

## BASIC SKILLS CERTIFICATION PROGRAM

(TC-96-07-09-7)

### EXECUTIVE SUMMARY

**MIF FACILITY:** Human Resources Facility (II)

**EXECUTING AGENCY:** *Federação das Industrias do Estado de Minas Gerais (FIEMG)*

**BENEFICIARIES:** The Secretariats of Labor and Education of Minas Gerais, chambers of industry and commerce, private entrepreneurs, labor unions, workers, public and private training institutions, the education system, and the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro*.

**FINANCING:**

Form of financing:	Grant
Local counterpart:	US\$2.000.000 (70%)
MIF:	<u>US\$ 850.000</u> (30%)
Total:	US\$2.850.000

**OBJECTIVES:** The Program's general objective is to develop, validate, and establish a testing instrument to identify the basic educational, skills, and ability levels of the workforce, on an ongoing basis in Minas Gerais State. This testing instrument as well as the methodology used in its design could very well serve as a point of reference and be replicated throughout Brazil and elsewhere in the region.

**DESCRIPTION:** The Program supports the first steps in the process of establishing mechanisms that will provide information to upgrade Minas Gerais' labor force to international competitive standards, by adapting a methodology successfully implemented in the region to assess basic, cross-occupational worker skills. Although designed as a three-phase Program, the Bank's resources will finance only the latter two phases and the expost evaluation. For purposes of clarity, the Program's three phases are:

(i) **Phase I:** Development of a Skills List for Job Analysis. A list of basic competencies (skills and abilities) considered to be essential for an individual to enter the workplace or to enroll in specialized professional training is developed based on a methodology designed and tested by the American

College Testing (ACT). Included among these competencies are verbal, written, numeric and social skills reflecting the standards and expectations demanded by employers of the labor force.

(ii) **Phase II:** Survey Development, Validation and Analysis of Results. Derived from the list of identified and nationally-validated skills during Phase I, a test is developed and pilot-tested which will serve to measure and evaluate the mastery of basic skills across occupations and occupational levels. Through the detection of gaps in workers' skills, this test will provide the private sector as well as educational and vocational training institutions with concrete inputs and specific recommendations for revitalizing the education and training systems.

(iii) **Phase III:** Dissemination and Sustainability. The results of the test validated during the previous phase will be disseminated and to ensure the sustainability of the methodology and the resultant test instrument, the transfer of the methodology and technical know-how will be transferred to a private non-profit organization, the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro*.

**THE BANK'S COUNTRY  
STRATEGY:**

The proposed program is fully compatible with the Bank's strategy, especially through the support that will be provided to the modernization of productive sectors by the introducing state-of-art methodologies to assess worker competencies and formalize the development of skill standards for the work force.

In this context, the Bank has recently approved a program to improve the State of Paraná's secondary education system (950/OC-BR), which among its proposed activities is the creation of a non-governmental organization, *PARANATEC*, to integrate the public sector, the business community as well as public and private institutions in the articulation of technical educational priorities, based on the demands for a more skilled work force. In addition, the Bank is currently preparing a program for the Reform of Professional Education (BR-0247) to support the implementation of the government's Professional Education Act.

**APPROVAL OF  
PROFILE:**

November 11, 1996.

**SCHEDULE OF  
EXECUTION:**

The Program will be implemented over a 12-month period, with an 18-month disbursement period.

**ENVIRONMENTAL AND  
SOCIAL IMPACT:**

This document was sent to the Committee on Environment and Social Impact for its information on August 28, 1997 and reviewed at its meeting of September 5, 1997. The comments received were integrated into the Program (see paragraphs 3.10 and 5.7).

**BENEFITS AND  
RISKS:**

The Program will contribute toward strengthening the effectiveness and efficiency of the educational and vocational training systems in Minas Gerais by providing a testing mechanism which will enable public and private institutions to conduct periodic assessments of the level of mastery of basic skills of the work force and of school leavers. In this way, both industry and training institutions will obtain vital information to identify training needs, design human resource development programs, and update curricula, allowing at the same time the incorporation of these skills in the regular primary and secondary school curricula.

An innovative Program such as the one being proposed is always subject to risks, for example: (i) the methodology utilized might be flawed leading to skepticism on the part of users and to attacks from academicians and technical specialists; (ii) the intended beneficiaries--private industry and workers--might not know about the instrument and not use it; and (iii) the inexistence of an institution to maintain the effort. In this case, however, it is anticipated that the impact of said risks will be reduced due to: (i) the international experience and expertise of ACT in the implementation of similar Programs (some of which have been funded by the Bank) will ensure that a proven methodology and scientific procedures are followed; (ii) FIEMG's commitment to the Program as demonstrated by the counterpart being provided as well as its role among the private sector and its capability as an executing agency will lend credibility to the effort and guarantee a smooth implementation; and (iii) the commitment to the Program by the founders of the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro* is a safeguard to the Program's sustainability.

**SPECIAL  
CONTRACTUAL  
CONDITIONS:**

Conditions precedent to the first disbursement (see paragraph 4.14).

