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DEVELOPMENT OF HUMAN RESOURCES IN CENTRAL AND SOUTH AMERICA

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Central and South American countries have made gains in economic growth, job creation and political stability, which has produced a 50 per cent growth in the middle class in the last decade (World Bank 2013e). As the economies continue to grow and develop, increased attention is being given to Human Resource Development (HRD) throughout the region.

The approaches to developing human resources in Central and South America differ greatly by country depending on the levels of education, infrastructure, wealth and foreign investment. The countries of this region have diverse cultural, historical and political characteristics which affect the ways in which workforce development, organization development (OD) and national HRD (NHRD) are approached. The purpose of this chapter is to present an overview of the unique contextual and cultural issues in this region by examining the workforce development, capacity and policy needs of two countries. The chapter is divided into sections presenting an overview of Central and South America, a discussion of workforce development and policy and an analysis of two cases: Chile and Panama. We conclude with implications for workforce development and policy.

Overview of Central and South America

South America is the fourth largest continent with the fifth largest population, 12 countries and three dependencies speaking five official languages adopted from former colonizing powers (Spanish, Portuguese, English, Dutch, French) and numerous indigenous languages (World Factbook 2013b). The countries have seen some moves towards trade and political integration through the Union of South American Nations (UNASUR) and Southern Common Market (Mercosur) (Unión de Naciones Suramericanas 2013).

Central America has seven countries with two official languages (Spanish, English) and many indigenous languages (World Factbook 2013b, Kaufman et al. 2001). During much of the twentieth century, Central America has been working towards integration of the countries by forming the Central American Court of Justice and the Organization of Central American States (ODECA) (Encyclopedia Britannica 2013).

During much of the twentieth century, politics and governments were heavily influenced by the Cold War, making self-determination, real democracies and economic growth difficult to achieve. Emigration, poor education systems, some of the most severe income disparities in the world and inefficient use of labor are examples of some of the issues prevalent in South and Central America. Today, South and Central American countries have distinct economic differences. Brazil is one of the top ten richest countries in the world and Venezuela is one of the top ten fastest growing economies (Aneki 2013d, Aneki 2013a) in the world. On the other hand, Honduras, Bolivia, Gautemala, Paraguay, El Salvador, Guyana and Belize are among the top 100 poorest in the world (Aneki 2013c). In terms of education, Mexico has just over 15 per cent of its population with postsecondary degrees (Aneki 2013b). Access to education is not uniform in any South or Central American country (CIA 2013b). Among Ibero-American States, over 50 per cent of students do not reach the minimum levels of math or reading as determined by the Program for International Student Evaluation (Scasso 2012).

Development of workforce capacity

The 'fit' of HRD in various cultural contexts is important to consider. Formal training programs vary widely from learner-centered programs to traditional information transmission sessions. The continuum of training and learning programs can be widely adapted to almost any culture. However, the OD aspect of HRD has been conceptualized and implemented in highly developed countries with cultural values that align most directly with OD (Cummings and Worley 2009). Particularly, many participation-based change programs have been quite dependent upon functioning in large organizations and in cultures that align with ideas of participation and shared decision making. According to Cummings and Worley, Central and South America have some fit with OD, although certainly not as neat of a fit with traditional OD as Scandinavian countries, which are largely seen as being most compatible with OD's values. The primary challenges result from being high-context, having high power distance, and being achievement oriented. However, the tendency in this region towards high levels of collectivism allows for some compatibility with traditional OD. The issues of cultural fit are further complicated in both international and domestic firms wanting to emulate the values of 'Western' business cultures.

In addition to learning and OD being used for the unleashing of human expertise within an organizational context (Swanson and Holton 2009), HRD can also be conceptualized as existing for the betterment of communities and nations (McLean and McLean 2001). NHRD involves the relationship between government and private sector programs (McLean 2003). In particular, within the developing countries of Central and South America, development of human expertise and unleashing of human potential is a central component of fostering stability and economic development. Success stories in the economic development of countries such as Japan, Taiwan, Singapore, and South Korea are all intertwined in a major way to the NHRD policies of those nations (Ardichvili et al. 2012). In these countries, economic and political policies worked in a very concerted way to ensure that HRD was not limited to development of internal capacity in private sector firms – HRD was also extended to workforce development.

