Provisional Agenda Item 14

SUPPLY OF TEXTBOOKS FOR MEDICAL STUDENTS

INTRODUCTION

The program of the supply of textbooks for medical students, which has been under study by the Pan American Health Organization for the last two years, was submitted to the XVII Pan American Sanitary Conference in Document CSP17/27. The Conference recognized the utility and the feasibility of the program in Resolution XV, which also instructed the Director to continue his negotiations to obtain financial support for the program.

BACKGROUND

The purpose of the program is to provide medical schools in Latin America with medical textbooks on terms suited to the financial possibilities of their students. The most suitable textbooks would be selected in cooperation with the faculty of medical schools, and a sufficient number of copies would be published to supply the majority of students. In order to reduce publishing costs, each printing would have to be rather large, the presentation of the books would be unpretentious, and administrative machinery would be established to facilitate the purchase of books by students. To satisfy this new market PAHO would utilize existing editorial installations and facilities.

In the opinion of medical educators in the Americas the lack of medical textbooks in schools of medicine is a major obstacle to the full development of teaching. This fact, which has been confirmed by personal visits which special PASB consultants made to 46 medical schools, was reaffirmed by the Pan American Federation of Associations of Medical Schools in a letter it sent to the XVII Pan American Sanitary Conference in its capacity of an association representing medical schools in the Hemisphere. The letter stated that the most necessary medical textbooks are in short supply in medical schools, and that a great many of the existing textbooks are out of date.
The number of textbooks translated into Spanish and Portuguese has been increasing in recent years, but their price is frequently beyond the pockets of students. According to available information on four basic subjects, Spanish books which might be used as textbooks are available and their price to the public, according to booksellers' catalogues, is as follows:

- Physiology $10 to $25
- Pharmacology $12 to $26
- Biochemistry $12 to $23
- Pathological anatomy $19 to $21

ADVANCES MADE IN DEVELOPING THE PROGRAM

The purpose of this document is to provide the Executive Committee with a progress report on the steps taken since the XVII Pan American Sanitary Conference.

A letter was sent to the Ministers of Health of the Member Countries of the Pan American Health Organization to inform them that, in view of the unanimous and enthusiastic support the project received at the Conference, steps were being taken to continue to plan the program, and efforts were being made to initiate the program without delay. The first step would be to review the model agreement which will be concluded between the government concerned and the Pan American Health Organization to establish the most advisable plan of operations. A similar letter was sent to the Rectors of the Universities of Latin America and to the Deans and Directors of Medical Schools. The Directors of the Medical Schools were requested to supply preliminary information about possible members of the Expert Committees that would select the textbooks. (Annex II).

A model agreement was drawn up (Annex III) and has been discussed with Ministers of Health of six countries as well as with the associations of medical schools of the countries concerned. In three countries, Brazil, Colombia and Venezuela, the Governments and the Association of Medical Schools have signed these agreements and accepted the plan of operations and the obligations proposed as a basis for the operation of the program, subject to the availability of funds for financing the program.

As for the financing of the program, negotiations with the Inter-American Development Bank have continued. The IDB has established the respective Project Committee which has continued to examine various aspects of the program with the officials of the Bureau.
SELECTION OF TEXTBOOKS

In accordance with the needs and aims of the program, the publication of textbooks for each of the subjects covered in the medical course will proceed by stages. The success of this program will depend in large measure on the acceptance of the textbooks both by faculty and by students. After consultation with faculty members on national or local characteristics of medicine, if any, each school of medicine will submit the names of four or five persons to form an Expert Committee on each subject. The most qualified persons will be appointed to select the books to be published.

This procedure, which was considered praiseworthy by the Deans and the faculty members interviewed, will ensure that the members of each committee will be authorities in their special field. Replies from medical schools suggesting the names of candidates for these expert committees have begun to arrive.

For the actual production of the textbooks there may be various alternatives once the book or books recommended have been selected by the committees concerned:

1. The book or books selected may already have been published in Spanish and/or Portuguese. In this case arrangements will be made with the publishing houses offering the best terms, to issue a special edition in a large number of copies and unpretentious presentation so as to reduce the cost. The publication of a special low-cost edition is expected to open up a new market for the regular edition, namely practicing physicians who might be inclined to buy a textbook selected by a group of international experts in the field.