FIEMG is to submit evidence to the Bank that the *Instituto Internacional de Avaliação Sergio Costa*

Ribeiro is duly registered as a private non-profit institution and that its Board of Directors is established as agreed upon with the Bank.

**EXCEPTION TO BANK  
POLICY:** N/A

**PROCUREMENT:** Bank procedures and standards will be observed for procurement of goods and services. International competitive bidding procedures will be followed for amounts equal to or greater than US\$200,000; for amounts below this threshold, the procedures prescribed by Brazilian law, which are acceptable to the Bank, will be followed.

## I. COUNTRY ELIGIBILITY

- 1.1 Brazil was declared eligible by the Donors Committee of the Multilateral Investment Fund (MIF) for all forms of financing on February 9, 1995.

## II. BACKGROUND

- 2.1 The need for skills standards in Brazil is increasingly clear, as the economy opens to foreign trade and new investments, and as integration moves apace with its neighboring economies into the regional market of MERCOSUR. The ability to respond rapidly to changes in technology and productive processes on the part of industries, workers and training programs is an essential characteristic of an open economy and it is this adaptability that serves as the driving force in labor market and training systems transformations. The challenge inherent in such trends is the ability to link training more closely to the changes taking place in the production structure.
- 2.2 The organizational innovations associated with technological change require a flexible labor force which can operate within a broader set of responsibilities, integrated work practices and participatory work structures. These technological and organizational factors demand high performance and capability from the labor force. Brazilian industry is undergoing a transition period toward modernization, involving the improvement of product quality, productivity and cost-competitiveness. The technological foundation of local industry is being upgraded, as witnessed by accelerated import rates of equipment and machinery to renovate installed capacity and build new factories within comparable international paradigms of efficient layout.
- 2.3 Transformations in the labor market and the nature of the employment relationship will produce a shift in the manner in which Brazilian institutions prepare the workforce for the productive sector. These changes will impact upon the responsibilities of both the education and the vocational-technical training system. In the past, the role of these institutions was to prepare the population for employment - in the new work environment, these systems must provide the foundation for building the individual's employability.
  - A. Professional Education and Training and Skills Standards
- 2.4 Vocational-technical education in Brazil is provided by a wide range of both public and private technical, commercial and agricultural schools each of them providing an equally diverse range of organizational, managerial, pedagogical and financial models. Some institutions operate formally, providing courses and diplomas according to the government law concerning the educational framework and operation [*Lei de Diretrizes e Bases da Educação (LDBE)*]. Other institutions operate primarily on an informal basis, and although they may offer long-term courses and diplomas or certificates which

are accepted in the labor market, these diplomas and certificates do not constitute formally recognized certification.

- 2.5 The issue of competency standards in Brazil is a fairly recent phenomenon <sup>1/</sup>. Responding to the pressures resulting from the market liberalization during the 1990s, Brazilian industry has become one of the world's leaders in obtaining ISO 9000 certification and thus a national dialogue has begun to address the issue of occupational certification. Traditionally, industry and service sectors relied on the *Serviço Nacional de Aprendizagem Industrial* (SENAI) [National Industrial Learning Service] and the *Serviço Nacional de Aprendizagem Comercial* (SENAC) [National Commercial Learning Service] <sup>2/</sup>, as the major providers of qualified manpower, and have adopted their standards as the national norms. These highly competent institutions only meet a small proportion of the rising scale and diversity of demand for training by the working population. Other vocational training institutions, both public and private and of widely-varying quality, also provide training and certification, but it is difficult to gauge the effectiveness and quality of the skills acquired by workers in these institutions without a national standard for certifying skills and competencies.
- 2.6 The roles and processes of the two largest vocational-technical training institutions - the "S System" and the federal technical schools - are being currently reviewed, in part through the Bank's support of the Professional Technical Education Reform Program (BR-0247). Vocational training must be adapted to suit the current paradigm of economic organization, the changing nature of the employment relationship, emerging forms of work and occupations and new skill requirements. These changes involve introducing methodologies to address the needs of adult education and professional retraining, as well as reformulating the provision of youth training, and broadening the scope of training to include women, adults with low formal education, micro and small-firm entrepreneurs, ethnic groups and the disabled.

#### B. State of Minas Gerais

- 2.7 Minas Gerais state represents the third largest economy in Brazil and is founded upon a broadly diversified economic base, comprising both modern and traditional sectors. Minas Gerais has a GDP of approximately US\$52 billion, making it the fourth largest regional economy. Exports have risen to over one third of output, at US\$18 billion. The state government and business sector of Minas Gerais are attracting a new wave of foreign investment which is entering Brazil and capture the opportunities afforded by this specific

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<sup>1/</sup> Industrialized countries (including the U.S., Japan, England and Australia, among others) and some developing countries in the region (Mexico, Trinidad-Tobago, as well as Jamaica) have opted for using certification systems based on skills standards.

<sup>2/</sup> Both SENAI and SENAC are training institutions that exist at the state level and that are part of Brazil's national training system. Both these institutions, like the SESI (Social Services for Industry), are financed through a 1% tax on industrial and commercial institutions. Between SENAI and SENAC, regular courses as well as non-formal training is offered to more than 4 million workers a year.

moment. These transformations must be undertaken rapidly, if the state is to succeed in its goal to establish a more dynamic economic foundation, based on growth-oriented industries and higher value-added activities.

