

# Market Oriented Management Training: The Case of INACAP in Chile

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## I. Introduction

The Chilean society places a high value on education, yet the nation faces shortages of qualified persons to fill managerial positions. The educational system has not been oriented toward meeting this important need. Chile's established universities have the capacity to accept approximately 32,000 new students each year, which represents roughly 25% of those who apply. This leaves a little more than 100,000 applicants who desire education beyond the high school level. For those students not accepted into a university, vocational training centers offer alternatives for further study. One of the largest vocational training organizations is INACAP (Instituto Nacional de Capacitación Profesional). INACAP originated in 1951 as a government technical training program and by 1980-81 had about 85,000 students enrolled in a variety of programs.

From an initial emphasis on industrial trades INACAP has broadened its curriculum to encompass management training and now offers three different specializations in Business Administration among the standard two-year courses. In this manner, INACAP has helped to meet the demand for lower and middle-level managers, an important vocational category that has not

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been addressed by Chilean universities. This demand for genuinely qualified management personnel has been stimulated by the economic policies of the Chilean Government which emphasize that efficiency will be impelled by competition, from both domestic and international sources. Business firms have increasingly recognized that the quickest route to efficiency is through the application of better management.

This paper is based upon a study carried out during the fall of 1980, including a visit to Chile in November 1980 by the authors as part of a team whose mission was to examine the impact of governmental policy changes on INACAP. The team was asked to evaluate alternatives for revising curriculum and adapting programs to meet professional training needs. The present report represents an institutional case study. First, we provide background information concerning INACAP; then we review a series of environmental forces and policy changes that have brought pressure for adaptation on the part of INACAP. Finally, we discuss the dilemmas that face an organization caught up in a rapidly changing environment.

## II. Background

INACAP traces its origin to the early 1950's when the Government of Chile and the United States entered into a technical cooperation agreement which included the training of technical personnel. This arrangement evolved into a professional training department within Chile's industrial development corporation, CORFO (Corporación de Fomento de la Producción). This department began training activities in 1959 with the assistance of the International Labor Office (ILO), the United States and other countries. Over 35,000 workers had been trained in programs of varying time duration by 1966 when INACAP was established as a separate state organization within the CORFO family of enterprises. This upgrading of the organization reflected the growing recognition of the importance of skills training to the economic development of the country.

Although a government organization, INACAP is presided over by a board of directors whose members represent labor, business, and academia in addition to the ministries of labor and

education. Three CORFO officials are members of the board of directors, one of whom serves as chairman.

INACAP enjoys a highly favorable reputation among the Chilean business community. The Institute has established linkages with business at several different levels. Some of the industry association promoted the formation of INACAP and have worked closely over the years in designing instructional programs to fit the needs of the particular industry. These industrial relationships have further encouraged individual firms to call upon INACAP to conduct in-plant training programs. A substantial proportion of INACAP's activities have been represented by such in-plant training. Courses are administered to groups of workers who attend training sessions after hours or in conjunction with on-the-job training. Such programs are designed in close cooperation with the firm and may range from apprenticeship training, basic culture orientation, and literacy classes to the development of highly skilled technical knowhow.

Given the growing demand for skilled workers to support the industrialization process and the fact that the number of secondary graduates is growing at a more rapid rate than university capacity, INACAP has expanded its offerings of standard two-year courses open to full time students who have graduated from secondary school. Courses have also been offered through correspondence, via radio, and a small proportion have been trained with support of the Government's "Minimum Employment Program," which is designed to offer public works jobs to any unemployed Chilean who desires to work.

Each regional office and each INACAP center are mandated to work with an advisory council made up of area businessmen. However, we found little evidence that such councils were being used to their full potential; and in some cases we surmised that the council members had not been appointed. Key benefits from an active advisory council should derive from facilitating placement of graduates and assignment of advanced students to the required professional practice internships in business firms. Department heads and individual instructors reported they were assuming responsibility for arranging these internships. From an outside perspective, it appeared that working with an advisory council of business leaders would facilitate this process.

