management changes and resisted Conocer’s new model. “It’s been very hard to try to make this model feel like theirs,” Jolly said of Conocer’s staff. Ultimately, the reform team would look to users to lock in Conocer’s new model.

Getting industry and labor leaders on board

Jolly said she and the other directors tried to understand the needs of the employers, unions, and academic institutions García-Bullé had identified as Conocer’s user base. “That was the first thing we did,” she said. “We got in touch with them and asked what they needed, what their problems were with Conocer. We tried to be receptive.”

“I encountered a lot of rejection of Conocer from employers and trade unions,” said García-Bullé. “In many cases, they told me to stop wasting their time, that they didn’t want to talk about it, that Conocer is a nest of corruption and inefficiency—in a word, a failure. I was told very tough things.” Listening to and empathizing with those concerns helped García-Bullé defuse tension between Conocer and its users, set a cooperative tone, and avoid past pitfalls. Conocer looked to representatives of its technical council and high-level officials in the education secretariat to facilitate these dialogues.

Miranda, a labor representative on Conocer’s council, recalled how García-Bullé overcame skepticism about the new model. “Initially, we resisted Sergio’s approach, but the experience he had gained in private industry was much more objective than the experience of government functionaries, who had a much more political perspective.” He said García-Bullé presented his new model in terms that were “more comprehensible” to the unions, which eased their resistance. “It was a very professional presentation, with clear statistics and logical arguments, showing that the new model could achieve the highest number of certifications of Mexican workers.”

Despite their historical rivalry, business associations and unions found common ground in supporting the new model for Conocer, which they saw as mutually beneficial. Together they drove committee formation, recruited new users,

and lobbied for political support. On Conocer’s technical council, business and labor representatives tended to disagree more with government representatives than with each other, especially over issues like lowering user fees. Noriega called the alliance between industry and labor leaders in Conocer “too good to be true.”

Jolly said that support from business associations and trade unions was crucial to the long-term success of Conocer’s new model. “Because we let them participate with us in this new operational model, they feel they are part of it,” she said. “Now they . . . defend it, because they feel it’s theirs.”

Creating competence management committees

Private-sector leaders worked with Conocer’s promotion and development team to establish new committees representing specific economic sectors, such as tourism or construction. Conocer’s communications staff also recruited users through targeted presentations, communication campaigns, a Web site, and social media presence.

Conocer gave committees leeway to determine their own compositions, but most had only a handful of members because all members had to be high-level decision makers in their field. A committee’s first task was to draft an “agenda of human capital development” that set out the skill sets sector workers had to have. Then the committee convened a technical working group of experts to define and develop skill standards. “We help them all the way,” Jolly said. “We advise them about how to integrate the technical group that will develop the skill standards. If they need a methodology, we help them. We send someone to teach it to them.” However, Conocer limited its assistance to methodology rather than content.

Committees had to determine the terms of each standard’s validity, including the frequency of its renewal or re-evaluation and the benefits or privileges that certification conferred.

Committees also developed a certification process for each skill and nominated certain institutions to be accredited by Conocer as certifying bodies. Committees could nominate third-party certifiers, but typically, they chose institutions (schools, colleges, major businesses, and trade unions) that also provided training and/or evaluation.

Putting training, evaluation, and certification under one roof presented a potential conflict of interest that could undermine the credibility of the certification process. To address any concerns about bias, Conocer created three safeguards. First, candidates could not be evaluated and certified by the same individual within a given institution. Second, the certifying institution’s procedures had to be transparent and approved by Conocer. Third, competence management committees had to nominate at least three certifiers for Conocer approval, which would undercut collusion and prevent individual certifiers from cornering the market.

Conocer staffers reviewed completed standards for comprehensiveness and compliance with the methodology for skills-based training. Then Conocer’s technical council voted on whether to approve the standards. Finally, the education secretariat made the standards official by publishing them in the government gazette.

Although the development of standards was a resource-intensive process for participants, García-Bullé emphasized that industry leaders ultimately found the investment was worthwhile. “The companies and trade unions believe that improving the knowledge, capabilities, and attitudes of workers is very good for the industry,” he said. “We offered a structured way to do that. We told them that if you make the standards—because you are the only ones who can do it in a way that ensures true value generation for your industry—then we will get the cooperation of the universities and vocational schools as certifying institutions, and we will offer the seal and recognition of the education ministry and Conocer.”