- 2.8 With a labor force of approximately 9 million workers and the formal unemployment rate hovering around 10%, the state's labor force reflects the same poor educational levels which plague the nation as a whole - the average schooling level of the workforce is slightly below the national average of 4 years. The low educational background of school dropouts and currently-employed workers presents a major challenge to higher-level technical education and informal training programs, since they lack the basic skills which are the basis for effective absorption of training experiences.

C. Federação das Industrias do Estado de Minas Gerais (FIEMG) Industry Federation of Minas Gerais' State

- 2.9 The *Federação das Industrias do Estado de Minas Gerais* (FIEMG) recognizes that, within the new paradigm of production, a well-prepared labor force is of equal importance as technological and organizational factors. The low level of formal education of the labor force constitutes a major impediment against a rapid transition toward the new competitive model. While the long-term solution involves raising the quality, reach and relevance of basic education - and these activities lie within the domain of the state government - the private sector is intervening with short-term solutions to bolster the basic skills of the existing labor force and improve the learning ability of youngsters in school and drop-outs before they enter the marketplace. As the representative of the productive sector in the state, FIEMG recognizes its role in providing mechanisms for economic actors to rapidly upgrade the skills base of the workforce 3/.

### III. THE PROGRAM

A. General Objective

- 3.1 The Basic Skills Certification Program has as its objective to develop, validate, and establish a testing instrument to identify the basic educational, ability, and skills levels of the workforce, on an ongoing basis in Minas Gerais State. The definition and identification of basic skills standards is a first step toward establishing a formal national skills certification system which introduces a common language to job qualifications and competency levels among private industry, the public sector, workers and training institutions. It is with this goal in mind that FIEMG has

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3/ For example, *Servico Social da Industria* (SESI) (one of the training branches within the FIEMG system) is involved in setting up literacy and school equivalency programs for all workers who did not complete the first eight years of schooling, via remedial courses (the *supletivo*) and distance learning (through the *Telecurso* program).

enlisted the support of the Bank in launching a pioneering initiative to implement the proposed Basic Skills Certification Program, to create a sustainable technical, instrumental, and institutional foundation to assess the quality and educational level of the labor force on a continuous basis.

- 3.2 The Program supports the first steps in the process of establishing mechanisms that will provide information to upgrade Minas Gerais' labor force, by adapting a methodology successfully implemented in some countries of the region to assess basic, cross-occupational worker skills. The practical results of this framework will provide data to guide future training programs by business, private and public educational and vocational training institutions (such as the "S" systems institutions and federal technical schools), and governmental agencies thus providing a model for use in other states and eventually throughout Brazil and the rest of the region.

B. Description of Activities

- 3.3 Designed in three phases, the Bank's resources will only finance the latter two and the ex post evaluation. However, for purposes of clarity the three phases and their activities are described below:

a. **Phase I:** Development of a Skills List for Job Analysis.  
(US\$700,000 financed entirely with counterpart funds)

- 3.4 During this first Phase a list of basic competencies (skills and abilities) necessary for an individual to enter the workplace or to enroll in specialized professional training is developed. Included in these competencies are verbal, written, numeric and social skills reflecting the standards and expectations demanded by employers of the labor force. Phase I consists of four steps: (i) perform a job analysis study to identify the set of core behaviors which are common across various occupations and occupational levels in a set of sample industries; and (ii) develop the BARS (behaviors, aptitudes and skills) which are required to master a given basic skill, at various levels and prepare the preliminary list; and (iii) validate the list of behaviors with a team of experts checking for content, specificity, language, and reading level; and (iv) based on the experts' recommendation, compile the items and conduct a pilot test of the list, called Survey 1.

- 3.5 These activities are being achieved by establishing skills standards groups, based upon a methodology developed by American College Testing (ACT) for the National Job Analysis Study (NJAS) <sup>4/</sup>, utilizing the competencies and foundation skills developed in the U.S. for the Secretary of Labor's Committee on Achieving Necessary

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<sup>4/</sup> A synopsis of the technical design of a study to identify cross-occupational behaviors is contained in: Korte, Robert, "Performing a National Job Analysis Study: Overview of Methodology and Procedures". American College Testing, Iowa City, Iowa n.d., and is available in RE1/SO1's technical archive. The Bank's project team has been working closely with FIEMG staff during Phase I and the work performed so far by ACT has been reviewed and it is the team's assessment that the work is satisfactory and has laid the foundation for Phases II and III.