### III. INACAP and the Traditional Educational System

Education in Chile is free and compulsory between the ages of six and fourteen years. Secondary education covers four years and there is a limited number of technical-vocational schools at this level, accommodating less than 10% of secondary enrollment. At the beginning of the 1980's, Chile had eight universities including two state institutions enrolling almost 85,000 students and six private universities with a combined student population of around 53,000. The universities range in size from an enrollment of around 54,000 in the state-run University of Chile to 4,000 in a private technical university. University admissions are highly competitive and about 32,000 new students have been enrolled each year. With approximately 145,000 students graduating from secondary schools each year, it is inevitable that large numbers, 100,000 or more, will be seeking some form of post-secondary training outside the university system. Since few of these possess the financial resources or language fluency required to pursue studies in other countries, they must seek opportunities in Chile. A major alternative for these students is to enroll in one of the two-year vocational programs offered by INACAP. These programs which are designed to prepare mid-level technical personnel include twenty-six specializations. These specializations are heavily oriented toward mechanics, construction trades, and industrial skills. However, considerable emphasis is being placed upon the relatively recent offerings in business administration, tourism, and commercial drawing. Several specializations are sub-divided into further concentrations. For example the Business Administration specialization offers concentrations in Personnel and Finance, Foreign Trade and Marketing and Sales.

The basic requirement for admission to INACAP's two-year programs is graduation from the secondary school although an equivalent preparation is also recognized. Since its capacity of 85,000 participants doesn't allow INACAP to admit all who might wish to enter the training programs, an entrance examination emphasizing mathematical and verbal knowledge has been used for screening. Presumably, under recent changes in the education law the national academic aptitude test will now figure in INACAP's admissions, at least in regard to the four-year programs.

INACAP has training centers throughout the country with an

administrative structure organized on a regional basis to conform with the administrative design of the national government. In the Santiago metropolitan region there are eleven training centers plus one subcenter and an apprenticeship program office. Some of these are specialized centers featuring such trades as construction, metal working, industrial chemistry, agriculture and forestry, and hotel administration. Three of these centers carry names which trace their origins to technical assistance programs provided by France, Germany, Switzerland, England, and Denmark. These particular centers tend to be very well equipped with machines and laboratory equipment from the donor countries. Originally, these assistance programs provided expatriate instructors and a number of long-time INACAP instructors have participated in some form of training in the donor countries.

There are twelve regions outside the metropolitan area with centers offering a variety of programs; some are specialized in keeping with the economic base of the region. Again, two center names indicate former assistance programs by Italy and Belgium.

#### **IV. New Policies Call for New Strategies**

In 1978, in keeping with the military government's free market economic policy, a decree was issued which called for INACAP to become self-supporting. This sudden transition from total governmental support to virtually no government support was partially softened by the concurrent establishment, within the Ministry of Labor, of a National Training and Employment Service, SENCE, which in recent years has provided scholarships for over 50% of the young people enrolled in INACAP's two-year technical courses. Nevertheless, this mandate to become self-supporting has caused INACAP to become keenly aware of the need for its offerings to be made more market oriented. A major preoccupation has emerged in the form of competition from some 300 private organizations which are now offering training in trades or specialized skills. Many of these competitors are small and poorly prepared to carry out training programs. Others include multinational computer companies with highly sophisticated data processing courses. Such programs will continue to attract participants given the extremely high priority placed upon education and training by the Chilean people. Whether or not they are in direct competition,

INACAP is beginning to develop an awareness of the significance of market share, and in effect is seeking to develop new offerings or find new uses for old offerings so as to fully employ the considerable resources of its nationwide organization.

In 1978, the Government issued another decree which provided that business firms may apply up to one-percent of their gross payroll as a credit against income taxes when this amount is used for the training of workers. Since there are stringent standards for recognition of bona fide training programs, most firms find it convenient to contract with INACAP to carry out their training activities. This law potentially has substantial significance for INACAP; however, unlike similar laws in Latin America, Chile's is voluntary and many firms have not yet recognized their ability to condition the government's budgetary process. INACAP thus faces the major educational task of convincing business firms that they can benefit from increased worker productivity brought about by training programs carried out, in effect, at government expense.