2. The book or textbooks selected that has been published in a language other than Spanish or Portuguese. In this case they would have to be translated into those languages, and then we would have to proceed as above.

3. In the opinion of the selection committee, there is no suitable textbook on the subject in Latin America. Under these circumstances the selection committees would have to entrust the preparation of a textbook to a particular instructor or group of instructors. It appears that this situation will arise in a very small number of cases.

Continuity of the program would be maintained as a result of the establishment of a PAHO Revolving Fund.

PAHO will inform the participating universities of the textbooks selected, and the medical schools will use these textbooks as provided in the model agreement, and in such letter-agreements as may be signed by the universities.
The textbooks will be sent to these schools of medicine and made available to medical students to whom they will be offered through a sale, resale or rental arrangement. The funds collected will be sent to PAHO to cover the cost of subsequent editions of the text.

Continuing technical evaluation of the program will be made by the government, the participating university, and PAHO.

From time to time the expert committees will review the textbooks in order to keep them up to date and will suggest the changes needed to strengthen the program.

To assure the accomplishment of the objectives and the continuity of the program, an auditing system will be established.

Books will be delivered as the progress develops, and in accordance with the regular dispatch to PAHO of the financial statements and the collection of funds by the universities.

COOPERATION WITH OTHER AGENCIES

PAHO recognizes the efforts which other public and private organizations are making to strengthen the publishing industry in the Americas and to improve medical libraries in the Latin American countries. PAHO intends to coordinate its plans of work in this field with those of the above-mentioned institutions, since they have common purposes. In planning this program, the Organization has followed with interest the Franklin Book Programs which are intended to strengthen medical libraries in Latin America in cooperation with the W.K. Kellogg Foundation. In our opinion this program is extremely important and supplements the program proposed by PAHO; that program is aimed at improving medical libraries in a very specific field whereas the program of the Organization is aimed at providing medical students with at least basic reference books.

BUDGET AND FINANCE

As presented in Document CSP17/27, the cost per book has been estimated in Table 4 at $4.96. On this basis the gross cost of 640,000 copies expected to be produced in the first 5-year period would be $3,174,000 (Table 4 reproduced as Annex IV for easy reference).

Table 5 of the same document estimated income and expenses for a 9-year period (Table 5 reproduced as Annex V for easy reference). This table shows that the amount of working capital needed to finance the program pending receipt of income from sale and rental of books becomes stable at the end of 5 years at $1,633,300. Thus a revolving fund of this size is needed to support the program. To provide an additional margin for contingencies an amount of $366,600 was added to make a revolving fund of $2,000,000.
These estimated requirements are maintained since no new information is available which indicates need for any change. Obviously they will require constant review as the program develops, taking into account such factors as the proportion of books which already exist in Spanish and Portuguese and the arrangements which can be made with the publishers for special editions at low cost.

As mentioned in CSP17/27, it is hoped to obtain a long-term loan at low interest to finance the creation of the revolving fund, and it was proposed to repay the loan from the regular budget of PAHO. Amortization over a period of 20 years at 3% interest would require from $100,000 to $130,000 annually, to meet the net requirement of $1,633,300 to $2,000,000 as shown in Table 5.

Annexes
The President of the
XVII Pan American Sanitary Conference
(Pan American Sanitary Bureau)
Washington, D. C.

Sir:

I have the honor to enclose with this letter a document in
which, in my capacity as Vice-President to the Pan American Federation
of Associations of Medical Schools, I set forth the position of the
Federation concerning the program for the supply of textbooks for
medical students which the Director of the Pan American Sanitary Bureau
has been good enough to submit to the Conference.

Circumstances beyond my control will prevent me from taking a
personal part in the discussion of this item, which is why I should
be grateful if you would be good enough to bring the attached docu-
ment to the attention of the participants.

I am, Sir,
Yours very truly,

Gabriel Velázquez Palau, Vice-President,
Pan American Federation of Associations
of Medical Schools

Attachment
The Pan American Federation of Medical Schools, a non-governmental organization composed of the Associations of Medical Schools of the Americas, and of most of the medical schools not members of an association, was officially recognized by the Directing Council of the Pan American Health Organization at its XVI Meeting (XVII Meeting of the Regional Committee of the World Health Organization for the Americas) as an organization representing medical schools in Latin America, according to Resolution XXXVIII of that Council. This same resolution authorized the Director of the Pan American Sanitary Bureau to develop with the Federation "cooperative activities of mutual interest aimed at strengthening medical education programs in the Hemisphere".