Skills. This methodology is already being applied in Mexico with the assistance of Bank/MIF funds and this previous experience has allowed ACT to incorporate lessons learned into the current Program. In contrast to more traditional task-based job analysis approaches, the NJAS methodology identifies cross-occupational, rather than job-specific work behaviors. By adapting the list of task statements developed and tested in the U.S. and adding common job behaviors derived from task statements in the Brazilian Occupational Catalog, the behaviors drawn from these task statements ensured that the resulting taxonomy was representative of the full set of job behaviors that are comparable across occupations.

b. **Phase II:** Survey Development, Validation and Analysis of Results. (US\$1,260,000)

- 3.6 Phase II involves the development of a test (derived from the list of identified and nationally-validated skills during Phase I) which will serve to measure and evaluate the mastery of these basic skills across occupations and occupational levels will be pilot-tested during this phase. Through the detection of gaps in workers' skills, this test will provide the private sector as well as educational and vocational training institutions with concrete inputs and specific recommendations for revitalizing the education and training systems.
- 3.7 Data analysis of the results from Survey 1 will contribute to developing a test blueprint for Survey 2. Based upon the cross-occupational analyses and dimension assignments of core behaviors, this test blueprint can be constructed on the basis of the relative weightings of dimensions. Each skill will have between two and five representative behaviors which will be identified. A taxonomy of behaviors will be constructed - and within this taxonomy, proficiency levels for each behavior will be established. These tasks will be conducted by ACT technical staff, as part of their support to the Program.
- 3.8 Based upon this structure, subject matter experts will identify the knowledge, skills and abilities (KSAs) associated with the behaviors, at each of the proficiency levels. The reliability and validity of the proficiency level assignments and KSAs will be ensured by developing and administering adequate instrumentation. The Program will develop assessment measures (following specific criteria which will be determined) in order to reflect the proficiency levels and associated KSAs.
- 3.9 The final, revised Survey 2 will be applied to a pilot population of 400 job incumbents, to be applied in the metropolitan region of Belo Horizonte, and adjusted accordingly. Thereafter, it will be administered to a representative sample of 3,000 respondents in a sample of productive sectors across Minas Gerais state.
- 3.10 A sample of sectors will be selected in order to include roughly 60 occupations, and to involve a collected sample of economic sectors representing more than 70% of the employed workforce in the state of Minas Gerais. The approximate share of different sectors in the

survey will be as follows: Industry (1,600 respondents); Trade/Retail (800 respondents); Services (800 respondents); Education (400 respondents) and Human Resource Departments (400 respondents). Every attempt will be made to ensure that during survey development, validation and analysis of data will be disaggregated by gender, that workforce samples include women, and that test results will be evaluated with respect to any possible gender bias.

- 3.11 After the final version of this test has been approved and administered to job incumbents, the next step will include the design of a generic test to assess the performance level of the labor force in Minas Gerais in line with the basic skills identified by employers.
- 3.12 The final activity is the construct of a database and the analytical capacity, at a local level, to retrieve and analyze the test results and to prepare reports based upon these test findings to meet the needs of various audiences (including FIEMG, educational systems, the Secretariat of Labor, productive sectors, individual firms, etc.). The results of the test (Survey 2) will be used as a major communication and marketing device to promote and disseminate the new concepts and products related to basic skills, as well to contribute toward upgrading the educational and vocational training activities in Minas Gerais, and other states. Specialized versions of this test will be prepared in the future, in line with the specific demands of different clients. The range of potential clients include individual workers, workers' organizations and unions, firms, chambers of industry and commerce, training institutions, educational systems and public authorities.

c. **Phase III: Dissemination and Sustainability.** (US\$505,000)

- 3.13 The results of the validation (in test form) will be disseminated and to ensure the sustainability of the methodology and the resultant test instrument, the transfer of the methodology and technical know-how will be transferred to a private non-profit organization.
- 3.14 During Phase III, dissemination activities will include public events, as well as activities for key partner institutions and user groups. Seminars and workshops will be organized for a diverse range of targeted audiences, such as: (i) Minas Gerais State Secretariats for Education, Labor and Planning (these actors are crucial, as the Secretariats are likely clients for the first major administration of the test); (ii) Representatives from other states; (iii) Members from the key education and vocational training institutions, at the state and national level; (iv) Specialists in the area of education, human resource development and professional training; (v) Sectoral groups represented by FIEMG; (vi) Workers' associations and representatives, or individual workers.
- 3.15 Methodological and empirical outcomes of the Program will be disseminated through several formats, including seminars, publications and institutional partnerships formed during the course of the Program. Public presentations, participatory workshops, and

seminars have already taken place during the early stage of the Program to publicize the methodology, anticipated outcomes and potential applications of the basic skills program format. Employers and labor union representatives will be involved in these public activities and meetings.

- 3.16 More specific outcomes will be disseminated periodically during the course of the Program. For example, the completed list of task statements lends itself easily to publication for distribution as an initial outcome of the Program, reflecting the types of skills which employers want, and cross-occupational groupings.
- 3.17 The wide utilization of the testing instrument and results will be promoted for different clients and needs, generating systematic information for the educational system, individual companies, and for economic sectors. Mechanisms will be developed to continuously update these tests, formalize the administration of the test, analyze the responses, produce reports for specialized demands and, eventually, disseminate test results at a national level.
- 3.18 The job analysis methodology and language will play an influential role in the further development of occupational certification in Brazil. In this sense, the attitude of employers in relation to the test and its results is certainly crucial and FIEMG has already organized two seminars in occupational certification in Brazil which have drawn national attention.