Workforce development cannot occur in a vacuum, removed from financial and economic development. According to Jacobs and Hawley (2009: 2543), 'Workforce development is the co-ordination of public and private sector policies and programmes that provides individuals with the opportunity for a sustainable livelihood and helps organizations achieve exemplary goals, consistent with the societal context.' The social context includes financial, social and educational systems which create individual capability and national capacity. In countries that are most successful in the development of economic capacity, consideration is given to possible 'bottlenecks' in several areas: financial capacity, manufacturing or industrial capacity and educational or workforce capacity (Al-Zendi and Wilson 2012). True 'capacity development' in each of these

Table 36.1 Multi-level framework for considering NHRD

	Individual Skills and Knowledge	*Organizational Policies and Practices*	*National Policies and Social Norms*
Financial Capacity	Ability to fund or have access to funding for skill development	Access to financial resources to initiate, grow and sustain firm	Government economic development policies and private sector funding capacity
Industrial Capacity	Capability and opportunity to align skills and knowledge with employment needs	Approaches to utilizing and/or developing infrastructure, natural resources and the dominant culture	Infrastructure, natural resources and cultural compatibility for encouraging development
Workforce Capacity	Capability to align skills and education with industry needs	Practices utilized for developing both current and future employees	Education, training and skill development of the workforce, cultural traits and compatibility with the direction of national policies

areas allows for localized, culturally appropriate and culturally compatible industry to emerge in a way that harnesses and develops capabilities and resources. Al-Zendi and Wilson explain that attention must be paid to the individual level skills and knowledge; organizational policies, frameworks and practices; and national policies, social norms and legislation.

Although the ultimate focus of this chapter is on the development of workforce capacity, we contend that this development exists as a result of financial and industrial capacity. Without financial capacity and industrial capacity, a skilled workforce will not be needed to work in the formal economy. Expanding on Al-Zendi and Wilson's (2012) general categories, we created a matrix (Table 36.1) to consider how financial, industrial and workforce capacities are developed at the individual, organizational and national levels.

This framework provides a holistic, yet focused, multi-level approach to consider HRD within a national context. Development of workforce capacity cannot be conceived within a vacuum (e.g. only within organizational contexts or devoid of larger considerations effecting economic development). At the same time, the framework is focused on factors most directly affecting the workforce, in order to avoid confusion with larger concepts such as human development. In this chapter, we use this multi-faceted framework as a lens for considering HRD in Central and South America, focusing primarily on national policies and social norms, with less emphasis on individual skills and knowledge and organizational policies and practices.

Two countries' experiences: Chile and Panama

Chile and Panama provide relevant case studies illustrating the successes and difficulties of government and market forces in creating economic opportunity and creating NHRD policy. Such policies include purposeful incentives, policies, and practice in developing the workforce. Chile underwent a major economic transformation during the preceding decades and is considered one of the most highly developed countries in Central and South America. On the other hand, Panama has more recently experienced a transformation, beginning with the transfer of the

Panama Canal and exit of US military personnel in 2000. The country has experienced an economic boom placing it among the world's fastest growing economies (World Factbook 2013b).

The approaches to developing financial, industrial and workforce capacity in both countries provides helpful glimpses into the challenges and opportunities to HRD in Central and Latin America.

Chile: anchor of economic strength in Latin America

Chile is one of Latin America's most stable economies; thus, configurations of its financial, industrial, and workforce capacity at the national level are worth examining. The Republic of Chile, with nearly 17 million people, is located in South America and is bordered by the Pacific Ocean to the west and south, and Argentina to the east. Peru and Bolivia border Chile to the north. Chile and Argentina have their border through the high Andes Mountains. The climate is desert in the north, Mediterranean in central regions and cool and damp in the south. Chile is a long and narrow piece of land with 4,020 miles of coastline and 150 miles average width (World Factbook 2013b). Chile's territory is larger than the US state of Texas and has slightly over 20 per cent of its land used for agricultural purposes (National Atlas 2013, World Bank 2013b, World Bank 2013d).

Chile is a major exporter, with exports accounting for approximately 30 per cent of its gross domestic product (GDP), primarily from commodities (World Factbook 2013b). Chile is the world's largest copper producer, which is the principal natural resource of the nation (Trosziewicz 2011). While copper provides 19 per cent of government revenue, Chile is also known for other exports such as fruits, fish and wood (World Factbook). The country imports close to 98 per cent of the oil consumed internally (International Energy Agency 2012). Chile is the only South American member of the Organization of Economic Cooperation and Development (OECD 2010).