In this capacity and pursuant to the above-mentioned resolution, the Federation has the honor to state its position on the proposal concerning the supply of textbooks for medical students which the Director of the Pan American Sanitary Bureau has submitted to the Conference (Document CSP17/27).

From the initiation of this project the Federation has been very interested in it and, to the best of its ability, has contributed to the preliminary studies and to such negotiations as might in any way lead to its realization. Thus, the preliminary survey carried out in ten schools of medicine in Brazil was undertaken by a group of medical educators under the direction of Dr. Ernani Braga, Executive Director of the Federation. Its Administrative Council took official notice of this project about a year ago, unanimously approved it, and sent a personal representative to the Inter-American Development Bank to support any financing negotiations which might take place. This request was subsequently repeated in a letter which Dr. Amador Negme, President of the Federation, sent to the President of the Bank and in representations which all the national associations of medical schools affiliated with the Federation made to that credit agency.

The many and active demonstrations of interest in the project by the Federation, and its constituent associations, are perfectly understandable. Indeed, all medical educators in Latin America are well aware of the fact that one of the major obstacles to teaching is the students' lack of textbooks. The Federation, while it recognizes the important advances made in other fields, is conscious that most of the teaching programs are affected by the present textbook problem. This is a hard fact which the professors and institutions represented in the Federation are well aware of. It is generally agreed that textbooks are in short supply, that many of the existing textbooks are out of date, or published in languages which students have difficulty in understanding and at prices which are too high for the pocket of most students.

The proposed program is perfectly feasible according to the experience gained in different schools. The selection systems guarantee both the quality and acceptability of the textbooks. The proposal presented by the Organization is not only an effective way of permanently solving the shortage of textbooks but it is also a factor of incalculable importance in
improving learning in our schools. By making available to students a sufficient number of textbooks of high scientific and educational quality, students will become accustomed to seeking sources of information, of sharpening their curiosity, and of improving their own training.

The system, providing for the selection and, if necessary, the preparation of textbooks, guarantees not only that they will be of high quality, but also that they will be adapted to the health conditions peculiar to our countries, that they will clearly present the main problems in our region, which are frequently not sufficiently stressed in the textbooks at present in use, and will show how these problems can be solved within our financial, personnel and institutional resources.

The establishment of a revolving fund, as a method of financing the program, guarantees the continuity the program must have, and at the same time makes it possible for the teaching material which is to be offered to be continuously reviewed, brought up to date, and renewed.

The medical schools in the Hemisphere, which have seen how their task goes far beyond the mere training of under-graduate students, and is extended to auxiliary and para-medical professions, and to the continuing education of professional health workers already in practice, foresee that this project will have important repercussions.

The Pan American Federation of Associations of Medical Schools, in its own name, and in that of the schools which compose it, and whose views it represents, requests the Conference to give its enthusiastic support to the program presented to it, and offers the fullest cooperation of the Federation and the schools in implementing it.

Washington, D. C.
3 October 1966
Sir:

I am pleased to inform you that the program for the supply of textbooks to medical students, about which I had occasion to write to you at an earlier date, will soon become a reality. The enthusiastic and favorable reception this program received, first from the Deans and Directors of Schools of Medicine, and then from the representatives of the Governments of the Member Countries at the XVII Pan American Sanitary Conference, has led me to make arrangements to implement this program while actively continuing negotiations for financing it.

I am today writing to the Minister of Health and to the Rector of the University to give them this information and at the same time to ask them for their good offices in negotiating the pertinent agreements that will have to be signed. These agreements will set forth the obligations of the Governments, the Universities, the Schools of Medicine, and our Organization, will clearly specify the purposes of the project, and set in motion the machinery for achieving them.

The relevant details will be discussed and defined in interviews with PASB/WHO Representatives who will call on you in due course.

For the time being I should like to ask you and your Faculty for assistance in making a sound selection of the textbooks our Organization will offer and which initially will cover the following subjects: physiology, biochemistry, pharmacology, pathology, and pediatrics. With this end in view, one of our consultants will soon visit your School for the purpose of working out with the teachers concerned a list of textbooks and of discussing other details of the program with you.