C. Costs and Financing

- 3.19 The total cost of this Program is estimated at US\$2.85 million, of which FIEMG will provide US\$2.0 million in counterpart funds solicited through the *Fundo de Amparo ao Trabalhador* (FAT) 5/. These resources have been approved at the federal level by the Brazilian Ministry of Labor and at the local level by the Office of the Governor of Minas Gerais.

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5/ RE1/SO1's technical file includes a copy of the contract, from the office of Minas Gerais' Governor, allocating BR\$2.0 million reais for this Basic Skills Certification Program, as well as a copy of the original project proposal submitted to the Deliberative Council of the Worker's Assistance Fund (FAT).

3.20 It is proposed that the Program resources be distributed as follows (a detailed budget is included in Annex III-1):

ITEM	MIF	LOCAL CONTRIBUTION	TOTAL
<b>PHASE I: <u>Development of a Skills List for Job Analysis</u></b>			
1. Professional services firms		560	560
2. Consultants		15	15
5. Travel		125	125
<b>SUBTOTAL PHASE I</b>		700	700
<b>PHASE II: <u>Survey Development, Validation and Analysis Results</u></b>			
1. Professional services firms			
1.1 Survey development and technical assistance		525	525
1.1 Pilot and field test of Survey 2	160	170	330
1.1 Computer Services/Data Base	125	125	250
2. Consultants	70	85	155
<b>SUBTOTAL PHASE II</b>	<b>355</b>	<b>905</b>	<b>1,260</b>
<b>PHASE III: <u>Dissemination and Sustainability</u></b>			
1. Professional services firms			
1.1 Transition		100	100
1.1 Dissemination and marketing	140	50	190
2. Consultants			
2.1 Social Marketing Specialist	40		40
2.1 Institutional Strengthening Specialists (2)	25		25
7. Printing	85	65	150
<b>SUBTOTAL PHASE III</b>	<b>290</b>	<b>215</b>	<b>505</b>
<b>ADMINISTRATIVE COSTS</b>			
2. Individual Consultants			
2.1 Program Implementation Team (PIT)	50	130	180
6. General Support			
6.4 Supplies	55	50	105
<b>SUBTOTAL ADMINISTRATIVE COSTS</b>	<b>105</b>	<b>180</b>	<b>285</b>
<b>EVALUATION</b>	<b>100</b>		<b>100</b>
<b>TOTAL Program</b>	<b>850</b>	<b>2,000</b>	<b>2,850</b>

#### IV. EXECUTION OF THE PROGRAM

##### A. Execution of the Program and Program Implementation Team (PIT)

- 4.1 The *Federação das Industrias do Estado de Minas Gerais* (FIEMG) will be responsible for program execution, which will delegate program coordination, monitoring and evaluation to the Program Implementation Team (PIT). FIEMG will act as the party ultimately responsible for the Program coordination and implementation, as well as the guarantor of the Program's sustainability.

- 4.2 The Program's execution timetable will be for 12 months and the disbursement period will be 18 months, both beginning on the effective date of the signing of the agreement. Counterpart resources are being used to accomplish Phase I activities. As explained in Chapter III, this phase is crucial for the design and preparation of the Program. The Project Team worked with FIEMG during this Phase and was involved in the definition of the terms of reference and the selection of ACT as technical assistance provider 6/. The Bank's resources will be used to contract the firm responsible for administering the surveys; the consultant services to conduct the data analysis and validation of the instrument, and the services to print the tests, conduct the social marketing and the disseminate information as well as materials during Phases II and III.
- 4.3 In order to focus the dissemination activities more effectively, a professional marketing strategy will be launched immediately prior to the test's completion. A social marketing specialist will be hired utilizing the consultant funds of the Program. It will be important to have this marketing specialist work closely with the PIT in order to effectively transmit the content and timing of the marketing strategy, as a key part of the dissemination phase procedures. The Program's activities and its implications on testing and training will be discussed during an international voc-ed training seminar to be sponsored by FIEMG in the fall of 1997.
- 4.4 In addition to the social marketing specialist, the PIT will be composed of a coordinator, a technical specialist, an administrative trainee, and a secretary whose salaries will be partly financed with Program resources. Technical assistance from ACT will be ongoing throughout all phases of the Program and is financed with counterpart funds.
- 4.5 One of the critical aspects of this Program is involves the successful transfer of this new methodology to a local institution, guaranteeing its adaptation, absorption and sustainability. This institution is the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro* (Institute). The Program's resources, as well as the copyright for the test, and other materials will be transferred at the Program's completion to the Institute who will be responsible for maintaining and updating the test instrument and ensure its sustainability. This transfer will necessarily involve effective diffusion of the ACT methodology through rigorous preparation of the PIT; training of stakeholders (such as members of the Validation Committee); and regular dissemination activities to a broad range of clients and experts who will eventually use these instruments (government agencies, economic sectors, individual firms, worker representative organizations and training and

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6/ The American College Testing (ACT), is an internationally recognized authority in the field of test development and will be a major provider of expert technical assistance. A staff member of ACT has been based in Belo Horizonte providing technical support to the PIT during most of the Program's duration.

education institutions). The PIT, therefore is in fact the embryo of the implementing unit that will be established within the Institute upon the Program's completion.