The Chilean Government's free market economic policies have had an impact on the demand for skilled personnel. With the new stress on competition, both domestic and foreign, firms recognize that only the most efficient will survive. Therefore, they have sought to apply advanced management techniques which require skilled personnel for proper implementation. Overall growth of the economy had likewise created new employment opportunities until the onset of recession in the latter half of 1981.<sup>1</sup>

Regardless of its self-sufficiency status, INACAP is identified as a governmental entity and is expected to support overall government objectives through its operations. For example, agrarian reform measures over the past several years created a large group of small farmers, entrepreneurs in effect, who lack sophisticated farming knowhow and who have no knowledge of banking and other credit arrangements available to small farmers. INACAP is expected to provide training to these farmers because increasing their productivity is of vital importance to the nation. The small farmers are unable to pay for training, thus private training

1 For recent reports on economic conditions see: "Chile's Economic Recovery Reflects a Merging of Both Demand and Supply Oriented Policies," *IMF Survey*, October 26, 1981, pp. 338-340; and Everett G. Martin, "Chile's Economy Runs into a Load of Trouble; Junta Sticks to Policies," *The Wall Street Journal*, January 18, 1982, p. 1.

organizations are uninterested in providing courses. Because of its public sector tradition, INACAP is expected to bear the burden of the agricultural programs as well as training for poverty-level communities in the Andes. Training in remote communities has been carried out through correspondence courses and in combination with radio broadcasts of lectures. Another INACAP constituency by virtue of its public service role consists of school dropouts. Without a secondary diploma, these youngsters are ineligible for INACAP's regular courses. Nevertheless, they represent part of the labor pool and enhancing their productivity through skills training and acculturation is accorded high priority by the Government.

A major revision in Chile's educational system was brought about by a law passed in late 1980 and implemented via decrees issued during early 1981. The new law provides for a gradual phasing down of the government's fiscal contribution to the universities, but a new apportionment is to be introduced based upon the number of students enrolled who rank among the top 20,000 in terms of scores on the national academic aptitude test. Reflecting the free market orientation of other government policies, the law allows new universities and institutes of higher education to be opened in direct competition with the established universities. The new policies sharply increase the cost of university education to students and their families. This will require all except the very rich to select a course of study primarily upon the basis of the expected financial returns in the job market. The new law discontinues the universities' monopoly on a number of traditional fields, so new universities and institutes such as INACAP are expected to begin offering programs in fields where there are shortages of trained personnel. Those in agreement with the new system emphasize that it will avoid the training of unemployed professionals and that it will enable individuals who elect to enter a technical program at one stage of their educational career to later switch back to an academic program and complete a university degree. Critics of the new law view it as designed to end the university's role as a source of social criticism and political opposition.<sup>2</sup>

The new law brought a prompt response. The Universidad Técnica del Estado changed its name to Universidad de Santiago

<sup>2</sup> "New University Law Decreed in Chile," *Science*, Vol. 211, 27 March 1981, pp. 1403, 1406.

and announced that ten new degree programs will be offered.<sup>3</sup> A series of new university names has been filed with the registry of the Ministry of Economy and applications have been submitted for approval by the ministries of Education and Interior. Already approved is the Universidad Gabriela Mistral which plans to open at the beginning of the new academic year, March, 1982. Four professional institutes including INACAP have been given approval to offer degree programs.<sup>4</sup> INACAP's new degrees will be Professor of Technical Education, Automotive Engineer, Ecology Engineering, and Public Relations, representing an extension and in-depth study of fields previously offered on a two-year basis.

### V. The Demand for Management Training

As a result of major changes in Chile's basic economic structure in recent years, the demand for managerial talent has increased far more rapidly than the supply. INACAP has recognized this imbalance and is attempting to meet a portion of the market demand through the two-year programs in Business Administration which are offered at eight of its thirty-eight fixed locations. Students entering Business Administration are able to select from three areas of concentration: Personnel and Finance, Foreign Trade and Marketing and Sales. This program began in 1978 and has grown steadily since then.

The program receives the full endorsement of various trade associations such as ASTIMET (metallurgy), CONUPIA (small business), and SOFAFA (textiles). From all indications the program could continue growing at a rather significant rate if resources are made available. The demand for middle-level managers is likely to continue to outstrip the supply for at least the decade of the 1980's and most likely beyond.

As was mentioned previously the basic orientation of INACAP has been vocational training. This will continue to be the predominant mission despite the fact that several years ago there was a movement to change the name of INACAP to the Universidad de

3 "Universidad de Santiago Crea Diez Nuevas Carreras," *El Mercurio* (International weekly), 8 July 1981, p. 4.

4 "Universidades: Primeros Frutos de un Nuevo Esquema," *ERCILLA*, 7 October 1981, pp. 13-17.