Financial capacity

In the early 1970s, Chile had a socialist government that nationalized all natural resources (British Broadcasting Corporation 2001). During a dictatorship that controlled the country between 1973 and 1990, Chile went through deep economic transformations privatizing all public assets (Pinochet's rule). The transition to a free market system exposed Chile to a considerable amount of business and production turmoil. But the experience taught the nation, the government, and the private sector how to perform in a global competitive environment. Chile built a reputation for strong financial institutions and sound fiscal policy (OECD 2013b, Sebastian and Ledermen 1998). The country has become one of the world's largest beneficiaries of free trade agreements (FTAs), having 24 trade agreements in place that cover 60 countries, that include Europe, the United States, Canada, and Mexico, Central America and Asia (Perales 2012, World Trade Organization 2013). Chile also has FTAs through its participation in MERCOSUR (*Mercado Comúm del Sur* or Southern Common Market). The 2013 Economic Freedom Index (measure of a country's level of free enterprise) places Chile in 7th place in the world, ahead of the United States (Heritage Foundation 2013).

From 2003 through 2012, real GDP growth averaged almost five per cent per year, despite a slight contraction in 2009 that resulted from the global financial crisis (World Bank 2013c). The Chilean economy has remained stable and growing compared with developed and most developing countries worldwide (Ministry of Finance 2013). The International Monetary Fund (2013) reports that Chile recovered rapidly from the global financial crisis and from the February 2010 earthquake, which devastated a large part of central Chile. The country's strategies included deploying a solid policy framework of fiscal rule, effectively targeting inflation, managing exchange rate flexibility and deploying a sound banking system supported by fiscal buffers (Duttagupta and Helbling 2013).

Chile's sound macroeconomic policy has provided financial capacity for economic development. However, despite the economic growth over the years, the competitiveness of the country has declined steadily since 1995 (Economic Commission for Latin America 2012). The macroeconomic reforms that explain most of the Chilean competitiveness between 1985 and 1995 seem to have decreased in impact. The country reached a point in which microeconomic changes were fundamental and one change is related to the productivity of the workforce (Lepeley and Albornoz 2013). The World Economic Forum ranked Chile as the 13th most competitive economy in the world in 1995, but in 2012 Chile fell to 31st place (Lepeley and Albornoz). Although Chile is still the most competitive economy in Latin America, the decrease in national competitiveness is a concern for business corporations, government and scholars (Lepeley and Albornoz, World Economic Forum 1995).

Industrial capacity

Industrial capacity relates to the infrastructure, natural resources and cultural compatibility for economic development. Key factors in this capacity are the income and availability of workers. Income inequality in Chile is the highest in the countries of the OECD, with a Gini coefficient (measure of income distribution) of 0.50, while the OECD average is 0.31 (OECD 2011). This means that 38 per cent of Chileans have difficulties living on their current income (MercoPress 2013). Minimum wage in Chile is about $2.30 USD per hour (OECD 2013c). Argentina, Panama, Brazil and Paraguay have a higher minimum wage compared to Chile.

During 2012, the unemployment rate in Chile averaged in the lower 40 per cent of nations (World Bank 2013f). Business owners raised the issue of the shortage of workers and the high turnover rates reported in industry (Long 2012). With low salaries, the strategy of most companies was to slightly increase salaries, creating competition to attract low skilled workers. In the last decade the mining industry has experienced a boom because of increased demand for copper to supply the construction industry in China. Chile sells as much copper as its copper companies can produce (Economist 2013).

These trends have resulted in a shortage of workers in the construction sector in Chile because many workers left to work in the mines (Long). The continued economic growth forecasted for China will continue to affect the construction and mining sectors in Chile (Duttagupta and Helbling 2013). Due to this projected growth, the demand for copper is anticipated to remain stable for the next ten years (Smith and Craze 2010). Similar to the gold rush that occurred in California, Chile has a copper fever with many workers from the south emigrating or flying north to work each month (Craze and Quiroga 2013). Work shifts in the mining industry are fifteen days inside the mine followed by fifteen days of free time. This schedule allows workers to commute from anywhere in Chile. Because workers are willing to leave their homes to work in the mines in the north, employment sectors elsewhere in Chile are facing worker shortages as well as increased pressure on wages (Craze and Quiroga 2013, Fundación Chile 2013). The cost of human resources increased by 20 per cent in the construction sector because workers emigrated north for jobs in the mining sector. Medium size companies in the construction sector could not compete to retain their specialized workers. The shortage of construction workers has consequences for businesses and the housing industry because it became very hard to find workers to complete household or industrial construction projects across the country. Various public policy initiatives have been created to train new construction workers, including adding more women to this workforce.