García-Bullé added that Conocer helped promote those new standards among educational institutions nationwide. Many educational institutions embraced the new system for two reasons: First, training, evaluation, and certification were new services to offer employers and workers, which brought in extra revenue. Second, skills-based training and certification could give students a leg up in the labor market. García-Bullé said, “This was good for universities and vocational schools because they could certify their students in skill standards developed by the very companies that would eventually employ those students.” In late 2012, the education secretariat enacted new regulations to integrate skills-based training standards within the educational system.

Permitting committees to form in social sectors

As Conocer’s visibility increased and more competence management committees took root, leaders in public and nonprofit sectors asked to form committees as well. Although Conocer’s mandate allowed for the development of skill standards in all parts of the economy, its work was intended to target so-called productive sectors rather than public, social, educational, or cultural areas. Against international recommendations, García-Bullé opened the door to all sectors.

The Inter-American Development Bank had recommended that Conocer focus more or less exclusively on productive sectors—to serve Mexico’s ultimate aim of business development. Furthermore, the bank wanted Conocer to concentrate its efforts on signature projects in roughly a dozen sectors that fit into the government’s economic development strategy—to avoid taking on too much at once.

Ricart of the Inter-American Development Bank said her advice was to “concentrate efforts on strategic sectors that have a strong incentive to promote certification and work with them to be able to show, at some point, that employers in

these sectors are actually demanding workers certified in these skills.” Her colleague Roberto Flores Lima, a former director general of employment in Mexico’s labor secretariat, added, “Then it will be useful to say to other branches: ‘Look, this is what you can achieve.’”

García-Bullé disagreed. “If our mission is to create economic competitiveness in the country, we have to be open to everybody,” he said. “We have a moral obligation to certify everybody who wants a skill standard regardless of their industry.” He thought this inclusive approach would serve Mexico’s development goals: “If a country wants to progress, there have to be competent people everywhere, in every sector.” For example, García-Bullé said that the Red Cross had developed skill standards for emergency responders and support staff. Not only did such standards serve the public interest, García-Bullé said, but it would have provoked “negative reactions on many fronts” to rebuff the Red Cross.

Ultimately, Conocer’s leaders said they focused on productive sectors but were unwilling to reject qualified leaders from other sectors who wished to create committees. Jolly said, “We wanted to listen and respond to other sectors, including social and government sectors.”

Conocer’s inclusive mix of committees enabled marginalized communities to share in the benefits of competency-based VET. For example, a committee for the public National Institute of Indigenous Languages developed skill standards for the millions of Mexican speakers of indigenous languages. Another committee run by a social organization developed skill standards among deaf and blind workers.

Permitting committees to set competing standards

Perhaps García-Bullé’s most radical decision at the helm of Conocer was to allow multiple committees to form within a single sector, even if those committees created inconsistent standards. This was a direct contravention of international

best practices, which held that skill standards must be universal to have value.

In contrast, Jolly argued that in Mexico, “we have different regions with different levels of technology, different languages. So sectors have demanded to have several committees within a sector, to be more flexible. . . . We try, in the first place, to have a national committee, but if it’s not possible, we allow more than one committee.”

Miranda called Conocer’s pluralistic approach “logical, healthy, and congruent” with industry needs. He used the example of his own union, which represented many workers in Mexico’s hospitality and tourism industries: “The business characteristics and job requirements in the service industry, for example, vary from region to region, even among the same types of businesses. The hotels in Cancún, Quintana Roo, have needs and services different from those of hotels in Mexico City. At the beginning we didn’t like this, but then we realized that each region needed the appropriate standards for what it had to do.”

García-Bullé said the acceptance of multiple committees within a given sector was a Mexican innovation that allowed for “national networks of committees” to develop organically. He justified the approach by arguing that competitors within a sector “might have different beliefs about how to do business in a sector, about product types and technologies and worker competencies.”

In more than one case, leading firms from specific industries—such as tourism, information technology, and construction—wanted to join Conocer but disagreed with standards that had been developed by preexisting committees, whose members represented only a fraction of the market. They wanted to start new committees to develop their own skill standards. Rather than force all companies to work together, Conocer allowed multiple committees to coexist, competing or collaborating as they saw fit.

To reduce the confusion of having conflicting competence standards in a sector,

García-Bullé said, Conocer required transparency, so that users were aware of any differences. Individuals and institutions could then choose the standard that best fit their needs. “What is wrong with allowing students and workers to decide the standards they are going to use?” he said. “There is going to be competition. The committees are going to put more attention into their standards because they are going to want to develop standards better than the other committees. And there could be alliances also. Committees could decide to merge their standards.”