- 4.6 The Institute is an autonomous unit of the Center of Professors of Minas Gerais State (CEPEMG) 7/. The Institute's goal is to provide high quality services in the areas of test development and professional certification. It relies upon the technical assistance of ACT, which not only participates jointly in projects but also shares the goal of consolidating the Institute into a technical body which will operate in line with international quality standards. The Institute was created with the help of the Secretariat of Education of Minas Gerais State, which has granted physical installations to house the Institute during its initial stages. The Institute, whose registration as a non-profit organization is still pending, currently has an Advisory Board that will, upon registration, be the basis for a formal Board of Directors.
- 4.7 The Institute is a private non-profit testing institution and was recently created to carry on the Program's activities. It will have responsibility for guaranteeing the technical quality of the Program's future products, as well as developing the mechanisms for the utilization and updating of the job analysis methodologies. The Institute is in the process of establishing an agreement with ACT, to provide of the technology, methodology and technical assistance for the continuation of the Program's activities.
- 4.8 The Institute will be the most significant element in guaranteeing the dissemination and marketing of the new basic skills product, as well as the sustained use and relevance of this Program. As the repository of the basic skills methodology, instruments and survey results, the Institute will serve as the point of reference for meeting the various demands of different sectors, as well as a center of excellence which continuously refines and updates its instruments and techniques.

B. Other Institutional Partners

- 4.9 The Basic Skills Certification Program requires a methodology which promotes the creation of partnerships and collaborations between different institutions, given its innovative nature within the Brazilian experience of skills development and certification. The Program has profound implications for transforming existing practices in the major institutions responsible for human resource development, as well as potential impacts on a wider scale if disseminated effectively. Therefore, in addition to FIEMG, the principal institutions and groups which are key collaborating partners to be targeted include:

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7/ CEPEMG is a private, non-profit institution created in 1984 to provide technical assistance in the areas of education, training of professors, conducting evaluations, developing educational materials and consulting services. Its membership is composed of professors from the Education Institute of Minas Gerais State.

- 4.10 The organizations that comprise the "**S System**", composed of the national employer-financed training system: **SENAI**; **SENAC**; *Servico Social da Industria* (**SESI**). During the Program, these institutions will provide technical support and assistance in the job analysis phase identifying skills, validating tests, and implementing the field trials. Representatives of these three institutions will participate in working groups which will define and validate skills.
- 4.11 **The State Secretariats for Education, Labor and Planning of Minas Gerais.** These public institutions will provide the necessary political and public support to the Program. They are likely to become major users of the tests, utilizing the results to introduce changes in the educational and vocational training practices and policies of the state. Officials from these organizations emphasized that state policies must change from a centralized, supply-push approach in manpower planning and training provision, toward applying more precise criteria for gauging real and existing demands in the economy, thereby avoiding expenditures which are wasteful of government resources and frustrating for new trainees who are unable to match their skills with employment opportunities. Given its role as a major funder of training, the Secretariat of Labor increasingly seeks to link training efforts with existing demands in the economy on the basis of informed indicators.
- 4.12 **Workers** from various productive sectors in the state will be involved in the Program in two principal ways: (i) a group of 15 workers from each of the major industrial and service sectors has been selected to comprise the Validation Committee, which will verify the task statements list in their respective work environments, and (ii) workers will be the primary respondents to the pilot and final test and will be important clients for the use of the final Program instruments.

C. Conditions for use of the contribution from the Bank

- 4.13 Bank funds for the procurement of goods and the awarding of consulting services will be carried out in accordance with the Bank's established procedures. Bank funds are to be utilized solely to finance the items indicated in the Program's budget. International competitive bidding procedures will be followed for amounts equal to or greater than US\$200,000; for amounts below this threshold, the procedures prescribed by Brazilian law, which are acceptable to the Bank, will be followed. A revolving fund will be established in the amount of 10% of the Program funds.
- 4.14 The following condition has been established for the first disbursement: the PIT must submit the registration of the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro* (International Evaluation Institute Sergio Costa Ribeiro) as a non-profit institution with a Board of Directors established as agreed upon with the Bank.

D. Monitoring

- 4.15 FIEMG through the PIT will submit the following reports to the Bank: (i) a progress and a financial report due 45 days after six months of execution, (ii) a final report due 45 days after the last day of program execution, including a breakdown of the Program's financial expenditures. This financial statement will be audited by an outside firm authorized by the Bank.