The ageing population of Chile is also contributing to the shortage of labor in Chile (World Factbook 2013b). The country is in the advanced stages of demographic transition with fertility below replacement level, low mortality rates and life expectancy on par with developed countries (World Factbook, 2013b). Policy experts and business owners envision the shortage of workers can be resolved partially by increasing women's access to the job market (OECD 2013d). As of 2011, 49 per cent of women ages 15 and over reported working or searching for a job (World Bank 2013a). The workforce participation rate of women in high income nations is 11 per cent higher in developed nations than in Latin America (World Bank). In Chile, the female participation rate is 26 per cent below the male rate (World Bank). Therefore, Chilean women have room to enter the job market aggressively.

Government policy for developing workforce capacity

For Chile to return to being among the most competitive economies in the world, developing workforce capacity is a key to fostering productivity, especially because the economy is highly dependent on natural resources (OECD 2012). Regaining the competitiveness of 1995 in the complex and interdependent global economy of the twenty-first century requires the synchronized efforts of government, policy makers, universities and corporations, all focused on the skill development needs of the Chilean workforce (Lepeley and Albornoz 2013). We can distinguish three levels of education for developing human resources in Chile. The lower level of education includes 28 per cent of the workforce (OECD 2013a). Second, 44 per cent of the workforce has attained a medium level of vocational or specialized training (OECD 2013a). Third, 29 per cent of the workforce is highly skilled and possess a professional or technical degree (OECD 2013a).

In 1976, the Chilean government created SENCE (National Service for Training and Employment), a public agency organized to contribute to national productivity by subsidizing occupational training through tax incentives (UNDP 2012). In 2010, SENCE programs accounted for \$226M (USD), or 80 per cent of Chile's public expenditure on training. Under this program, domestic and foreign-owned organizations operating in Chile are eligible to receive a tax exemption of up to one per cent of their total annual payroll for workforce training (Biblioteca del Congreso 1997). For example, if a company has 500 employees with annual average salaries of \$40,000, that company can request a tax exemption of \$200,000 to refund its workforce development expenses. SENCE does not provide this training directly; however, it oversees the Technical Training Agencies (OTEC) that provide certified training services (United Nations Development Programme 2012). OTEC providers are unique because training is their sole function, which they provide to public and private organizations alike.

A commission organized by Chile's Ministry of Labor and Social Security found that SENCE has not been effective in closing the skills gap in the Chilean workforce (United Nations Development Programme 2012). Part of the reason is that training programs are relatively short in duration (averaging 19 hours), and are not grounded in front-end assessment or evaluation. A second criticism is that since organizations decide who receives what training, and the amount of the tax credit is tied to trainee salary, tax incentives tend to flow disproportionately to large organizations that employ moderately to highly educated and salaried employees, and therefore add little to the skills or employability of the population over all.

In addition to supporting the training and development of employed individuals, SENCE also targets members of vulnerable populations who may not possess the skills to be successful in the labor market (United Nations Development Programme 2012). For instance, several SENCE programs target unemployed youth from low-income families. However, the quality of these programs varies greatly. For instance, one of the most successful is the Special Youth Program which offers 450 hours of instruction to be followed by 300 hours of internship and technical assistance. One of the least successful is the Bicentennial Youth Program which has an 84 per cent attrition rate.

In 2005, a special tax of five per cent of mining profits was enacted on firms with 50,000 tons of copper or more (CONICYT 2012, OECD 2013b). The Chilean government provides a fund to drive innovation through science and technology research (CONICYT). As of 2011, this fund was $874M (USD) which is mostly invested in R&D and human capital development (CONICYT). In 2007, 'Becas Chile' was created, which is the national agency that manages scholarships to study abroad. Becas Chile was established with the goal of increasing opportunities for up to 3,300 Chileans to study abroad each year, modernize the government scholarship system and encourage international involvement and cooperation. Despite the fact that Becas Chile is oftentimes lauded for its innovation, the program is also criticized for its rushed implementation.

Panama: newly revitalized country takes advantage of its strategic location

The Republic of Panama, with nearly 3.5 million people coming from different heritages and ethnic mixes, is located in Central America and is bordered by the Caribbean Sea to the north and the Pacific Ocean to the south. The country's climate is mostly tropical; however, it is hurricane/earthquake free unlike neighboring countries (World Factbook 2013a). Panama has been blessed with a strategic geographical position and many call it 'bridge of the world, heart of the universe' by virtue of the Panama Canal, the inter-oceanic waterway that connects the two oceans. The canal is the biggest contributor to the nation's GDP with 13,000 to 14,000 vessels from around the world going through the canal each year (Panama Canal Authority 2013).