You will not be unaware, Sir, of the importance to the program of the assistance I am requesting. Indeed, it has always been the view that both the technical and operational aspects of this program must, at all stages, be moved forward jointly by our Organization and by the Schools of Medicine participating in it. I should like to assure you and your Faculty that any suggestions you may wish to send us will receive due attention, will be extremely useful in making a selection of textbooks, and will constitute the technical grounds for the decisions that will be taken.

I shall continue to keep you informed about the development of this program, specially the various aspects concerning which I am seeking the assistance of your School.

I am, Sir,

Yours truly,

Abraham Horwitz
Director
AGREEMENT
FOR A PROGRAM FOR THE PROVISION OF
MEDICAL TEXTBOOKS IN COLOMBIA

The Government of Colombia, represented by the Ministry of Public Health (hereinafter referred to as "the Government"),

The Colombian Association of Medical Schools (hereinafter referred to as "the Association"), and

The Pan American Health Organization (hereinafter referred to as "PAHO"),

BEING DESIROUS of obtaining mutual agreement concerning the supply of medical textbooks and teaching material to schools of medicine in Colombia, particularly with reference to the purposes of the project and responsibilities which shall be assumed by each of the parties,

DECLARING that these responsibilities will be fulfilled in a spirit of friendly cooperation,

HAVE AGREED as follows:

PART I

Basis of Relationship

The basic agreement of 7 December 1954, concluded between the Government and the Organizations represented on the Technical Assistance Board, provides the basis of the relationship between the Government and the Pan American Health Organization, Pan American Sanitary Bureau, Regional Office of the World Health Organization, and the articles of this agreement are to be interpreted in the light of the respective basic agreement.

PART II

Background

1. A key factor in all health programs and therefore in economic and social development is the proper training of the personnel that will carry them out. It has therefore been recognized that it is the responsibility of
the countries of the Hemisphere to increase both the number and the quality of the programs for the training of the health professions.

2. The Governments have increasingly asked for the assistance of PAHO in strengthening their medical schools. In recent years a survey has been made of the teaching of medicine in the region, the problems affecting its development, and ways and means by which PAHO, in its capacity as an international agency, can give more assistance in improving the training of health personnel, including physicians. One of the special problems brought out by this survey was the shortage of textbooks in medical schools.

3. Studies made and interviews held with a significant sample of educational authorities, instructors, and students in medical schools in Latin America showed that:

3.1 In many medical schools the library does not have enough textbooks for the use of students.

3.2 The sales price of existing textbooks is usually beyond the financial possibilities of students and of the universities.

3.3 Some of the textbooks available are out of date or inadequate, or are published in languages other than Spanish or Portuguese.

4. At present Latin America has 110 medical schools with approximately 83,000 students.

5. It is estimated that in order to supply textbooks to all medical students in 22 fields of study it will be necessary to publish approximately 640,000 copies in the course of five years.

PART III

Objectives

The objectives of this project are as follows:

1. To raise the level of medical education in Colombia as part of a general program for Latin America by providing medical students with properly selected textbooks in such a way that medicine is taught in accordance with the most advanced methods of medical methodology and pedagogy, and in this way to qualify physicians to take part in the general health plans which are being executed in the countries of the Continent.

2. To develop a system by means of which, with the cooperation of medical schools, medical textbooks of high scientific and educational quality may
be chosen. These textbooks will deal with the subjects included in the
curriculum of Latin American medical schools.

3. To establish expert committees composed of the faculty of medical
schools responsible for selecting or preparing the textbooks to be published.

4. To produce the selected textbooks cheaply since they will be published
for non-profit purposes, with an unpretentious presentation and in a very
large number of copies for each subject.

5. To make available to the universities in the country a sufficient num-
ber of the selected textbooks to satisfy teaching requirements.

6. To ensure that these textbooks are widely used by making them available
to students at the lowest possible sales or rental prices.

7. To maintain the continuity of the program by establishing a PAHO re-
volving fund so that the income from the sale or rental of the textbooks is
used for financing the publication of textbooks.

8. To provide medical schools with advisory services on specific problems
that may arise in connection with this project.