Ultimately, García-Bullé argued that competing committees fit New Conocer’s user-led approach. He called the empowerment of committees across a wide range of regional and national sectors a “de facto decentralization . . . allowing employers and workers to determine their own destinies.”

OVERCOMING OBSTACLES

Despite high-level support for Conocer’s new model, administrative and legal procedures delayed the education secretariat’s official approval of the necessary regulatory changes until late 2009, more than a year after García-Bullé took office. The secretariat faced many competing priorities from the 37 different institutions under its oversight, and Noriega noted that “Conocer is one of the smallest ones.” Furthermore, Conocer’s new model had to go through a mandatory process of public input and legal review. “It was really difficult to get the [new] rules through,” García-Bullé said. “We needed to go public, to comply with the law and be very transparent.”

In the tense months before the reform passed, opponents mounted a range of attacks against it, mostly behind the scenes and anonymously. Although Conocer leaders could not be sure who was behind those efforts, they suspected third-party certifiers desperate to hold on to control of the certification process, as well

as disgruntled former staffers who had lost their jobs.

“It was very tough,” said García-Bullé. “I was sued four or five times, and I was anonymously denounced probably 15 or 20 times. They accused me in the office of the president, in the secretariat of education, in the office of the government anticorruption agency. . . . They accused me of everything you can imagine: lack of morality, corruption, misuse of public funds, lying to my board and to the secretary of education.” García-Bullé said the secretary and undersecretary of education also were sued and accused of malfeasance for changing Conocer’s operating rules. “None of those accusations amounted to anything, although they were very annoying,” he said. Sometimes the anonymous attacks escalated into personal harassment. García-Bullé said: “They used to send e-mail to my daughters and my wife. I received phone calls on my personal phone.” Other Conocer staff, too, received hostile, anonymous e-mail messages with accusations of corruption and abuse of office.

García-Bullé said that support from high-level officials and other leaders enabled his team to sustain momentum and overcome pushback. “I got some resistance,” he said, “but I got much more support from employers, from trade union leaders, from universities, from some very important people in this country.”

Many were unsurprised by the resistance from third-party certifiers, whose lucrative certification fees were at stake. “The old certifying bodies didn’t like these changes at all, because their business interests suffered,” said Miranda. Under the new system, Miranda’s union conducted its own certification and charged just enough to cover operational costs. Completing three levels of certification cost only 1,500 pesos (US\$115), of which employers covered three-quarters. Indeed, when Conocer surveyed certification entities in 2012, it found that

certification fees generally averaged around 2,500 to 3,500 pesos (US\$180 to US\$260).¹³ For-profit certifiers had trouble competing with those rates.

Noriega conceded that the reform was disadvantageous to the third-party certifiers in some ways, because they had set up their businesses with reasonable expectations of revenue from certification fees. Still, he argued, “they can change; they can operate like schools and train and certify people. The door was not closed for them.”

After the new rules took effect, the third-party certifiers more or less conceded their efforts to overturn the new system. But many still had contracts with Conocer that could not be canceled. “The only route we had was to invite them into the new model,” Jolly said. She said the third-party certifiers resisted at first, believing they could outlast the reform, but eventually conformed. “The majority of them changed their contracts to the new model,” she said. “Others lost interest or failed to adopt the processes.” In late 2013, Conocer renegotiated its last remaining preexisting contract with a third-party certifier.

The delays in implementing the new Conocer rules—and the necessity for public input and legal review—also slowed Conocer’s efforts to harmonize vocational learning across schools and workplaces. In November 2012, the education secretariat officially enacted the National Qualifications Framework, which integrated Conocer standards across every sector and training level. With that framework in place, Conocer could finally make headway toward integrating its standards into the educational system. In late 2013, Jolly said the secretariat was working with universities to create a credit bank whereby workers could convert time spent in training into credits toward formal academic degrees, which she called “very useful and important.”

ASSESSING RESULTS

Because Conocer's new rules did not take effect until 2009 and because its skill standards weren't integrated into the education system until the end of 2012, the success of the model was still difficult to assess by 2013. Soria, Conocer's operations director, said the new model was still in its infancy.

Nevertheless, by June 2013 there were 134 competence management committees across a range of sectors including construction, mortgage lending, automotive, tourism, rural sectors, and renewable energy. The committees had completed more than 300 skill standards in four years, which was roughly half as many as had been developed under Conocer's old model in the previous 16 years.

García-Bullé said approximately two-thirds of Conocer's standards were already being used by at least some training centers, whereas under the old system, more than 90% of standards had never been used. However, Soria noted that the competence management committees were "working at different rhythms and speeds" and some of the most active were not those with the highest usage.