Beginning with US support for Panama's independence from Colombia in 1903, the country's identity and history has been intertwined with the US (World Factbook 2013a). Until 2000, the US provided massive investment and had a major presence in the Panama Canal Zone, a sovereign piece of land administered by a US appointed governor. With the transfer of the canal and exit of US military personnel in 2000, Panama began its transformation as a fully independent country, able to forge its own political identity and able to fully control the use of its economic and natural resources.

Financial capacity

The expansion of Panama's financial capacity is mostly attributed to the government's macro-level infrastructure investments, effective management of the Panama Canal and open market policies in an effort to promote free trade and foreign direct investment (Bureau of Economic and Business Affairs 2012). The country's long history of US involvement provided for transfer of substantial infrastructure in 2000 and a continuation of the country's currency, the Balboa (B/), being based on the US dollar (World Factbook 2013a). The dollar-based economy has provided the foundation for a strong and stable banking sector.

In 2012, Panama's GDP recorded an increase of 10.7 per cent in the production of goods and services compared to the previous year. Based on estimates from the National Institute of Statistics and Census (INEC), the country's GDP sums B/ 755.5 million (USD $755.5 million) represent an annual increase of B/ 483.4 million (USD $483.4 million) (Contraloría General

2013). Other improvements include the declining percentage of people living under extreme poverty conditions which fell from 17.6 per cent in 2006 to 10.4 per cent in 2012, according to the Ministry of Economy and Finance. In other words, approximately 34,000 Panamanians left extreme poverty conditions during that time period. Additionally, general poverty rates fell from 27.6 per cent in 2011 to 25.8 per cent in March 2012 (Panama America 2012).

A nation's economic growth does not necessarily imply positive advances in HRD. In the case of Panama, foreigners with greater education levels and more competitive mindsets hold many of the higher-paid positions and create most of the entrepreneurial activity of the country (Lao 2013). This disparity leaves little room for many Panamanians for whom a sustainable livelihood is still a far-fetched reality.

Industrial capacity

The immense growth that Panama has experienced points to the promise of its internal resources. However, much of the growth can be credited to increased foreign investments, be it in the form of multinationals entering, foreign projects, banking or foreign entrepreneurial activity (Mattson and Teran 2011). As the economy continues to improve and grow, a primary question is whether there will be growth in local human resources (Mattson and Teran 2011, Schwab 2013). The success of the economy will require more advanced leadership, management and technical expertise in order to be sustained. Furthermore, opportunities for domestic entrepreneurial activity need to be fostered to sustain the cycle of continued and stable growth.

Ciudad del Saber ('City of Knowledge') is a complex of research, academic, technology and non-governmental organizations located in the redeveloped Fort Clayton (former headquarters of the US Army Southern Command). It is managed by a non-profit organization and affiliated with the national government. This complex was designed as an incubator of innovation and a space for development of businesses in Panama by foreign and domestic firms around communication and information technologies, biosciences, environmental management, human development, business management and entrepreneurship, and global services (Ciudad del Saber 2013). The case of *Ciudad del Saber* is one of several examples of Panama's retooling of US Military installations for developing industrial capacity in the country.

Government policy for developing workforce capacity

The globalization of markets and technological shifts across the world create the need for a greater specialized labor force in Panama. The demand for workers capable of facing and adapting to the emerging digitalized world is significant. Despite being considered the second most competitive economy in Central and South America (behind Chile), Panama has one of the worst education systems in the world for a country so advanced (Schwab 2013). Executives doing business in Panama see an inadequately educated workforce as the most problematic factor for doing business, even greater than government bureaucracy or corruption (Schwab). This lack of education has resulted in Panama losing high tech jobs to other countries and results in many of the country's high-paying jobs being filled by foreigners, particularly from other Latin American countries (Mattson and Teran 2011).

Currently, Panama's development of human resources is stagnated because unequal distribution of wealth, poverty, public transportation, education and access to healthcare are major issues that affect most Panamanians every day. Panama has the second worst income distribution in Latin America and nearly 30 per cent live in poverty and 12 per cent in extreme poverty, although that rate has been decreasing (World Factbook 2013a, International Monetary Fund 2013). Both inflation and increased demand and use of high tech consumer products have been challenges for the average worker in Panama (International Monetary Fund).