ORAL (University of the Worker). The objective of the name change would have been to change the mission and image of INACAP. The name change did not take place, and the primary mission of INACAP remains "train the worker." For this reason, INACAP has not directly competed with the Universities for the brightest students. The Universities have had a clear advantage in their ability to attract the top students. The students who enrolled in INACAP's programs in general, and specifically in the Business Administration program, were those who had been denied admission into the University System. It should be noted that the Business Administration students were among INACAP's brightest, but if given a choice, the majority would have opted for a five-year university program as opposed to the two-year INACAP program. Development subsequent to introduction of the new education law have probably altered this traditional pattern. Over time the mission of INACAP will continue to broaden and will very likely become more educationally oriented as opposed to vocationally oriented. Some of the seeds for this broadening predated the new education law as a growing number of the INACAP faculty, especially those teaching Business Administration courses, also have been university faculty. This sharing of faculty seems certain to broaden the traditional perspectives of INACAP.

## VI. Constraints Facing INACAP

INACAP, like virtually all educational/vocational institutions around the world, is experiencing serious resource constraints. One of these constraints was mentioned in a previous section but warrants elaboration. Since 1978 INACAP no longer receives direct subsidies from the government. INACAP, by law, must be self-supporting. The government offers indirect support to INACAP in the form of student scholarships, but whatever other monies are necessary must come from tuition, revenue, and other non-governmental sources. INACAP can not significantly raise its tuition rate because few people can afford existing fees. Consequently, INACAP would have little to gain through a lowering of its admissions standards to admit more students. This financial constraint places a tremendous burden on INACAP and requires the organization to exercise astute financial management.

Another equally serious resource constraint is personnel or,

more precisely, faculty. Skilled faculty are in scarce supply, and those who have affiliated with INACAP are unable to earn a sufficient income from their teaching. Faculty members at INACAP may also be faculty members at a University and some indeed hold a third job in the private sector. Because of the basic necessity of holding more than one job, the allegiance of the faculty member to any one institution is diluted, thus reducing his or her effectiveness. This is a very serious constraint that will continue to plague the post-secondary education system in Chile. There is no short term remedy, and, in fact, the problem may intensify as there will be an increasing number of attractive opportunities for faculty in the private sector, a condition that will be especially true for faculty in Business Administration.

A third constraint involves the support system i.e., the physical facilities. Big and large classroom space does not appear to be a significant problem. However, the equipment used in teaching the basic trades such as machining, electronics/electricity, refrigeration, and hydraulics is rapidly becoming outdated. Much of this equipment was donated by countries from around the world. To maintain a competitive position in the vocational training market, INACAP is compelled to stay as current as possible with the state of the art. However, INACAP lacks the financial reserves to buy modern equipment and there appears to be little chance that assistance from other countries would be forthcoming today. Fortunately, there is not a great need for equipment in teaching of Business Administration and this will make offerings in this field even more attractive from an institutional perspective. The exception is the computer that is indeed becoming a necessity in the teaching of many Business Administration courses and in the training of data processing skills. Providing access to computers by purchase, by donation, or by time-sharing arrangements represents a challenge to INACAP if the institute is to maintain a competitive offering in this important field.

A fourth constraint involves the rather limited scope and mission of INACAP. "Training the worker" may no longer be an appropriate mission for INACAP even in view of its traditional role as a governmental training institute. INACAP, if its mission is not broadened more rapidly into degree programs may not be an appropriate alternative to the bright students who are not admitted into the universities. In view of recent developments, INACAP will be compelled to re-examine its competitive position with respect to

the universities. INACAP should determine its position in the overall educational system for the next decade and beyond. Additionally, INACAP should assure that its two-year programs will be appropriate both as terminal programs for those seeking employment and preparatory programs for those desiring to continue their education at the university level. Traditionally, INACAP's programs have been terminal programs, and its graduates have not continued their education except on a very limited scale. In the future, as students are allowed an opportunity for additional studies after completion of a two-year technical program, the general educational content will have to be strengthened. Failure to meet this dual need may prove to form a constraint whose consequences extend beyond INACAP. The students who are bright and well motivated are representative of the best possible future of Chile. If these students are not given the chance to further their education in Chile, they may seek out study opportunities in other countries of Latin America, in the United States or in Europe. Once the students go abroad to study, there is no guarantee they will return. This would clearly be a significant "brain drain" to Chile if such students were to choose not to return.