V. **FEASIBILITY, BENEFITS AND RISKS**

A. Feasibility and Sustainability

- 5.1 FIEMG brings the necessary technical experience to this Program, especially through its SENAI and SESI units, involving a number of large projects and activities in the area of training, human resource development and motivation. This prior experience is an example of FIEMG's ability to undertake a Program of this size and nature. Through its numerous councils and committees, FIEMG will serve as the primary advisory board for the Program. By allocating resources, requesting funding from outside organizations, and finally approving the test as an instrument that measures the "skills employers want", employer representatives have endorsed the Program and contributed to its legitimization, especially among the formal business sector.
- 5.2 The institutional sustainability of the Program is addressed through the identification of the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro* as the recipient of the Program's test instrument and methodology. The Institute serves as the institutional base where the testing instrument and data will be housed, as well as where the technical staff necessary for providing specialized services arising from the Program - analysis of basic skills testing results and individualized consulting services - will reside.
- 5.3 The Secretariat of Labor has played a direct role in approving the financing of a major part of this Program through the FAT funds. The Program's outcomes are considered by the state authorities as an important tool to help guide future decisions concerning FAT resource allocations. The Secretariat of Labor recognizes the importance of the Basic Skills Program to assist policy and planning activities of government and the major training institutions. Henceforth, all courses administered by the Secretariat of Labor will include basic skills (interpreted in the broad sense, including specific skills and management skills as well), in order to contribute toward training workers to communicate effectively, listen to others, interact well and assert their citizenship. Likewise, the "S System" courses need to be adapted to suit employers' new expectations of the workforce.

- 5.4 Finally, sustainability is built through the dissemination of information and the institutional partnerships built during the course of the Program's implementation. This relates to the extent to which the various social and economic actors are made aware of the Program's activities and the significance of its outputs, as well as creating a sense of participation in the construction of its instruments. The formation of strong partnerships with future users of the instrument is a core element in the execution of this Program. The participation of a wide range of representatives in the Validation Committee is a step in this direction, although its activities are geared toward operational tasks involving the adaptation and validation of the list of task statements.

B. Benefits

- 5.5 The benefits to be derived include: (i) the involvement of employers, workers, and education/vocational training institutions in the development of the testing instruments, (ii) the transfer of technology and a methodology crucial to the development of a credible assessment instrument, and (iii) utilization of the results from the test data to improve the level of basic skills of the workforce in the state of Minas Gerais and eventually, throughout the country.
- 5.6 The Program will contribute toward strengthening the effectiveness and efficiency of the educational and vocational training systems in Minas Gerais by providing a testing mechanism which will enable public and private institutions to conduct periodic assessments of the level of mastery of basic skills of the work force and of school leavers. In this way, both industry and training institutions will obtain vital information to identify training needs, design human resource development programs, and update curricula, allowing at the same time the incorporation of these skills in the regular primary and secondary school curricula.
- 5.7 **Environmental and social impact.** Given the nature of this Program, no negative environmental or social impact is anticipated. The methodology used by ACT in the development of lists, core behaviors, and competencies is designed to eliminate gender bias. In addition, when identifying the members of the Validation Committee whose job was to validate the skills list, women were included as members by the PIT to ensure wide representation. The validity and credibility of the test instrument to be designed by the Program is dependent on the elimination of any bias that may occur.

C. Risks

- 5.8 An innovative Program such as the one being proposed is always subject to risks. In this case, however, it is anticipated that their impact will be reduced due to: (i) the international experience and expertise of ACT in the implementation of similar Programs; (ii) the influence that FIEMG exerts in the private sector as well as its institutional capability as an executing

agency; and (iii) the commitment to the Program by the founders of the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro*.

- 5.9 There is concern that workers, via their representative organizations, were brought into the Program at a late stage, which may inhibit a greater integration and acceptance of the basic skills instrument by this constituency, thus affecting its credibility. However, the *Confederação Geral dos Trabalhadores* (CGT) [General Confederation of Workers] in Belo Horizonte, is aware and has been supportive of the Program, having approved the release of FAT funds for the Certification of Basic Skills Program as the labor representative on the *Conselho Deliberativo do Fundo de Amparo ao Trabalhador* (CODEFAT) [Deliberative Council of the Workers' Assistance Fund]. This risk will be substantially reduced through the active and ongoing participation of workers and their organizations during Phases II and III of the Program.

## **VI. FULFILLMENT OF THE PROGRAM ELIGIBILITY CRITERIA**

- 6.1 **General Criteria for Program Eligibility.** The proposed Program is consistent with the Agreement establishing the MIF, particularly with Article I, subsections (a) and (b), which call for financing to support development strategies based on sound economic policies which encourage increased private investment and an expanding private sector, as those policies will speed up social and economic growth.
- 6.2 **Eligibility Criteria for the Human Resources Facility.** The proposed Program is consistent with the financing criteria of the Human Resources Facility one of whose goals is to provide grant funds to develop the human resource base needed for increased investment flows and an expanded private sector. The Program will finance the implementation of a pilot system to measure basic skills that may impact on all training and development systems in Minas Gerais and eventually throughout the country. The Program focuses on key issues for making the labor force competitive on the world market and establishes a process to assess the level of the Brazilian labor force to meet those standards. Similar Programs have been approved for Mexico, Jamaica, and Trinidad and Tobago.