9. Once self-financing of textbooks has been achieved to gradually extend
the scope of the program so as to be able to supply other educational aids,
as well as to benefit students of other health professions.

PART IV

Plan of Action

The plan of action for this project shall be as follows:

1. In accordance with the needs and objectives of the above-mentioned
program the publication of textbooks covering the subjects included in the
medical course will proceed by stages.

2. Each medical school will be invited to nominate persons for the expert
committees that will be responsible for the selection or preparation of the
textbooks to be published.

3. Every medical school, in consultation with its faculty, will submit to
PASB a list of four or five names of candidates for the expert committee on
each subject.
4. PASB will establish expert committees in each subject, made up of the persons nominated by the largest number of medical schools and they will be responsible for the selection of the books to be published. PASB will provide the committee with such technical advisory services as may be necessary.

5. The expert committees will submit to PASB recommendations on the best textbooks for teaching in medical schools. As soon as the recommendation of the committee is accepted, the title of the textbook selected will be communicated to the universities.

6. If the expert committee decides that a suitable textbook is available for continental use in a given subject, it will be printed and published in Spanish and supplied to the medical schools concerned. If, on the other hand, no such textbook exists, the committee will make recommendations for the preparation of a text in Spanish.

7. PASB will inform the participating universities of the textbooks selected, and the faculties will use these textbooks in the manner provided for in this agreement and in such letter-agreements as may be concluded with the universities. If a participating university decides not to use a particular textbook, it will so advise PASB within a time limit to be determined by PASB in each particular case.

8. The textbooks will be sent to the medical schools so as to be made available to students to whom they will be offered for sale, resale or rental. The funds collected will be paid to PASB to cover the cost of subsequent editions of the textbooks.

9. Studies will be made to see how the program can be extended to other health professions, as well as how other educational aids can be supplied by means of a similar system.

10. The Government, the participating university, and PASB will be responsible for the continuing technical evaluation of the project.

10.1 From time to time the expert committees will review the textbooks so as to keep them up to date and will suggest such changes as may be necessary for strengthening the program.

11. To assure achievement of the objectives and continuity of the program, an auditing system will be established with the agreement of the university in which this project is being carried out.

12. Book deliveries will be made on the basis of the satisfactory operation of the project and the regular despatch to PASB of the financial statements and collection of funds by the universities.
PART V

Administration and Assignment of Commitments

1. The parties to this agreement will assume the respective responsibilities of the project indicated in the Parts concerned.

2. The universities included in the project will assume direct responsibility for its administration and execution, as set forth in the chapter on commitments in this agreement, as well as in other supplementary agreements.

3. The international personnel appointed by PASB will be responsible to it and will remain under its direction and supervision.

PART VI

Commitments of PASB

PASB agrees to provide the following from its own resources, and in accordance with the funds available from other sources, subject to budgetary limitations:

1. Personnel

1.1 Periodical technical advisory services through the established professional staff of Headquarters and the corresponding Zone Office.

1.2 Short-term consultant services in particular fields.

2. Fellowships

2.1 A limited number of short-term fellowships may be awarded for the training abroad of national personnel in subjects connected with this project.

2.2 The fellowships will be administered in accordance with the regulations PASB has established for this purpose.

3. Textbooks

3.1 Through the revolving fund, medical textbooks will be supplied as they become available and in such numbers as are established in the light of the number of students in the participating medical school. The provision of textbooks will be governed by such stipulations as may be established in the letter-agreements to be concluded with the respective universities.
3.2 PASB will take the necessary steps to ensure that the textbooks are sent directly to the medical school of the university.

3.3 These books will continue to be the property of PASB until such time as they are sold to medical students on the terms established.

PART VII

Commitments of the Government

The Government undertakes to provide the following:

1. General facilities for the appropriate conduct of the program including personnel, premises, other facilities and services that are agreed upon between PASB and the Government.

2. Facilities for international consultants to discharge their duties in connection with this project, including transportation within the country.

3. Exemption from custom duties for such textbooks and other instruments, apparatus and demonstration models (teaching, lecturing, etc.) as cannot be used for other purposes and are sent to medical schools.

4. Permission to convert into hard currency the funds collected for the sale or rental of the books supplied by PASB, in accordance with the laws of the country and the regulations of the national authorities.