National economic growth that has occurred in Panama has not necessarily been tightly connected to domestic development of human resources. Much of Panama's growth has occurred as a result of foreign direct investment and through the use of foreign management; however, for Panama to have long term domestic growth, development of its workforce capacity is essential. For future growth to be sustained, skilled workers and skilled management must be developed from among the Panamanian population.

An underdeveloped education sector in Panama has been a persistent problem. Although Panama generally has wide access to primary, secondary and higher education (Arocena and Sutz 2000), educational quality is relatively low. Panama has been ranked 133 out of 142 countries for quality of education (Bureau of Economic and Business Affairs 2012). Reforms have been challenging to enact due to lack of progressive cooperation between political leaders and powerful teachers' unions (Mattson and Teran 2011). The country also lacks rigorous regulations and quality standards for established and new universities. In 2011, 43 private universities were certified by the University of Panama (UP), which is also the national regulatory body for higher education. Reforms to primary, secondary and higher education have been a priority for the current president; however, the long term effects of those reforms remain to be seen (International Monetary Fund 2013, Mattson and Teran).

When Panamanian graduates enter the labor market, they oftentimes find that they are under skilled and less competitive than candidates who studied abroad. This situation is challenging for a developing country like Panama that strives to be an advanced economy and is growing at such a rapid rate. Corruption and inefficiencies have resulted in an education sector that needs further reform and change in order to help the country continue to increase in competitiveness. Panama's economic growth demands competitive, aggressive and leader-oriented mindsets that can best be attained through a special focus on education and building of workforce capacity.

Implications for HRD practice and research

The two countries discussed in this chapter, Chile and Panama, are different in history and relationships to colonizing powers. Both represent present the unique challenges and opportunities for developing human resources in Central and South America. Chile has endured dictatorships and Panama was in many ways an occupied country for a hundred years by hosting a US military presence and US-governed Canal Zone. Currently, both countries enjoy stable democratic governments but neither country has reached the level of being a fully developed country. Both countries have a dominant industrial presence (mining or the canal/transportation) which plays a large role in determining workforce development policy, setting wages and worker shortages. Both countries have very specific and tangible national policies designed to increase economic growth and skill development. However, these efforts seem to be occurring at the macro levels. In Chile, organizations have access to government sponsored trainers who work to enhance skills and competencies of workers. Educational disparities contribute to extreme disparities in income, with both countries leading in huge income gaps compared with other countries. Chile and Panama have similar educational difficulties with large segments of the population being under-educated by inefficient educational systems. In each country basic skills in math and reading are not enjoyed by large segments of the population.

In order to further develop the knowledge, skills and competencies of workers and prepare them for future industrial jobs, each country needs to address its basic educational needs. These needs include securing qualified and capable teachers who encourage real learning in their students, equity in access to good education, implementing real systemic reform to educational systems and lessening social stigma produced by the disparities in income and educational achievement. A strong primary education system where the population learns basic math, reading, writing, and problem solving is necessary to build a foundation for increasing workforce capacity. In Chile, career opportunities and trajectories can be determined by the private primary and secondary school attended (Albornoz and Rocco in press). The attendance at particular schools creates a social network and career opportunities. These social networks are more important to advancement then merit.

Each country needs to establish standards for higher education institutions to increase quality and to ensure consistency in quality between institutions. Until the quality of higher education in each country is consistent and competitive with other countries skilled labor and higher-paid positions will be filled by immigrants. This dilemma is particularly true in Panama. In Chile, the workforce has an oversupply of professional labor and not enough technical workers because technical careers are not valued. In Panama the education system is not producing workers with traditional or technological forms of literacy. Industrial sectors are difficult to strengthen without technical and technology workers.

HRD does not exist as a field in Chile so students cannot choose it as a career option. An HRD-related degree program is being offered by a foreign higher education institution in Panama, which will help the field gain traction in Panama as a discipline; however, this offering is recent. In Chile, people with degrees in psychology and engineering perform some of the HR functions. Training seems to be handled by the government for larger firms leaving workers in smaller firms to encounter skill obsolesce. Organizations and corporations could support workers' learning and education by hiring people to train with credentials, creating training programs to enhance skill development at various levels and encouraging their workers to participate in continuing education. These activities would in some way mirror the development of HRD as a field in developed countries.

The challenges for the field include: how do we make inroads into countries where HRD does not exist or is little known? How can we learn from research on HRD in Central and South American countries when no research exists? And how can we build relationships with scholars in these countries who may have no understanding of the work of HRD? Each one of these challenges presents an opportunity.

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