## VII. Change Introduced Dilemmas

Under a situation of unprecedented experimentation in the field of education and high demand for managerial talent, INACAP faces an array of organizational decisions as it adapts to a rapidly changing environment. A number of alternatives are being assessed, some to accommodate short-run pressures; others have longer run implications.

Given its traditional public utility function as a governmental entity, there is no indication that INACAP is considering the possibility of discontinuing operations. In light of the serious financial and personnel constraints that currently exist, this stands out as a realistic alternative, at least from an outside point of view. For anything but a dynamic going concern, to be placed suddenly on a self-supporting basis would have had a devastating impact. For INACAP the shock has been absorbed because large numbers of Chilean youth have been willing to pay a cost-covering rate to invest in highly marketable managerial skills. Opportunity costs for the organization are best evidenced by its inability to retain highly

qualified instructors. Such individuals find higher compensation for their services in the private sector; and until INACAP and the educational system in general accommodate to this dimension of the market, shortages of qualified instructors will persist.

From all indicators, INACAP has decided that maintaining the status quo is not a viable alternative. The introduction of two-year programs in business administration and service-sector occupations manifests an early response to needs of the labor market. The participation of Commerce, Finance, and Other Services sectors in Chile's gross national product increased from 32.2% in 1974 to 44.7% in 1980.<sup>5</sup> The more recent addition of degree programs appears to be aimed at helping to meet INACAP's own needs for qualified instructors and filling occupational demands in the private sector. The business administration specializations are likely candidates for addition to the list of degree programs since labor market demand for managers should continue at a high level for some time to come. Given its experience with the professional practicum or internship and a strengthening of linkages with business firms through advisory councils and placement activities, INACAP will be well positioned to meet a major national need.

INACAP has some experience in the area of short term executive training. These have ranged from high-level programs offered in collaboration with the American Management Association to middle management seminars led by INACAP faculty, in some cases assisted by imported audio-visual materials. INACAP has been able to attract a number of student executives who desire to improve their skills through such seminars. There is evidence that the market for such programs is far greater than is being served by INACAP or other training organizations. INACAP has not emphasized the executive programs because of its traditional orientation toward worker training and because of the high costs involved in providing faculty for the courses. Because executive programs hold the potential for generating substantial revenues, it appears inevitable that INACAP will expand its offerings. Such programs hold a significant public relations impact because of the position of the participations; and in other countries of Latin America, the image value has been enhanced by partially staffing the courses with instructors from overseas.

<sup>5</sup> "Economica," *EL Mercurio*, (International weekly), 1 July 1981, p. 2.

The current period of action and reaction in Chilean higher education presents opportunities for establishing new relationships and linkages. Both INACAP and the universities should be able to benefit from developing closer bonds. For example, informal ties have existed through university faculty who have held part-time positions with INACAP. Since faculty are the most valuable and scarcest resource of both INACAP and the universities, formal sharing arrangements might be established to prevent the loss of such individuals to business positions. Additionally, resources such as computers might also be shared since it is unlikely that one institution by itself would fully utilize the capacity of a well-equipped computer center. From the standpoint of students, the fundamental constituency, guidelines for the transferability of credits between INACAP, other institutes of higher education, and the universities should be established. The possibility of changing paths in the educational career as afforded by the new educational law will require early action in this regard.

### VIII. Summary

The university system of Chile is able to accept only about 25% of the high school graduates who seek post-secondary education. This leaves more than 100,000 students who will not be admitted. For these students not accepted into a university, the educational alternative has been primarily a vocational training institution. One of the largest of the vocational institutions is INACAP which began in 1951 and today has about 85,000 students.

Within the past several years INACAP has expanded its programs; among these new offerings are Business Administration courses. This expansion was designed in part to help reduce the imbalance between the supply of and demand for lower and middle managers. It was also motivated by the need for INACAP to become self-supporting and thus offer curriculum that is in high demand.

INACAP faces a number of challenges and opportunities in the near future. There will be a strong tendency for INACAP to continually broaden and strengthen its course offerings as it respond to changes in the market place. INACAP will position itself in a dual role, first to provide a two year vocational degree in the basic trades and second to provide the foundation courses for students

seeking additional studies beyond two years. It is likely that there will be more sharing of faculty and facilities between INACAP and the universities which will allow for certain economies of scale.

Finally, the very recent changes in education related statutes will have a profound impact on INACAP. In essence the new law will remove some of the shackles from INACAP and allow for a better chance to compete with the universities to attract the better students.

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