5. The Government will authorize the publication of the results of the program and of the experience acquired through it.

6. The Government will be responsible for dealing with any claims which may be brought by third parties against PASB, its advisers, agents, and employees, and shall hold harmless PASB, its advisers, agents, and employees in case of any claims or liabilities resulted from operations under this agreement, except where it is agreed by the Government and PASB that such claims or liabilities arise from the gross negligence or willful misconduct of such advisers, agents, or employees.

PART VIII

Commitments of the Universities

The universities that decide to take part in this program by concluding supplementary letter-agreements will assume the following commitments:
1. They will provide the personnel, premises, equipment, furniture and facilities necessary for the execution of the program, as well as appropriate premises for the storage of textbooks.

2. They will provide the technical information requested by PASB, especially with respect to the selection of textbooks and such other information on curriculum, number of students, and other universities statistics necessary for the planning and execution of the program.

3. For the local administration of the program they will adapt themselves to the procedures established by PASB as agreed upon by the parties.

4. They will deliver to PASB within the time limit agreed upon the sums collected for the sale or rental of the textbooks.

5. They will complete and return promptly to PASB the forms it supplies them with, for maintaining statistics and supervision of the program.

6. They will provide PASB international personnel with communication and transport facilities and services for the discharge of their duties.

7. They will keep PASB, the Government, and the Association regularly informed of the status of the project.

PART IX

Commitments of the Association

1. The Association will provide the necessary facilities for the satisfactory development of the project, and will help to promote, coordinate, and evaluate this program in accordance with the purposes and provisions of its Statutes.

2. The specific part to be played by the Association will be determined by mutual agreement.

PART X

Concluding Provisions

1. This agreement will come into effect upon signature by the parties and may be modified by mutual consent.

2. The participation of the universities in this project can only be made formal by means of the signature of a letter-agreement between the university concerned and PASB, in which it expresses its desire to adhere to and to accept the terms of this agreement.
3. This agreement may be terminated by any of the contracting parties on six months' notice in writing being given to that effect.

IN WITNESS WHEREOF, the under-signed being duly authorized have signed this agreement in three copies in Spanish.

FOR THE GOVERNMENT OF COLOMBIA

Minister of Public Health
Dr. Antonio Ordoñez Plaja
Place Bogotá
Date 23 February 1967

FOR THE COLOMBIA ASSOCIATION OF MEDICAL SCHOOLS

President
Executive Director
Dr. Bernardo Moreno Mejía
Place Bogotá
Date 22 February 1967

FOR THE PAN AMERICAN HEALTH ORGANIZATION

Director, Pan American
Sanitary Bureau
Dr. Abraham Horwitz
Place Washington, D. C.
Date 6 March 1967
3 February 1967

Dr. Gabriel Velázquez Palau  
President  
Colombian Association of Medical Schools

Dear Sir:

As you know, the Pan American Health Organization is preparing a program which seeks to supply textbooks for medical students in Latin America on the best possible technical and financial conditions. This project has received the enthusiastic support of the Pan American Federation of Associations of Medical Schools and of its member associations. Provision has been made for the Associations of Medical Schools to actively cooperate in the execution of the program from the very beginning.

The purpose of this letter is to suggest to you that your association take part in certain initial stages of the above-mentioned program, namely:

a) To encourage the Ministry of Health, the Ministry of Education, university authorities, and other managerial officials and all agencies interested in the betterment of education in their country, to take an interest in this project.

b) To discuss with the university authorities agreements necessary for the execution of the program and to obtain the respective signatures.

c) To obtain, from each of the medical schools, lists prepared by the faculty members concerned, of names of candidates for the expert committees responsible for the selection of textbooks, initially for physiology, biochemistry, pharmacology, pathology, and pediatrics.

The above-mentioned activities will be carried out by such persons as you deem advisable, but the responsibility for completing the work on time will be that of the Association.

Since the work mentioned above will require the people concerned to visit schools of medicine in other cities and to remain away from their homes for a certain time, PASB will give the association a subsidy of
$1,000 with which to pay the cost of this work. On completion of this program, the Association will submit a financial statement to PASB.

PASB will send the Association the corresponding documents and reports, and the Association will complete its work and submit the results to PASB not later than 30 April 1967.

If you agree with the terms of this letter, I should be grateful if you would return the attached copies duly signed as a token of your acceptance.