## **VII. COMPATIBILITY WITH THE BANK'S COUNTRY STRATEGY**

- 7.1 The Bank's current strategy for Brazil is consistent with the objectives of the Eighth Replenishment, the government's focus on eliminating the causes (and easing some of the social consequences) of chronic inflation, and the need to foster economic modernization. The main elements of the strategy emphasize: (i) promoting the reform and modernization of the public sector at all levels of government; (ii) supporting the process of economic opening, in part through the modernization of the productive sectors and also through the *Redução do Custo Brasil* initiative,

whose objective is the rehabilitation and expansion of the nation's transport and port infrastructure; and (iii) addressing socio-economic inequities and poverty alleviation by increasing the effectiveness of social spending and improving the targeting of social programs. In the latter instance, special support is given to the decentralization of the social sectors, in part through increased partnerships with the local community and civil society. At the same time, the traditional emphasis on basic sanitation and the environment are retained in the current Bank strategy.

- 7.2 The proposed program is fully compatible with the Bank's strategy, especially through the support that will be provided to the modernization of productive sectors by the introducing state-of-art methodologies to assess worker competencies and formalize the development of skill standards for the work force.
- 7.3 In this context, the Bank has recently approved a program to improve the State of Paraná's secondary education system (950/OC-BR), which among its proposed activities is the creation of a non-governmental organization, PARANATEC, to integrate the public sector, the business community as well as public and private institutions in the articulation of technical educational priorities, based on the demands for a more skilled work force. In addition, the Bank is currently preparing a program for the Reform of Professional Education (BR-0247) to support the implementation of the government's Professional Education Act.

#### VIII. AVAILABILITY OF RESOURCES FROM THE MIF

- 8.1 **Financing modality.** It is expected that the Program will be financed through a non-reimbursable grant. On February 9, 1995, Brazil was declared eligible for all forms of financing by the Donors Committee of the Multilateral Investment Fund (MIF).

#### IX. EVALUATION

- 9.1 Two evaluation activities will be carried out by a consultant or consulting firm engaged by FIEMG for this purpose: upon six months of Program execution for the presentation of a formal evaluation plan, and an ex-post evaluation conducted 6 months after Program completion.
- 9.2 The six month evaluation plan will set the parameters and identify the indicators used to assess the impact of the dissemination activities to be carried out during Phase III of the Program. Among the indicators to be reviewed will be the appropriateness of the methodology to Brazil's context, an assessment of the incentives that exist for the use of the testing instrument by the private and public sector, and the level of dissemination and acceptance of the instrument. The ex-post evaluation will measure the impact of the Program's activities on the partner institutions,

stakeholders, and end-users of the test instrument. In addition, the evaluation will make an assessment of the activities being undertaken by the *Instituto Internacional de Avaliação Sérgio Costa Ribeiro* to maintain and update the test instrument and will make specific recommendations to ensure its wider dissemination and use.

## PROGRAM INDICATORS

GENERAL OBJECTIVES	VERIFIABLE INDICATORS	MEANS OF VERIFICATION
Develop a testing instrument to enable public and private institutions to assess the level of mastery of basic skills thus strengthening the effectiveness and efficiency of educational and vocational training in Minas Gerais.	Within 12 months of Program completion, at least 3 industrial and/or commercial sectors are utilizing the testing instrument to assess the basic skills of workers seeking jobs.	Letters of agreement between industrial and/or commercial associations with the Instituto Internacional de Avaliação Sergio Costa Ribeiro to utilize the testing instrument.
<b>ACTIVITIES</b>		
<b>Phase I:</b> Develop a list of basic competencies (verbal, written, numeric, and social) necessary for a worker to enter the workplace.	The Program's Validation Committee will have reviewed the list of competencies and made adjustments.	Records and minutes of Validation Committee meetings.  Different versions of the list.
<b>Phase II:</b> Develop a validated testing instrument to assess the educational, skill and ability levels of the workforce on an ongoing basis.	3000 job incumbents will validate the testing instrument.  Testing instrument is gender bias-free.	Responses from field test.
<b>Phase III:</b> Disseminate information about the testing instrument and create the institutional framework needed to maintain and update the test.	Industrial and commercial associations, worker organizations, and private training institutions will submit formal inquiries as to the use and application of the testing instrument.  Presentations to disseminate information will be arranged at meetings and conferences for employers, workers, training institutions and State Secretariats.  The Institute is an established autonomous institution with the technical capacity and resources necessary to maintain and update the testing instrument.	Phone logs and correspondence files at the Institute.  Attendance records and presentations made by Project staff members.  The Institute's strategic plan and organizational records.

**PROPOSED RESOLUTION**

**BRAZIL. TECHNICAL COOPERATION PROGRAM FOR  
A BASIC SKILLS CERTIFICATION PROGRAM**

The Donors Committee of the Multilateral Investment Fund

**RESOLVES:**

1. That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, on behalf of the Multilateral Investment Fund, to enter into such agreements as may be necessary with the Federação das Industrias do Estado de Minas Gerais (FIEMG) and to adopt such other measures as may be pertinent for the execution of the plan of operations referred to in Document MIF/AT-\_\_\_\_\_ with respect to a technical cooperation, the purpose of which is a Basic Skills Certification Program.
2. That up to the amount of US\$850,000 is authorized for the purpose of this resolution, chargeable to the Human Resources Facility of the Multilateral Investment Fund.
3. That the above mentioned sum is to be provided on a non-reimbursable basis.