From Conocer's relaunch in 2008 to June 2013, the public trust issued 300,000 certifications—twice the total for 1994–2006—averaging 60,000 per year. Whereas Conocer previously had 20 accredited certification entities—all of them in Mexico City—by 2013 there were 170 nationwide, encompassing roughly 3,000 certification facilities.

Ricart of the Inter-American Development Bank was skeptical of Conocer's certification figures, which included public and social sectors that were not the system's target user base sectors. In addition, she noted that the figures included certifications approved under the old system but put on hold during Conocer's collapse. Noriega said García-Bullé had "put a lot of effort" into getting unissued certificates from

third-party certifiers. García-Bullé said the numbers spoke for themselves.

A 2012 Conocer user satisfaction survey of more than a thousand business, labor, educational, social sector, and government representatives who had interacted with Conocer's competence management committees found that (1) 89% reported a positive experience with Conocer and (2) 86% agreed that Conocer provided good support for committees and the development of skill standards.¹⁴

"The project is excellent, and the way it works is good," said Noriega. He conceded, "We're on the right track, but not moving at the right velocity—and not with the budget we would like." He lamented government bottlenecks that had delayed the publication of new standards by up to a year.

Certification was boosting the careers of union workers, according to Miranda. He said productivity gains among companies using certified workers had helped the union negotiate for a monthly productivity bonus for hardworking employees.

Many educational leaders were also happy with Conocer's new model. Rosa Gluyas Fitch, who managed competence-based training and certification for the Monterrey Institute of Technology and Higher Education (Tec de Monterrey), a leading university system and accredited evaluation and certification entity, said: "The freedom and power Conocer has now given to Tec de Monterrey and other entities is very important because it has linked the sectors together. . . . Before, it was a very complicated model, and it was very difficult to design and operate standards. It has been a very radical change." She said she believed the market was recognizing the competencies developed and certified by Tec de Monterrey.

In contrast, Manuel Montoya, president of the Automotive Cluster of Nuevo León—which oversaw a competence management committee

for the regional automotive sector—had mixed views. “For some companies, it’s very useful,” he said. “For some companies, it’s not useful. But the problem is how it is managed. Today it is not practical.” Montoya pointed out that “the process is quite complicated,” even though, as an association of companies that were already trying to harmonize standards, his cluster was an ideal user for Conocer. “I imagine it can’t be so easy for another industry that is not as organized as ours,” he said. Moreover, he said, the process was still too rigid to accommodate his sector’s needs. He also thought Conocer needed to raise its profile. “People in the human resources area know it, but not in the other areas,” he said. “You have to spend a lot of time and money,” he said. “If Conocer was an easier tool, it would be more widely used. That’s something our country needs.”

Above all, Montoya said, Conocer needed to provide direct funding for the committees’ operations not just technical assistance, in line with concerns raised by international experts. He said his cluster had completed only four standards in two years, occupying the time of two of his eight staffers. “In the end, nobody wants to pay,” he said. “At the moment, we are not moving forward because we don’t have resources for this, and we are looking at how we can finance this.”

Others disagreed that it was necessary for Conocer to cofinance the development of standards. Miranda considered the approach paternalistic. “We have a saying in Mexico that ‘He who pays commands,’” he said. Noriega agreed: “We don’t really need public money to coordinate these efforts. ... Technical assistance [alone] is significant.” He said business associations can support each other and ultimately can find funding when it’s important.

Inter-American Development Bank experts were also critical of Conocer, although they conceded that the new system was better than the old one. Ricart said Conocer had “lost its focus.” She continued: “They’re not functioning properly

as a regulatory body that also provides guidance to ensure the technical quality of the standards generated. They’ve gone from one extreme of being too paternalistic and formulaic, demanding that the private sector adjust to those formulas, to the other extreme of not focusing on priority sectors, which prompted the creation of standards that were perhaps less relevant to economic growth.”

Ricart complained that Conocer had an unclear structure and had allowed committees to proliferate too rapidly. “I’ve questioned whether those committees have sufficient technical support to do the analysis and check with resource people and strategic thinkers in the industry to make sure they were spending their time on things that were of value,” she said. She added that Conocer pushed committees into choosing their certification and evaluation entities before their standards were fully developed and they had a good sense of which evaluation processes would best fit the needs of workers and employers.