I am,
Yours very truly,

Abraham Horwitz
Director

______________________________
Gabriel Velázquez Palau
President
Colombian Association of
Medical Schools
Table No. 4

COST OF PRODUCTION OF TEXTBOOKS

a. Selection, translation, editing, printing and distribution

1. Text ... (average 500 pages) .......... 20,000 copies:

- Royalties ................................ $3,000
- Translation into Spanish ............... 5,000
- Translation into Portuguese ............ 6,000
- Revision .................................. 2,000
- Corrections ................................ 2,000
- Printing, binding, plates, distribution, etc. 60,000
- 1 committee of 3 experts .............. 2,850

Cost per 20,000 copies of one textbook 80,850

Cost for one year (5 textbooks) $404,250

B. Administration

- Chief of Program
- Chief of Production
- Administrative Officers (2) 68,000
- Secretaries (2)
- Consultants, travel and miss. 24,000 92,000

C. Total cost per 100,000 copies $496,250

Cost for 1 textbook 4.96

D. Cost per calendar year

<table>
<thead>
<tr>
<th>Year</th>
<th>Subjects</th>
<th>Copies</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>5</td>
<td>100,000</td>
<td>$496,000</td>
</tr>
<tr>
<td>1968</td>
<td>5</td>
<td>100,000</td>
<td>496,000</td>
</tr>
<tr>
<td>1969</td>
<td>4</td>
<td>80,000</td>
<td>396,000</td>
</tr>
<tr>
<td>1970</td>
<td>9</td>
<td>180,000</td>
<td>692,000</td>
</tr>
<tr>
<td>1971</td>
<td>9</td>
<td>180,000</td>
<td>892,000</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>640,000</td>
<td>$3,174,000</td>
</tr>
</tbody>
</table>

1/ These estimates are subject to revision as costs may change. The unit cost also will rise or fall in relation to the yearly change in volume of copies produced.


3/ The availability of books already translated will bring down the cost per unit of textbook.
### TABLE NO 5

**BUDGET FOR A TEXTBOOK PROGRAM ON THE BASIS OF A REVOLVING FUND**  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000</td>
<td>500</td>
<td>...</td>
<td>500</td>
<td>...</td>
<td>500</td>
<td>1,000</td>
<td>...</td>
<td>500</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>A. (Texts 1 to 5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>333.3</td>
<td>(166.6)</td>
<td>333.3</td>
<td>(166.6)</td>
<td>333.3</td>
<td>(166.6)</td>
<td>(166.6)</td>
</tr>
<tr>
<td>B. (Texts 6 to 10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(500)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>(166.6)</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>(166.6)</td>
<td>(166.6)</td>
<td>333.3</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>C. (Texts 11 to 14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(266.6)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
</tr>
<tr>
<td></td>
<td>400</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>400</td>
<td>133.3</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>D. (Texts 15 to 18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
</tr>
<tr>
<td></td>
<td>400</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>266.6</td>
<td>133.3</td>
<td>266.6</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
</tr>
<tr>
<td>E. (Texts 19 to 22)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Income)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
</tr>
<tr>
<td></td>
<td>400</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>266.6</td>
<td>133.3</td>
<td>266.6</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
<td>(133.3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Gross expenditure</td>
<td>500</td>
<td>500</td>
<td>400</td>
<td>500</td>
<td>900</td>
<td>3,200</td>
<td>400</td>
<td>900</td>
<td>900</td>
<td>400</td>
</tr>
<tr>
<td>(Income)</td>
<td>(166.6)</td>
<td>(333.3)</td>
<td>(466.6)</td>
<td>(600)</td>
<td>(1,566.6)</td>
<td>(733.3)</td>
<td>(733.3)</td>
<td>(733.3)</td>
<td>(733.3)</td>
<td>(733.3)</td>
</tr>
<tr>
<td>Net expenditure</td>
<td>500</td>
<td>333.3</td>
<td>66.6</td>
<td>433.3</td>
<td>300</td>
<td>1,633.3</td>
<td>(333.3)</td>
<td>166.6</td>
<td>166.6</td>
<td>333.3</td>
</tr>
<tr>
<td>Adjustments, incidental expenses</td>
<td>366.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*In thousands of dollars.*