Tzitz Morán Carreño, an Inter-American Development Bank consultant who had studied similar systems worldwide, said Conocer suffered from too broad a mandate. “Conocer might want to rethink its own scope and perhaps limit itself to a skills standards council, because the skills development system is much broader and requires a wider institutional framework to ensure the articulation of all policies, initiatives, and actors involved in the system,” she said. “Conocer has definitely suffered from a lack of representativeness of the productive sector, as well as a lack of strategic focus to capture those standards that are valued by the industry.”¹⁵

Flores, the former director general of employment in Mexico’s labor secretariat, was concerned that the freedom of competence management committees to design their own standards risked splintering the system. Furthermore, he said, the evaluation requirements were too weak to guarantee that certified

individuals were truly proficient by international standards, which he called “a big problem.”

Knowledge of Conocer was also limited mainly to human resources divisions of companies, and the lack of knowledge limited take-up. Despite efforts to recruit users, many businesses and unions were still unaware or distrustful of Conocer. Noriega, head of the chamber of industry, said it took effort to persuade firms in his association to collaborate with Conocer. He said that at first, he tried to take advantage of their “envy” by showing off the achievements of businesses that had developed skill standards. He also tried to show companies how Conocer’s standards were comparable to brand-name global standards that companies respected, such as ISO 9000, maintained by the International Organization for Standardization. Finally, the chamber *directed* its members to work with Conocer. However, a June 2013 survey of members found that only 30% of them knew about Conocer. “They are getting more motivated,” he said. “On the other hand, we are missing the 70%.”

Soria, Conocer’s operations director, said, “Some sectors come to us by through recommendation by other sectors or other players in the system,” but Conocer currently lacked the data to assess the impact of promotional efforts. “I believe that the next stage of Conocer will expand like a network, a community,” she said. “Within that community there could be an exchange of ideas and transfer of knowledge.”

REFLECTIONS

Sergio García-Bullé, former managing partner at a global consulting firm, was proud of what his team had accomplished in government. “[Josefina [Vazquez Mota, secretary of public education] had the idea of bringing into Conocer someone with my [private-sector] background, and I brought along 10 other people with similar backgrounds, and we brought new insight into the way we think about competency-based

education,” he said. “And we were successful.” Ultimately, García-Bullé said he hoped to spread this model worldwide and to create worldwide networks that would “globalize the committees and the certification entities.” He hoped this would facilitate human capital development, knowledge sharing, and harmonization of standards worldwide.

Founding director of Conocer Augustin Ibarra was less sanguine about Conocer’s course. He lamented that Mexico had begun as a global pioneer in skills-based VET but had since fallen behind other countries in the region. “What happened during 12 years?” he asked. “We were the pioneers, and now we don’t have anything solid.” Nevertheless, he saw some hope. “The best result Sergio [García-Bullé] achieved was the repositioning of Conocer—not at the level we need, but it was practically dead eight years ago.”

Eduardo Miranda, training secretary for a Mexican trade union, and Carlos Noriega, vice president of Mexico’s leading business association, the National Confederation of Industrial Chambers, said Conocer needed firmer legal grounding to ensure sustainability—that it should be an institution established by law rather than a public trust set up by administrative decree within one secretariat. They argued that a legislative foundation would give the institution more independence and insulation from political change. “Something that’s worried us for a long time is that Conocer’s legal status is weak because it’s a public trust,” Miranda said. “It doesn’t have the strength to outlive changes in government.” They also wanted to reallocate seats on Conocer’s council equally among government, business, and labor. “It’s very slow, the way that we work,” said Noriega of the council under a government majority. “If we were a company, we would lose ground.”

Consuelo Ricart, an Inter-American Development Bank vocational education and training specialist based in Mexico, said, “We have to reflect and rethink the whole structure of

Conocer.” In her vision, the institution should have a steering committee, a strong technical unit, and a strong research unit and should fund the development of matching grants. National sector committees would develop standards and include business executives on rotation, following the Australian model.

Nevertheless, Ricart stressed that “What Mexico has done in technical education on the supply side is very important and very radical. . . . Mexico is the only Latin American country that has already implemented competency-based education in the educational system.”

new director, who left office after a few months, leaving Conocer without a director for most of 2013. Blanca Jolly, who acted in a directorial capacity during that time, said in late 2013 that her team believed the strong political support that Conocer enjoyed under the previous administration would continue. “The president’s agenda is very aligned with Conocer’s objectives,” she said. As of late 2013, the Mexican government and the Inter-American Development Bank were exploring the possibility of a new round of funding for the program that supported Conocer.

EPILOGUE

García-Bullé left office at the end of 2012, after the election of President Enrique Peña Nieto. The secretary of education appointed a

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¹⁴ Ibid.

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